

Ferguson fails to cure the disclosure deficiencies of Sundahl with respect to these features as Ferguson fails to disclose any vents, much less a shock absorbing insert “spanning at least the first vent and the second vent.” As such, the Applicant respectfully asserts that claim 1 is allowable over the combination of Sundahl and Ferguson. Claim 31 includes similar features to claim 1 and is therefore allowable for similar reasons as claim 1.

Claims 2, 7, 8, 28, 32, 33, and 37-40 and 42, each depend either directly or indirectly from one of claim 1 or 31 and are therefore allowable for at least the same reasons as claims 1 and 31. The Applicant makes this statement without reference to and without waiving the independent bases of patentability of claims 2, 7, 8, 28, 32, 33, and 37-42 and specifically reserves the right to argue those bases in a separately filed response, if necessary.

C. Rejections Under Sundahl, Ferguson, Fournier, and Weber

Claims 4, 9-11, 35, 36 and 43 were rejected under 35 U.S.C. 103 as being unpatentable over Sundahl in view of Ferguson, and further in view of U.S. Patent No. 5,950,244 to Fournier (“Fournier”). Claim 12 was rejected under 35 U.S.C. 103 as being unpatentable over Sundahl in view of Ferguson, and further in view of U.S. Patent Publication No. 2012/0198604 to Weber (“Weber”). The Applicant respectfully traverses.

Fournier and Weber both fail to cure the disclosure deficiencies of the Sundahl and Ferguson combination with respect to claims 1 and 31. Claims 4, 9-12, 35, 36, and 43, each depend either directly or indirectly from one of claim 1 or 31 and are therefore allowable for at least the same reasons as claims 1 and 31. The Applicant makes this statement without reference to and without waiving the independent bases of patentability of claims 4, 9-12, 35, 36, and 43, and 37-42 and specifically reserves the right to argue those bases in a separately filed response, if necessary.

VI. New Claims

New claims 44-46 have been added. Support for these claims can be found throughout the specification and figures as-filed.

Claim 44 recites, “a shell having an interior surface and an exterior surface and defining a first vent, a second vent, and a third vent and a fourth vent;

a shock absorbing liner coupled to the interior surface of the shell and defining a first insert cavity and a second insert cavity, wherein the first insert cavity is positioned beneath the first vent and the second vent and the second insert cavity is positioned beneath the third vent and the fourth vent;

a first shock absorbing insert positioned within the first insert cavity, wherein the first shocking absorbing insert spans across at least the first vent and the second vent;

a second shock absorbing insert positioned within the second insert cavity, wherein the second shocking absorbing insert spans across at least the third vent and the fourth vent; wherein

the first shock absorbing insert and the second shock absorbing insert are tubular arrays formed of open tubes extending longitudinally relative to a thickness of the shock absorbing liner and direct air from an exterior of the helmet to an interior of the helmet.”

The cited art of record fails to disclose these features at least because none of the cited references disclose first and second shock absorbing inserts, where the “first shock absorbing insert spans across at least the first vent and the second vent” and the “second shock absorbing insert spans across at least the third vent and the fourth vent.” Claims 45 and 46 depend from claim 44 and are therefore distinguishable over the cited art of record for at least this reason.

VII. Conclusion

Favorable consideration and a timely Notice of Allowance are earnestly solicited. The Examiner is invited to contact the undersigned should a telephone conversation be useful in the efficient prosecution of this matter.

Respectfully submitted,
DORSEY & WHITNEY LLP

August 17, 2017
Date

/Gina Cornelio/
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Reg. No. 64,336

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 13/965,703 Confirmation No. : 5250
First Named Inventor : James A. Chilson
Filed : August 13, 2013 Attorney Docket No.: P240940.US.01
Art Unit : 3765 Customer No. : 27,076
Examiner : Anne M. Kozak
Title : HELMET WITH SHOCK ABSORBING INSERTS

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Commissioner:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicant wishes to make known to the Patent and Trademark Office the information set forth on the attached form PTO/SB/08. Copies of any foreign patent and/or non-patent literature references contained in the attached form PTO/SB/08, as required under 37 C.F.R. § 1.98(a)(2), are attached. Copies of any U.S. patents and/or U.S. patent application publications contained in the attached form PTO/SB/08 have not been provided in accordance with 37 CFR 1.98(a)(2).

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Respectfully submitted,

DORSEY & WHITNEY LLP

/Gina Cornelio/

August 17, 2017

Date

Gina Cornelio
Registration No. 64,336

GC:rar

Enclosures:
Form PTO/SB/08

1 of 1

4841-7973-6909\1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13/965,703
	Filing Date		Aug 13, 2013
	First Named Inventor	James A. Chilson	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		P240940.US.01

U.S.PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		D517739	S	2006-03-21	HO, CHANG-HSIEN	
		D570548	S	2008-06-03	ASHIDA, KYOICHI	
		D679865	S	2013-04-09	GARNEAU et al.	
		D724788	S	2015-03-17	WOXING, JAN et al.	
		D764115	S	2016-08-16	Ashida, Kyoichi	
		D771874	S	2016-11-15	CHILSON, JAMES et al.	
		D773120	S	2016-11-29	CHILSON, JAMES et al.	
U.S.PATENT APPLICATION PUBLICATIONS						
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13/965,703
	Filing Date		Aug 13, 2013
	First Named Inventor	James A. Chilson	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		P240940.US.01

FOREIGN PATENT DOCUMENTS								
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
NON-PATENT LITERATURE DOCUMENTS								
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						T ⁵
		U.S. Patent Application No. 29/496,854, entitled "HELMET", filed on July 17, 2014 (P247532.US.01)						
		U.S. Patent Application No. 29/581,659, entitled: "Helmet" filed October 20, 2016 (P247939.US.02)						
		U.S. Patent Application No. 29/583980, entitled "HELMET", filed November 10, 2016						
EXAMINER SIGNATURE								
Examiner Signature			Date Considered					
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								
¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.								

Electronic Patent Application Fee Transmittal				
Application Number:		13965703		
Filing Date:		13-Aug-2013		
Title of Invention:		HELMET WITH SHOCK ABSORBING INSERTS		
First Named Inventor/Applicant Name:		James A. Chilson		
Filer:		Gina N. Cornelio/Randi Rowe		
Attorney Docket Number:		P240940.US.01		
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
RCE- 2ND AND SUBSEQUENT REQUEST	1820	1	1700	1700
Total in USD (\$)				1700

Electronic Acknowledgement Receipt	
EFS ID:	30112973
Application Number:	13965703
International Application Number:	
Confirmation Number:	5250
Title of Invention:	HELMET WITH SHOCK ABSORBING INSERTS
First Named Inventor/Applicant Name:	James A. Chilson
Customer Number:	27076
Filer:	Gina N. Cornelio/Randi Rowe
Filer Authorized By:	Gina N. Cornelio
Attorney Docket Number:	P240940.US.01
Receipt Date:	17-AUG-2017
Filing Date:	13-AUG-2013
Time Stamp:	17:13:32
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$1700
RAM confirmation Number	081817INTEFSW17144000
Deposit Account	501266
Authorized User	Randi Rowe
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)					
37 CFR 1.20 (Post Issuance fees)					
37 CFR 1.21 (Miscellaneous fees and charges)					
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	20170817_RCE_P240940US01.pdf	697613	no	3
			cfa11c1946aabda7d0e6757f0cd3101bf3be07fd		
Warnings:					
Information:					
2		20170816_FOAResponse_P240940US01.pdf	151145	yes	11
			9bfb82994bfd52b6f0587528cfe89973e9010fd		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment Submitted/Entered with Filing of CPA/RCE		1	1	
	Claims		2	6	
	Applicant Arguments/Remarks Made in an Amendment		7	11	
Warnings:					
Information:					
3		20170817_IDS_P240940US01.pdf	153621	yes	3
			3db6e5b6d947d77c8de421934c3e2ee610ef528f		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Transmittal Letter		1	1	
	Information Disclosure Statement (IDS) Form (SB08)		2	3	
Warnings:					
Information:					

4	Fee Worksheet (SB06)	fee-info.pdf	30685	no	2				
			1591e816351b85cdb3b412b33faef6c5a2c8f1d						
Warnings:									
Information:									
Total Files Size (in bytes):			1033064						
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.									

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 13/965,703		Filing Date 08/13/2013		☐ To be Mailed	
ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO									
APPLICATION AS FILED - PART I									
		(Column 1)			(Column 2)				
FOR		NUMBER FILED			NUMBER EXTRA			RATE (\$)	FEE (\$)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A			N/A			N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A			N/A			N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A			N/A			N/A	
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 = *						x \$80 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 = *						x \$420 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))									
* If the difference in column 1 is less than zero, enter "0" in column 2.								TOTAL	
APPLICATION AS AMENDED - PART II									
AMENDMENT	08/17/2017	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA			RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 24	Minus	** 27	= 0			x \$80 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0			x \$420 =	0
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
								TOTAL ADD'L FEE	0
AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA			RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=			x \$0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=			x \$0 =	
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
								TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.								HSLIE	
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".								LELAND WATKINS	
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".									
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.									

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



UNITED STATES PATENT AND TRADEMARK OFFICE

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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/965,703	08/13/2013	James A. Chilson	P240940.US.01	5250
27076 7590 07/24/2017 DORSEY & WHITNEY LLP - Seattle INTELLECTUAL PROPERTY DEPARTMENT Columbia Center 701 Fifth Avenue, Suite 6100 SEATTLE, WA 98104-7043			EXAMINER KOZAK, ANNE M	
			ART UNIT 3765	PAPER NUMBER
			NOTIFICATION DATE 07/24/2017	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocket-se@dorsey.com
seattle.ip@dorsey.com

<i>Applicant-Initiated Interview Summary</i>	Application No.	Applicant(s)	
	13/965,703	CHILSON, JAMES A.	
	Examiner	Art Unit	
	ANNE KOZAK	3765	

All participants (applicant, applicant's representative, PTO personnel):

(1) ANNE KOZAK. (3) GINA CORNELIO.

(2) NATHAN DURHAM. (4) _____.

Date of Interview: 17 July 2017.

Type: ☒ Telephonic ☐ Video Conference
 ☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
 If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☒103 ☐Others
 (For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 1.

Identification of prior art discussed: Sundahl, Fournier, Ferrara (as cited on the PTO-892).

Substance of Interview
 (For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Differences between the liner and inserts of instant application and prior art were discussed. The Examiners noted that amended claims do not appear to overcome the prior art, and further structural detail of the configuration of the liner and vents with respect to the inserts and e.g. their size, number, shape, and/or positioning (e.g. as shown in Fig. 2 and 4) may be helpful to distinguish the instant application over the prior art. No particular agreements were reached regarding specific claim language, and Applicant agreed to file a formal response.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☒ Attachment

/NATHAN DURHAM/ Primary Examiner, Art Unit 3765	/ANNE KOZAK/ Examiner, Art Unit 3765

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

DO NOT ENTER
/AK/ 7/17/17

From: cornelio.gina@dorsey.com
To: [Kozak, Anne M.](#)
Subject: Proposed Examiner Agenda for App. No. 13/965,703
Date: Tuesday, July 11, 2017 4:47:17 PM
Attachments: [20171107_P240740_US01_Proposed_Agenda_for_Examiner_Interview_4847-8256-6027_v.1.pdf](#)

Hi Examiner Kozak,

Attached please find an agenda for Thursday's interview. Please let me know if the time changes based on Nathan's availability, otherwise look forward to speaking to you on Thursday.

Sincerely,

Gina

Gina N. Cornelio

Partner

DORSEY & WHITNEY LLP
1400 Wewatta Street
Suite 400 | Denver, CO 80202-5549
P: 303.352.1170 F: 303.629.3450 C: 303.927.8643

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	: 13/965,703	Confirmation No.	: 5250
First Named Inventor	: James A. Chilson		
Filed	: August 13, 2013	Attorney Docket No.:	P240940.US.01
Art Unit	: 3765	Customer No.	: 27,076
Examiner	: Anne M. Kozak		
Title	: HELMET WITH SHOCK ABSORBING INSERTS		

Proposed Agenda for Examiner Interview

- Teleconference scheduled for Thursday July 13th at 3pm ET (1pm MT)
- Proposed Attendees: Examiner Kozak, Examiner Durham, and Gina Cornelio
- Discuss the § 103 rejections in light of the proposed claim amendments to claim 1 below:

A helmet, comprising:

a shell including a vent;

a shock absorbing liner attached to the shell, wherein the shock absorbing liner is formed of a first shock absorbing material adjacent to the shell and comprises a cavity at least partially aligned with the vent; and

a shock absorbing insert positioned within the cavity, wherein the shocking absorbing insert is formed of tubes arranged in a closely packed array, each of the tubes having an exterior end and an interior end, wherein the interior and exterior ends of each of the tubes are open, and positioned in the cavity, and wherein the tubes are oriented longitudinally within in the cavity to allow air to flow into the exterior ends of the tubes from an outside of the helmet, through the tube, and exit out the interior ends of the tubes toward a concave side of the helmet.

- Discuss any Examiner suggestions to expedite prosecution.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/965,703	08/13/2013	James A. Chilson	P240940.US.01	5250
27076 7590 05/17/2017 DORSEY & WHITNEY LLP - Seattle INTELLECTUAL PROPERTY DEPARTMENT Columbia Center 701 Fifth Avenue, Suite 6100 SEATTLE, WA 98104-7043			EXAMINER KOZAK, ANNE M	
			ART UNIT 3765	PAPER NUMBER
			NOTIFICATION DATE 05/17/2017	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocket-se@dorsey.com
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Office Action Summary	Application No. 13/965,703	Applicant(s) CHILSON, JAMES A.	
	Examiner ANNE KOZAK	Art Unit 3765	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/3/17.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

- 5) ☒ Claim(s) 1,2,4,7-12,28,31-33 and 35-43 is/are pending in the application.
5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1,2,4,7-12,28 and 31-33 and 35-43 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) ☒ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 8/13/13 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some** c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date ____.
- 3) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 4) ☐ Other: ____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Status of Claims

Claims 1, 9, 10, 31, 33, 35, and 36 are amended, and claims 3, 5, 6, 13-27, 29, 30, and 34 are canceled, and claims 37-43 are new. Claims 1, 2, 4, 7-12, 28, and 31-33 and 35-43 are pending in this application.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required, as the specification does not disclose:

- “an array of tubules” (Claim 33, line 2).

Claim Objections

Claims 10, 35, and 41 are objected to because of the following informalities:

- “defined in wall” (Claim 10, line 2) should be “defined in the wall” for clarity.
- “the inner surface” (Claim 35, line 3) should be “an inner surface” to avoid antecedent issues.
- Claim 41 appears to be a duplicate claim (see Claim 28).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 4, 7-12, 28, 35, and 39-43 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

The term "closely" in "closely packed array" in claim 1, line 7 is a relative term which renders the claim indefinite. The term "closely" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For examination purposes, "closely packed array" has been construed as an array. Applicant's attention is directed to MPEP 2173.05(b) which provides guidance for defining terms of degree and approximations.

Regarding claim 35, in the phrase "which cover extend along more than," (line 2) it is unclear what portion "cover extend along more than" is referring to, and it is therefore indefinite since it is unclear what is being claimed. For examination purposes, "which cover extend along more than," has been construed "which extend along more than."

Claim 43 recites the limitation "shock absorbing" in line 1. There is insufficient antecedent basis for this limitation in the claim. It is unclear whether Applicant is referring to "shock absorbing inserts" or the "shock absorbing liner." For examination purposes, "shock absorbing" has been construed as "shock absorbing insert."

Any remaining claims are rejected as depending from a rejected base claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 31 are rejected under 35 U.S.C. 102(a)(1) as being unpatentable over Ferrara (U.S. 2006/0059606) in view of Lemelson (U.S. 4,075,717).

Regarding claim 1, Ferrara teaches a helmet (2), comprising: a shell (20) including a vent (6) ; a shock absorbing liner (32 including 28) which appears to be attached (e.g. via 24 or possibly direct attachment beyond 30 in Fig. 2) to the shell (20), wherein the shock absorbing liner (32 including 28) is formed of a first shock absorbing material (hard inner shell and internal liner that would be capable of providing at least some shock absorption) adjacent to (see Fig. 2) the shell (20) and appears to comprise a cavity (portion between 32 including 28 and 20) at least partially aligned with (since it one of the various layers underneath;

see Para. [0035]) the vent (6); and a shock absorbing insert (24) formed of tubes arranged in a closely packed array (i.e. a honeycomb structure having interconnected walls an open cells or air filled cylindrical columns; see Para. [0047]) and positioned in (see 24 in Fig. 2) the cavity (portion between 32 including 28 and 20), and wherein the tubes (i.e. a honeycomb structure having interconnected walls an open cells or air filled cylindrical columns; see Para. [0047]) are oriented (see Para. [0047] and Fig. 4) in the cavity (portion between 32 including 28 and 20) to be capable of the intended use of allowing air to flow from an outside of the helmet toward a concave side of the helmet, but is silent about the liner specifically being attached to the shell and comprising a cavity.

Lemelson teaches a similar invention (a helmet, e.g. 40) that has a similar configuration (43) that is attached (see example of attachment in Fig. 1 and 2; Col. 4, lines 59-61 and Col. 5, lines 63-65) to another similar configuration (42) and comprising a cavity (portion between the sides of 43; see example of sides in Fig. 1 and 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Ferrara's teaching of a liner and a shell to include Lemelson's teaching of the liner being attached to the shell since doing so would provide an enclosure to help secure the insert material so that it can reliably function as an impact absorption layer between an outer wall and inner wall (see Col. 5, lines 12-22 and 25-27 of Lemelson).

Applicant is respectfully reminded that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In the instant case, the device of the combined references has met the structural limitations of the claim, and would therefore be expected to be capable of performing the intended use claimed, e.g. allowing air to flow from an outside of the helmet toward a concave side of the helmet.

Regarding claim 31, Ferrara teaches a helmet, comprising: a shell (20) including a plurality of vents (plurality of 6) ; a shock absorbing liner (32 including 28) adjacent (see Fig. 2) to which appears to be attached (e.g. via 24 or possibly direct attachment beyond 30 in Fig. 2) to the shell (20) and appears to comprise a cavity (portion between 32 including 28 and 20) at least partially at least partially aligned at least partially aligned with (since it one of the various layers underneath; see Para. [0035]) the plurality of vents (plurality of 6); and a honeycomb insert (i.e.24, which is a honeycomb structure, see Para. [0047]) positioned in the cavity (portion between 32 including 28 and 20) such that the honeycomb insert (i.e.24, which is a honeycomb structure, see Para. [0047]) is visible through (openings appears as a single layer 14, and 24 is the top layer; see Fig. 2 and Para. [0035]) the plurality of vents (plurality of 6), but is silent about the liner specifically being attached to the shell and comprising a cavity.

Lemelson teaches a similar invention (a helmet, e.g. 40) that has a similar configuration (43) that is attached (see example of attachment in Fig. 1 and 2; Col. 4, lines 59-61 and Col. 5, lines 63-65) to another similar configuration (42) and comprising a cavity (portion between the sides of 43; see example of sides in Fig. 1 and 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Ferrara's teaching of a liner and a shell to include Lemelson's teaching of the liner being attached to the shell since doing so would provide an enclosure to help secure the insert material so that it can reliably function as an impact absorption layer between an outer wall and inner wall (see Col. 5, lines 12-22 and 25-27 of Lemelson).

Claims 1, 2, 7, 8, 28, 31-33, and 37-42 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) in view of Ferguson (U.S. 8,087,101).

Regarding claim 1, Sundahl teaches a helmet (10) comprising a shell (11) including a vent (front opening 14); a shock absorbing liner (liner 12 including padding 49) attached to the shell (11), wherein the shock absorbing liner (liner 12 including padding 49) is formed of a first shock absorbing material (material of 12 and padding 49; semi-flexible foam plastic; see Col. 2, lines 20-21) adjacent to the shell and comprises a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) at least partially aligned (see Fig. 6) with the vent (front opening 14); and a shock absorbing insert (pad 47)

positioned in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) which is oriented in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) to be capable of the intended use of allowing air to flow from an outside (see Fig. 6) of the helmet (10) toward a concave side (e.g. inside of 10), but does not teach that the shock absorbing insert is comprised of tubes arranged in a closely packed array and wherein the tubes are oriented for the intended use of allowing air to flow from an outside of the helmet toward a concave side of the helmet.

Ferguson teaches a similar configuration (i.e. a shock absorbing insert 10 including inner lining for a helmet; see Col. 1, lines 59-63 and Col. 2, lines 66-67) comprised of tubes arranged in a closely packed array (see tubes of 10 in Fig. 1) wherein the tubes (tubes of 10 in Fig. 1) are oriented (see Col. 2, line 26) for the intended use of allowing air to flow (see Col. 2, lines 25-26 and 31-33).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a helmet insert to include Ferguson's teaching of a helmet insert comprised of tubes since doing so would give rise to a more comfortable and protective versatile insert that is flexible yet responsive upon impact, while also being light weight, providing ventilation, and allowing for dissipation of body heat and moisture (see Col. 2, lines 18-19 and 31-33 of Ferguson).

Applicant is respectfully reminded that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention

and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In the instant case, the device of the combined references has met the structural limitations of the claim, and would therefore be expected to be capable of performing the intended use claimed, e.g. allowing air to flow from an outside of the helmet toward a concave side of the helmet.

Regarding claim 2, the combined references teach the claimed invention and wherein the shock absorbing insert (pad 47 of Sundahl) is configured to be manually deformed (grasped and pulled out; see Col.3, line 54-56 of Sundahl) to be removed from the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl).

Regarding claim 7, the combined references of Sundahl and Ferguson teach the claimed invention and wherein the shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21 of Sundahl) comprises: first (sidewall at one inner edge 49a of Sundahl) and second (sidewall at the other inner edge 49a of Sundahl) sidewalls defining the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl), and wherein the first (sidewall at one inner edge 49a of Sundahl) and second (sidewall at the other inner edge 49a of Sundahl) sidewalls are angled (see Fig. 6 of Sundahl) relative to one another (see Fig. 6 of Sundahl) such that a distance between the first (sidewall at one inner edge 49a of Sundahl) and second (sidewall at the other inner edge 49a of Sundahl) sidewalls along a first curved side (i.e. the top portion of pad 47, i.e. the side

nearest the shell of Sundahl) of the shock absorbing insert (pad 47 of Sundahl) is greater than a distance (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length of Sundahl) between the first (sidewall at one inner edge 49a of Sundahl) and second (sidewall at the other inner edge 49a of Sundahl) sidewalls along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell of Sundahl) of the shock absorbing insert (pad 47 of Sundahl) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell of Sundahl).

Regarding claim 8, the combined references Sundahl and Ferguson teach the claimed invention and wherein the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl) is configured such that a distance along a first curved side along a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell of Sundahl) of the shock absorbing insert (pad 47 of Sundahl) is greater (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a distance along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell of Sundahl) of the shock absorbing insert (pad 47 of Sundahl) opposite (on the bottom, opposite the top) the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell of Sundahl) when the shock absorbing insert (pad 47 of Sundahl) is positioned (see Fig. 6 of Sundahl) in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl).

Regarding claim 28, the combined references of Sundahl and Ferguson teach the claimed invention and wherein a thickness of the shock absorbing insert (pad 47 of Sundahl) is equal to or less than a thickness (see Fig. 6 of Sundahl) of the shock absorbing liner (12 including padding 49 of Sundahl).

Regarding claim 31, Sundahl teaches a helmet (10), comprising: a shell (11) including a plurality of vents (e.g. two or more of the vents 14-22 and 24-26); a shock absorbing liner (liner 12 including padding 49) adjacent to (see Fig. 6) and attached to the shell (11) and comprising a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) at least partially aligned (see Fig. 6) with the plurality of vents (e.g. two or more of the vents 14-22 and 24-26) and an insert (pad 47) positioned in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) and appears capable of being viewed through the plurality of vents (i.e. through some of the plurality of vents such as 15, 14, and 19; see Fig. 6 and viewing of 47 of Sundahl), but does not teach the insert being made of honeycomb material.

Ferguson teaches a similar configuration (i.e. a shock absorbing insert 10 including inner lining for a helmet; see Col. 1, lines 59-63 and Col. 2, lines 66-67) made of a honeycomb material (material of 10, see Col. 2, line 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a helmet insert to include Ferguson's teaching of a helmet insert made of honeycomb material since doing so would give rise

to a more comfortable and protective versatile insert that is flexible yet responsive upon impact, while also being light weight, providing ventilation, and allowing for dissipation of body heat and moisture (see Col. 2, lines 18-19 and 31-33 of Ferguson).

Applicant is respectfully reminded that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In the instant case, the device of the combined references has met the structural limitations of the claim, and would therefore be expected to be capable of performing the intended use claimed, e.g. is visible through the plurality of vents.

Regarding claim 32, the combined references of Sundahl and Ferguson teach the claimed invention and the shock absorbing liner (12 including 49 of Sundahl), but are silent about the liner being seamless.

Sundahl disclosed the claimed invention except for the shock absorbing liner being seamless. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to make the shock absorbing liner seamless since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. See MPEP 2144.04 (V)(B).

Regarding Claim 33, the combined references of Sundahl and Ferguson teach the claimed invention and wherein the honeycomb (material of 10, see Col. 2, line 8 of Ferguson) insert (47 of Sundahl) is formed of an array of tubules (see tubules of 10 in Fig. 1).

Regarding Claim 37, the combined references of Sundahl and Ferguson teach the claimed invention and the tubes (tubes of 10 in Fig. 1 of Ferguson) appear to be cylindrical (i.e. like a cylinder; see Fig. 1 of Ferguson) in shape, but are silent about them being specifically cylindrical.

The combined references teach the claimed invention, but are silent about the honeycomb tubes specifically being cylindrical. It would have been obvious to one having ordinary skill in the art at the time the invention was effectively filed to make the tubes cylindrical since a change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results or criticality. See MPEP 2144.04(IV)(B). It is also noted that Applicant teaches the insert being made of a "honeycomb material" (see Para. [018] of the instant application) which appears to be the same material as that of the combined teachings of Sundahl and Ferguson.

Regarding Claim 38, the combined references of Sundahl and Ferguson teach the claimed invention and wherein the tubes (tubes of 10 in Fig. 1 of Ferguson) are oriented (see Col. 2, line 26 and Fig. 1 and 7 of Ferguson) along a thickness of the shock absorbing insert (pad 47 of Sundahl).

Regarding Claim 39, the combined references of Sundahl and Ferguson teach the claimed invention and wherein the tubes (tubes of 10 in Fig. 1 of Ferguson) are oriented (see Col. 2, line 26 and Fig. 1 and 7 of Ferguson) along a thickness of the shock absorbing insert (pad 47 of Sundahl).

Regarding Claim 40, the combined references of Sundahl and Ferguson teach the claimed invention and the tubes (tubes of 10 in Fig. 1 of Ferguson) appear to be cylindrical (i.e. like a cylinder; see Fig. 1 of Ferguson) or circular conical in shape, but are silent about them being specifically cylindrical.

The combined references teach the claimed invention, but are silent about the honeycomb tubes specifically being cylindrical. It would have been obvious to one having ordinary skill in the art at the time the invention was effectively filed to make the tubes cylindrical since a change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results or criticality. See MPEP 2144.04(IV)(B). It is also noted that Applicant teaches the insert being made of a "honeycomb material" (see Para. [018] of the instant application) which appears to be the same material as that of the combined teachings of Sundahl and Ferguson.

Regarding Claim 41, the combined references of Sundahl and Ferguson teach the claimed invention and wherein a thickness of the shock absorbing insert (pad 47 of Sundahl) is equal to or less than a thickness (see Fig. 6 of Sundahl) of the shock absorbing liner (12 including padding 49 of Sundahl).

Regarding Claim 42, the combined references of Sundahl and Ferguson teach the claimed invention and wherein the vent (front opening 14 of Sundahl) is one of a plurality of vents (e.g. 14-33 and 24-26 of Sundahl) and wherein the shock absorbing insert (pad 47 of Sundahl) and appears capable of being viewed through the plurality of

vents (i.e. through some of the plurality of vents such as 15, 14, and 19; see Fig. 6 of Sundahl and viewing of 47 of Sundahl).

Applicant is respectfully reminded that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In the instant case, the device of the combined references has met the structural limitations of the claim, and would therefore be expected to be capable of performing the intended use claimed, e.g. is visible through the plurality of vents.

Claims 4 and 9-11, 35, 36, and 43 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) in view of Ferguson (U.S. 8,087,101) as applied to Claim 1, and further in view of Fournier (U.S. 5,950,244).

Regarding claim 4, the combined references of Sundahl and Ferguson teach the claimed invention and a first shock absorbing material (material of 12 and padding 49; semi-flexible foam plastic; see Col. 2, lines 20-21 of Sundahl), but are silent about the first shock absorbing material being non-porous.

Fournier teaches a first shock absorbing material (first material 16 is non-porous; see Fig. 4, i.e. dashed lines).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl and Ferguson's teaching of a first shock absorbing material to include Fournier's teaching of the material being non-porous since

this material would be capable of absorbing and dissipating a single relatively high impact event imparted on the outer shell (Col. 3, lines 63-65 of Fournier).

Regarding claim 9, the combined references of Sundahl and Ferguson teach the claimed invention and a wall of the shock absorbing liner (wall of the liner 12 including padding 49) defining the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl) and a shock absorbing insert (pad 47 of Sundahl) placed in the cavity (area between inner edges 49a; see Fig. 6; Col. 3, lines 42-45 of Sundahl) of the shock absorbing liner (liner 12 including padding 49 of Sundahl), but are silent about that the cavity includes a recess and that the shock absorbing insert includes a protrusion keyed to the recess in the cavity of the shock absorbing liner.

Fournier teaches a cavity (plug hole 25) including a recess (groove 52), and the shock absorbing insert (plug 19) including a protrusion (ridge 50) keyed to the recess (groove 52).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl and Ferguson's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 10, the combined references of Sundahl and Ferguson teach the claimed invention and an edge (edge of pad 47) of the shock absorbing insert (pad 47 of Sundahl) and a cavity (area between inner edges 49a and including space 46, air

channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl) of the shock absorbing liner (liner 12 including padding 49 of Sundahl) and a wall of the shock absorbing liner (wall of the liner 12 including padding 49) defining the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl), but are silent about the edge of the shocking absorbing insert being rounded to form a semi-ovular shape that is keyed to a recess defined in wall of the shock absorbing liner defining the cavity.

Fournier teaches an edge (ridge 50) of the insert (plug 19) is rounded (see Fig. 5) to form a semi-ovular shape that is keyed to a recess (groove 52) in the cavity (plug hole 25).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl and Ferguson's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 11, the combined references of Sundahl and Ferguson teach the claimed invention and wherein the shock absorbing liner (liner 12 including padding 49 of Sundahl) and cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl) configured to retain the shock absorbing insert (pad 47 of Sundahl), but do teach wherein the shock absorbing liner includes tabs protruding laterally across the cavity that are configured to retain the shock absorbing insert.

Fournier teaches wherein the shock absorbing liner (16) includes tabs (ridge 27) protruding laterally across the cavity (plug hole 25) that are configured to retain the insert (plug 19; see Fig. 4; Col. 5, lines 23-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl and Ferguson's teaching of a liner and cavity to retain an insert to include Fournier's teaching of the liner having tabs since doing so would provide a secure interference fit (See Col. 5, lines 22-26 of Fournier).

Regarding Claim 35, the combined references of Sundahl and Ferguson teach the claimed invention and the honeycomb (material of 10, see Col. 2, line 8 of Ferguson) insert (pad 47 of Sundahl), but does not teach that it is one of plurality of inserts.

Fournier teaches a similar configuration (18) is one of a plurality of inserts (e.g. of plurality of 18) which cover extend along more than 90% (i.e. extends along; see e.g. Fig. 5 and 18 extends along all of the inner surfaces of 16 of Fournier) of the inner surface (i.e. surface of 16, near 18 of Fournier) of the liner (i.e. liner 16 of Fournier).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl and Ferguson's teaching of a helmet insert to include Fournier's teach of a helmet having multiple inserts that extend along inner surfaces of the liner since doing so help maintain contact between the components and would help to effectively and controllably absorb, displace, and dissipate varying degrees and ranges of impact imparted in various areas of the helmet (see Col. 4, lines 13-15).

Regarding Claim 36, the combined references of Sundahl and Ferguson teach the claimed invention and the honeycomb (material of 10, see Col. 2, line 8 of Ferguson) insert (pad 47 of Sundahl) of the helmet (helmet of Sundahl), but does not teach where it extends to a back of the helmet.

Fournier teaches a similar configuration (18) that extends to a back (see 18 extending to a back) of a similar configuration (a helmet).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl and Ferguson's teaching of a helmet insert to include Fournier's teach of a helmet having an insert extending to a back since doing so would help to effectively and controllably absorb, displace, and dissipate varying degrees and ranges of impact imparted in various areas of the helmet (see Col. 4, lines 13-15).

Regarding Claim 43, the combined references of Sundahl and Ferguson teach the claimed invention and the shock absorbing insert (pad 47 of Sundahl), but does not teach that it is one of plurality of inserts.

Fournier teaches a similar configuration (18) is one of a plurality of inserts (e.g. of plurality of 18) which cover extend along more than 50% (i.e. extends along; see e.g. Fig. 5 and 18 extends along all of the inner surfaces of 16 of Fournier) of the inner surface (i.e. surface of 16, near 18 of Fournier) of the liner (i.e. liner 16 of Fournier).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl and Ferguson's teaching of a helmet insert to include Fournier's teach of a helmet having multiple inserts that extend along inner

surfaces of the liner since doing so help maintain contact between the components and would help to effectively and controllably absorb, displace, and dissipate varying degrees and ranges of impact imparted in various areas of the helmet (see Col. 4, lines 13-15).

Claim 12 is rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) in view of Ferguson (U.S. 8,087,101) as applied to Claim 1, and further in view of Weber (U.S. 2012/0198604).

Regarding claim 12, the combined references teach the claimed invention and wherein the shell (11 of Sundahl) comprises at least one of polycarbonate (polycarbonate; see Col. 2, lines 17-19 of Sundahl) (PC) or Acrylonitrile butadiene styrene (ABS), and wherein the shock absorbing liner comprises polystyrene (Col. 2, lines 19-21 of Sundahl), but are silent about the liner comprising expanded polystyrene (EPS).

Weber teaches helmet with a liner formed of EPS (Para. 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl and Ferguson's teaching of a polystyrene liner to include Weber's teaching of the liner being made of EPS since doing so would give rise to a lining that would help dissipate the energy of impacts (Para. 45 of Weber), thus leading to a more protective helmet.

Response to Arguments

Applicant's arguments, see Page 6, filed 2/3/17, with respect to the specification objection have been fully considered and are persuasive. Therefore, the rejection has

been withdrawn. However, upon further consideration, a new ground of objection is made in view of language in the amended claims.

Applicant's arguments, see Page 7, with respect to the rejection(s) of claim(s) 33 and 34 under 35 U.S.C. 112(a), are persuasive, and this rejection has been withdrawn. Applicant's arguments with respect to the rejection of Claims 1, 2, 5-12, 13-,14, 16, 17 20-22, 28-30, and 34-36 under 35 U.S.C. 112(b), have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of indefinite language in the amended claims.

Applicant's arguments, see Pages 7-9, with respect to Sundahl and Sajic and the rejections under 35 U.S.C. 103 have been considered, but are moot because the arguments do not apply to the combination of references being used in the current rejection.

With respect to the Applicant's remarks, see Page 8, that "Sundahl does not disclose a shock absorbing insert which is formed of tubes arranged in a closely packed array," the Examiner agrees that this feature is not taught by Sundahl, but notes that it is taught by Ferguson, and the combination is proper since the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir.

1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

In this case, the one pad (as taught by Sundahl) has been substituted for another pad (as taught by Ferguson). It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a helmet insert to include Ferguson's teaching of a helmet insert comprised of tubes since doing so would give rise to a more comfortable and protective versatile insert that is flexible yet responsive upon impact, while also being light weight, providing ventilation, and allowing for dissipation of body heat and moisture (see Col. 2, lines 18-19 and 31-33).

In response to applicant's argument, see Page 9, that there is "no indication in Sundahl that the perspiration pad is intended to serve an energy absorbing function," the Examiner respectfully notes that the pad of Sundahl is capable of serving this purpose since it is a pad located inside a helmet, and respectfully notes that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Applicant's arguments with respect to claim 31 have been considered, but are moot because the arguments do not apply to the combination of references being used in the current rejection.

With respect to Applicant's argument, see Page 10, regarding Sundahl and Claim 31 that "a shell including a plurality of vents" is not taught by Sundahl, the Examiner

respectfully disagrees. Sundahl teaches plurality of vents (e.g. two or more of the vents 14-22 and 24-26). It is also noted that it appears the insert (47) is capable of being viewed through the plurality of vents (i.e. through some of the plurality of vents such as 15, 14, and 19; see Fig. 6), and the Examiner respectfully notes that a functional recitation of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Applicant's Arguments, see Pages 10 and 11, with respect to the dependent claims being allowable based on the independent claims, have been considered, but are not persuasive for the reasons presented in the rejections and addressed in the above response to remarks.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNE KOZAK whose telephone number is (571)270-0552. The examiner can normally be reached on Mon - Fri: 8AM - 5:30PM EST.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Clinton Ostrup can be reached on (571) 272-5559. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/ANNE KOZAK/
Examiner, Art Unit 3765

/NATHAN DURHAM/
Primary Examiner, Art Unit 3765

Notice of References Cited	Application/Control No. 13/965,703	Applicant(s)/Patent Under Reexamination CHILSON, JAMES A.	
	Examiner ANNE KOZAK	Art Unit 3765	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-4,075,717 A	02-1978	Lemelson; Jerome H.	A42B3/065	2/412
*	B	US-2006/0059606 A1	03-2006	Ferrara; Vincent R.	A01N25/18	2/412
*	C	US-8,087,101 B2	01-2012	Ferguson; James Riddell	A41D31/005	2/455
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<i>Index of Claims</i> 	Application/Control No. 13965703	Applicant(s)/Patent Under Reexamination CHILSON, JAMES A.
	Examiner ANNE KOZAK	Art Unit 3765

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant		☐ CPA		☐ T.D.		☐ R.1.47				
CLAIM		DATE								
Final	Original	04/01/2015	09/10/2015	12/30/2015	05/17/2016	10/03/2016	05/10/2017			
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	3	✓	✓	✓	✓	-	-			
	4	✓	✓	✓	✓	✓	✓			
	5	✓	✓	✓	✓	✓	-			
	6	✓	✓	✓	✓	✓	-			
	7	✓	✓	✓	✓	✓	✓			
	8	✓	✓	✓	✓	✓	✓			
	9	✓	✓	✓	✓	✓	✓			
	10	✓	✓	✓	✓	✓	✓			
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	27	N	-	-	-	-	-			
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	31			✓	✓	✓	✓			
	32			✓	✓	✓	✓			
	33					✓	✓			
	34					✓	-			
	35					✓	✓			
	36					✓	✓			

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	Examiner ANNE KOZAK	Art Unit 3765

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant										☐ CPA										☐ T.D.										☐ R.1.47									
CLAIM		DATE																																					
Final	Original	04/01/2015	09/10/2015	12/30/2015	05/17/2016	10/03/2016	05/10/2017																																
	37						✓																																
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	41						✓																																
	42						✓																																
	43						✓																																

Search Notes 	Application/Control No. 13965703	Applicant(s)/Patent Under Reexamination CHILSON, JAMES A.
	Examiner ANNE KOZAK	Art Unit 3765

CPC- SEARCHED		
Symbol	Date	Examiner
A42B 3/063,069,12,1,124,127	4/1/2015	AK
Updated above search - conducted a fast & focused STIC search with Fern Birtwistle	8/28/2015	AK
Updated above search	12/18/2015	AK
Updated above search	5/6/2016	AK
Updated above search	9/27/2016	AK
Updated above search	5/11/2017	AK

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
2	414	4/1/2015	AK
Updated above search		8/28/2015	AK

SEARCH NOTES		
Search Notes	Date	Examiner
Conducted an IDS, Inventor, USPC and CPC search with text in EAST	4/1/2015	AK
Updated above search	8/28/2015	AK
Updated above search	12/18/2015	AK
Conducted a new IDS search and updated above search	5/6/2016	AK
Updated above search	9/20/2016	AK
Updated above search	5/11/2017	AK

INTERFERENCE SEARCH

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S2	1	("20130333100").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S3	1	("20120196147").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S5	1	("7254843").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S6	1	("D703871").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:44
S8	1	("20110225706").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:44
S9	2	("20080307568" "8082599").PN.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:45
S10	11	((James) near2 (Chilson)).INV.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:46
S16	82	A42B3/124.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:52
S17	178	A42B3/121.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S18	140	A42B3/127.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S19	109	A42B3/063.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S20	40	A42B3/069.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S21	32	("20010032351" "2381524" "3174155" "3242500" "3501772" "3787893" "3872511" "3906546" "4075717" "4124904" "4307471" "4937888" "5150479" "5177815" "5815846" "6282724" "7089602").PN. OR ("7254843").URFN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 09:54
S22	300	A42B3/12.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:16
S23	156	A42B3/125.cpc.	US-PGPUB;	OR	ON	2015/03/27 10:17

			USPAT			
S24	197	A42B3/10.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:17
S25	4	S23 and (honeycomb liner)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:23
S26	6	("20060059605" "20040117896" "6065158" "5561866" "7930771" "6387200").PN.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:26
S27	15	S22 and (honeycomb liner)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:29
S28	67	S22 and (removable pads)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:31
S29	70	S22 and (removable (pads or inserts))	US-PGPUB; USPAT	AND	ON	2015/03/27 10:33
S30	64	S22 and (removable (pads or inserts))and liner	US-PGPUB; USPAT	AND	ON	2015/03/27 10:33
S31	6	S30 and honeycomb	US-PGPUB; USPAT	AND	ON	2015/03/27 10:34
S32	1	"4985931".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:37
S33	1	"5561866".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:39
S34	4	("20070130670" "5119514" "5336180" "7958570").PN.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:45
S35	81	S18 and (liner and (insert or pad))	US-PGPUB; USPAT	AND	ON	2015/03/27 10:53
S36	7	S35 and key\$2	US-PGPUB; USPAT	AND	ON	2015/03/27 10:53
S37	4	("2012/0036620").URPN.	USPAT	OR	ON	2015/03/27 10:58
S38	1	S18 and (honeycomb pad)	US-PGPUB; USPAT	AND	ON	2015/03/27 11:14
S39	20	S22 and (honeycomb)	US-PGPUB; USPAT	AND	ON	2015/03/27 11:14
S40	1	"5840397".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 11:21
S41	45	("3447163" "3895152" "4422183" "4465725" "4485568" "5203607" "5416924" "5496610").PN. OR ("5840397").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 11:21
S42	189	("0058403" "0357597" "0386191" "0491123" "0891977" "0901592"	US-PGPUB;	OR	ON	2015/03/27 11:23

		"1295297" "1374177" "1374669" "1389767" "1514462" "1573212" "1587508" "1602454" "1622211" "1697833" "1717609" "1887473" "1915754" "20040128748" "20050229293" "2057575" "2165081" "2249966" "2251018" "2266886" "2460895" "2467907" "2539170" "2570497" "2629094" "2774073" "2800663" "2853757" "2884675" "2930046" "3073305" "3146461" "3194233" "3237257" "3295530" "3310053" "3350719" "3407452" "3431560" "3463147" "3506000" "3515142" "3528412" "3581741" "3584622" "3640273" "3674023" "3799158" "3885252" "3909847" "3945046" "4097932" "4136226" "4166460" "4179826" "4237874" "4249524" "4256097" "4280489" "4287920" "4312335" "4325148" "4367733" "4370754" "4381768" "4428080" "4453271" "4455686" "4462115" "4479269" "4513449" "4628945" "4670945" "4691697" "4700407" "4727863" "4844058" "4878274" "4961233" "4962768" "4974343" "5007416" "5029341" "5046197" "5054121" "5105473" "5125400" "5159715" "5168576" "5172494" "5187812" "5259096" "5361410" "5390368" "5487187" "5492133" "5493736" "5536246" "5557804" "5579538" "5636380" "5676641" "5781935" "5792714" "5840397" "5881395" "5974592" "6006363" "6023789" "6074274" "6098209" "6145132" "6161222" "6336220" "6363538" "6401250" "6430752" "6629945").PN. OR ("6845522" "6880269" "6934971" "7389547" "7506384" "D123025" "D301566" "D339902" "D360516" "D423188" "D445724" "D456995" "D480989" "D486093" "D525765" "D543488").PN. OR ("7828759").URPN.	USPAT; USOCR			
S43	0	("2014/0013492").URPN.	USPAT	OR	ON	2015/03/27 12:05
S44	4	("20060059605" "20040117896" "6065158" "5561866" "7930771" "6387200").PN.	USPAT	OR	ON	2015/03/27 12:07
S45	34	("20020120978" "2619639" "3055013" "3241154" "3248738" "3344433" "3447162" "3673609" "3820163" "3843970" "3859666" "3882547" "4558470" "4627114" "5315718" "5603117" "5687426" "5694649" "6105176" "6467099").PN. OR ("6883181").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2015/03/27 12:31
S46	79	S18 and (liner and (removable insert or pad))	US- PGPUB; USPAT	AND	ON	2015/03/27 13:51

S47	22	("20040117896" "20090307827" "20110179557" "20120198604" "20120233745" "20120266366" "20120317705" "20130019384" "20130174331" "20130254978" "4307471" "5056162" "5734994" "5915537" "6065158" "6425141" "6560787" "6658671" "6704943" "7328462" "7509835" "7930771").PN.	US-PGPUB; USPAT	AND	ON	2015/03/27 13:54
S48	134	A42B3/122.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 14:20
S49	10	(US-20140259314-\$ or US-20140223644-\$ or US-20070000032-\$ or US-20070226881-\$ or US-20040261157-\$ or US-20030140400-\$).did. or (US-7082623-\$ or US-5950244-\$ or US-4345338-\$ or US-3720955-\$).did.	US-PGPUB; USPAT	OR	ON	2015/03/27 16:25
S50	58	("3729744" "3783450" "3820163" "3946441" "4006496" "4081865" "4133055" "4134155" "4345338" "4484364" "4534068" "4558470" "5086520" "5269025" "5309576" "5351342" "5428846" "5581819" "5619756" "5669079" "5815846" "5833796").PN. OR ("5950244").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/30 08:21
S52	55	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544-\$).did. or (US-D650132-\$ or US-D645210-\$ or US-8082599-\$ or US-7254843-\$ or US-8986798-\$ or US-8966669-\$ or US-8667618-\$ or US-8512843-\$ or US-8166574-\$ or US-7669378-\$ or US-7089602-\$ or US-6282724-\$ or US-4307471-\$ or US-6387200-\$ or US-6065158-\$ or US-5561866-\$ or US-8533869-\$ or US-4985931-\$ or US-6446271-\$ or US-6185753-\$ or US-4916759-\$ or US-6883181-\$ or US-5088129-\$ or US-5687426-\$ or US-8732869-\$ or US-7828759-\$).did. or (US-6336220-\$ or US-5840397-\$ or US-3447163-\$ or US-5694649-\$ or US-5950244-\$).did.	US-PGPUB; USPAT	OR	ON	2015/03/30 11:56
S53	19	S52 and honeycomb	US-PGPUB; USPAT	OR	ON	2015/03/30 11:57
S54	18	S52 and polycarbonate	US-PGPUB; USPAT	OR	ON	2015/03/30 11:58
S55	7	S52 and (polycarbonate and honeycomb)	US-PGPUB; USPAT	OR	ON	2015/03/30 11:59

S56	1	S52 and (polycarbonate near shell)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:08
S57	0	S52 and (acrylonitrile butadiene styrene near shell)	US-PGPUB; USPAT	AND	ON	2015/03/30 12:10
S58	5	S52 and (acrylonitrile butadiene styrene)	US-PGPUB; USPAT	AND	ON	2015/03/30 12:10
S59	0	S52 and (polycarbonate near shell) and honeycomb	US-PGPUB; USPAT	OR	ON	2015/03/30 12:11
S60	17	S52 and (EPS)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:12
S61	17	S52 and "EPS"	US-PGPUB; USPAT	OR	ON	2015/03/30 12:12
S62	6	S52 and ("EPS" and polycarbonate)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:15
S63	7	S52 and (porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 13:32
S65	2	S52 and (non\$1porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:32
S66	62386	S50/.clas.	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S67	5824	S66 and helmet	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S68	74	S67 and (non\$1porous and porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S69	56	"L21" and (air\$1flow)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S70	9	S68 and (air\$1flow)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:35
S71	27	S68 and (ventilat\$3)	US-PGPUB; USPAT	OR	ON	2015/03/30 16:50
S72	56	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544-\$ or US-20060101556-\$).did. or (US-D650132-	US-PGPUB; USPAT	OR	ON	2015/03/30 16:59

		\$ or US-D645210-\$ or US-8082599-\$ or US-7254843-\$ or US-8986798-\$ or US-8966669-\$ or US-8667618-\$ or US-8512843-\$ or US-8166574-\$ or US-7669378-\$ or US-7089602-\$ or US-6282724-\$ or US-4307471-\$ or US-6387200-\$ or US-6065158-\$ or US-5561866-\$ or US-8533869-\$ or US-4985931-\$ or US-6446271-\$ or US-6185753-\$ or US-4916759-\$ or US-6883181-\$ or US-5088129-\$ or US-5687426-\$ or US-8732869-\$ or US-7828759-\$).did. or (US-6336220-\$ or US-5840397-\$ or US-3447163-\$ or US-5694649-\$ or US-5950244-\$).did.				
S73	9	S72 and cooling	US-PGPUB; USPAT	OR	ON	2015/03/30 17:00
S74	36	S72 and air	US-PGPUB; USPAT	OR	ON	2015/03/30 17:04
S76	59	("3729744" "3783450" "3820163" "3946441" "4006496" "4081865" "4133055" "4134155" "4345338" "4484364" "4534068" "4558470" "5086520" "5269025" "5309576" "5351342" "5428846" "5581819" "5619756" "5669079" "5815846" "5833796").PN. OR ("5950244").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/07/17 18:29
S77	94	("5083320" "5298208" "5450631" "5581819" "5651145" "5659900" "5704072" "5745924" "5774901" "5794272" "5813055" "5829065" "5887288" "5898950" "5915537" "5950244" "5983405" "5991930" "6105176" "6159324" "6292952" "6311338" "6332228" "D285980" "D299180" "D299978" "D300070" "D303851" "D309961" "D310893" "D312148" "D319112" "D326001" "D335366" "D339427" "D340544" "D347300" "D347711" "D348545" "D348750" "D348752" "D351684" "D361407" "D361408" "D361409" "D361410" "D361411" "D363570" "D366538" "D367341" "D367548" "D371867" "D371868" "D380870" "D382370" "D382371" "D383249" "D387500" "D388551" "D389280" "D407857" "D410116" "D410304" "D410571" "D411337" "D411338" "D413185" "D415593" "D415860" "D416110" "D424246" "D426032" "D426677" "D427381" "D427727" "D428534" "D433541" "D490572" "D514259" "D518241" "D549394" "D556951" "D559468" "D572865" "D592809" "D628346" "D645210" "D645619" "D654628").PN. OR ("D672095").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/07/17 18:30
S78	13	("2006/0059605").URPN.	USPAT	OR	ON	2015/07/17 18:37

S79	13	("2006/0059605").URPN.	USPAT	OR	ON	2015/07/17 18:52
S80	56	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544-\$ or US-20060101556-\$).did. or (US-D650132-\$ or US-D645210-\$ or US-8082599-\$ or US-7254843-\$ or US-8986798-\$ or US-8966669-\$ or US-8667618-\$ or US-8512843-\$ or US-8166574-\$ or US-7669378-\$ or US-7089602-\$ or US-6282724-\$ or US-4307471-\$ or US-6387200-\$ or US-6065158-\$ or US-5561866-\$ or US-8533869-\$ or US-4985931-\$ or US-6446271-\$ or US-6185753-\$ or US-4916759-\$ or US-6883181-\$ or US-5088129-\$ or US-5687426-\$ or US-8732869-\$ or US-6336220-\$).did. or (US-5840397-\$ or US-3447163-\$ or US-5694649-\$ or US-5950244-\$ or US-8640267-\$).did.	US-PGPUB; USPAT	OR	ON	2015/07/17 19:05
S81	167	A42B3/28.cpc.	US-PGPUB; USPAT	OR	ON	2015/07/17 19:07
S82	74	A42B3/281.cpc.	US-PGPUB; USPAT	OR	ON	2015/07/17 19:07
S83	143	A42B3/127.cpc.	US-PGPUB; USPAT	OR	ON	2015/07/17 19:17
S84	67	("20040250339" "20040255370" "20050278834" "20060059605" "20060059606" "20060162053" "20060242752" "20060277664" "20070107112" "20070119538" "20070130673" "20070157370" "20070226881" "20080222782" "20090222964" "20110107503" "20110179557" "20120060251" "20120151663" "20120186002" "20120216339" "20120233745" "3174155" "3186004" "3320619" "3577562" "3818508" "3906546" "4101983" "4345338" "4484364" "4599752" "4845786" "4937888" "4972527" "5018220" "5204998" "5259071" "5680656" "5724681" "5930840" "5956777" "6032297" "6272692" "6389607" "6421840" "6709062" "6912736" "6931671" "7062795" "7328462" "7536731" "7676854" "7765621" "7765622" "7802321" "7832023" "7930771"	US-PGPUB; USPAT; USOCR	OR	ON	2015/07/20 09:18

		"7987525" "8166573" "8209784").PN. OR ("8640267").URPN.				
S85	1	"4434514".pn.	US-PGPUB; USPAT	OR	ON	2015/08/27 09:45
S86	1	"1347046".pn.	US-PGPUB; USPAT	OR	ON	2015/08/27 09:46
S87	454	2/414.ccls.	US-PGPUB; USPAT	OR	ON	2015/08/28 12:09
S88	1	"4434514".pn.	US-PGPUB; USPAT	OR	ON	2015/08/28 12:10
S89	330	A42B3/12.cpc.	US-PGPUB; USPAT	OR	ON	2015/12/18 15:04
S90	219	A42B3/121.cpc.	US-PGPUB; USPAT	OR	ON	2015/12/18 15:04
S91	52	A42B3/069.cpc.	US-PGPUB; USPAT	OR	ON	2015/12/18 15:04
S92	106	A42B3/124.cpc.	US-PGPUB; USPAT	OR	ON	2015/12/18 15:04
S93	161	A42B3/127.cpc.	US-PGPUB; USPAT	OR	ON	2015/12/18 15:04
S94	0	("2015/0047113").URPN.	USPAT	OR	ON	2015/12/18 15:05
S95	110	("0935556" "1234589" "1347046" "2769176" "2846683" "2991478" "3082428" "3274612" "3289212" "3310811" "3344433" "3496854" "3783450" "3873997" "3925821" "4044400" "4075714" "4110847" "4115874" "4117553" "4141085" "4305160").PN. OR ("4434514").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/12/18 15:05
S96	1	("D752814").PN.	US-PGPUB; USPAT	OR	ON	2016/09/22 11:59
S99	149	A42B3/063.cpc.	US-PGPUB; USPAT	OR	ON	2016/09/27 11:00
S100	124	A42B3/124.cpc.	US-PGPUB; USPAT	OR	ON	2016/09/27 11:01
S101	184	A42B3/28.cpc.	US-PGPUB; USPAT	OR	ON	2016/09/27 11:01
S102	63	A42B3/069.cpc.	US-PGPUB; USPAT	OR	ON	2016/09/27 11:14
S103	250	A42B3/121.cpc.	US-PGPUB; USPAT	OR	ON	2016/09/27 11:14

S104	477	2/414.ccls.	US-PGPUB; USPAT	OR	ON	2017/05/10 09:00
S105	189	A42B3/28.cpc.	US-PGPUB; USPAT	OR	ON	2017/05/10 09:00
S106	82	A42B3/281.cpc.	US-PGPUB; USPAT	OR	ON	2017/05/10 09:00
S107	221	A42B3/127.cpc.	US-PGPUB; USPAT	OR	ON	2017/05/10 09:00
S108	913	Y10T29/53996.cpc.	US-PGPUB; USPAT	OR	ON	2017/05/10 09:00
S109	115	helmet and honeycomb and vent	US-PGPUB; USPAT	OR	ON	2017/05/10 09:02
S110	1	(helmet near5 vent)and (honeycomb near5 insert)	US-PGPUB; USPAT	OR	ON	2017/05/10 09:05
S111	19	(helmet near5 vent) and honeycomb	US-PGPUB; USPAT	OR	ON	2017/05/10 09:05
S112	493	helmet near5 vent	US-PGPUB; USPAT	OR	ON	2017/05/10 09:13
S113	4652	helmet and bicycle	US-PGPUB; USPAT	OR	ON	2017/05/10 09:15
S114	27	helmet and bicycle and vent and honeycomb	US-PGPUB; USPAT	OR	ON	2017/05/10 09:15
S115	560	honeycomb and sweat	US-PGPUB; USPAT	OR	ON	2017/05/10 09:33
S119	701	honeycomb and (moisture near5 absorption)	US-PGPUB; USPAT	OR	ON	2017/05/10 09:35
S120	218	(honeycomb near5 material) and (moisture near5 absorption)	US-PGPUB; USPAT	OR	ON	2017/05/10 09:35
S121	1	(honeycomb near5 pad) and (moisture near5 absorption)	US-PGPUB; USPAT	OR	ON	2017/05/10 09:37
S122	0	(honeycomb near5 padding) and (moisture near5 absorption)	US-PGPUB; USPAT	OR	ON	2017/05/10 09:37
S123	67	(honeycomb near5 padding)	US-PGPUB; USPAT	OR	ON	2017/05/10 09:37
S124	733	helmet and honeycomb	US-PGPUB; USPAT	OR	ON	2017/05/10 09:44
S125	287	S124 and (moisture or sweat)	US-PGPUB; USPAT	OR	ON	2017/05/10 09:45

S126	90	("0758806" "1131043" "1571827" "1775561" "2445209" "3027564" "3570491" "3578736" "3805790" "3881490" "3882547" "4020507" "4060855" "4274157" "4308623" "4347092" "4354284" "4434514" "4468817" "4502156" "4540414" "4619055" "4626247" "4627115" "4653123" "4815144" "4883734" "4886697").PN. OR ("5025504").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2017/05/10 10:25
S127	1	S126 and honeycomb	US- PGPUB; USPAT; USOCR	OR	ON	2017/05/10 10:27
S128	14	honeycomb and sweatband	US- PGPUB; USPAT; USOCR	OR	ON	2017/05/10 10:37
S129	24	("4434514" "4476589" "5495622" "6598237" "6691322" "0889981" "4945575" "3169251" "3811130" "4550445" "3811130" "1036004" "4114201" "4704746" "3925821" "6376067" "6526595" "7398560" "8516617" "20160291447" "0402182" "0504350" "RE29452" "1194935" "4476589" "0707486").PN.	US- PGPUB; USPAT	OR	ON	2017/05/10 10:48
S130	5	S129 and honeycomb	US- PGPUB; USPAT	OR	ON	2017/05/10 10:48
S131	8	("3169251").URPN.	USPAT	OR	ON	2017/05/10 10:52
S132	18	("1996254" "2302226" "3112184" "3169251" "3447163" "3773614").PN. OR ("3811130").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2017/05/10 11:11
S133	25	("2477852" "3447163" "3811130" "3829900" "3877076" "4484364" "4534068" "4558470" "4627114" "5349893" "5518796" "5918309" "5942307" "6336220" "7089602" "7150217" "7254843").PN. OR ("8082599").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2017/05/10 11:13
S135	82	("2738297" "3130414" "3395067" "3447163" "3575786" "3582990" "3862879" "3916060" "4198454" "4241131" "4413357" "4422183" "4472472" "4483020" "4510200" "4566237" "4648136" "4739690" "4774724" "5087516" "5110661" "5200256" "5221807" "5317950" "5349893" "5364679" "5373582" "5444881" "5471906" "5534343").PN. OR ("5918309").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2017/05/10 11:37
S136	22	S135 and honeycomb	US- PGPUB; USPAT; USOCR	OR	ON	2017/05/10 11:38
S137	18	S136 and absorb\$3	US- PGPUB;	OR	ON	2017/05/10 11:39

			USPAT; USOCR			
S138	6	S136 and moisture	US- PGPUB; USPAT; USOCR	OR	ON	2017/05/10 11:40
S139	58	("3447163").URPN.	USPAT	OR	ON	2017/05/10 11:51
S140	81	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544-\$ or US-20060101556-\$ or US-20130263363-\$).did. or (US-20040250339-\$ or US-20160286886-\$ or US-20040117896-\$ or US-20150282550-\$ or US-20140373257-\$ or US-20070130672-\$ or US-20110189440-\$ or US-20150237942-\$).did. or (US-D650132-\$ or US-D645210-\$ or US-8082599-\$ or US-7254843-\$ or US-8986798-\$ or US-8966669-\$ or US-8667618-\$ or US-8512843-\$ or US-8166574-\$ or US-7669378-\$ or US-7089602-\$ or US-6282724-\$ or US-4307471-\$ or US-6387200-\$ or US-6065158-\$ or US-5561866-\$ or US-8533869-\$ or US-4985931-\$ or US-6446271-\$ or US-6185753-\$ or US-4916759-\$ or US-6883181-\$ or US-5088129-\$ or US-5687426-\$ or US-8732869-\$ or US-6336220-\$).did. or (US-5840397-\$ or US-3447163-\$ or US-5694649-\$ or US-5950244-\$ or US-8640267-\$ or US-6332228-\$ or US-4434514-\$ or US-1347046-\$ or US-7654260-\$ or US-8359668-\$ or US-6453476-\$ or US-D752814-\$ or US-5201125-\$ or US-5025504-\$ or US-8850617-\$ or US-5862523-\$ or US-3169251-\$ or US-3811130-\$ or US-7150217-\$ or US-5918309-\$ or US-8087101-\$).did.	US- PGPUB; USPAT	OR	ON	2017/05/10 13:08
S141	16	S140 and moisture	US- PGPUB; USPAT	OR	ON	2017/05/10 13:08
S142	5052	urethane and honeycomb	US- PGPUB; USPAT	OR	ON	2017/05/10 17:27
S143	2	S140 and (urethane and honeycomb)	US- PGPUB; USPAT	OR	ON	2017/05/10 17:27
S144	46	("20020002730" "20040171321" "20040249056" "20050037189" "20060006987" "20060234577" "20060277664" "4558470" "4646367"	US- PGPUB; USPAT; USOCR	OR	ON	2017/05/10 17:29

		"4698852" "4947488" "5090053" "5180619" "5349893" "5561866" "5599290" "5830548" "5840400" "5854143" "5878780" "5918309" "5930841" "5946734" "6065159" "6093468" "6247181" "6266827" "6336220" "6339849" "6349416" "6381760" "6397399" "6467099" "6625820" "6675395" "6701529" "7058989" "7062795" "7089602" "7103923" "7226878" "7235291") .PN. OR ("8087101") .URPN.				
S145	104	TPU and honeycomb and cylind\$5	US- PGPUB; USPAT	OR	ON	2017/05/10 17:35
S146	14	S140 and cylind\$5	US- PGPUB; USPAT	OR	ON	2017/05/10 17:40
S147	68	"2657385" "3529306" "4213202" "4307471" "5349893" "5669079" "6240570" "6343385" "6743325" "3881130" "7150217" "20050273910" "20060059605" "5090053" "5840397" "5920915" "4627114" "5942307" "6336220" "7089602" "20010047537" "4219892" "4766614" "5720047" "5734994" "5745923" "6519781" "4484364" "5518796" "5918309" "7254843" "20040112389" "3454963" "4666130" "5518796" "6418832" "20070029690" "3447163" "20050246824" "4024586" "6301722" "2447852" "20020004947" "20060070171" "3577836" "4613993" "5113526" "5204998" "5950243" "6381759" "6969548" "20070083965" "5349893" "20060059606" "3447163" "4133055" "4142252" "6282724" "6336220" "2298986" "3404406" "5496610" "4534068" "20060070170" "20070000032" "20080066217" "4343047" "4422183" "4864738" "6032300" "6314586" "5534343") .PN.	US- PGPUB; USPAT	OR	ON	2017/05/10 17:42
S148	6	S147 and urethane	US- PGPUB; USPAT	OR	ON	2017/05/10 17:43
S149	1	"4075717".pn.	US- PGPUB; USPAT	OR	ON	2017/05/11 15:31

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/965,703	08/13/2013	James A. Chilson	P240940.US.01	5250
27076 7590 02/07/2017 DORSEY & WHITNEY LLP - Seattle INTELLECTUAL PROPERTY DEPARTMENT Columbia Center 701 Fifth Avenue, Suite 6100 SEATTLE, WA 98104-7043			EXAMINER KOZAK, ANNE M	
			ART UNIT 3765	PAPER NUMBER
			NOTIFICATION DATE 02/07/2017	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocket-se@dorsey.com
seattle.ip@dorsey.com

<i>Applicant-Initiated Interview Summary</i>	Application No.	Applicant(s)	
	13/965,703	CHILSON, JAMES A.	
	Examiner	Art Unit	
	ANNE KOZAK	3765	

All participants (applicant, applicant's representative, PTO personnel):

(1) ANNE KOZAK. (3) ELEN WETZEL.

(2) RICHALE QUINN. (4) ____.

Date of Interview: 27 January 2017.

Type: ☒ Telephonic ☐ Video Conference
 ☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
 If Yes, brief description: _____.

Issues Discussed ☐ 101 ☒ 112 ☐ 102 ☒ 103 ☐ Others
 (For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 1 and 13.

Identification of prior art discussed: Sundahl and Sajic (as cited on PTO-892).

Substance of Interview
 (For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Differences between the inventive concept and prior art were discussed, including features of the honeycomb material. Examiners noted that the amended claims do not appear to overcome the cited art, and further structural distinction of the helmet with respect to the arrangement, shape, and/or other properties of the shock absorbing insert may be necessary to distinguish the claimed invention over the prior art. With respect to the 112 rejection and Claim 13, Applicant's proposed amendment clarifies the claimed feature and would thus obviate this rejection to Claim 13. It was noted by the Examiners that the specification may need to be updated to reflect the language in the claims (e.g. tubular energy absorbing cells, see Claim 33) and proposed claims (e.g. plurality of tubes, see proposed Claim 1) to clarify the claimed subject matter, and support for this language in the specification and claims should be noted in the remarks section of the response to avoid any new matter issues. No particular agreements were reached regarding specific claim language, and Applicant agreed to file a formal response.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☒ Attachment

/RICHALE QUINN/ Primary Examiner, Art Unit 3765	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

DO NOT ENTER
/AK/ 1/27/17



FAX COVER SHEET

The information contained in this facsimile message, if a client of this firm is a named addressee, or the message is otherwise intended for a client, is presumptively legally privileged and confidential information. If you are not a named addressee, or if there is any reason to believe that you may have received this message in error, (1) do not read the message below; (2) do not distribute or copy this facsimile; and (3) please immediately call us collect at the number of the sender below.

DATE:	January 26, 2017	TOTAL # OF PAGES:	3
		(INCLUDING THIS COVER SHEET)	
TO:	Examiner Kozak	FAX #:	(571) 270-9307
FIRM NAME:	USPTO	PHONE #:	
FROM:	Elen Wetzel	FAX #:	(206) 903-8820
PHONE #:	(206) 903-2415	EMAIL:	wetzel.elen@dorsey.com

COMMENTS:

Please see enclosed a proposed agenda for an interview on Jan. 27, 2017 at 2:30 p.m. EST (11:30 a.m. PST).

Thanks.

ORIGINALS WILL NOT BE SENT

PLEASE CONTACT TINA CHOI AT (206) 903-8781 IF THIS TRANSMISSION IS INCOMPLETE OR CANNOT BE READ.

REFERENCE # Appl. #13/965,703; 453868-00326; P240940.US.01

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Examiner Kozak

RE: Application No. 13/965,703

Proposed agenda for Examiner interview on Jan 27, 2017, 2:30pm EST

Applicant thanks the Examiner for scheduling the subject telephone interview. A brief outline of Applicant's contemplated discussion is provided below. Additional items that would facilitate effective and efficient prosecution of this matter would of course be welcomed.

1. Discussion of the 35 U.S.C. § 103 rejections:
 - a. Discuss combination of Sundhal and Sajic
 - b. Discuss rejections of the independent claims and/or possible amendments, if needed
2. Discussion of the 35 U.S.C. § 112 rejections.
3. If agreement on the patentability of the claims is not reached, claim amendments to place the claims in allowable form may also be discussed. For informal discussion purposes only, an example claim amendment is attached.
4. Discuss any Examiner suggestions to expedite prosecution.

This Itinerary is for informal guidance only. It is not intended to be an exclusive list of what is to be discussed or of the deficiencies of the rejections, nor does it represent Applicant's final position on any matter.

Elen Wetzel
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(206)903-2415

1. A helmet, comprising:

a shell including a vent;

a shock absorbing liner directly attached to the shell, wherein the shock absorbing liner is formed of a first shock absorbing material adjacent to the shell and ~~comprises~~ defines a cavity at least partially aligned with the vent; and

~~a shock absorbing insert formed of a second shock absorbing material different from the first shock absorbing material and positioned in the cavity, wherein the second shock absorbing material is porous, and wherein the second shock absorbing material provides the same or better shock absorption than the first shock absorbing material~~ comprises a plurality of tubes in a closely packed array.

13. A helmet, comprising:

a shell comprising a vent;

a seamless shock absorbing liner forming a concave shape, wherein the shock absorbing liner is attached to the shell and comprises a cavity at least partially aligned with the vent; and

an insert retained in the cavity in the shock absorbing liner, wherein the insert fills the cavity such that any air passing through the vent from outside the helmet toward a concave side of the shock absorbing liner passes through the insert,

wherein sidewalls of the shock absorbing liner defining the cavity are shaped such that a distance between the sidewalls along a first curved side of the insert is greater than a distance between the sidewalls along a second curved side of the insert opposite the first curved side.

31. A helmet, comprising:

a shell including a vent;

a shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the vent; and

a honeycomb insert positioned in the cavity.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 13/965,703

Confirmation No. : 5250

First Named Inventor : James A. Chilson

Filed : August 13, 2013

Attorney Docket No.: P240940.US.01

Art Unit : 3765

Customer No. : 27,076

Examiner : Anne M. Kozak

Title : HELMET WITH SHOCK ABSORBING INSERTS

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE UNDER 37 C.F.R. § 1.111

Madam:

Applicant acknowledges receipt of the Office Action dated October 3, 2016. The Commissioner is hereby authorized to charge any deficiency of fees that may be required, or credit any overpayment, to Deposit Account No. 50-1266. Please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A helmet, comprising:
a shell including a vent;
a shock absorbing liner attached to the shell, wherein the shock absorbing liner is formed of a first shock absorbing material adjacent to the shell and comprises a cavity at least partially aligned with the vent; and
a shock absorbing insert formed of a second shock absorbing material different from the first shock absorbing material, tubes arranged in a closely packed array and positioned in the cavity, wherein the second shock absorbing material is porous, and wherein the second shock absorbing material provides the same or better shock absorption than the first shock absorbing material, and wherein the tubes are oriented in the cavity to allow air to flow from an outside of the helmet toward a concave side of the helmet.
2. (Original) The helmet of claim 1, wherein the shock absorbing insert is configured to be manually deformed to be removed from the cavity.
3. (Cancelled)
4. (Previously Presented) The helmet of claim 1, wherein the first shock absorbing material is non-porous.
5. (Cancelled)
6. (Cancelled)

7. (Previously Presented) The helmet of claim 1, wherein the first shock absorbing material comprises:

first and second sidewalls defining the cavity,

and wherein the first and second sidewalls are angled relative to one another such that a distance between the first and second sidewalls along a first curved side of the shock absorbing insert is greater than a distance between the first and second sidewalls along a second curved side of the shock absorbing insert opposite the first curved side.

8. (Previously Presented) The helmet of claim 1 wherein the cavity is configured such that a distance along a first curved side of the shock absorbing insert is greater than a distance along a second curved side of the shock absorbing insert opposite the first curved side when the shock absorbing insert is positioned in the cavity.

9. (Currently Amended) The helmet of claim 1, wherein a wall of the shock absorbing liner defining the cavity includes a recess and wherein the shock absorbing insert includes a protrusion keyed to the recess ~~in the cavity of the shock absorbing liner.~~

10. (Currently Amended) The helmet of claim 1, wherein an edge of the shock absorbing insert is rounded to form a semi-ovular shape that is keyed to a recess defined in wall of the shock absorbing liner defining the cavity ~~of the shock absorbing liner.~~

11. (Previously Presented) The helmet of claim 1, wherein the shock absorbing liner includes tabs protruding laterally across the cavity that are configured to retain the shock absorbing insert.

12. (Original) The helmet of claim 1, wherein the shell comprises at least one of polycarbonate (PC) or Acrylonitrile butadiene styrene (ABS), and wherein the shock absorbing liner comprises at least one of expanded polystyrene (EPS) or expanded polypropylene (EPP).

13-27. (Canceled)

28. (Previously Presented) The helmet of claim 1, wherein a thickness of the shock absorbing insert is equal to or less than a thickness of the shock absorbing liner.

29. (Cancelled)

30. (Cancelled)

31. (Currently Amended) A helmet, comprising:
a shell including a plurality of vents;
a shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the plurality of vents; and
a honeycomb insert positioned in the cavity such that the honeycomb insert is visible through the plurality of vents.

32. (Previously Presented) The helmet of claim 31, wherein the shock absorbing liner is seamless.

33. (Currently Amended) The helmet of claim 31, wherein the honeycomb insert ~~comprises~~ is formed of an array of tubules ~~as energy absorbing cells~~.

34. (Cancelled)

35. (Currently Amended) The helmet of claim ~~[[22]]~~ 31, wherein the honeycomb insert is one of a plurality of honeycomb inserts which cover more extend along more than 90% of the inner surface of the liner.

36. (Currently Amended) The helmet of claim ~~[[22]]~~ 31, wherein the ~~plurality of honeycomb insert~~ includes at least one insert extends ~~to a back of the helmet~~.

37. (New) The helmet of claim 33, wherein tubes are cylindrical in shape.

38. (New) The helmet of claim 37, wherein tubes are oriented along a thickness of the honeycomb insert.

39. (New) The helmet of claim 1, wherein the tubes are oriented along a thickness of the shock absorbing insert.

40. (New) The helmet of claim 1, wherein the tubes are cylindrical or circular conical in shape.

41. (New) The helmet of claim 1, wherein a thickness of the shock absorbing insert is equal to or less than a thickness of the shock absorbing liner.

42. (New) The helmet of claim 1, wherein the vent is one of a plurality of vents and wherein the shock absorbing insert is visible through the plurality of vents.

43. (New) The helmet of claim 1, wherein the shock absorbing is one of a plurality of shock absorbing inserts which extend along more than 50% of an inner surface of the shock absorbing liner.

REMARKS

Claims 1, 2, 4, 7-12, 28, 31-33, 35-43 are pending after inclusion of the present amendment. Claim 5, 6, 13, 14, 16, 17, 20-22, 29, 30, and 34 have been cancelled without prejudice. Claims 1, 9, 10, 31, 33, 35, and 36 have been amended and new claims 37-43 have been added to recite features disclosed in the application as filed, including the specification, drawings, and originally filed claims. No new matter has been added.

Examiner interview

Applicant would like to thank Examiners Kozak and Quinn for their courtesy in conducting a telephone interview with Applicant's representatives, Elen Wetzel and Kerry Lee Andken, on January 27, 2017. During the interview, Ms. Wetzel and the Examiners discussed the rejections in the Office Action, dated October 3, 2016 ("Office Action") and distinguishing features of the claims over the applied references, specifically over U.S. Patent No. 4,434,514 to Sundahl ("Sundahl") and U.S. Patent No. 8,082,599 to Sajic ("Sajic"). Applicant's representative pointed out that the office action did not establish a *prima facie* case for combining U.S. Patent No. 4,434,514 to Sundahl ("Sundahl") with U.S. Patent No. 8,082,599 to Sajic ("Sajic"). Proposed amendments to some of the claims were discussed. No specific agreement was reached.

Objection to specification

The Office Action objected to the specification for purportedly failing to provide proper antecedent basis for certain claimed subject matter. Without agreeing to the objection, and as further discussed below, Applicant submits that the amendments made, which are made to expedite to expedite the indication of allowable subject matter and not specifically in acquiescence with any rejection in the Office Action, render the objection to the specification moot. For example, claim 34 has been canceled thus the objection relating to claim 34 is rendered moot. Claim 33 has been amended also rendering the objection moot. With regards to claim 33, the Office Action objected to the use of the term "tubular energy absorbing cells." While Applicant believes that this term is supported in the specification (see at least paragraphs [0012] and [0014]), claim 33 has been amended and no longer recites the objected to term. Withdrawal of the objections is respectfully requested.

35 U.S.C. 112

The Office Action rejected claims 33 and 34 under 35 U.S.C. 112(a) as purportedly failing to comply with the written description requirement. Without acquiescence or agreement, but solely to expedite the indication of allowable subject matter, claim 34 has been cancelled rendering the rejection moot. As noted above, claim 33 has been amended and no longer recites the objected to term. Therefore, the 35 U.S.C. 112(a) rejections should be withdrawn.

Claims 1, 2, 5-12, 13, 14, 16, 17, 20-22, 28-30, and 34-36 were rejected under 35 U.S.C. 112(b) as purportedly being indefinite. Specifically, claim 1, and claims 2, 5-12, and 28 which depend from claim 1, were rejected over a term, which is no longer recited in claim 1. The 35 U.S.C. 112(b) rejection of these claims should therefore be withdrawn. Claims 13, and dependent claims 14, 16, 17, 20-22, and 30, as well as claim 34 have been cancelled without prejudice or disclaimer. The 35 U.S.C. 112(b) rejection of these claims is therefore moot. Claims 35 and 36 now depend from claim 31 and thus the 35 U.S.C. 112(b) rejection of these claims is moot.

Withdrawal of the 35 U.S.C. 112 rejections is respectfully requested.

Non-obviousness over Sundahl and Sajic

Claims 1-3, 5-8, 16, 17, 28, and 31-37 were rejected under 35 U.S.C. 102(a)(1) as unpatentable over Sundahl in view of Sajic. Of these, claims 1 and 31 are independent, and have been amended without acquiescence but solely to expedite the indication of allowable subject matter. Sundahl and Sajic do not render obvious the combination of elements recited in amended claims 1 and 31 and accordingly, the rejection of claims 1 and 31 over Sundahl and Sajic should be withdrawn.

Claim 1 is directed to a helmet and recites in part “a shell including a vent” “a shock absorbing liner attached to the shell, wherein the shock absorbing liner is formed of a first shock absorbing material adjacent to the shell and comprises a cavity at least partially aligned with the vent,” and “a shock absorbing insert formed of tubes arranged in a closely packed array and positioned in the cavity, and wherein the tubes are oriented in the cavity to allow air to flow from an outside of the helmet toward a concave side of the helmet.” Support for the amendments

to claim 1 can be found in the application as originally filed, for example at least in paragraph [0012] and FIGS. 1-5.

The Office Action relies on the perspiration absorbing pad 47 of Sundahl to correspond with Applicant's "shock absorbing insert" in the combination previously claimed. *See* Office Action, pages 5-6. The Examiner agrees that Sundahl does not disclose a shock absorbing insert which is formed of tubes arranged in a closely packed array as is now recited in amended claim 1. *See e.g.*, Office Action, page 8 addressing previous claim 6, which contained a similar, although not identical, recitation of energy absorbing cells in the shape of tubes. To reject previous claim 6, now cancelled, the Examiner relied on the combined teachings of Sundahl and Sajic. Applicant submits that a person of ordinary skill in the art would not be motivated to combine Sundahl and Sajic as suggested by the Examiner and therefore Sundahl and Sajic do not render claim 1 obvious.

The entire portion of Sundahl which describes the perspiration absorbing pad 47 is reproduced below for convenience. Sundahl states that:

"As seen in FIGS. 3, 6 and 7 the front opening 14 in the shell, and liner opening 114, communicate with forward ends of channels 35 and 36, via space 46 which is in turn covered by a perspiration absorbing pad 47. The latter is shown to have generally rectangular form and is peripherally frictionally retained at 48 by matching inner edge 49a of padding 49. Pad 47 is removable, whereas padding 49 is bonded to the liner inner surface. Further, pad 47 contains multiple through openings 50 to allow air flow therethrough, whereby air in the space 46 (received via front opening 14 and exiting via channels 35 and 36) may circulate to the brow of the wearer, to cool same. When pad 47 is soaked with perspiration, it may be quickly grasped and pulled out to be wrung out, and then just as quickly replaced, as by the wearer during the course of a bicycle race. Space 46 overlies opening 14 and the front ends of channels 35 and 36, and underlies pad 47."

Sundahl does not expressly disclose the material which is used to form the component 47 but simply describes it as a "perspiration absorbing pad," which when "soaked with perspiration... may be quickly grasped and pulled out to be wrung out, and then just as quickly replaced, as by the wearer during the course of a bicycle race." Based on this description, Sundahl teaches a perspiration absorbing pad made from a material which is suitable to absorb perspiration and to be wrung out and replaced in the helmet, which suggests to a person of skill in the art that the pad 47 should be made of a material which is capable of being twisted and/or compressed in order to force out water or other liquid therefrom.

The Examiner suggest that a person of ordinary skill in the art would be motivated to replace the “perspiration absorbing pad 47” of Sundahl with the honeycomb cells 60 or tubes 22 that form the core material 20 of Sajic. *See generally*, Office Action, page 8. As the motivation for such substitution, the Examiner states that “doing so would give rise to increased energy absorbing performance, and would therefore improve the safety device.” *See id.*

As an initial matter, there is no indication in Sundahl that the perspiration pad is intended to serve an energy absorbing function and therefore there is no evidence that increasing the energy absorbing capability of the perspiration absorption pad would improve the performance of the Sundahl helmet. With respect to the perspiration absorption pad, Sundahl only teaches that a pad 47 is provided for perspiration absorption and that it is capable of being wrung out and then replaced, presumably to absorb more perspiration. There is no evidence of record that would suggest that the core material 20 of Sajic would be a suitable material for perspiration absorption nor that it would be capable of being wrung out and then replaced for subsequent use. Therefore, the purported combination is not supported by the evidence of record but is instead arrived at based solely on hindsight reconstruction of the claimed invention.

It is further submitted that the references teach away because the purported substitution would render the perspiration absorption pad inoperative for its intended purpose. It has been well established that a combination that would render the prior art invention unsatisfactory for its intended purpose is not obvious. *See e.g., In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); MPEP 2143.01. V. As noted above, Sundahl requires a perspiration absorbing pad 47 which is capable of being wrung out and replaced. Sajic discloses a core material, which is specifically designed to avoid the risk of global buckling (i.e., compression) because such global buckling would be detrimental to the functioning of the core material. *See e.g.*, Col 5, ll. 59-65. In this regard, Sajic describes a specific method of forming a sandwich panel which sandwiches the core material (i.e., the array of hollow tubes) between two skins that are bonded to the upper and lower surface of the core material. *See* Col 6, ll. 48-67. There is no evidence in Sajic, that it would be advisable or practical to use only the core material 20 without it being sandwiched between the skins 40 and 50 or that the core material 20 would provide a useful function if placed in a cavity with the upper and lower sides of the core not being supported by a skin. Furthermore, it is evident that the core material 20 is not intended to

be repeatedly wrung out and replaced but rather care is taken in Sajic to secure the core material 20 with the tubes being in certain alignment between skins 40 and 50.

Accordingly, Applicant submits that because the references teach away from the purported combination and because the Office Action fails to provide a motivation for combining the reference based on the facts of record, a *prima facie* case of obviousness has not been established and the 35 U.S.C. 103 rejection of claim 1 should be withdrawn.

Analogous arguments apply to claim 31, which includes similar recitations and was similarly rejected over the combined teachings of Sundahl and Sajic. Specifically, **claim 31** is directed to a helmet and recites as amended in part “a shell including a plurality of vents,” “a shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the plurality of vents,” and “a honeycomb insert positioned in the cavity such that the honeycomb insert is visible through the plurality of vents.” The amendments to claim 31 are supported by the application as originally filed, including the specification, figures (*see e.g.*, FIG. 1 which shows one example in which the insert 124 that is visible through two vents) and originally filed claims.

As discussed above with respect to claim 1, Sundahl and Sajic do not teach or suggest a honeycomb insert positioned in the cavity because neither of the references teaches this element and because there is no motivation to combine the references to arrive at the claimed combination. Sundahl and Sajic also fail to teach or suggest a honeycomb insert positioned in the cavity such that it is visible through a plurality of vents nor has the Examiner relied on the references in such capacity. Reconsideration and withdrawal of the 35 U.S.C. 103 rejection of claim 31 over Sundahl and Sajic is respectfully requested.

Dependent Claims

Claims 2, 4, 7-12, 28, 32-43 depend from and include all of the elements of at least one of Applicant's respective independent claims discussed above. These claims are patentably distinguished over the applied references because of their dependency on patentable independent claims and also because of the additional elements recited in those claims. Accordingly, for at least the reasons discussed above with respect to Applicant's independent claims, reconsideration and withdrawal of the rejections of claims 2, 4, 7-12, 28, and 32-36 is respectfully requested. Applicant has, for brevity, chosen not to individually discuss additional

distinguishing characteristics of the dependent claims. Applicant's silence should not be interpreted as belief that the dependent claims are patentable only by virtue of their dependence on a patentable independent claim.

Request for Interview

Favorable consideration and a timely Notice of Allowance are respectfully requested. In the interest of efficient prosecution and if the Examiner's reply to this communication is anything other than allowance of all pending claims, Applicant formally requests an interview with the Examiner to expedite the resolution of any remaining issues. The Examiner is invited to contact the undersigned to discuss any such remaining issues.

Respectfully submitted,
DORSEY & WHITNEY LLP

February 3, 2017

/Elen Wetzel/

Date

Elen Wetzel
Registration No. 69,563
Telephone No. (206) 903-2415

EW:rar

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Electronic Patent Application Fee Transmittal				
Application Number:		13965703		
Filing Date:		13-Aug-2013		
Title of Invention:		HELMET WITH SHOCK ABSORBING INSERTS		
First Named Inventor/Applicant Name:		James A. Chilson		
Filer:		Elen Wetzel/Randi Rowe		
Attorney Docket Number:		P240940.US.01		
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension - 1 month with \$0 paid	1251	1	200	200
Miscellaneous:				
Total in USD (\$)				200

Electronic Acknowledgement Receipt	
EFS ID:	28265240
Application Number:	13965703
International Application Number:	
Confirmation Number:	5250
Title of Invention:	HELMET WITH SHOCK ABSORBING INSERTS
First Named Inventor/Applicant Name:	James A. Chilson
Customer Number:	27076
Filer:	Elen Wetzel/Randi Rowe
Filer Authorized By:	Elen Wetzel
Attorney Docket Number:	P240940.US.01
Receipt Date:	03-FEB-2017
Filing Date:	13-AUG-2013
Time Stamp:	20:33:39
Application Type:	Utility under 35 USC 111(a)

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Payment Type	CARD
Payment was successfully received in RAM	\$200
RAM confirmation Number	020617INTEFSW20341900
Deposit Account	501266
Authorized User	Randi Rowe
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		20170203_Response_P240940 US01.pdf	145955	yes	11
			3259de2f0abc2686128c14a50ed1f99c24aa58d4		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Claims		2	5	
	Applicant Arguments/Remarks Made in an Amendment		6	11	
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30823	no	2
			a661a2d91feb8e5d7f8b6cc4ba4980c126f7e03e		
Warnings:					
Information:					
Total Files Size (in bytes):			176778		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875				Application or Docket Number 13/965,703		Filing Date 08/13/2013		☐ To be Mailed				
ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO												
APPLICATION AS FILED – PART I												
(Column 1)		(Column 2)										
FOR		NUMBER FILED		NUMBER EXTRA		RATE (\$)		FEE (\$)				
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A		N/A		N/A						
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A		N/A		N/A						
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A		N/A		N/A						
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 =		*		X \$ =						
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 =		*		X \$ =						
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).										
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))												
* If the difference in column 1 is less than zero, enter "0" in column 2.						TOTAL						
APPLICATION AS AMENDED – PART II												
(Column 1)		(Column 2)		(Column 3)								
AMENDMENT	02/03/2017		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))		* 22		Minus ** 27		=		X \$ =			
	Independent (37 CFR 1.16(h))		* 2		Minus *** 3		=		X \$ =			
	☐ Application Size Fee (37 CFR 1.16(s))											
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))											
						TOTAL ADD'L FEE						
(Column 1)		(Column 2)		(Column 3)								
AMENDMENT			CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))		*		Minus **		=		X \$ =			
	Independent (37 CFR 1.16(h))		*		Minus ***		=		X \$ =			
	☐ Application Size Fee (37 CFR 1.16(s))											
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))											
						TOTAL ADD'L FEE						
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.												

LIE
KATRINA . TURNER

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/965,703	08/13/2013	James A. Chilson	P240940.US.01	5250

27076 DORSEY & WHITNEY LLP - Seattle INTELLECTUAL PROPERTY DEPARTMENT Columbia Center 701 Fifth Avenue, Suite 6100 SEATTLE, WA 98104-7043	7590 10/03/2016

EXAMINER	
KOZAK, ANNE M	

ART UNIT	PAPER NUMBER
3765	

NOTIFICATION DATE	DELIVERY MODE
10/03/2016	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocket-se@dorsey.com
IPDocket_SE@dorsey.foundationip.com
lash.dawn@dorsey.com

Office Action Summary	Application No. 13/965,703	Applicant(s) CHILSON, JAMES A.	
	Examiner ANNE KOZAK	Art Unit 3765	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/18/2016.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

- 5) ☒ Claim(s) 1,2,4-14,16,17,20-22 and 28-36 is/are pending in the application.
5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1,2,4-14,16,17,20-22 and 28-36 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) ☒ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 8/13/2013 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some** c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date ____.
- 3) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 4) ☐ Other: ____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/18/2016 has been entered.

Status of Claims

Claims 1, 4, 8, 13, 16, and 22 have been amended, Claims 33-36 are new, and Claims 3, 15, 18, 19, and 23-27 are canceled. Claims 1, 2, 4-14, 16, 17, 20-22, and 28-36 are pending in this application.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required, as the specification does not disclose:

- “tubular energy absorbing cells” (Claim 33, line 2).
- “the shock absorbing insert is bonded to the shock absorbing liner” (Claim 34, lines 1 and 2)

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112(a):

(a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it

is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

The following is a quotation of the first paragraph of pre-AIA 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 33 and 34 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor or a joint inventor, or for pre-AIA the inventor(s), at the time the application was filed, had possession of the claimed invention. There does not appear to be support in the originally filed specification for "tubular energy absorbing cells" (Claim 33, line 2). There also does not appear to be support in the originally filed specification for "the shock absorbing insert is bonded to the shock absorbing liner" (Claim 34, lines 1 and 2).

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2, 5-12, 13, 14, 16, 17, 20-22, 28-30, and 34-36 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Regarding claim 1, in the phrase "provides the same or better shock absorption," it is unclear what type of shock absorption (e.g. single high impact, cyclical low impact, etc.) or material property (e.g. toughness, ductility, etc.) is being referred to by the phrase "same or better shock absorption", and it is therefore indefinite since it unclear what is being claimed. For examination purposes, "provides the same or better shock absorption" has been construed as provides the properties of a honeycomb material (as the recited material of the first shock absorbing insert, see Claim 5).

Regarding claim 13, in the phrase "passing through the vent from outside toward a concave side," it is unclear what portion "outside" is referring to, and it is therefore indefinite since it unclear what is being claimed. For examination purposes, "passing through the vent from outside toward a concave side," has been construed "passing through the vent from outside the shell toward a concave side."

Regarding claim 33, in the phrase "tubular energy absorbing cells" (Claim 33, line 2), it is unclear whether the portion is referring to the honeycomb structure including the tube (as described in Para. [012]) or some other type of energy absorbing cells, and it is therefore indefinite since it is unclear what is being claimed. For examination purposes, "tubular energy absorbing cells" has been construed as the honeycomb structure including a tube.

Regarding claim 34, in the phrase "the shock absorbing insert is bonded to the shock absorbing liner," it is unclear what portions are bonded since the specification

details the inserts being retained in the cavity without bonding (see Para. [016] of the instant application) and the liner bonded to an inner surface of the shell (see Para. [015]), and it is therefore indefinite since it is unclear what is being claimed. For examination purposes, "the shock absorbing insert is bonded to the shock absorbing liner," has been construed the shock absorbing liner is capable of being bonded to an inner surface of the shell.

Any remaining claims are rejected as depending from a rejected base claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 5-8, 16, 17, 28, 31-34 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Sundahl (U.S. 4,434,514) in view of Sajic (U.S. 8,082,599).

Regarding claim 1, Sundahl teaches a helmet (10) comprising a shell (11) including a vent (front opening 14); a shock absorbing liner (liner 12 including padding 49) attached to the shell (11), wherein the shock absorbing liner (liner 12 including padding 49) is formed of a first shock absorbing material (material of 12 and padding 49; semi-flexible foam plastic; see Col. 2, lines 20-21) adjacent to the shell and comprises a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) at least partially aligned (see Fig. 6) with the vent (front opening 14); and a shock absorbing insert (pad 47)

formed of a second shock absorbing material (i.e. material containing multiple through openings; see Col. 3, line 50, and designated with a different marking indicating that the material is a different material; see MPEP 37 CFR 1.84(n)) different from the first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) and positioned in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) wherein the second shock absorbing material (i.e. material containing multiple through openings; see Col. 3, line 50) is porous (i.e. has multiple through openings; see Col. 3, line 50), and wherein the second shock absorbing material (i.e. material containing multiple through openings; see Col. 3, line 50) provides shock absorption (e.g. the material containing multiple through openings would provide some shock absorption value as compared to having no material) and a first shock absorbing material (i.e. shock absorption value of material of 12 and padding 49; semi-flexible foam plastic; see Col. 2, lines 20-21), but does not teach the same or better shock absorption between second shock absorbing material as compared to the first shock absorbing material. It is noted that "better shock absorption" has been interpreted as having the shock absorption of the claimed material (i.e. of the honeycomb material).

Sajic teaches a similar configuration (i.e. a second shock absorbing material in the form of a sandwich panel and made of honeycomb cells 60; see Fig. 4 and 5) being the same material (honeycomb cells 60; see Fig. 4 and 5) as the second shock absorbing material claimed (see Claim 5 of the instant application), and therefore

presumably having the same shock absorption properties as the second shock absorption material claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of an insert with a second shock absorbing material to include Sajic's teaching of an insert with a second shock absorbing material having better shock absorption since doing so would give rise to increased energy absorbing performance, and would therefore improve the safety of the device (Col. 2, lines 2-4 of Sajic).

Regarding claim 2, the combined references teach the claimed invention and wherein the shock absorbing insert (pad 47 of Sundahl) is configured to be manually deformed (grasped and pulled out; see Col.3, line 54-56 of Sundahl) to be removed from the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl).

Regarding claim 3, the combined references teach the claimed invention and wherein the cavity (area between 49 and 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl) has a shape configured to retain the shock absorbing insert (pad 47 of Sundahl) based on an expansion pressure (i.e. frictionally retained; see Col. 3, lines 45-47 of Sundahl) of sides of the insert (pad 47 of Sundahl) against sides (i.e. the portion of the cavity between 49 and 49a of Sundahl) of the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl).

Regarding claim 5, Sundahl teaches the claimed invention and wherein the shock absorbing insert (pad 47), but is silent about it being formed from a honeycomb material.

Sajic teaches a shock absorbing insert (sandwich panel) with a honeycomb material (honeycomb cells 60; Fig. 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of an insert to include Sajic's teaching of an insert with a honeycomb shape since doing so would give rise to increased energy absorbing performance, and would therefore improve the safety of the device (Col. 2, lines 2-4 of Sajic).

Regarding claim 6, the combined references of Sundahl and Sajic teach the claimed invention and wherein the honeycomb materials (honeycomb cells 60 of Sajic) include an array of energy absorbing cells (Fig. 4 and 5 of Sajic), each of the energy absorbing cells including a tube (22; see Col. 5, lines 45-47 of Sajic).

Regarding claim 7, the combined references teach the claimed invention and wherein the shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21 of Sundahl) comprises: first (sidewall at one inner edge 49a of Sundahl) and second (sidewall at the other inner edge 49a of Sundahl) sidewalls defining the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl), and wherein the first (sidewall at one inner edge 49a of Sundahl) and second (sidewall at the other inner edge 49a of Sundahl) sidewalls are angled (see Fig. 6 of Sundahl) relative to one another (see Fig. 6

of Sundahl) such that a distance between the first (sidewall at one inner edge 49a of Sundahl) and second (sidewall at the other inner edge 49a of Sundahl) sidewalls along a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell of Sundahl) of the shock absorbing insert (pad 47 of Sundahl) is greater than a distance (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length of Sundahl) between the first (sidewall at one inner edge 49a of Sundahl) and second (sidewall at the other inner edge 49a of Sundahl) sidewalls along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell of Sundahl) of the shock absorbing insert (pad 47 of Sundahl) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell of Sundahl).

Regarding claim 8, the combined references teach the claimed invention and wherein the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl) is configured such that a distance along a first curved side along a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell of Sundahl) of the shock absorbing insert (pad 47 of Sundahl) is greater (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a distance along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell of Sundahl) of the shock absorbing insert (pad 47 of Sundahl) opposite (on the bottom, opposite the top) the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell of Sundahl) when the shock absorbing insert (pad

47 of Sundahl) is positioned (see Fig. 6 of Sundahl) in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl).

Regarding claim 16, Sundahl teaches the claimed invention and wherein the second shock absorbing material (i.e. containing multiple through openings; see Col. 3, line 50), but is silent about it includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.

Sajic teaches a second shock absorbing material (tubes 22 of Sajic) include an array of energy absorbing cells (Fig. 4 and 5; Col. 2, lines 1-5 of Sajic), each of the energy absorbing cells including a tube (22; see Col. 5, lines 45-47 of Sajic).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a second shock absorbing material to include Sajic's teaching of the material including an array of energy absorbing cells including a tube since doing so would provide a relatively constant level of energy absorption as the column is progressively buckled or crushed (See Col. 2, lines 4-6) and the tubular array results in a material which is substantially isotropic (Col. 3, lines 19-20 of Sajic).

Regarding claim 17, the combined references teach the claimed invention and wherein each of the tubes (tubes 22 of Sajic) of the energy absorbing cells (Fig. 4 and 5; Col. 2, lines 1-5 of Sajic) comprises a circular cylindrical or circular conical structure (Col. 3, lines 17-18 of Sajic).

Regarding claim 28, the combined references teach the claimed invention and wherein a thickness of the shock absorbing insert (pad 47 of Sundahl) is equal to or less than a thickness (see Fig. 6 of Sundahl) of the shock absorbing liner (12 including padding 49 of Sundahl).

Regarding claim 31, Sundahl teaches a helmet (10), comprising: a shell (11) including a vent (front opening 14); a shock absorbing liner (liner 12 including padding 49) adjacent to (see Fig. 6) and attached to the shell (11) and comprising a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) at least partially aligned (see Fig. 6) with the vent (front opening 14) and an insert positioned in the cavity, but does not teach the insert being made of honeycomb material.

Sajic teaches a honeycomb insert (sandwich panel made with honeycomb cells 60; Fig. 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of an insert to include Sajic's teaching of an insert with a honeycomb shape since doing so would give rise to increased energy absorbing performance, and would therefore improve the safety of the device (Col. 2, lines 2-4 of Sajic).

Regarding claim 32, the combined references teach the claimed invention and the shock absorbing liner (12 including 49 of Sundahl), but are silent about the liner being seamless.

Sundahl disclosed the claimed invention except for the shock absorbing liner being seamless. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to make the shock absorbing liner seamless since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. See MPEP 2144.04 (V)(B).

Regarding Claim 33, the combined references teach the claimed invention and wherein the honeycomb insert (sandwich panel made with honeycomb cells 60; Fig. 4 and 5) comprises an array of tubular energy absorbing cells (22; see Col. 5, lines 45-47 of Sajic).

Regarding Claim 34, the combined references teach the claimed invention and wherein the shock absorbing insert (i.e. interpreted as the shock absorbing liner, 12 including 49 of Sundahl) is bonded (See Col. 2, line 24 of Sundahl) to the shock absorbing liner (i.e. interpreted as "inner surface of the shell"; i.e. inner surface of 11; see Col. 2, line 24 of Sundahl).

Regarding the limitation "bonded to," it is noted that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985).

Claims 4 and 9-11 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) in view of Sajic (U.S. 8,082,599) as applied to Claim 1, and further in view of Fournier (U.S. 5,950,244).

Regarding claim 4, the combined references teach the claimed invention and a first shock absorbing material (material of 12 and padding 49; semi-flexible foam plastic; see Col. 2, lines 20-21 of Sundahl), but are silent about the first shock absorbing material being non-porous.

Fournier teaches a first shock absorbing material (first material 16 is non-porous; see Fig. 4, i.e. dashed lines).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl and Sajic's teaching of a first shock absorbing material to include Fournier's teaching of the material being non-porous since this material would be capable of absorbing and dissipating a single relatively high impact event imparted on the outer shell (Col. 3, lines 63-65 of Fournier).

Regarding claim 9, the combined references teach the claimed invention and the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl) and a shock absorbing insert (pad 47 of Sundahl) placed in the cavity (area between inner edges 49a; see Fig. 6; Col. 3, lines 42-45 of Sundahl) of the shock absorbing liner (liner 12 including padding 49 of Sundahl), but are silent about the cavity including a recess and the shock absorbing insert including a protrusion keyed to the recess in the cavity of the shock absorbing liner.

Fournier teaches a cavity (plug hole 25) including a recess (groove 52), and the shock absorbing insert (plug 19) including a protrusion (ridge 50) keyed to the recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl and Sajic's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 10, the combined references teach the claimed invention and an edge (edge of pad 47) of the shock absorbing insert (pad 47 of Sundahl) and a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl) of the shock absorbing liner (liner 12 including padding 49 of Sundahl), but are silent about the edge of the shocking absorbing insert being rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

Fournier teaches an edge (ridge 50) of the insert (plug 19) is rounded (see Fig. 5) to form a semi-ovular shape that is keyed to a recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl and Sajic's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a

protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 11, the combined references teach the claimed invention and wherein the shock absorbing liner (liner 12 including padding 49 of Sundahl) and cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl) configured to retain the shock absorbing insert (pad 47 of Sundahl), but does teach wherein the shock absorbing liner includes tabs protruding laterally across the cavity that are configured to retain the shock absorbing insert.

Fournier teaches the claimed invention and wherein the shock absorbing liner (16) includes tabs (ridge 27) protruding laterally across the cavity (plug hole 25) that are configured to retain the insert (plug 19; see Fig. 4; Col. 5, lines 23-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a liner and cavity to retain an insert to include Fournier's teaching of the liner having tabs since doing so would provide a secure interference fit (See Col. 5, lines 22-26 of Fournier).

Claim 12 is rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) in view of Sajic (U.S. 8,082,599) as applied to Claim 1, and further in view of Weber (U.S. 2012/0198604).

Regarding claim 12, the combined references teach the claimed invention and wherein the shell (11 of Sundahl) comprises at least one of polycarbonate (polycarbonate; see Col. 2, lines 17-19 of Sundahl) (PC) or Acrylonitrile butadiene

styrene (ABS), and wherein the shock absorbing liner comprises polystyrene (Col. 2, lines 19-21 of Sundahl), but are silent about the liner comprising expanded polystyrene (EPS).

Weber teaches helmet with a liner formed of EPS (Para. 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl and Sajic's teaching of a polystyrene liner to include Weber's teaching of the liner being made of EPS since doing so would give rise to a lining that would help dissipate the energy of impacts (Para. 45 of Weber), thus leading to a more protective helmet.

Claims 13-15, 18-20, and 29-30 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514).

Regarding claim 13, Sundahl teaches a helmet, comprising: a shell (11) comprising a vent (front opening 14) a shock absorbing liner (12 including padding 49) forming a concave shape (see Fig. 6), wherein the shock absorbing liner (12 including padding 49) is attached (see Fig. 6) to the shell (11) and comprises a cavity (area between inner edges 49a) at least partially aligned (see Fig. 6 and positioning of area between inner edges 49a with respect to 14) with the vent (14); and an insert (pad 47) retained (see Fig. 6) in the cavity (area between inner edges 49a; see Fig. 6; Col. 3, lines 42-45); and an insert (pad 47) in the shock absorbing liner (12 including padding 49), wherein the insert (47) fills the cavity (area between inner edges 49a) such that any air passing through the vent (14) from outside (i.e. from outside the helmet, see top arrow of air path in Fig. 6) toward a concave side (see middle arrow of air path, near

49a in Fig. 6) of the shock absorbing liner (12 including padding 49) passes through (see bottom arrow of air path, near 47 in Fig. 6) the insert (47), wherein the sidewalls (i.e. sidewalls at inner edges 49a) of the shock absorbing liner (12 including padding 49) defining cavity (area between inner edges 49a) are shaped such that a distance between the sidewalls (i.e. sidewalls at inner edges 49a) along a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) of the insert (pad 47) is greater (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a distance between the sidewalls (i.e. sidewalls at inner edges 49a) along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) of the insert (pad 47) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell), but is silent about the shock absorbing liner being seamless.

Sundahl disclosed the claimed invention except for the shock absorbing liner being seamless. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to make the shock absorbing liner seamless since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. See MPEP 2144.04 (V)(B).

Regarding claim 14, Sundahl teaches the claimed invention and wherein the shock absorbing liner (12 including padding 49) comprises a first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) and the insert (pad 47) comprises a second shock absorbing material (i.e. material containing multiple through

openings; see Col. 3, line 50) that is different than the first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21).

Regarding claim 20, Sundahl teaches the claimed invention and wherein the insert (pad 47) comprises a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) adjacent an outer portion (see Fig. 6) of the shock absorbing liner (12 including padding 49) and a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell), where a distance across the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) is greater (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a corresponding distance across the second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell).

Regarding claim 29, Sundahl teaches the claimed invention and wherein the shell (11) includes a vent (front opening 14), and wherein the vent (front opening 14) aligns with a portion (see Fig. 6) of the cavity (area between inner edges 49a; see Fig. 6; Col. 3, lines 42-45).

Regarding claim 30, Sundahl teaches the claimed invention and wherein a thickness of the insert (pad 47) is equal to or less than a thickness (see Fig. 6) of the shock absorbing liner (12).

Claims 21, 22, 35, and 36 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) in view of Fournier (U.S. 5,950,244).

Regarding claim 21, Sundahl teaches the claimed invention and an edge (edge of pad 47) of the insert (pad 47) and a cavity (area between inner edges 49; see Fig. 6; Col. 3, lines 42-45) of the shock absorbing liner (liner 12 including padding 49), but is silent about the edge of the shock absorbing insert being rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

Fournier teaches an edge (ridge 50) of the insert (plug 19) is rounded (see Fig. 5) to form a semi-ovular shape that is keyed to a recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 22, Sundahl teaches the claimed invention and wherein the shock absorbing liner (12 including padding 49) comprises a cavity (area between inner edges 49; see Fig. 6; Col. 3, lines 42-45), an insert (47), and an inner surface (inner surface of 12 including 49) of a liner (liner 12 including padding 49), but is silent about the helmet further comprising a plurality of cavities and a plurality of inserts, the plurality of inserts covering more than 50% of the inner surface of the liner.

Fournier teaches a similar configuration (see 12) comprises a plurality of cavities (plug holes 25; see Fig. 4 or 5) and a plurality of inserts (see 18) covering more than

50% (see e.g. Fig. 5 and portion of 16 covered by 18) of an inner surface (i.e. surface of 16, near 18) of a similar configuration (i.e. liner 16)

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a cavity and insert to include Fournier's teaching of a plurality of cavities and a plurality of inserts since doing so would to allow multiple locations of the helmet to provide areas for inclusion of inserts, thus providing broader coverage of the inserts and giving rise to effective and controllable absorption, displacement, and dissipation of varying degrees and ranges of impact on the head (see Col. 4, lines 13-16 of Fournier).

Regarding Claim 35, the combined references teach the claimed invention and wherein the plurality of inserts (18 of Fournier) cover more than 90% (see e.g. Fig. 5 and portion of 16 covered by 18 of Fournier) of the inner surface (i.e. surface of 16, near 18 of Fournier) of the liner (i.e. liner 16 of Fournier).

Regarding Claim 36, the combined references teach the claimed invention and wherein the plurality of inserts (18 of Fournier) includes at least one insert (e.g. 18 near the back, see Fig. 5, of Fournier) extending to a back (see 18 extending to a back, of Fournier) of the helmet (helmet of Sundahl).

Response to Arguments

Applicant's arguments filed 7/18/16 with respect to Sundahl and the claims rejected under 35 U.S.C. 102(a)(1) have been considered, but are moot because the arguments do not apply to the combination of references being used in the current rejection.

Applicant's arguments with respect Sundahl and the claims rejected under 35 U.S.C. 103 have been fully considered, but are moot because the arguments do not apply to the interpretation of the reference being used in the current rejection.

Regarding Sundahl and Claim 13, the Examiner respectfully disagrees that the Sundahl does not teach or suggest the claimed combination with respect to the claim language "wherein the insert fills the cavity such that any air passing through the vent from outside toward a concave side of the shock absorbing liner passes through the insert" (see Page 9 of the Remarks, and Claim 13, lines 5-7). Sundahl teaches wherein the insert (47) fills the cavity (area between inner edges 49a) such that any air passing through the vent (14) from outside (i.e. from outside the helmet, see top arrow of air path in Fig. 6) toward a concave side (see middle arrow of air path, near 49a in Fig. 6) of the shock absorbing liner (12 including padding 49) passes through (see bottom arrow of air path, near 47 in Fig. 6) the insert (47).

In Fig. 6 of Sundahl, it appears that that air entering through the vent (14) goes through the liner (47) in accordance with the arrows indicating the air pathway. Although presence of a contorted pathway from the vent to the liner may affect the flow rate of air, it is unclear why the Applicant is arguing (see Page 9 of the Remarks) that not all the air that enters through opening 114 (as seen in Fig. 6) as it passes through the perspiration absorbing pad 47 (as seen in Fig. 6). It is also noted that the features upon which applicant relies (i.e., *all of the air* that enters through opening 114 is passed through the perspiration absorbing pad 47, see Page 9 of Remarks) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification,

limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Applicant's arguments with respect to the Sundahl and Sajic and the rejections under 35 U.S.C. 103 have been fully considered, but they are not persuasive.

In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references of Sundhal and Sajic, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

In the present case, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of an insert to include Sajic's teaching of an insert with a honeycomb shape since doing so would give rise to increased energy absorbing performance, and would therefore improve the safety of the device (Col. 2, lines 2-4 of Sajic).

With respect to Applicant's argument (see Page 10 of the Remarks) that the sandwich panel of Sajic would render the Sundahl invention inoperable for its intended purposed because "the sandwich panel of Sajic cannot function as a perspiration absorbing pad...For example, the sandwich panel cannot be wrung out," (see Page 10

of the Remarks) the Examiner respectfully disagrees. The material of Sajic is a honeycomb material, the same material of which the Applicant has described in the instant application claims as "configured to be manually deformed to be removed from the cavity" (see Claim 2).

The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In the present case, one padding (as taught by Sundahl) that is capable of deforming is replaced by another padding (as taught by Sajic) which is capable of manually deforming. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of an insert to include Sajic's teaching of an insert with a honeycomb shape since doing so would give rise to increased energy absorbing performance, and would therefore improve the safety of the device (Col. 2, lines 2-4 of Sajic).

It is also respectfully noted that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNE KOZAK whose telephone number is (571)270-0552. The examiner can normally be reached on Mon - Fri: 8AM - 5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Clinton Ostrup can be reached on (571) 272-5559. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANNE KOZAK/
Examiner, Art Unit 3765

/RICHALE QUINN/

Application/Control Number: 13/965,703
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Primary Examiner, Art Unit 3765

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	149	A42B3/063.cpc.	US-PGPUB; USPAT	OR	ON	2016/09/27 11:00
L5	124	A42B3/124.cpc.	US-PGPUB; USPAT	OR	ON	2016/09/27 11:01
L6	184	A42B3/28.cpc.	US-PGPUB; USPAT	OR	ON	2016/09/27 11:01
L7	63	A42B3/069.cpc.	US-PGPUB; USPAT	OR	ON	2016/09/27 11:14
L8	250	A42B3/121.cpc.	US-PGPUB; USPAT	OR	ON	2016/09/27 11:14
S2	1	("20130333100").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S3	1	("20120196147").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S5	1	("7254843").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S6	1	("D703871").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:44
S8	1	("20110225706").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:44
S9	2	("20080307568" "8082599").PN.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:45
S10	11	((James) near2 (Chilson)).INV.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:46
S16	82	A42B3/124.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:52
S17	178	A42B3/121.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S18	140	A42B3/127.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S19	109	A42B3/063.cpc.	US-PGPUB;	OR	ON	2015/03/27 09:53

			USPAT			
S20	40	A42B3/069.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S21	32	("20010032351" "2381524" "3174155" "3242500" "3501772" "3787893" "3872511" "3906546" "4075717" "4124904" "4307471" "4937888" "5150479" "5177815" "5815846" "6282724" "7089602").PN. OR ("7254843").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 09:54
S22	300	A42B3/12.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:16
S23	156	A42B3/125.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:17
S24	197	A42B3/10.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:17
S25	4	S23 and (honeycomb liner)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:23
S26	6	("20060059605" "20040117896" "6065158" "5561866" "7930771" "6387200").PN.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:26
S27	15	S22 and (honeycomb liner)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:29
S28	67	S22 and (removable pads)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:31
S29	70	S22 and (removable (pads or inserts))	US-PGPUB; USPAT	AND	ON	2015/03/27 10:33
S30	64	S22 and (removable (pads or inserts))and liner	US-PGPUB; USPAT	AND	ON	2015/03/27 10:33
S31	6	S30 and honeycomb	US-PGPUB; USPAT	AND	ON	2015/03/27 10:34
S32	1	"4985931".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:37
S33	1	"5561866".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:39
S34	4	("20070130670" "5119514" "5336180" "7958570").PN.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:45
S35	81	S18 and (liner and (insert or pad))	US-PGPUB; USPAT	AND	ON	2015/03/27 10:53
S36	7	S35 and key\$2	US-PGPUB; USPAT	AND	ON	2015/03/27 10:53
S37	4	("2012/0036620").URPN.	USPAT	OR	ON	2015/03/27

						10:58
S38	1	S18 and (honeycomb pad)	US-PGPUB; USPAT	AND	ON	2015/03/27 11:14
S39	20	S22 and (honeycomb)	US-PGPUB; USPAT	AND	ON	2015/03/27 11:14
S40	1	"5840397".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 11:21
S41	45	("3447163" "3895152" "4422183" "4465725" "4485568" "5203607" "5416924" "5496610").PN. OR ("5840397").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 11:21
S42	189	("0058403" "0357597" "0386191" "0491123" "0891977" "0901592" "1295297" "1374177" "1374669" "1389767" "1514462" "1573212" "1587508" "1602454" "1622211" "1697833" "1717609" "1887473" "1915754" "20040128748" "20050229293" "2057575" "2165081" "2249966" "2251018" "2266886" "2460895" "2467907" "2539170" "2570497" "2629094" "2774073" "2800663" "2853757" "2884675" "2930046" "3073305" "3146461" "3194233" "3237257" "3295530" "3310053" "3350719" "3407452" "3431560" "3463147" "3506000" "3515142" "3528412" "3581741" "3584622" "3640273" "3674023" "3799158" "3885252" "3909847" "3945046" "4097932" "4136226" "4166460" "4179826" "4237874" "4249524" "4256097" "4280489" "4287920" "4312335" "4325148" "4367733" "4370754" "4381768" "4428080" "4453271" "4455686" "4462115" "4479269" "4513449" "4628945" "4670945" "4691697" "4700407" "4727863" "4844058" "4878274" "4961233" "4962768" "4974343" "5007416" "5029341" "5046197" "5054121" "5105473" "5125400" "5159715" "5168576" "5172494" "5187812" "5259096" "5361410" "5390368" "5487187" "5492133" "5493736" "5536246" "5557804" "5579538" "5636380" "5676641" "5781935" "5792714" "5840397" "5881395" "5974592" "6006363" "6023789" "6074274" "6098209" "6145132" "6161222" "6336220" "6363538" "6401250" "6430752" "6629945").PN. OR ("6845522" "6880269" "6934971" "7389547" "7506384" "D123025" "D301566" "D339902" "D360516" "D423188" "D445724" "D456995" "D480989" "D486093" "D525765" "D543488").PN. OR ("7828759").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 11:23

S43	0	("2014/0013492").URPN.	USPAT	OR	ON	2015/03/27 12:05
S44	4	("20060059605" "20040117896" "6065158" "5561866" "7930771" "6387200").PN.	USPAT	OR	ON	2015/03/27 12:07
S45	34	("20020120978" "2619639" "3055013" "3241154" "3248738" "3344433" "3447162" "3673609" "3820163" "3843970" "3859666" "3882547" "4558470" "4627114" "5315718" "5603117" "5687426" "5694649" "6105176" "6467099").PN. OR ("6883181").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 12:31
S46	79	S18 and (liner and (removable insert or pad))	US-PGPUB; USPAT	AND	ON	2015/03/27 13:51
S47	22	("20040117896" "20090307827" "20110179557" "20120198604" "20120233745" "20120266366" "20120317705" "20130019384" "20130174331" "20130254978" "4307471" "5056162" "5734994" "5915537" "6065158" "6425141" "6560787" "6658671" "6704943" "7328462" "7509835" "7930771").PN.	US-PGPUB; USPAT	AND	ON	2015/03/27 13:54
S48	134	A42B3/122.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 14:20
S49	10	(US-20140259314-\$ or US-20140223644-\$ or US-20070000032-\$ or US-20070226881-\$ or US-20040261157-\$ or US-20030140400-\$).did. or (US-7082623-\$ or US-5950244-\$ or US-4345338-\$ or US-3720955-\$).did.	US-PGPUB; USPAT	OR	ON	2015/03/27 16:25
S50	58	("3729744" "3783450" "3820163" "3946441" "4006496" "4081865" "4133055" "4134155" "4345338" "4484364" "4534068" "4558470" "5086520" "5269025" "5309576" "5351342" "5428846" "5581819" "5619756" "5669079" "5815846" "5833796").PN. OR ("5950244").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/30 08:21
S52	55	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544-\$).did. or (US-D650132-\$ or US-D645210-\$ or US-8082599-\$ or US-7254843-\$ or US-8986798-\$ or US-8966669-\$ or US-8667618-\$ or US-8512843-\$ or US-8166574-\$ or US-7669378-\$ or US-7089602-\$ or US-6282724-\$ or US-4307471-\$ or US-6387200-\$ or US-6065158-\$ or US-5561866-\$ or US-8533869-\$ or US-4985931-\$ or US-6446271-\$ or US-	US-PGPUB; USPAT	OR	ON	2015/03/30 11:56

		6185753-\$ or US-4916759-\$ or US-6883181-\$ or US-5088129-\$ or US-5687426-\$ or US-8732869-\$ or US-7828759-\$.did. or (US-6336220-\$ or US-5840397-\$ or US-3447163-\$ or US-5694649-\$ or US-5950244-\$).did.				
S53	19	S52 and honeycomb	US-PGPUB; USPAT	OR	ON	2015/03/30 11:57
S54	18	S52 and polycarbonate	US-PGPUB; USPAT	OR	ON	2015/03/30 11:58
S55	7	S52 and (polycarbonate and honeycomb)	US-PGPUB; USPAT	OR	ON	2015/03/30 11:59
S56	1	S52 and (polycarbonate near shell)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:08
S57	0	S52 and (acrylonitrile butadiene styrene near shell)	US-PGPUB; USPAT	AND	ON	2015/03/30 12:10
S58	5	S52 and (acrylonitrile butadiene styrene)	US-PGPUB; USPAT	AND	ON	2015/03/30 12:10
S59	0	S52 and (polycarbonate near shell) and honeycomb	US-PGPUB; USPAT	OR	ON	2015/03/30 12:11
S60	17	S52 and (EPS)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:12
S61	17	S52 and "EPS"	US-PGPUB; USPAT	OR	ON	2015/03/30 12:12
S62	6	S52 and ("EPS" and polycarbonate)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:15
S63	7	S52 and (porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 13:32
S65	2	S52 and (non\$1porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:32
S66	62386	S50/.clas.	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S67	5824	S66 and helmet	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S68	74	S67 and (non\$1porous and porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S69	56	"L21" and (air\$1flow)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S70	9	S68 and (air\$1flow)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:35
S71	27	S68 and (ventilat\$3)	US-	OR	ON	2015/03/30

			PGPUB; USPAT			16:50
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S73	9	S72 and cooling	US- PGPUB; USPAT	OR	ON	2015/03/30 17:00
S74	36	S72 and air	US- PGPUB; USPAT	OR	ON	2015/03/30 17:04
S76	59	("3729744" "3783450" "3820163" "3946441" "4006496" "4081865" "4133055" "4134155" "4345338" "4484364" "4534068" "4558470" "5086520" "5269025" "5309576" "5351342" "5428846" "5581819" "5619756" "5669079" "5815846" "5833796").PN. OR ("5950244").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2015/07/17 18:29
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S78	13	("2006/0059605").URPN.	USPAT	OR	ON	2015/07/17 18:37
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S80	56	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544-\$ or US-20060101556-\$).did. or (US-D650132-\$ or US-D645210-\$ or US-8082599-\$ or US- 7254843-\$ or US-8986798-\$ or US-8966669- \$ or US-8667618-\$ or US-8512843-\$ or US- 8166574-\$ or US-7669378-\$ or US-7089602- \$ or US-6282724-\$ or US-4307471-\$ or US- 6387200-\$ or US-6065158-\$ or US-5561866- \$ or US-8533869-\$ or US-4985931-\$ or US- 6446271-\$ or US-6185753-\$ or US-4916759- \$ or US-6883181-\$ or US-5088129-\$ or US- 5687426-\$ or US-8732869-\$ or US-6336220- \$).did. or (US-5840397-\$ or US-3447163-\$ or US-5694649-\$ or US-5950244-\$ or US- 8640267-\$).did.	US- PGPUB; USPAT	OR	ON	2015/07/17 19:05
S81	167	A42B3/28.cpc.	US- PGPUB; USPAT	OR	ON	2015/07/17 19:07
S82	74	A42B3/281.cpc.	US- PGPUB; USPAT	OR	ON	2015/07/17 19:07
S83	143	A42B3/127.cpc.	US- PGPUB; USPAT	OR	ON	2015/07/17 19:17
S84	67	("20040250339" "20040255370" "20050278834" "20060059605" "20060059606" "20060162053" "20060242752" "20060277664" "20070107112" "20070119538" "20070130673" "20070157370" "20070226881" "20080222782" "20090222964" "20110107503" "20110179557" "20120060251" "20120151663" "20120186002" "20120216339" "20120233745" "3174155" "3186004" "3320619" "3577562"	US- PGPUB; USPAT; USOCR	OR	ON	2015/07/20 09:18

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S85	1	"4434514".pn.	US- PGPUB; USPAT	OR	ON	2015/08/27 09:45
S86	1	"1347046".pn.	US- PGPUB; USPAT	OR	ON	2015/08/27 09:46
S87	454	2/414.ccls.	US- PGPUB; USPAT	OR	ON	2015/08/28 12:09
S88	1	"4434514".pn.	US- PGPUB; USPAT	OR	ON	2015/08/28 12:10
S89	330	A42B3/12.cpc.	US- PGPUB; USPAT	OR	ON	2015/12/18 15:04
S90	219	A42B3/121.cpc.	US- PGPUB; USPAT	OR	ON	2015/12/18 15:04
S91	52	A42B3/069.cpc.	US- PGPUB; USPAT	OR	ON	2015/12/18 15:04
S92	106	A42B3/124.cpc.	US- PGPUB; USPAT	OR	ON	2015/12/18 15:04
S93	161	A42B3/127.cpc.	US- PGPUB; USPAT	OR	ON	2015/12/18 15:04
S94	0	("2015/0047113").URPN.	USPAT	OR	ON	2015/12/18 15:05
S95	110	("0935556" "1234589" "1347046" "2769176" "2846683" "2991478" "3082428" "3274612" "3289212" "3310811" "3344433" "3496854" "3783450" "3873997" "3925821" "4044400" "4075714" "4110847" "4115874" "4117553" "4141085" "4305160").PN. OR ("4434514").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2015/12/18 15:05
S96	1	("D752814").PN.	US- PGPUB; USPAT	OR	ON	2016/09/22 11:59

EAST Search History (Interference)

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9/ 27/ 2016 11:15:08 AM**C:\Users\akozak\Documents\EAST\Workspaces\13965703.wsp**

Doc code: IDS

PTO/SB/08a (01-10)

Doc description: Information Disclosure Statement (IDS) Filed

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13/965,703
	Filing Date		Aug 13, 2013
	First Named Inventor	James A. Chilson	
	Art Unit	3765	
	Examiner Name	Anne M. Kozak	
	Attorney Docket Number	P240940.US.01	

U.S.PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		5915537	A	1999-06-29	Dallas et al.	
		D424246	S	2000-05-02	Ho, Chang-Hsien	
		D426032	S	2000-05-30	Ho, Chang-Hsien	
		D447604	S	2001-09-04	Watters et al.	
		D455522	S	2002-04-09	Royes, et al.	
		D464174	S	2002-10-08	Lu, Tung-feng	
		D481171	S	2003-10-21	Ho, Chang-hsien	
		D535059	S	2007-01-09	Lam, Wing Ho	
		D541480	S	2007-04-24	Turner	
		D547908	S	2007-07-31	Wise et al.	
		D549394	S	2007-08-21	Broeckl	
		D572865	S	2008-07-08	Baker, Jonathan	
		7716754	B1	2010-05-18	Ross	
		D650132	S	2011-12-06	Chilson et al.	
		D654628	S	2012-02-21	Aris et al.	
		D655048	S	2012-02-28	Moeller et al.	
		D671272	S	2012-11-20	Clement	
		D672095	S	2012-12-04	Clement	
		D677006	S	2013-02-26	Pfanner et al.	
		D683904	S	2013-06-04	Ho, Chang-Hsien	
		D683905	S	2013-06-04	Wills, Nathan	
		D691329	S	2013-10-08	Anderson, David	
U.S.PATENT APPLICATION PUBLICATIONS						
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		20020023290		2002-02-28	Watters et al.	
		20050060793		2005-03-24	Rosie	
		20090049586		2009-02-26	Wirthenstaetter	

Receipt date: 10/16/2015

13965703 - GAU: 3765

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-10)

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	Filing Date	Aug 13, 2013
	First Named Inventor	James A. Chilson
	Art Unit	3765
	Examiner Name	Anne M. Kozak
	Attorney Docket Number	P240940.US.01

EXAMINER SIGNATURE			
Examiner Signature	/ANNE M KOZAK/	Date Considered	09/27/2016
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			
¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.			

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.M.K./

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-10)

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13/965,703
	Filing Date		Aug 13, 2013
	First Named Inventor	James A. Chilson	
	Art Unit	3765	
	Examiner Name	Anne M. Kozak	
	Attorney Docket Number	P240940.US.01	

U.S.PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
U.S.PATENT APPLICATION PUBLICATIONS						
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
NON-PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T ⁵
		First Office Action dated 6/22/2015 received for CA Appln No. 2,858,707				
EXAMINER SIGNATURE						
Examiner Signature		/ANNE M KOZAK/		Date Considered		09/27/2016
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.						
¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.						

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.M.K./

Search Notes 	Application/Control No. 13965703	Applicant(s)/Patent Under Reexamination CHILSON, JAMES A.
	Examiner ANNE KOZAK	Art Unit 3765

CPC- SEARCHED		
Symbol	Date	Examiner
A42B 3/063,069,12,1,124,127	4/1/2015	AK
Updated above search - conducted a fast & focused STIC search with Fern Birtwistle	8/28/2015	AK
Updated above search	12/18/2015	AK
Updated above search	5/6/2016	AK
Updated above search	9/27/2016	AK

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
2	414	4/1/2015	AK
Updated above search		8/28/2015	AK

SEARCH NOTES		
Search Notes	Date	Examiner
Conducted an IDS, Inventor, USPC and CPC search with text in EAST	4/1/2015	AK
Updated above search	8/28/2015	AK
Updated above search	12/18/2015	AK
Conducted a new IDS search and updated above search	5/6/2016	AK
Updated above search	9/20/2016	AK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (01-10)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13/965,703
	Filing Date		Aug 13, 2013
	First Named Inventor	James A. Chilson	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		P240940.US.01

U.S. PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		D752814	S	2016-03-29	Chilson et al.	

U.S. PATENT APPLICATIONS						
Examiner Initial*	Cite No	Application Number	Filing Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		29/496,856	2014-07-17	Chilson et al.		
		29/496,854	2014-07-17	Chilson et al.		
		29/497,628	2014-07-25	Storey et al.		

EXAMINER SIGNATURE			
Examiner Signature	/ANNE M KOZAK/	Date Considered	09/27/2016

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV, or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

Doc code: RCEX

PTO/SB/30EFS (07-09)

Doc description: Request for Continued Examination (RCE)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL **(Submitted Only via EFS-Web)**

Application Number	13/965,703	Filing Date	2013-08-13	Docket Number (if applicable)	P240940.US.01	Art Unit	3765
First Named Inventor	James A. Chilson			Examiner Name	Anne M. Kozak		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.
 Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☒ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

☐ Other _____

☐ Enclosed

☐ Amendment/Reply

☐ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____.
 (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

☒ The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to
 Deposit Account No 501266

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

Applicant Signature

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	Elen Wetzel/	Date (YYYY-MM-DD)	2016-08-07
Name	Elen Wetzel	Registration Number	69563

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 13/965,703

Confirmation No. : 5250

First Named Inventor : James A. Chilson

Filed : August 13, 2013

Attorney Docket No.: P240940.US.01

Art Unit : 3765

Customer No. : 27,076

Examiner : Anne M. Kozak

Title : HELMET WITH SHOCK ABSORBING INSERTS

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Madam:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicant wishes to make known to the Patent and Trademark Office the references set forth on the attached form PTO-SB/08. Copies of the cited U.S. applications, U.S. patents and/or U.S. patent application publications have not been provided in accordance with 37 CFR 1.98(a)(2) and the 1287 O.G. 163 waiver published October 19, 2004.

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Respectfully submitted,

DORSEY & WHITNEY LLP

/Elen Wetzel/

August 17, 2016

Date

Elen Wetzel

Registration No. 69,563

EW:rar

Enclosures:

Form PTO-SB/08

701 Fifth Avenue, Suite 6100
Seattle, WA 98104-7043
Telephone: (206) 903-8800
Facsimile: (206) 299-9288

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13/965,703
	Filing Date		Aug 13, 2013
	First Named Inventor	James A. Chilson	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		P240940.US.01

U.S. PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		D752814	S	2016-03-29	Chilson et al.	

U.S. PATENT APPLICATIONS					
Examiner Initial*	Cite No	Application Number	Filing Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		29/496,856	2014-07-17	Chilson et al.	
		29/496,854	2014-07-17	Chilson et al.	
		29/497,628	2014-07-25	Storey et al.	

EXAMINER SIGNATURE			
Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV, or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

Electronic Patent Application Fee Transmittal				
Application Number:		13965703		
Filing Date:		13-Aug-2013		
Title of Invention:		HELMET WITH SHOCK ABSORBING INSERTS		
First Named Inventor/Applicant Name:		James A. Chilson		
Filer:		Elen Wetzel/Randi Rowe		
Attorney Docket Number:		P240940.US.01		
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
RCE- 2nd and Subsequent Request	1820	1	1700	1700
Total in USD (\$)				1700

Electronic Acknowledgement Receipt	
EFS ID:	26673163
Application Number:	13965703
International Application Number:	
Confirmation Number:	5250
Title of Invention:	HELMET WITH SHOCK ABSORBING INSERTS
First Named Inventor/Applicant Name:	James A. Chilson
Customer Number:	27076
Filer:	Elen Wetzel/Randi Rowe
Filer Authorized By:	Elen Wetzel
Attorney Docket Number:	P240940.US.01
Receipt Date:	17-AUG-2016
Filing Date:	13-AUG-2013
Time Stamp:	19:19:38
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$1700
RAM confirmation Number	081816INTEFSW19202800
Deposit Account	1007
Authorized User	Randi Rowe
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)					
37 CFR 1.20 (Post Issuance fees)					
37 CFR 1.21 (Miscellaneous fees and charges)					
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	20160817_RCE_P240940US01.pdf	697602	no	3
			592b0c81dfc9d5eaca3d79a7de8947c36add88c2		
Warnings:					
Information:					
2		20160817_IDS_P240940US01.pdf	184091	yes	3
			cb3704221bfe63487b540d753dcfe6925c6adffc		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Transmittal Letter		1	2	
	Information Disclosure Statement (IDS) Form (SB08)		3	3	
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30759	no	2
			9191798ae5fdabbf7d5b90b1eadda7e8bce62b2c		
Warnings:					
Information:					
Total Files Size (in bytes):			912452		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					Application or Docket Number 13/965,703		Filing Date 08/13/2013		☐ To be Mailed				
ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO													
APPLICATION AS FILED – PART I													
(Column 1)			(Column 2)										
FOR		NUMBER FILED		NUMBER EXTRA		RATE (\$)		FEE (\$)					
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A		N/A		N/A							
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))		N/A		N/A		N/A							
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A		N/A		N/A							
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 =		*		X \$ =							
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 =		*		X \$ =							
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).											
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))													
* If the difference in column 1 is less than zero, enter "0" in column 2.						TOTAL							
APPLICATION AS AMENDED – PART II													
(Column 1)			(Column 2)			(Column 3)							
AMENDMENT	08/17/2016		CLAIMS REMAINING AFTER AMENDMENT			HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))		* 27		Minus	** 27		= 0		X \$80 =		0	
	Independent (37 CFR 1.16(h))		* 3		Minus	***3		= 0		X \$420 =		0	
	☐ Application Size Fee (37 CFR 1.16(s))												
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))												
	TOTAL ADD'L FEE											0	
(Column 1)			(Column 2)			(Column 3)							
AMENDMENT			CLAIMS REMAINING AFTER AMENDMENT			HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))		*		Minus	**		=		X \$ =			
	Independent (37 CFR 1.16(h))		*		Minus	***		=		X \$ =			
	☐ Application Size Fee (37 CFR 1.16(s))												
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))												
	TOTAL ADD'L FEE												
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.											LIE CHERYL CLARK		

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Acknowledgement Receipt	
EFS ID:	26673163
Application Number:	13965703
International Application Number:	
Confirmation Number:	5250
Title of Invention:	HELMET WITH SHOCK ABSORBING INSERTS
First Named Inventor/Applicant Name:	James A. Chilson
Customer Number:	27076
Filer:	Elen Wetzel/Randi Rowe
Filer Authorized By:	Elen Wetzel
Attorney Docket Number:	P240940.US.01
Receipt Date:	17-AUG-2016
Filing Date:	13-AUG-2013
Time Stamp:	19:19:38
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	\$1700
RAM confirmation Number	081816INTEFSW19202800
Deposit Account	501266
Authorized User	Randi Rowe
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: 37 CFR 1.16 (National application filing, search, and examination fees) 37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)					
37 CFR 1.20 (Post Issuance fees)					
37 CFR 1.21 (Miscellaneous fees and charges)					
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	20160817_RCE_P240940US01.pdf	697602	no	3
			592b0c81dfc9d5eaca3d79a7de8947c36add88c2		
Warnings:					
Information:					
2		20160817_IDS_P240940US01.pdf	184091	yes	3
			cb3704221bfe63487b540d753dcfe6925c6adffc		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Transmittal Letter		1	2	
	Information Disclosure Statement (IDS) Form (SB08)		3	3	
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	30759	no	2
			9191798ae5fdabbf7d5b90b1eadda7e8bce62b2c		
Warnings:					
Information:					
Total Files Size (in bytes):			912452		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/965,703	08/13/2013	James A. Chilson	P240940.US.01	5250
27076 7590 08/05/2016 DORSEY & WHITNEY LLP - Seattle INTELLECTUAL PROPERTY DEPARTMENT Columbia Center 701 Fifth Avenue, Suite 6100 SEATTLE, WA 98104-7043			EXAMINER KOZAK, ANNE M	
			ART UNIT 3765	PAPER NUMBER
			NOTIFICATION DATE 08/05/2016	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocket-se@dorsey.com
IPDocket_SE@dorsey.foundationip.com
lash.dawn@dorsey.com

Advisory Action Before the Filing of an Appeal Brief	Application No. 13/965,703	Applicant(s) CHILSON, JAMES A.	
	Examiner ANNE KOZAK	Art Unit 3765	AIA (First Inventor to File) Status Yes

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 18 July 2016 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.
NO NOTICE OF APPEAL FILED

1. ☒ The reply was filed after a final rejection. No Notice of Appeal has been filed. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114 if this is a utility or plant application. Note that RCEs are not permitted in design applications. The reply must be filed within one of the following time periods:

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action; or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

c) ☐ A prior Advisory Action was mailed more than 3 months after the mailing date of the final rejection in response to a first after-final reply filed within 2 months of the mailing date of the final rejection. The current period for reply expires _____ months from the mailing date of the prior Advisory Action or SIX MONTHS from the mailing date of the final rejection, whichever is earlier.

Examiner Note: If box 1 is checked, check either box (a), (b) or (c). ONLY CHECK BOX (b) WHEN THIS ADVISORY ACTION IS THE FIRST RESPONSE TO APPLICANT'S FIRST AFTER-FINAL REPLY WHICH WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. ONLY CHECK BOX (c) IN THE LIMITED SITUATION SET FORTH UNDER BOX (c). See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) or (c) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendments filed after a final rejection, but prior to the date of filing a brief, will not be entered because

a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);

b) ☐ They raise the issue of new matter (see NOTE below);

c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): (a) ☒ will not be entered, or (b) ☐ will be entered, and an explanation of how the new or amended claims would be rejected is provided below or appended.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

9. ☐ The affidavit or other evidence filed after final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

10. ☐ The affidavit or other evidence filed after the date of filing the Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

11. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

12. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
see continuation note below.

13. ☐ Note the attached Information *Disclosure Statement(s)*. (PTO/SB/08) Paper No(s). _____

14. ☒ Other: see PTO-2323.

STATUS OF CLAIMS

15. The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-17, 19-22, and 28-32.

Claim(s) withdrawn from consideration: _____.

	/RICHALE QUINN/ Primary Examiner, Art Unit 3765

Continuation of 3: the proposed amendments to Claims 1, 4, 8, 13, 16, and 22 and newly added Claims 33-36 raise new issues that would require further consideration and/or search, as these limitations were not presented previously in the independent and dependent claims. Thus, the proposed amendments clearly raise new issues that would require further consideration and/or search.

Continuation of 12. does NOT place the application in condition for allowance because: The amended Claims 1, 4, 8, 13, 16, and 22 and newly added Claims 33-36 include limitations that have not been previously presented or searched, and therefore the arguments are not commensurate in the scope of the rejected claims.

AFCP 2.0 Decision

Application No.

13/965,703

Applicant(s)

CHILSON, JAMES A.

Examiner

ANNE KOZAK

Art Unit

3765

This is in response to the After Final Consideration Pilot request filed 18 July 2016.

1. **Improper Request** – The AFCP 2.0 request is improper for the following reason(s) and the after final amendment submitted with the request will be treated under pre-pilot procedure.

- ☐ An AFCP 2.0 request form PTO/SB/434 (or equivalent document) was not submitted.
- ☐ A non-broadening amendment to at least one independent claim was not submitted.
- ☐ A proper AFCP 2.0 request was submitted in response to the most recent final rejection.
- ☐ Other:

2. Proper Request

- A. After final amendment submitted with the request will not be treated under AFCP 2.0.

The after final amendment cannot be reviewed and a search conducted within the guidelines of the pilot program.

- ☒ The after final amendment will be treated under pre-pilot procedure.

- B. Updated search and/or completed additional consideration.

The examiner performed an updated search and/or completed additional consideration of the after final amendment within the time authorized for the pilot program. The result(s) of the updated search and/or completed additional consideration are:

- ☐ 1. All of the rejections in the most recent final Office action are overcome and a Notice of Allowance is issued herewith.
- ☐ 2. The after final amendment would not overcome all of the rejections in the most recent final Office action. See attached interview summary for further details.
- ☐ 3. The after final amendment was reviewed, and it raises a new issue(s). See attached interview summary for further details.
- ☐ 4. The after final amendment raises new issues, but would overcome all of the rejections in the most recent final Office action. A decision on determining allowability could not be made within the guidelines of the pilot. See attached interview summary for further details, including any newly discovered prior art.
- ☐ 5. Other:

Examiner Note: Please attach an interview summary when necessary as described above.

DO NOT ENTER: /A.M.K./
07/25/2016

**RESPONSE UNDER 37 C.F.R. § 1.116
EXPEDITED PROCEDURE - EXAMINING GROUP 3700**

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	: 13/965,703	Confirmation No.	: 5250
First Named Inventor	: James A. Chilson		
Filed	: August 13, 2013	Attorney Docket No.:	P240940.US.01
Art Unit	: 3765	Customer No.	: 27,076
Examiner	: Anne M. Kozak		
Title	: HELMET WITH SHOCK ABSORBING INSERTS		

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE UNDER 37 C.F.R. § 1.116

Madam:

Applicants acknowledge receipt of the Office Action dated May 17, 2016.
Please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 7 of this paper.

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Madam:

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Please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 7 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claims 3, 15, and 19, amend claims 1, 4, 8, 13, 16, and 22, and add new claims 33-35 as follows:

Listing of Claims:

1. (Currently Amended) A helmet, comprising:
a shell including a vent;
a shock absorbing liner attached to the shell, wherein the shock absorbing liner is formed of a first shock absorbing material adjacent to the shell and comprises a cavity at least partially aligned with the vent; and
a shock absorbing insert formed of a second shock absorbing material different ~~than from~~ the first shock absorbing material and positioned in the cavity, wherein the second shock absorbing material is porous, and wherein the second shock absorbing material provides the same or better shock absorption than the first shock absorbing material.
2. (Original) The helmet of claim 1, wherein the shock absorbing insert is configured to be manually deformed to be removed from the cavity.
3. (Cancelled)
4. (Currently Amended) The helmet of claim 1, wherein the first shock absorbing material is non-porous, ~~and wherein the second shock absorbing material is porous.~~
5. (Original) The helmet of claim 1, wherein the shock absorbing insert is formed from a honeycomb material.
6. (Original) The helmet of claim 5, wherein the honeycomb material includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.

7. (Previously Presented) The helmet of claim 1, wherein the first shock absorbing material comprises:

first and second sidewalls defining the cavity,

and wherein the first and second sidewalls are angled relative to one another such that a distance between the first and second sidewalls along a first curved side of the shock absorbing insert is greater than a distance between the first and second sidewalls along a second curved side of the shock absorbing insert opposite the first curved side.

8. (Currently Amended) The helmet of claim 1 wherein the cavity is configured such that a distance along a first curved side of the shock absorbing insert is greater than a distance along a second curved side of the shock absorbing insert opposite the first curved side when the shock absorbing insert is positioned in the cavity.

9. (Original) The helmet of claim 1, wherein the cavity includes a recess and the shock absorbing insert includes a protrusion keyed to the recess in the cavity of the shock absorbing liner.

10. (Previously Presented) The helmet of claim 1, wherein an edge of the shock absorbing insert is rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

11. (Previously Presented) The helmet of claim 1, wherein the shock absorbing liner includes tabs protruding laterally across the cavity that are configured to retain the shock absorbing insert.

12. (Original) The helmet of claim 1, wherein the shell comprises at least one of polycarbonate (PC) or Acrylonitrile butadiene styrene (ABS), and wherein the shock absorbing liner comprises at least one of expanded polystyrene (EPS) or expanded polypropylene (EPP).

13. (Currently Amended) A helmet, comprising:

a shell comprising a vent;

a seamless shock absorbing liner forming a concave shape, wherein the shock absorbing liner is attached to the shell and comprises a cavity at least partially aligned with the vent; and

an insert retained in the cavity in the shock absorbing liner, wherein the insert fills the cavity such that any air passing through the vent from outside toward a concave side of the shock absorbing liner passes through the insert,

wherein sidewalls of the shock absorbing liner defining the cavity are shaped such that a distance between the sidewalls along a first curved side of the insert is greater than a distance between the sidewalls along a second curved side of the insert opposite the first curved side; ~~and a shell attached to an outer surface of the shock absorbing liner.~~

14. (Original) The helmet of claim 13, wherein the shock absorbing liner comprises a first shock absorbing material and the insert comprises a second shock absorbing material that is different than the first shock absorbing material.

15. (Cancelled)

16. (Currently Amended) The helmet of claim ~~15~~14, wherein the second shock absorbing material includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.

17. (Original) The helmet of claim 16, wherein each of the tubes of the energy absorbing cells comprises a circular cylindrical or circular conical structure.

18. (Cancelled)

19. (Cancelled)

20. (Original) The helmet of claim 13, wherein the insert comprises a first curved side adjacent an outer portion of the shock absorbing liner and a second curved side opposite the first curved side, where a distance across the first curved side is greater than a corresponding distance across the second curved side.

21. (Previously Presented) The helmet of claim 13, wherein an edge of the insert includes at least one of a protrusion keyed to a recess in the cavity of the shock absorbing liner, a semi-circular shape keyed to the recess in the cavity of the shock absorbing liner, or a semi-ovular shape keyed to the recess in the cavity of the shock absorbing liner.

22. (Currently Amended) The helmet of claim 13, wherein the shock absorbing liner comprises a plurality of cavities, the helmet further comprising a plurality of inserts, ~~each of the plurality of inserts~~ covering more than 50% of an inner surface of the liner ~~having a shape configured to a shape of a respective cavity of the plurality of cavities in the shock absorbing liner.~~

23-27. (Cancelled)

28. (Previously Presented) The helmet of claim 1, wherein a thickness of the shock absorbing insert is equal to or less than a thickness of the shock absorbing liner.

29. (Previously Presented) The helmet of claim 18, wherein the shell includes a vent, and wherein the vent aligns with a portion of the cavity.

30. (Previously Presented) The helmet of claim 18, wherein a thickness of the insert is equal to or less than a thickness of the shock absorbing liner.

31. (Previously Presented) A helmet, comprising:
a shell including a vent;
a shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the vent; and
a honeycomb insert positioned in the cavity.

32. (Previously Presented) The helmet of claim 31, wherein the shock absorbing liner is seamless.

33. (New) The helmet of claim 31, wherein the honeycomb insert comprises an array of tubular energy absorbing cells.

34. (New) The helmet of claim 1, wherein the shock absorbing insert is bonded to the shock absorbing liner.

35. (New) The helmet of claim 22, wherein the plurality of inserts cover more than 90% of the inner surface of the liner.

36. (New) The helmet of claim 22, wherein the plurality of inserts includes at least one insert extending to a back of the helmet.

REMARKS

Claims 1, 2, 4-14, 16, 17, 20-22, and 28-36 are pending after inclusion of the present amendment. Claims 3, 15, and 19 have been canceled without prejudice, claims 1, 4, 8, 13, 16, and 22 have been amended and new claims 33-36 have been added to recite features disclosed in the application as filed, including the specification, drawings, and originally filed claims. Support for the amendments herein can be found for example in paragraphs 12, 14-16, 18, and 20, and Figures 2, 4, and 5 of the application. No new matter has been added.

The Office Action dated May 17, 2016 (“Office Action”) rejected claims 1-3, 7 and 8 under 35 U.S.C. 102(a)(1) as anticipated by U.S. Patent No. 4,434,514 to Sundahl (“Sundahl”). Claims 4, 9-11, 21 and 22 were rejected under 35 U.S.C. 103 as being unpatentable over Sundahl, in view of U.S. Patent No. 5,950,244 to Fournier (“Fournier”). Claims 13-15, 18-20 and 28-30, of which claim 13 is independent, were rejected under 35 U.S.C. 103 as unpatentable over Sundahl. Claims 5, 6, 16, 17, 31 and 32 were rejected under 35 U.S.C. 103 as being unpatentable over Sundahl, in view of U.S. Patent No. 8,082,599 to Sajic (“Sajic”).

Novelty over Sundahl

Without agreeing with the Examiner’s characterization of Sundahl or the merits of the rejection, independent claim 1 has been amended to expedite the indication of allowable subject matter. Applicant submits that Sundahl does not disclose all of the elements in the combination recited in amended claim 1. Reconsideration and withdrawal of the rejection of claim 1 is respectfully requested.

Claim 1 recites, as amended in part, “a shock absorbing liner attached to the shell, wherein the shock absorbing liner is formed of a first shock absorbing material adjacent to the shell and comprises a cavity at least partially aligned with the vent” and “a shock absorbing insert formed of a second shock absorbing material different from the first shock absorbing material and positioned in the cavity,... wherein the second shock absorbing material provides the same or better shock absorption than the first shock absorbing material.”

The Office Action relies on the liner 12 of Sundahl to correspond with Applicant’s “shock absorbing liner” and on the perspiration absorbing pad 47 to correspond with Applicant’s “shock absorbing insert” as previously claimed. *See* Office Action, pages 2-3.

However, even if such interpretation was reasonable, a point which Applicant does not concede, Sundahl still fails to disclose a shock absorbing insert in the combination of claim 1.

Sundahl describes a helmet which includes a shell 11 and a liner 12. The liner in Sundahl is made of polystyrene foam or polyurethane foam. Sundahl does not describe what type of material the perspiration absorbing pad 47 is made from. With regards to the perspiration absorbing pad 47, Sundahl only teaches that it is capable of being wrung out to discard any perspiration soaked into the pad 47, thus presumably the pad 47 is made from a relatively soft material that can be wrung out manually (i.e., by one hand during the course of a bicycle race). *See e.g.*, Col 3, ll. 42-59.

As such, the perspiration absorbing pad 47 of Sundahl cannot correspond with the shock absorbing insert at least because the perspiration absorbing pad 47 is not made from a material which is different from the material of the liner and which provides the same or better shock absorption as the liner. Rather, the perspiration absorbing pad 47 is made from a material which is capable of being easily deformed by hand and not a material that provide same or better shock absorption than a helmet liner.

Accordingly, amended claim 1 is patentably distinguished over Sundahl and indication of the same is respectfully requested.

Non-obviousness over Sundahl

Without agreeing with the Examiner's characterization of Sundahl or the merits of this rejection, independent claim 13 has been amended to expedite the indication of allowable subject matter.

Claim 13 recites, as amended in part, "an insert retained in the cavity in the shock absorbing liner, wherein the insert fills the cavity such that any air passing through the vent from outside toward a concave side of the shock absorbing liner passes through the insert." Sundahl fails to teach or suggest at least these features in the combination of amended claim 13.

Sundahl describes a helmet which includes a shell 11 and a liner 12. The liner 12 includes openings 114, 115-117, 119-121, 124 and 125, which conduct the inflowing air to flow channels in the liner, and openings 118, 122 and 126 conduct air flow from the flow channels to the exterior. *See e.g.*, Col 2, ll. 67-Col. 3, ll. 23. Incoming air from inlet openings 115, 116 and 117 flows into a left channel 30' via recessed paths 115a, 116a, and 117a and air leaves that channel as shown by arrow 32. Similar air flow path is defined on the right side of the liner. *See*

id. Longitudinally extending channels 35 and 36 in the liner intersect the top openings 124, 125 and 126. Air flowing in via the openings 124 and 125 exits via the rear opening 126. *Id.* A mesh or screen 43 is attached to padding strips attached to the liner. The screen blocks entrance of the wearer's hair into the air flow channels 35 and 36 while allowing air flow therein. *See* Col 3, ll. 34-40. As shown in FIGS. 3, 6, and 7, the helmet includes a front opening 14 in the shell and corresponding opening 114 in the liner which communicate with forward ends of the channels 35 and 36 via the space 46. Padding 49 is attached to the liner around the space 46 and a perspiration absorbing pad 47 is frictionally retained within padding 49 covering the space 46. The perspiration absorbing pad 47 has openings 50 to allow air flow therethrough.

The Examiner relies on the area between the edges of the padding 49 and including the space 46, air channels 35 and 36 and the opening 114 to correspond with Applicant's "cavity" and further relies on the perspiration absorbing pad 47 to correspond with Applicant's "insert" in the combination of previous claim 13. However, these elements of Sundahl do not teach or suggest the claimed combination because the perspiration absorbing pad 47 does not fill the purported cavity in the combination required by claim 13 because not all of the air that enters through the opening 114 passes through the perspiration absorbing pad 47. Instead, the liner of Sundahl includes flow channels that are specifically arranged to allow air to flow in from openings in the shell into these flow channels and be vented out through openings in the back. Sundahl teaches against the claimed combination thus claim 13 is not obvious over Sundahl.

Accordingly, for at least these reasons, the 35 U.S.C. 103 rejection of claim 13 over Sundahl should be reconsidered and withdrawn.

Non-obviousness over Sundahl and Sajic

The 35 U.S.C. 103 rejection of independent claim 31 over Sundahl in view of Sajic is traversed.

Claim 31 recites "a shell including a vent," "a shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the vent," and "a honeycomb insert positioned in the cavity." Sundahl and Sajic, alone or in combination, fail to teach or suggest the combination of features recited in claim 31.

The Examiner agrees that Sundahl does not teach the claimed honeycomb insert. *See* Office Action, page 14 (the Examiner agrees that the perspiration absorbing pad 47 of

Sundahl is not made from a honeycomb material). The Examiner relies on Sajic to cure the deficiencies of Sundahl. *Id.* The Office Action fails to establish a *prima facie* case of obviousness of claim 31 over the combined teachings of Sundahl and Sajic.

As discussed above, Sundahl describes a helmet with a perspiration absorbing pad 47 placed in an opening at the front of the helmet. The perspiration absorbing pad is made from a material which can be wrung out to remove perspiration that has been soaked into the pad.

Sajic describes a helmet 10 which is formed from a sandwich panel 12 which is formed of a core 20 sandwiched between outer and inner skins 30 and 50. Sajic teaches that because of the curvature of the panel 12, there is slippage between the outer skin 30 and the core 20 and between the inner skin 50 and the core 20. This slippage is prevented by an adhesive 40. *See e.g.*, Col 5, ll. 17-34. The core 20 and skins 30 and 50 are thermoformed into the curved panel 12 for use in making the helmet. *See e.g.*, Col 6, ll. 47-67.

It is well established that if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *See In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); MPEP 2143.01. Applicant submits that replacing the perspiration absorbing pad 47 of Sundahl with the thermoformed sandwich panel structure of Sajic would render the Sundahl invention inoperable for its intended purpose because the sandwich panel of Sajic cannot function as a perspiration absorbing pad as described in Sundahl. For example, the sandwich panel structure of Sajic cannot be wrung out to remove perspiration nor would a person of ordinary skill in the art use the sandwich panel for absorbing perspiration in the first place.

Accordingly, for at least this reason, Applicant submits that claim 31 is not obvious over Sundahl and Sajic and requests withdrawal of the 35 U.S.C. 103 rejection of claim 31 over Sundahl in view of Sajic.

Dependent Claims

Claims 2, 4-12, 14, 16, 17, 20-22, 28-30, and 32-36 depend from and include all of the elements of at least one of Applicant's respective independent claims discussed above. These claims are patentably distinguished over the applied references because of their dependency on patentable independent claims and also because of the additional elements recited in those claims. Accordingly, for at least the reasons discussed above with respect to Applicant's independent claims, reconsideration and withdrawal of the rejections of claims 2, 4-12, 14, 16,

17, 20-22, 28-30, and 32-36 is respectfully requested. Applicant has, for brevity, chosen not to individually discuss additional distinguishing characteristics of the dependent claims. Applicant's silence should not be interpreted as belief that the dependent claims are patentable only by virtue of their dependence on a patentable independent claim.

Favorable consideration and a timely Notice of Allowance are earnestly solicited. The Examiner is invited to contact the undersigned should a telephone conversation be useful in the efficient prosecution of this matter.

Respectfully submitted,
DORSEY & WHITNEY LLP

July 18, 2016

/Elen Wetzel/

Date

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Doc Code: A.NE.AFCP

Document Description: After Final Consideration Pilot Program Request

PTO/SB/434 (05-13)

CERTIFICATION AND REQUEST FOR CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0		
Practitioner Docket No.: P240940.US.01	Application No.: 13/965,703	Filing Date: August 13, 2013
First Named Inventor: James A. Chilson	Title: HELMET WITH SHOCK ABSORBING INSERTS	
APPLICANT HEREBY CERTIFIES THE FOLLOWING AND REQUESTS CONSIDERATION UNDER THE AFTER FINAL CONSIDERATION PILOT PROGRAM 2.0 (AFCP 2.0) OF THE ACCOMPANYING RESPONSE UNDER 37 CFR 1.116. - The above-identified application is (i) an original utility, plant, or design nonprovisional application filed under 35 U.S.C. 111(a) [a continuing application (<i>e.g.</i>, a continuation or divisional application) is filed under 35 U.S.C. 111(a) and is eligible under (i)], or (ii) an international application that has entered the national stage in compliance with 35 U.S.C. 371(c). - The above-identified application contains an outstanding final rejection. - Submitted herewith is a response under 37 CFR 1.116 to the outstanding final rejection. The response includes an amendment to at least one independent claim, and the amendment does not broaden the scope of the independent claim in any aspect. - This certification and request for consideration under AFCP 2.0 is the only AFCP 2.0 certification and request filed in response to the outstanding final rejection. - Applicant is willing and available to participate in any interview requested by the examiner concerning the present response. - This certification and request is being filed electronically using the Office's electronic filing system (EFS-Web). - Any fees that would be necessary consistent with current practice concerning responses after final rejection under 37 CFR 1.116, <i>e.g.</i>, extension of time fees, are being concurrently filed herewith. [There is no additional fee required to request consideration under AFCP 2.0.] - By filing this certification and request, applicant acknowledges the following: - Reissue applications and reexamination proceedings are not eligible to participate in AFCP 2.0. - The examiner will verify that the AFCP 2.0 submission is compliant, <i>i.e.</i>, that the requirements of the program have been met (see items 1 to 7 above). For compliant submissions: - The examiner will review the response under 37 CFR 1.116 to determine if additional search and/or consideration (i) is necessitated by the amendment and (ii) could be completed within the time allotted under AFCP 2.0. If additional search and/or consideration is required but cannot be completed within the allotted time, the examiner will process the submission consistent with current practice concerning responses after final rejection under 37 CFR 1.116, <i>e.g.</i>, by mailing an advisory action. - If the examiner determines that the amendment does not necessitate additional search and/or consideration, or if the examiner determines that additional search and/or consideration is required and could be completed within the allotted time, then the examiner will consider whether the amendment places the application in condition for allowance (after completing the additional search and/or consideration, if required). If the examiner determines that the amendment does not place the application in condition for allowance, then the examiner will contact the applicant and request an interview. - The interview will be conducted by the examiner, and if the examiner does not have negotiation authority, a primary examiner and/or supervisory patent examiner will also participate. - If the applicant declines the interview, or if the interview cannot be scheduled within ten (10) calendar days from the date that the examiner first contacts the applicant, then the examiner will proceed consistent with current practice concerning responses after final rejection under 37 CFR 1.116.		
Signature /Elen Wetzel/		Date July 18, 2016
Name (Print/Typed) Elen Wetzel		Practitioner Registration No. 69,563
Note: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.		
☒ * Total of <u>1</u> forms are submitted.		

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (*i.e.*, GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt	
EFS ID:	26382974
Application Number:	13965703
International Application Number:	
Confirmation Number:	5250
Title of Invention:	HELMET WITH SHOCK ABSORBING INSERTS
First Named Inventor/Applicant Name:	James A. Chilson
Customer Number:	27076
Filer:	Elen Wetzel/Randi Rowe
Filer Authorized By:	Elen Wetzel
Attorney Docket Number:	P240940.US.01
Receipt Date:	18-JUL-2016
Filing Date:	13-AUG-2013
Time Stamp:	20:03:16
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment		no			
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		20160718_FOAResponse_P240940US01.pdf	126125	yes	11
			9601e2178ebb87fead71276c31cf95d7eec545e9		

Multipart Description/PDF files in .zip description					
Document Description			Start	End	
Response After Final Action			1	1	
Claims			2	6	
Applicant Arguments/Remarks Made in an Amendment			7	11	
Warnings:					
Information:					
2	After Final Consideration Program Request	20160718_AFCP_P240940US01.pdf	226978	no	2
		62d031eb1ccdbacc9075e7e5eaa73fb437a168a8			
Warnings:					
Information:					
Total Files Size (in bytes):			353103		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					Application or Docket Number 13/965,703		Filing Date 08/13/2013		☐ To be Mailed				
ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO													
APPLICATION AS FILED – PART I													
(Column 1)			(Column 2)										
FOR		NUMBER FILED		NUMBER EXTRA		RATE (\$)		FEE (\$)					
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))		N/A		N/A		N/A							
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))		N/A		N/A		N/A							
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))		N/A		N/A		N/A							
TOTAL CLAIMS (37 CFR 1.16(i))		minus 20 =		*		X \$ =							
INDEPENDENT CLAIMS (37 CFR 1.16(h))		minus 3 =		*		X \$ =							
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))		If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).											
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))													
* If the difference in column 1 is less than zero, enter "0" in column 2.						TOTAL							
APPLICATION AS AMENDED – PART II													
(Column 1)			(Column 2)			(Column 3)							
AMENDMENT	07/18/2016		CLAIMS REMAINING AFTER AMENDMENT			HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))		* 27		Minus	** 27		= 0		X \$80 =		0	
	Independent (37 CFR 1.16(h))		* 3		Minus	*** 3		= 0		X \$420 =		0	
	☐ Application Size Fee (37 CFR 1.16(s))												
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))												
	TOTAL ADD'L FEE											0	
(Column 1)			(Column 2)			(Column 3)							
AMENDMENT			CLAIMS REMAINING AFTER AMENDMENT			HIGHEST NUMBER PREVIOUSLY PAID FOR		PRESENT EXTRA		RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))		*		Minus	**		=		X \$ =			
	Independent (37 CFR 1.16(h))		*		Minus	***		=		X \$ =			
	☐ Application Size Fee (37 CFR 1.16(s))												
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))												
	TOTAL ADD'L FEE												
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.											LIE CHERYL CLARK		

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/965,703	08/13/2013	James A. Chilson	P240940.US.01	5250
27076 7590 05/17/2016 DORSEY & WHITNEY LLP - Seattle INTELLECTUAL PROPERTY DEPARTMENT Columbia Center 701 Fifth Avenue, Suite 6100 SEATTLE, WA 98104-7043			EXAMINER KOZAK, ANNE M	
			ART UNIT 3765	PAPER NUMBER
			NOTIFICATION DATE 05/17/2016	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocket-se@dorsey.com
IPDocket_SE@dorsey.foundationip.com
lash.dawn@dorsey.com

Office Action Summary	Application No. 13/965,703	Applicant(s) CHILSON, JAMES A.	
	Examiner ANNE KOZAK	Art Unit 3765	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/28/2016.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

- 5) ☒ Claim(s) 1-17, 19-22 and 28-32 is/are pending in the application.
5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-17, 19-22 and 28-32 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 8/13/2013 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some** c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date ____.
- 3) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 4) ☐ Other: ____.

DETAILED ACTION

Status of Claims

Claims 1, 7, 13, and 31 have been amended, and claims 18 and 23-27 are canceled. Claims 1-17, 19-22, and 28-32 are pending in this application.

Claim Rejections - 35 USC § 102

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

Claims 1-3 and 7-8 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Sundahl (U.S. 4,434,514).

Regarding claim 1, Sundahl teaches a helmet (10) comprising a shell (11) including a vent (front opening 14); a shock absorbing liner (liner 12 including padding 49) attached to the shell (11), wherein the shock absorbing liner (liner 12 including padding 49) is formed of a first shock absorbing material (material of 12 and padding 49; semi-flexible foam plastic; see Col. 2, lines 20-21) adjacent to the shell and comprises a cavity (area between inner edges 49a and including space 46, air channels

35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) at least partially aligned (see Fig. 6) with the vent (front opening 14); and a shock absorbing insert (pad 47) formed of a second shock absorbing material (i.e. material containing multiple through openings; see Col. 3, line 50, and designated with a different marking indicating that the material is a different material see MPEP 37 CFR 1.84(n)) different than the first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) and positioned in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45).

Regarding the limitation "molded to the shell," it is noted that even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). The product of Sundahl is silent with regard to the shock absorbing material being molded to the shell, but is capable of being attached by the process claimed and therefore meets the claims as recited.

Regarding claim 2, Sundahl teaches the claimed invention and wherein the shock absorbing insert (pad 47) is configured to be manually deformed (grasped and pulled out; see Col.3, line 54-56) to be removed from the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45).

Regarding claim 3, Sundahl teaches the claimed invention and wherein the cavity (area between 49 and 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) has a shape configured to retain the shock absorbing insert (pad 47) based on an expansion pressure (i.e. frictionally retained; see Col. 3, lines 45-47) of sides of the insert (pad 47) against sides (i.e. the portion of the cavity between 49 and 49a) of the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45).

Regarding claim 7, Sundahl teaches the claimed invention and wherein the shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) comprises: first (sidewall at one inner edge 49a) and second (sidewall at the other inner edge 49a) sidewalls defining the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45), and wherein the first (sidewall at one inner edge 49a) and second (sidewall at the other inner edge 49a) sidewalls are angled (see Fig. 6) relative to one another (see Fig. 6) such that a distance between the first (sidewall at one inner edge 49a) and second (sidewall at the other inner edge 49a) sidewalls along a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) of the shock absorbing insert (pad 47) is greater than a distance (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) between the first (sidewall at one inner edge 49a) and second (sidewall at the other inner edge 49a) sidewalls along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the

shell) of the shock absorbing insert (pad 47) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell).

Regarding claim 8, Sundahl teaches the claimed invention and wherein the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) is configured such that a distance along a first curved side along a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) of the shock absorbing insert (pad 47) is greater (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a distance along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) of the shock absorbing insert (pad 47).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-15, 18-20, and 28-30 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514).

Regarding claim 13, Sundahl teaches a helmet, comprising: a shock absorbing liner (12 including padding 49) forming a concave shape (see Fig. 6), wherein the shock absorbing liner (12 including padding 49) comprises a cavity (area between inner edges

49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45); an insert (pad 47) retained (see Fig. 6) in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45); and an insert (pad 47) in the shock absorbing liner (12 including padding 49), wherein the sidewalls (i.e. sidewalls at inner edges 49a) of the shock absorbing liner (12 including padding 49) defining cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) are shaped such that a distance between the sidewalls (i.e. sidewalls at inner edges 49a) along a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) of the insert (pad 47) is greater (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a distance between the sidewalls (i.e. sidewalls at inner edges 49a) along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) of the insert (pad 47) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell); and a shell (11) attached to (see Fig. 6) an outer surface (e.g. outer surface of 12) of the shock absorbing liner (12 including 49), but is silent about the shock absorbing liner being seamless.

Sundahl disclosed the claimed invention except for the shock absorbing liner being seamless. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to make the shock absorbing liner seamless since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. See MPEP 2144.04 (V)(B).

Regarding claim 14, Sundahl teaches the claimed invention and wherein the shock absorbing liner (12 including padding 49) comprises a first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) and the insert (pad 47) comprises a second shock absorbing material (i.e. material containing multiple through openings; see Col. 3, line 50) that is different than the first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21).

Regarding claim 15, Sundahl teaches the claimed invention and wherein the second shock absorbing material (i.e. containing multiple through openings; see Col. 3, line 50) is porous (i.e. containing multiple through openings; see Col. 3, line 50).

Regarding claim 18, Sundahl teaches the claimed invention and further comprising a shell (11) attached to on an outer surface (see Fig. 6) of the shock absorbing liner (12 including padding 49).

Regarding claim 19, Sundahl teaches the claimed invention and further comprising a shell (11) attached to on an outer surface (see Fig. 6) of the shock absorbing liner (12 including padding 49).

Regarding claim 20, Sundahl teaches the claimed invention and wherein the insert (pad 47) comprises a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) adjacent an outer portion (see Fig. 6) of the shock absorbing liner (12 including padding 49) and a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell), where a distance across the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) is greater (i.e. given that the pad

forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a corresponding distance across the second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell).

Regarding claim 28, Sundahl teaches the claimed invention and wherein a thickness of the shock absorbing insert (pad 47) is equal to or less than a thickness (see Fig. 6) of the shock absorbing liner (12).

Regarding claim 29, Sundahl teaches the claimed invention and wherein the shell (11) includes a vent (front opening 14), and wherein the vent (front opening 14) aligns with a portion (see Fig. 6) of the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45).

Regarding claim 30, Sundahl teaches the claimed invention and wherein a thickness of the insert (pad 47) is equal to or less than a thickness (see Fig. 6) of the shock absorbing liner (12).

Claims 4, 9-11, 21, and 22 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) in view of Fournier (U.S. 5,950,244).

Regarding claim 4, Sundahl teaches the claimed invention and the first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) and wherein the second shock absorbing material (i.e. containing multiple through openings; see Col. 3, line 50) is porous (i.e. has multiple through openings; see Col. 3, line 50), but is silent about the first shocking material being non-porous.

Fournier teaches a first shocking material (first material 16 is non-porous; see Fig. 4, i.e. dashed lines).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a first shock absorbing material to include Fournier's teaching of the material being non-porous since this material would be capable of absorbing and dissipating a single relatively high impact imparted on the outer shell (Col. 3, lines 63-65 of Fournier).

Regarding claim 9, Sundahl teaches the claimed invention and the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) and a shock absorbing insert (pad 47) placed in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) of the shock absorbing liner (liner 12 including padding 49), but is silent about the cavity including a recess and the shock absorbing insert including a protrusion keyed to the recess in the cavity of the shock absorbing liner.

Fournier teaches a cavity (plug hole 25) including a recess (groove 52), and the shock absorbing insert (plug 19) including a protrusion (ridge 50) keyed to the recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a protrusion

since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 10, Sundahl teaches the claimed invention and an edge (edge of pad 47) of the shock absorbing insert (pad 47) and a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) of the shock absorbing liner (liner 12 including padding 49), but is silent about the edge of the shocking absorbing insert being rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

Fournier teaches an edge (ridge 50) of the insert (plug 19) is rounded (see Fig. 5) to form a semi-ovular shape that is keyed to a recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 11, Sundahl teaches the claimed invention and wherein the shock absorbing liner (liner 12 including padding 49) and cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) configured to retain the shock absorbing insert (pad 47), but does teach wherein the shock absorbing liner includes tabs protruding laterally across the cavity that are configured to retain the shock absorbing insert.

Fournier teaches the claimed invention and wherein the shock absorbing liner (16) includes tabs (ridge 27) protruding laterally across the cavity (plug hole 25) that are configured to retain the insert (plug 19; see Fig. 4; Col. 5, lines 23-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a liner and cavity to retain an insert to include Fournier's teaching of the liner having tabs since doing so would provide a secure interference fit (See Col. 5, lines 22-26 of Fournier).

Regarding claim 21, Sundahl teaches the claimed invention and an edge (edge of pad 47) of the insert (pad 47) and a cavity (area between inner edges 49 a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) of the shock absorbing liner (liner 12 including padding 49), but is silent about the edge of the shocking absorbing insert being rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

Fournier teaches an edge (ridge 50) of the insert (plug 19) is rounded (see Fig. 5) to form a semi-ovular shape that is keyed to a recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 22, Sundahl teaches the claimed invention and wherein the shock absorbing liner (12 including padding 49) comprises a plurality of cavities (e.g. openings 124, 125, 126, and area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45), but is silent about the helmet further comprising a plurality of inserts, each of the plurality of inserts having a shape configured to a shape of a respective cavity of the plurality of cavities in the shock absorbing liner.

Fournier teaches the shock absorbing liner (first material 16) comprises a plurality of cavities (plug holes 25; see Fig. 4), the helmet further comprising a plurality of inserts (19, see Fig. 4), each of the plurality of inserts having a shape configured to a shape of a respective cavity (plug hole 25; see Fig. 4) of the plurality of cavities (plug holes 25) in the shock absorbing liner (first material 16).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a liner with a plurality of cavities to include Fournier's teaching of liner with a plurality of cavities and inserts configured to a shape of the cavities since doing so provide a mixture of liner and insert materials, the combination of which is needed to effectively and controllably absorb, displace, and dissipate varying degrees and ranges of impact imparted on outer shell 12 (see Col. 4, lines 13-16 of Fournier).

Claims 5-6, 16, 17, 31, and 32 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) in view of Sajic (U.S. 8,082,599).

Regarding claim 5, Sundahl teaches the claimed invention and wherein the shock absorbing insert (pad 47), but is silent about it being formed from a honeycomb material.

Sajic teaches a shock absorbing insert (sandwich panel) with a honeycomb material (honeycomb cells 60; Fig. 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of an insert to include Sajic's teaching of an insert with a honeycomb shape since doing so would give rise to increased energy absorbing performance, and would therefore improve the safety of the device (Col. 2, lines 2-4 of Sajic).

Regarding claim 6, the combined references of Sundahl and Sajic teach the claimed invention and wherein the honeycomb materials (honeycomb cells 60 of Sajic) include an array of energy absorbing cells (Fig. 4 and 5 of Sajic), each of the energy absorbing cells including a tube (22; see Col. 5, lines 45-47 of Sajic).

Regarding claim 16, Sundahl teaches the claimed invention and wherein the second shock absorbing material (i.e. containing multiple through openings; see Col. 3, line 50), but is silent about it includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.

Sajic teaches a second shock absorbing material (tubes 22 of Sajic) include an array of energy absorbing cells (Fig. 4 and 5; Col. 2, lines 1-5 of Sajic), each of the energy absorbing cells including a tube (22; see Col. 5, lines 45-47 of Sajic).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a second shock absorbing material to include Sajic's teaching of the material including an array of energy absorbing cells including a tube since doing so would provide a relatively constant level of energy absorption as the column is progressively buckled or crushed (See Col. 2, lines 4-6) and the tubular array results in a material which is substantially isotropic (Col. 3, lines 19-20 of Sajic).

Regarding claim 17, the combined references of Sundahl and Sajic teach the claimed invention and wherein each of the tubes (tubes 22 of Sajic) of the energy absorbing cells (Fig. 4 and 5; Col. 2, lines 1-5 of Sajic) comprises a circular cylindrical or circular conical structure (Col. 3, lines 17-18 of Sajic).

Regarding claim 31, Sundahl teaches a helmet (10), comprising: a shell (11) including a vent (front opening 14); a shock absorbing liner (liner 12 including padding 49) adjacent to (see Fig. 6) and attached to the shell (11) and comprising a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) at least partially aligned (see Fig. 6) with the vent (front opening 14) and an insert positioned in the cavity, but does not teach the insert being made of honeycomb material.

Sajic teaches a shock absorbing insert (sandwich panel) with a honeycomb material (honeycomb cells 60; Fig. 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of an insert to include Sajic's teaching

of an insert with a honeycomb shape since doing so would give rise to increased energy absorbing performance, and would therefore improve the safety of the device (Col. 2, lines 2-4 of Sajic).

Regarding claim 32, the combined references teach the claimed invention and the shock absorbing liner (12 including 49 of Sundahl), but are silent about the liner being seamless.

Sundahl disclosed the claimed invention except for the shock absorbing liner being seamless. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to make the shock absorbing liner seamless since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. See MPEP 2144.04 (V)(B).

Claim 12 is rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) view of Weber (U.S. 2012/0198604).

Regarding claim 12, Sundahl teaches the claimed invention and wherein the shell (11) comprises at least one of polycarbonate (polycarbonate; see Col. 2, lines 17-19) (PC) or Acrylonitrile butadiene styrene (ABS), and wherein the shock absorbing liner comprises polystyrene (Col. 2, lines 19-21), but is silent about the liner comprising expanded polystyrene (EPS).

Weber teaches helmet with a liner formed of EPS (Para. 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of a polystyrene liner to include Weber's teaching of the liner being made of EPS since doing so would give rise to a

lining that would help dissipate the energy of impacts (Para. 45 of Weber), thus leading to a more protective helmet.

Response to Arguments

Applicant's arguments, see Pages 6 and 7, filed 3/28/2016, with respect to rejection under 35 U.S.C. 112(b) have been fully considered and are persuasive. The rejection of 7, 13, and 32 under 35 U.S.C. 112(b) has been withdrawn.

Applicant's arguments filed 3/28/2016 have been fully considered but they are not persuasive.

Regarding Sundahl and Claim 1, the applicant's claim limitations require a helmet (10 of Sundahl) comprising...wherein the shock absorbing liner (12 and 49 of Sundahl) is formed of a first shock absorbing material (material of 12 and 49 of Sundahl). It is noted that use of the "comprising" language is open-ended and does not exclude additional, unrecited elements. In addition, the "first shock absorbing material" can be interpreted as a single material in the form of a composite.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the first shock absorbing material being a single composition of a specific material) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response the application argument that padding 49 is not positioned in a cavity in a material that is adjacent to the shell" (see Page 8), the examiner respectfully

disagrees. The term "adjacent" has been interpreted according to the definition by Merriam-Webster, i.e. adjacent: close or near.

Regarding Sundahl and Claim 13 and 31, the applicant's claim limitations require a helmet (10 of Sundahl) comprising... the shock absorbing liner (12 and 49 of Sundahl)... compris(es/ing) a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45 of Sundahl). It is noted that use of the "comprising" language is open-ended and does not exclude additional, unrecited elements.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the cavity having a particular configuration and/or extending a particular width/depth into the shock absorbing liner) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir.

1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

In response to applicant's argument that there is no teaching, suggestion, or motivation to combine parts 12 and 49 of Sundahl to make "a seamless shock absorbing liner" since "liner 12 is for impact loading from the shell 11...In contrast the padding 49 is in direct contact with a wearers head and cushions the head from the harder liner 12 material" (see Remarks, Page 10), Examiner respectfully disagrees that the portions cannot be combined since Sundahl also teaches that liner 12 provides "enhanced protective and cushioning effect" (see Col. 2, lines 35-37). It would have been obvious to one of ordinary skill in the art at the time the invention was filed to make the shock absorbing liner seamless since it has been held that forming in one piece (e.g. one piece providing cushioning effect) an article which has formerly been formed in two piece (both of which provide cushioning effect) and put together involves only routine skill in the art. See MPEP 2144.04 (V)(B).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNE KOZAK whose telephone number is (571)270-0552. The examiner can normally be reached on Mon - Fri: 8AM - 5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Clinton Ostrup can be reached on (571) 272-5559. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANNE KOZAK/
Examiner, Art Unit 3765

/RICHALE QUINN/

Primary Examiner, Art Unit 3765

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Doc description: Information Disclosure Statement (IDS) Filed

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13/965,703
	Filing Date		Aug 13, 2013
	First Named Inventor	James A. Chilson	
	Art Unit		3765
	Examiner Name	Anne M. Kozak	
	Attorney Docket Number		P240940.US.01

U.S. PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		D424246		2000-05-02	Ho	
		D437092		2001-01-30	Ho	
		D444268		2001-06-26	Montello	
		D453975		2002-02-26	Ho	
		D481172		2003-10-21	Ho	
		D563053		2008-02-26	Fang	
		D563054		2008-02-26	Fang	
		D563055		2008-02-26	Fang	
		D565249		2008-03-25	Fang	
		D570548		2008-06-03	Ashida	
		D650949		2011-12-20	Richard	
		D650950		2011-12-20	Richard	
		D679865		2013-04-09	Garneau et al.	
		D752294		2016-03-22	Chilson et al.	

NON-PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
		"Examiner's Report for Canada Patent Appl. No. 2858707 dated March 9, 2016"	

EXAMINER SIGNATURE			
Examiner Signature	/ANNE M KOZAK/	Date Considered	05/06/2016

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	115	A42B3/124.cpc.	US-PGPUB; USPAT	OR	ON	2016/05/06 16:27
L2	347	A42B3/12.cpc.	US-PGPUB; USPAT	OR	ON	2016/05/06 16:27
L3	14	("D424246" "D437092" "D444268" "D453975" "D481172" "D563053" "D563054" "D563055" "D565249" "D570548" "D650949" "D650950" "D679865" "D752294").PN.	US-PGPUB; USPAT	OR	ON	2016/05/06 16:29
L4	71	("20010032351" "20060096011" "20060260026" "20070000025" "20120036620" "5088129" "5687426" "6336220" "8966669" "4434514" "D437092" "D563055" "20090158506" "20140013492" "4985931" "5561866" "6387200" "6446271" "6883181" "D453975" "D563053" "D650949" "D752294" "20110252544" "20120036619" "20120198604" "8533869" "8732869" "20060059605" "20080307568" "20130007950" "20140338104" "20150047110" "20150047113" "4307471" "7828759" "8986798" "D650132" "D563054" "D565249" "D679865" "20150082520" "4916759" "5694649" "5950244" "D481172" "20080307568" "8082599" "20050015855" "20080184463" "20090264073" "20130061375" "20140366252" "3447163" "6065158" "6282724" "7089602" "8166574" "D645210" "D444268" "20060059606" "20060101556" "5840397" "6185753" "7669378" "8082599" "8667618" "D424246" "D570548" "20140250571" "8512843" "5915537" "D650950").PN.	US-PGPUB; USPAT	OR	ON	2016/05/06 16:30
L6	58	A42B3/069.cpc.	US-PGPUB; USPAT	OR	ON	2016/05/06 16:31
L7	115	A42B3/124.cpc.	US-PGPUB; USPAT	OR	ON	2016/05/06 16:32
S2	1	("20130333100").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S3	1	("20120196147").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43

S5	1	("7254843").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S6	1	("D703871").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:44
S8	1	("20110225706").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:44
S9	2	("20080307568" "8082599").PN.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:45
S10	11	((James) near2 (Chilson)).INV.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:46
S16	82	A42B3/124.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:52
S17	178	A42B3/121.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S18	140	A42B3/127.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S19	109	A42B3/063.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S20	40	A42B3/069.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S21	32	("20010032351" "2381524" "3174155" "3242500" "3501772" "3787893" "3872511" "3906546" "4075717" "4124904" "4307471" "4937888" "5150479" "5177815" "5815846" "6282724" "7089602").PN. OR ("7254843").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 09:54
S22	300	A42B3/12.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:16
S23	156	A42B3/125.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:17
S24	197	A42B3/10.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:17
S25	4	S23 and (honeycomb liner)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:23
S26	6	("20060059605" "20040117896" "6065158" "5561866" "7930771" "6387200").PN.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:26
S27	15	S22 and (honeycomb liner)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:29
S28	67	S22 and (removable pads)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:31

S29	70	S22 and (removable (pads or inserts))	US-PGPUB; USPAT	AND	ON	2015/03/27 10:33
S30	64	S22 and (removable (pads or inserts)) and liner	US-PGPUB; USPAT	AND	ON	2015/03/27 10:33
S31	6	S30 and honeycomb	US-PGPUB; USPAT	AND	ON	2015/03/27 10:34
S32	1	"4985931".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:37
S33	1	"5561866".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:39
S34	4	("20070130670" "5119514" "5336180" "7958570").PN.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:45
S35	81	S18 and (liner and (insert or pad))	US-PGPUB; USPAT	AND	ON	2015/03/27 10:53
S36	7	S35 and key\$2	US-PGPUB; USPAT	AND	ON	2015/03/27 10:53
S37	4	("2012/0036620").URPN.	USPAT	OR	ON	2015/03/27 10:58
S38	1	S18 and (honeycomb pad)	US-PGPUB; USPAT	AND	ON	2015/03/27 11:14
S39	20	S22 and (honeycomb)	US-PGPUB; USPAT	AND	ON	2015/03/27 11:14
S40	1	"5840397".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 11:21
S41	45	("3447163" "3895152" "4422183" "4465725" "4485568" "5203607" "5416924" "5496610").PN. OR ("5840397").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 11:21
S42	189	("0058403" "0357597" "0386191" "0491123" "0891977" "0901592" "1295297" "1374177" "1374669" "1389767" "1514462" "1573212" "1587508" "1602454" "1622211" "1697833" "1717609" "1887473" "1915754" "20040128748" "20050229293" "2057575" "2165081" "2249966" "2251018" "2266886" "2460895" "2467907" "2539170" "2570497" "2629094" "2774073" "2800663" "2853757" "2884675" "2930046" "3073305" "3146461" "3194233" "3237257" "3295530" "3310053" "3350719" "3407452" "3431560" "3463147" "3506000" "3515142" "3528412" "3581741" "3584622" "3640273" "3674023" "3799158" "3885252" "3909847" "3945046" "4097932" "4136226"	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 11:23

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S43	0	("2014/0013492").URPN.	USPAT	OR	ON	2015/03/27 12:05
S44	4	("20060059605" "20040117896" "6065158" "5561866" "7930771" "6387200").PN.	USPAT	OR	ON	2015/03/27 12:07
S45	34	("20020120978" "2619639" "3055013" "3241154" "3248738" "3344433" "3447162" "3673609" "3820163" "3843970" "3859666" "3882547" "4558470" "4627114" "5315718" "5603117" "5687426" "5694649" "6105176" "6467099").PN. OR ("6883181").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2015/03/27 12:31
S46	79	S18 and (liner and (removable insert or pad))	US- PGPUB; USPAT	AND	ON	2015/03/27 13:51
S47	22	("20040117896" "20090307827" "20110179557" "20120198604" "20120233745" "20120266366" "20120317705" "20130019384" "20130174331" "20130254978" "4307471" "5056162" "5734994" "5915537" "6065158" "6425141" "6560787" "6658671" "6704943" "7328462" "7509835" "7930771").PN.	US- PGPUB; USPAT	AND	ON	2015/03/27 13:54
S48	134	A42B3/122.cpc.	US- PGPUB; USPAT	OR	ON	2015/03/27 14:20
S49	10	(US-20140259314-\$ or US-20140223644-\$ or US-20070000032-\$ or US-20070226881-\$ or US-20040261157-\$ or US-20030140400- \$).did. or (US-7082623-\$ or US-5950244-\$ or US-4345338-\$ or US-3720955-\$).did.	US- PGPUB; USPAT	OR	ON	2015/03/27 16:25

S50	58	("3729744" "3783450" "3820163" "3946441" "4006496" "4081865" "4133055" "4134155" "4345338" "4484364" "4534068" "4558470" "5086520" "5269025" "5309576" "5351342" "5428846" "5581819" "5619756" "5669079" "5815846" "5833796").PN. OR ("5950244").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2015/03/30 08:21
S52	55	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544- \$).did. or (US-D650132-\$ or US-D645210-\$ or US-8082599-\$ or US-7254843-\$ or US- 8986798-\$ or US-8966669-\$ or US-8667618- \$ or US-8512843-\$ or US-8166574-\$ or US- 7669378-\$ or US-7089602-\$ or US-6282724- \$ or US-4307471-\$ or US-6387200-\$ or US- 6065158-\$ or US-5561866-\$ or US-8533869- \$ or US-4985931-\$ or US-6446271-\$ or US- 6185753-\$ or US-4916759-\$ or US-6883181- \$ or US-5088129-\$ or US-5687426-\$ or US- 8732869-\$ or US-7828759-\$).did. or (US- 6336220-\$ or US-5840397-\$ or US-3447163- \$ or US-5694649-\$ or US-5950244-\$).did.	US- PGPUB; USPAT	OR	ON	2015/03/30 11:56
S53	19	S52 and honeycomb	US- PGPUB; USPAT	OR	ON	2015/03/30 11:57
S54	18	S52 and polycarbonate	US- PGPUB; USPAT	OR	ON	2015/03/30 11:58
S55	7	S52 and (polycarbonate and honeycomb)	US- PGPUB; USPAT	OR	ON	2015/03/30 11:59
S56	1	S52 and (polycarbonate near shell)	US- PGPUB; USPAT	OR	ON	2015/03/30 12:08
S57	0	S52 and (acrylonitrile butadiene styrene near shell)	US- PGPUB; USPAT	AND	ON	2015/03/30 12:10
S58	5	S52 and (acrylonitrile butadiene styrene)	US- PGPUB; USPAT	AND	ON	2015/03/30 12:10
S59	0	S52 and (polycarbonate near shell) and honeycomb	US- PGPUB; USPAT	OR	ON	2015/03/30 12:11
S60	17	S52 and (EPS)	US- PGPUB; USPAT	OR	ON	2015/03/30 12:12
S61	17	S52 and "EPS"	US- PGPUB; USPAT	OR	ON	2015/03/30 12:12

S62	6	S52 and ("EPS" and polycarbonate)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:15
S63	7	S52 and (porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 13:32
S65	2	S52 and (non\$1porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:32
S66	62386	S50/.clas.	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S67	5824	S66 and helmet	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S68	74	S67 and (non\$1porous and porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S69	56	"L21" and (air\$1flow)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S70	9	S68 and (air\$1flow)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:35
S71	27	S68 and (ventilat\$3)	US-PGPUB; USPAT	OR	ON	2015/03/30 16:50
S72	56	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544-\$ or US-20060101556-\$).did. or (US-D650132-\$ or US-D645210-\$ or US-8082599-\$ or US-7254843-\$ or US-8986798-\$ or US-8966669-\$ or US-8667618-\$ or US-8512843-\$ or US-8166574-\$ or US-7669378-\$ or US-7089602-\$ or US-6282724-\$ or US-4307471-\$ or US-6387200-\$ or US-6065158-\$ or US-5561866-\$ or US-8533869-\$ or US-4985931-\$ or US-6446271-\$ or US-6185753-\$ or US-4916759-\$ or US-6883181-\$ or US-5088129-\$ or US-5687426-\$ or US-8732869-\$ or US-7828759-\$).did. or (US-6336220-\$ or US-5840397-\$ or US-3447163-\$ or US-5694649-\$ or US-5950244-\$).did.	US-PGPUB; USPAT	OR	ON	2015/03/30 16:59
S73	9	S72 and cooling	US-PGPUB; USPAT	OR	ON	2015/03/30 17:00
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EAST Search History

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EAST Search History (Interference)

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5/ 6/ 2016 5:16:40 PM**C:\Users\akozak\Documents\EAST\Workspaces\13965703.wsp**

Search Notes 	Application/Control No. 13965703	Applicant(s)/Patent Under Reexamination CHILSON, JAMES A.
	Examiner ANNE KOZAK	Art Unit 3765

CPC- SEARCHED		
Symbol	Date	Examiner
A42B 3/063,069,12,1,124,127	4/1/2015	AK
Updated above search - conducted a fast & focused STIC search with Fern Birtwistle	8/28/2015	AK
Updated above search	12/18/2015	AK
Updated above search	5/6/2016	AK

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
2	414	4/1/2015	AK
Updated above search		8/28/2015	AK

SEARCH NOTES		
Search Notes	Date	Examiner
Conducted an IDS, Inventor, USPC and CPC search with text in EAST	4/1/2015	AK
Updated above search	8/28/2015	AK
Updated above search	12/18/2015	AK
Conducted a new IDS search and updated above search	5/6/2016	AK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	: 13/965,703	Confirmation No.	: 5250
First Named Inventor	: James A. Chilson		
Filed	: August 13, 2013	Attorney Docket No.:	P240940.US.01
Art Unit	: 3765	Customer No.	: 27,076
Examiner	: Anne M. Kozak		
Title	: HELMET WITH SHOCK ABSORBING INSERTS		

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE UNDER 37 C.F.R. § 1.111

Madam:

Applicant acknowledges receipt of the Office Action dated December 30, 2015. The Commissioner is hereby authorized to charge any deficiency of fees that may be required, or credit any overpayment, to Deposit Account No. 50-1266. Please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claim 18, and amend claims 1, 7, 13, and 31 as follows:

Listing of Claims:

1. (Currently amended) A helmet, comprising:
a shell including a vent;
a shock absorbing liner attached to the shell, wherein the shock absorbing liner is formed of a first shock absorbing material ~~molded adjacent~~ to the shell and comprises~~[[ing]]~~ a cavity at least partially aligned with the vent; and
a shock absorbing insert formed of a second shock absorbing material different than the first shock absorbing material and positioned in the cavity.
2. (Original) The helmet of claim 1, wherein the shock absorbing insert is configured to be manually deformed to be removed from the cavity.
3. (Previously Presented) The helmet of claim 1, wherein the cavity has a shape configured to retain the shock absorbing insert based on an expansion pressure of sides of the insert against sides of the cavity.
4. (Original) The helmet of claim 1, wherein the first shock absorbing material is non-porous, and wherein the second shock absorbing material is porous.
5. (Original) The helmet of claim 1, wherein the shock absorbing insert is formed from a honeycomb material.
6. (Original) The helmet of claim 5, wherein the honeycomb material includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.

7. (Currently amended) The helmet of claim 1, wherein the first shock absorbing material comprises:

first and second sidewalls defining the cavity,
and wherein the first and second sidewalls are angled relative to one another such that a distance between the first and second sidewalls along a first curved side of the shock absorbing insert is greater than a distance between the first and second sidewalls along a second curved side of the shock absorbing insert opposite the first curved side.

8. (Previously Presented) The helmet of claim 1 wherein the cavity is configured such that a distance along a first curved side of the shock absorbing insert is greater than a distance along a second curved side of the shock absorbing insert opposite the first curved side.

9. (Original) The helmet of claim 1, wherein the cavity includes a recess and the shock absorbing insert includes a protrusion keyed to the recess in the cavity of the shock absorbing liner.

10. (Previously Presented) The helmet of claim 1, wherein an edge of the shock absorbing insert is rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

11. (Previously Presented) The helmet of claim 1, wherein the shock absorbing liner includes tabs protruding laterally across the cavity that are configured to retain the shock absorbing insert.

12. (Original) The helmet of claim 1, wherein the shell comprises at least one of polycarbonate (PC) or Acrylonitrile butadiene styrene (ABS), and wherein the shock absorbing liner comprises at least one of expanded polystyrene (EPS) or expanded polypropylene (EPP).

13. (Currently Amended) A helmet, comprising:
~~an integral~~ seamless shock absorbing liner forming a concave shape, wherein the shock absorbing liner comprises [[ing]] a cavity; ~~and~~

an insert retained in the cavity in the shock absorbing liner,
wherein sidewalls of the shock absorbing liner defining the cavity are shaped such that a distance between the sidewalls along a first curved side of the insert is greater than a distance between the sidewalls along a second curved side of the insert opposite the first curved side; and
a shell attached to an outer surface of the shock absorbing liner.

14. (Original) The helmet of claim 13, wherein the shock absorbing liner comprises a first shock absorbing material and the insert comprises a second shock absorbing material that is different than the first shock absorbing material.

15. (Original) The helmet of claim 14, wherein the second shock absorbing material is porous.

16. (Original) The helmet of claim 15, wherein the second shock absorbing material includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.

17. (Original) The helmet of claim 16, wherein each of the tubes of the energy absorbing cells comprises a circular cylindrical or circular conical structure.

18. (Cancelled)

19. (Original) The helmet of claim 13, wherein the insert is configured to allow air to flow there through to the head of a wearer.

20. (Original) The helmet of claim 13, wherein the insert comprises a first curved side adjacent an outer portion of the shock absorbing liner and a second curved side opposite the first curved side, where a distance across the first curved side is greater than a corresponding distance across the second curved side.

21. (Previously Presented) The helmet of claim 13, wherein an edge of the insert includes at least one of a protrusion keyed to a recess in the cavity of the shock absorbing liner, a

semi-circular shape keyed to the recess in the cavity of the shock absorbing liner, or a semi-ovular shape keyed to the recess in the cavity of the shock absorbing liner.

22. (Original) The helmet of claim 13, wherein the shock absorbing liner comprises a plurality of cavities, the helmet further comprising a plurality of inserts, each of the plurality of inserts having a shape configured to a shape of a respective cavity of the plurality of cavities in the shock absorbing liner.

23-27. (Canceled)

28. (Previously Presented) The helmet of claim 1, wherein a thickness of the shock absorbing insert is equal to or less than a thickness of the shock absorbing liner.

29. (Previously Presented) The helmet of claim 18, wherein the shell includes a vent, and wherein the vent aligns with a portion of the cavity.

30. (Previously Presented) The helmet of claim 18, wherein a thickness of the insert is equal to or less than a thickness of the shock absorbing liner.

31. (Currently Amended) A helmet, comprising:
a shell including a vent;
a shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the vent; and
a honeycomb insert positioned in the cavity.

32. (Previously Presented) The helmet of claim 31, wherein the shock absorbing liner is seamless.

REMARKS

Claims 1-17, 19-22, 28-32 are pending after inclusion of the present amendment. Claims 1, 7, 13 and 31 have been amended to recite features disclosed in the application as filed, including the specification, drawings, and originally filed claims. No new matter has been added.

In the Office Action dated December 30, 2015, the Examiner rejected claims 7, 13-22, 29, 30 and 32 under 35 U.S.C. 112(b) or pre-AIA 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claims 1-3, 7 and 8 were rejected under 35 U.S.C. 102(a)(1) as being anticipated by U.S. Patent No. 4,434,514 to Sundahl ("Sundahl"). Claims 13-15, 18-20 and 28-30 were rejected under 35 U.S.C. 103 as being unpatentable over Sundahl. Claims 4, 9-11, 21 and 22 were rejected under 35 U.S.C. 103 as being unpatentable over Sundahl, in view of U.S. Patent No. 5,950,244 to Fournier ("Fournier"). Claims 5-6, 16, 17, 31 and 32 were rejected under 35 U.S.C. 103 as being unpatentable over Sundahl, in view of U.S. Patent No. 8,082,599 to Sajic ("Sajic"). Claim 12 was rejected under 35 U.S.C. 103 as being unpatentable over Sundahl, in view of U.S. Patent Publication No. 2012/0198604 to Weber ("Weber").

112 Second Paragraph Rejections

The Examiner rejected claims 7, 13, and 32 as being indefinite. *See* Office Action, page 2.

Applicant has amended claim 7 to correct a typographical error. No new matter has been added. Reconsideration and withdrawal of the rejection of claim 7 are respectfully requested.

Applicant has amended claim 13 to recite in part, "a seamless shock absorbing liner." Support for this amendment may be found at least in paragraph [0015] of the instant application. The Examiner rejected claim 32 for reciting "wherein the shock absorbing liner is seamless." The Examiner claimed it was unclear what was meant by "seamless." Applicant asserts that the specification adequately describes what is meant by the term "seamless." For example, Applicant respectfully directs the Examiner's attention to paragraph [0015] of the

specification which states “The shock absorbing liner 130 may be seamless, aside from the seam formed with the inserts 122, 124, and 126. For example, the shock absorbing liner 130 may not be interrupted by joints or seams that may compromise the shock absorbing capabilities and/or structural integrity of the shock absorbing liner 130 during impact of the helmet 100.” Accordingly, reconsideration and withdrawal of the rejections of claims 13 and 32 are respectfully requested.

Novelty over Sundahl

Applicant respectfully submits that Sundahl fails to disclose the combination of elements recited in Applicant’s independent claim 1. Reconsideration and withdrawal of the 35 U.S.C. § 102 rejection of claim 1 over Sundahl is respectfully requested.

Claim 1 is directed to a helmet and recites, as amended in part, “a shock absorbing liner attached to the shell, wherein the shock absorbing liner is formed of a first shock absorbing material adjacent to the shell and comprises a cavity at least partially aligned with the vent; and a shock absorbing insert formed of a second shock absorbing material different than the first shock absorbing material and positioned in the cavity.”

The Office Action relied on Sundahl to disclose all of the features of claim 1 in the combination previously presented. *See* Office Action, page 4. Specifically, the Office Action points to two separate components, liner 12 and padding 49, of Sundahl to correspond with Applicant’s single component, the “shock absorbing liner formed of a first shock absorbing material.” The Office Action further points to the perspiration absorbing pad 47 to correspond to Applicant’s “shock absorbing insert.”

Sundahl describes a helmet with air flow and perspiration control. The helmet 10 includes a thin outer shell 11 and a thicker inner liner 12. The liner 12, which can consist of a semi-flexible foam plastic such as polystyrene or polyurethane, is formed of two sections 12a and 12b meeting at transverse parting line 12c. The two sections 12a and 12b are rigidly bonded to the shell’s inner surface. *See* Sundahl Col. 2, ll. 15-25. The helmet 10 includes a perspiration absorbing pad 47. The pad 47 is frictionally retained by inner edge 49a of the padding 49. The pad 47 is removable while padding 49 is bonded to the liner 12 inner surface. *See* Sundahl Col 3, ll. 45-49.

Sundahl describes two separate components: a liner 12 which consists of a semi-flexible foam plastic such as polystyrene or polyurethane, and a padding 49 which is bonded to the inner surface of liner 12. As an initial matter, Applicant respectfully disagrees with the Examiner's assertion that the liner 12 and padding 49 can be combined to correspond to a "first material" as recited in Applicant's claim 1. *See* Office Action, page 17. Liner 12 and padding 49 are two different materials as taught by Sundahl. Accordingly, together, they cannot form a first material. At most, only the semi-flexible material of the liner 12 may correspond to a first material because the material of padding 49 is not adjacent to the shell as recited in Applicant's claim 1.

Furthermore, the pad 47 cannot correspond with the shock absorbing insert because the pad 47 is not positioned in a cavity defined by the first shock absorbing material. The pad 47 of Sundahl is contained only within a cavity of the padding 49, not the cavity 114 of the inner surface liner 12. *See* Sundahl, Figure 6. In other words, the padding 49 is not positioned in a cavity in a material that is adjacent to the shell 11 but is instead positioned in a cavity that is formed in a material that is not adjacent to the shell. Thus the pad 47 cannot be considered to correspond to Applicant's "shock absorbing insert" because the pad 47 is not positioned in a cavity of a shock absorbing liner formed of a first shock absorbing material adjacent to the shell. Accordingly, Sundahl fails to disclose "the shock absorbing liner formed of a first shock absorbing material adjacent to the shell and comprising a cavity at least partially aligned with the vent; and a shock absorbing insert formed of a second shock absorbing material different than the first shock absorbing material and positioned in the cavity," in the combination of Applicant's claim 1.

For at least these reasons, Applicant respectfully submits the 35 U.S.C. § 102 rejection of claim 1 should be reconsidered and withdrawn.

Non-Obviousness Over Sundahl

Applicant respectfully submits that Sundahl fails to disclose or suggest the combination of elements recited in Applicant's independent claim 13. Reconsideration and withdrawal of the 35 U.S.C. § 103 rejection of claim 13 over Sundahl is respectfully requested.

Claim 13 is directed to a helmet and recites as amended in part, “a seamless shock absorbing liner forming a concave shape, wherein the shock absorbing liner comprises a cavity; an insert retained in the cavity in the shock absorbing liner,” and “a shell attached to an outer surface of the shock absorbing liner.”

The Office Action relied on Sundahl to disclose all of the elements of Applicant’s claim 13 other than the seamless shock absorbing liner. The Office Action states that creating a seamless shock absorbing liner would be obvious to one having skill in the art. *See* Office Action, pages 7-8.

Similar to the rejection of claim 1, the Office Action points to two separate components, liner 12 and padding 49, of Sundahl to correspond with Applicant’s single component, the “shock absorbing liner.” The Office Action further points to the perspiration absorbing pad 47 to correspond to Applicant’s “insert.”

Sundahl describes a helmet with air flow and perspiration control. The helmet 10 includes a thin outer shell 11 and a thicker inner liner 12. The liner 12, which can consist of a semi-flexible foam plastic such as polystyrene or polyurethane, is formed of two sections 12a and 12b meeting at transverse parting line 12c. The two sections 12a and 12b are rigidly bonded to the shell’s inner surface. *See* Sundahl Col. 2, ll. 15-25. The helmet 10 includes a perspiration absorbing pad 47. The pad 47 is frictionally retained by inner edge 49a of the padding 49. The pad 47 is removable while padding 49 is bonded to the liner 12 inner surface. *See* Sundahl Col 3, ll. 45-49.

Sundahl describes two separate components: a liner 12 which consists of a semi-flexible foam plastic such as polystyrene or polyurethane, and a padding 49 which is bonded to the inner surface of liner 12. The padding 49 and liner 12 cannot be used together to teach or suggest “a seamless shock absorbing liner,” in the combination of Applicant’s claim 13 because these components are two separate components made of two different materials bonded together and a seam therefore necessarily exists between the padding 49 and liner 12. As noted previously in reference to claim 1, the pad 47 is contained only within the cavity of the padding 49, not the cavity 114 of the inner surface liner 12. *See* Sundahl, Figure 6. The shell 11 is not attached to the padding 49.

Furthermore, it would not be obvious from the teachings of Sundahl to form liner 12 and padding 49 as an integral unit of a single, seamless material. Sundahl does not suggest combining liner 12 and padding 49. Rather, Sundahl suggests that the two components are made of different materials because they serve different purposes. The liner 12 is for impact loading from the shell 11. *See* Sundhal, col. 2, ll. 35-37. In contrast, the padding 49 is in direct contact with a wearer's head and cushions the head from the harder liner 12 material. *See* Sundhal, col. 3, ll. 45-49 and Fig. 6. Thus, because of the differences in location relative to the shell 11 and intended purposes of the components, based on the teachings of Sundahl, it would not be obvious to combine liner 12 and padding 49 into a single component of a single material.

Accordingly, Sundahl fails to teach or suggest, "a seamless shock absorbing liner forming a concave shape, the shock absorbing liner comprising a cavity; an insert retained in the cavity in the shock absorbing liner," and "a shell attached to an outer surface of the shock absorbing liner," in the combination of Applicant's claim 13.

Non-Obviousness Over Sundahl and Sajic

Applicant respectfully submits that Sundahl and Sajic, even if combined, fail to disclose or suggest the combination of elements recited in Applicant's independent claim 31. Reconsideration and withdrawal of the 35 U.S.C. § 103 rejection of claim 31 over Sundahl and Sajic is respectfully requested.

Claim 31 is directed to a helmet and recites in part, "a shell including a vent; a shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the vent; and a honeycomb insert positioned in the cavity."

The Office Action relied on Sundahl to disclose all of the features of claim 31 except for the honeycomb insert. The Office Action relies on Sajic to disclose a honeycomb material that can be used as an insert. *See* Office Action, pages 15-16. Similar to claim 1, the Office Action points to two separate components, liner 12 and padding 49, of Sundahl to correspond with Applicant's single component, the "shock absorbing liner." The Office Action further points to the perspiration absorbing pad 47 to correspond to Applicant's "insert."

As discussed previously, Sundahl describes a helmet with air flow and perspiration control. The helmet 10 includes a thin outer shell 11 and a thicker inner liner 12.

See Sundahl Col. 2, ll. 15-25. The helmet 10 includes a perspiration absorbing pad 47. The pad 47 is frictionally retained by inner edge 49a of the padding 49. The pad 47 is removable while padding 49 is bonded to the liner 12 inner surface. *See Sundahl Col 3, ll. 45-49.*

Sundahl describes two separate components, a liner 12 bonded to the shell 11 and a padding 49 which is bonded to the inner surface of liner 12. The pad 47 is contained only within the cavity of the padding 49, not the cavity 114 of the inner surface liner 12. *See Sundahl, Figure 6.* The padding 49 is not attached to the shell 11. Thus, the pad 47 cannot be considered to correspond to Applicant's "insert" because the pad 47 is not positioned in a cavity of a shock absorbing liner which is adjacent to and attached to the shell. Rather, the pad 47 is in a cavity of the padding 49 which is attached to another component (i.e., liner 12) that is adjacent to and attached to the shell. Accordingly, Sundahl fails to disclose "a shell including a vent; a shock absorbing liner attached to the shell and comprising a cavity at least partially aligned with the vent; and a honeycomb insert positioned in the cavity," in the combination of Applicant's claim 31.

Sajic does not make up for the deficiencies of Sundahl, nor does the Examiner rely on Sajic in this capacity. Sajic teaches energy absorbing cells 20 between two skins 30 to form a sandwich panel 12 to be used as a body protecting device. *See Sajic, Abstract, col. 5, ll. 17-23, and Figs. 2-3.* The purpose of the pad 47 of Sundahl and the purpose of the cells 20 of Sajic are different, and combining Sajic with Sundahl would impermissibly change the principle of operation of Sundahl and render the pad 47 unsatisfactory for its intended purpose. *See MPEP 2143.01.* Sundahl teaches pad 47 is easily removable, can be quickly pulled out of padding 49, and wrung out to remove perspiration. *See Sundahl, col. 3, ll. 54-57.* In contrast, Sajic teaches the cells 20 are located in the core of the sandwich panel 12 and are configured and made of materials to resist deformation when a load is applied. *See Sajic, col. 3, ll. 13-15.* One would not be motivated by the teachings of Sundahl to replace the perspiration absorbing pad 47 of Sundahl with the interior 20 of the sandwich panel 12 of Sajic that is designed to resist deformation. Accordingly, the combined teachings of Sundahl and Sajic do not teach or suggest the combination of limitations recited in Applicant's claim 31.

For at least these reasons, Applicant respectfully submits the 35 U.S.C. § 103 rejection of claim 31 should be reconsidered and withdrawn.

Dependent Claims

Claims 2-12, 14-17, 19-22, 28-30, and 32 depend from and include all of the elements of at least one of Applicant's respective independent claims discussed above. These claims are patentably distinguished over the applied references because of their dependency on patentable independent claims and also because of the additional elements recited in those claims. Accordingly, for at least the reasons discussed above with respect to Applicant's independent claims, reconsideration and withdrawal of the rejections of claims 2-12, 14-17, 19-22, 28-30, and 32 is respectfully requested. Applicant has, for brevity, chosen not to individually discuss additional distinguishing characteristics of the dependent claims. Applicant's silence should not be interpreted as belief that the dependent claims are patentable only by virtue of their dependence on a patentable independent claim.

Favorable consideration and a timely Notice of Allowance are earnestly solicited. The Examiner is invited to contact the undersigned should a telephone conversation be useful in the efficient prosecution of this matter.

Respectfully submitted,
DORSEY & WHITNEY LLP

March 28, 2016

Date

/Elen Wetzel/

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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 13/965,703 Confirmation No. : 5250
First Named Inventor : James A. Chilson
Filed : August 13, 2013 Attorney Docket No. : P240940.US.01
Art Unit : 3765 Customer No. : 27,076
Examiner : Anne M. Kozak
Title : HELMET WITH SHOCK ABSORBING INSERTS

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Madam:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicant wishes to make known to the Patent and Trademark Office the references set forth on the attached form PTO-SB/08. Copies of the cited U.S. patents will not be submitted herewith in accordance with the waiver by the Office of the requirement under 37 C.F.R. § 1.98(a)(2)(i) for U.S. national patent applications filed after June 30, 2003.

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

A fee of \$180 is submitted in accordance with 37 C.F.R. § 1.97(c). The Commissioner is authorized to charge any other fees which may be required, or credit any overpayment to Deposit Account No. 50-1266.

Respectfully submitted,
DORSEY & WHITNEY LLP

/Elen Wetzel/

March 28, 2016

Date

Elen Wetzel
Registration No. 69,563

EW:rar

Enclosures:

Form PTO-SB/08

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13/965,703
	Filing Date		Aug 13, 2013
	First Named Inventor	James A. Chilson	
	Art Unit	3765	
	Examiner Name	Anne M. Kozak	
	Attorney Docket Number	P240940.US.01	

U.S. PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		D424246		2000-05-02	Ho	
		D437092		2001-01-30	Ho	
		D444268		2001-06-26	Montello	
		D453975		2002-02-26	Ho	
		D481172		2003-10-21	Ho	
		D563053		2008-02-26	Fang	
		D563054		2008-02-26	Fang	
		D563055		2008-02-26	Fang	
		D565249		2008-03-25	Fang	
		D570548		2008-06-03	Ashida	
		D650949		2011-12-20	Richard	
		D650950		2011-12-20	Richard	
		D679865		2013-04-09	Garneau et al.	
		D752294		2016-03-22	Chilson et al.	

NON-PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
		"Examiner's Report for Canada Patent Appl. No. 2858707 dated March 9, 2016"	

EXAMINER SIGNATURE			
Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

Electronic Patent Application Fee Transmittal				
Application Number:		13965703		
Filing Date:		13-Aug-2013		
Title of Invention:		HELMET WITH SHOCK ABSORBING INSERTS		
First Named Inventor/Applicant Name:		James A. Chilson		
Filer:		Elen Wetzel/Randi Rowe		
Attorney Docket Number:		P240940.US.01		
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
Total in USD (\$)				180

Electronic Acknowledgement Receipt	
EFS ID:	25324615
Application Number:	13965703
International Application Number:	
Confirmation Number:	5250
Title of Invention:	HELMET WITH SHOCK ABSORBING INSERTS
First Named Inventor/Applicant Name:	James A. Chilson
Customer Number:	27076
Filer:	Elen Wetzel/Randi Rowe
Filer Authorized By:	Elen Wetzel
Attorney Docket Number:	P240940.US.01
Receipt Date:	28-MAR-2016
Filing Date:	13-AUG-2013
Time Stamp:	19:28:01
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$180
RAM confirmation Number	5251
Deposit Account	501266
Authorized User	WETZEL, ELEN
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows: Charge any Additional Fees required under 37 CFR 1.16 (National application filing, search, and examination fees) Charge any Additional Fees required under 37 CFR 1.17 (Patent application and reexamination processing fees)	

Charge any Additional Fees required under 37 CFR 1.19 (Document supply fees) Charge any Additional Fees required under 37 CFR 1.20 (Post Issuance fees) Charge any Additional Fees required under 37 CFR 1.21 (Miscellaneous fees and charges)					
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		20160328_Response_P240940US01.pdf	124491 ca45895fd008396480afb6047dd6c748eb48a25b	yes	12
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Claims		2	5	
	Applicant Arguments/Remarks Made in an Amendment		6	12	
Warnings:					
Information:					
2		20160328_IDS_P240940US01.pdf	134135 bad913521719cc893dafbc1d014d143a9ddca0724	yes	2
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Transmittal Letter		1	1	
	Information Disclosure Statement (IDS) Form (SB08)		2	2	
Warnings:					
Information:					
3	Non Patent Literature	20160309_ExaminersReport_P240940CA01_.pdf	5213174 887c47afe539fc75bbe1ee24d1502058578ad295	no	4
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	30997 4971f386b85e09fcb19ffe28c44497fe66cb06af	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			5502797		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD				Application or Docket Number		Filing Date		☐ To be Mailed	
Substitute for Form PTO-875				13/965,703		08/13/2013			
ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO									
APPLICATION AS FILED – PART I									
(Column 1)		(Column 2)							
FOR	NUMBER FILED	NUMBER EXTRA		RATE (\$)		FEE (\$)			
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A					
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A		N/A					
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A					
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		X \$ =					
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		X \$ =					
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))									
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL					
APPLICATION AS AMENDED – PART II									
(Column 1)		(Column 2)		(Column 3)					
AMENDMENT	03/28/2016	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	* 26	Minus	** 27	= 0	X \$80 =		0	
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X \$420 =		0	
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
						TOTAL ADD'L FEE		0	
(Column 1)		(Column 2)		(Column 3)					
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =			
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =			
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
						TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.									

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/965,703	08/13/2013	James A. Chilson	P240940.US.01	5250
27076 7590 12/30/2015 DORSEY & WHITNEY LLP - Seattle INTELLECTUAL PROPERTY DEPARTMENT Columbia Center 701 Fifth Avenue, Suite 6100 SEATTLE, WA 98104-7043			EXAMINER KOZAK, ANNE M	
			ART UNIT 3765	PAPER NUMBER
			NOTIFICATION DATE 12/30/2015	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocket-se@dorsey.com
IPDocket_SE@dorsey.foundationip.com
lash.dawn@dorsey.com

Office Action Summary	Application No. 13/965,703	Applicant(s) CHILSON, JAMES A.	
	Examiner ANNE KOZAK	Art Unit 3765	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/16/2015.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

- 5) ☒ Claim(s) 1-22 and 28-32 is/are pending in the application.
5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-22 and 28-32 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 8/13/2013 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some** c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date ____.
- 3) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 4) ☐ Other: ____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/16/2015 has been entered.

Status of Claims

Claims 1, 7, and 13 have been amended, and claims 31 and 32 are new. Claims 1-22 and 28-32 are pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7 and 13-22, 29, 30, and 32 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Claim 7 recites the limitation "shocking absorbing material" in line 1. There is insufficient antecedent basis for this limitation in the claim. It is unclear whether the

“shock absorbing material” is referring to the first or second shock absorbing material, or some other shock absorbing material. For examination purposes, “shock absorbing material” has been construed as “the first shock absorbing material” as described in Claim 1, lines 3 and 4.

Regarding claim 13, in the phrase “an integral shock absorbing liner,” it is unclear what portion “integral” is referring to and what it is integral with, and is therefore indefinite since it is unclear what is being claimed. For examination purposes, “an integral shock absorbing liner” has been construed as “a shock absorbing liner formed as a single piece”.

Regarding claim 32, in the phrase “liner is seamless,” it is unclear what portion of the liner “seamless” is referring to, and it is therefore indefinite since it is unclear what is being claimed. It is not clear how the liner is seamless if it is attached to the helmet shell. For examination purposes, “liner is seamless” has been construed as “liner formed as a single piece.”

Any remaining claims are rejected as depending from a rejected base claim.

Claim Rejections - 35 USC § 102

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

Claims 1-3 and 7-8 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Sundahl (U.S. 4,434,514).

Regarding claim 1, Sundahl teaches a helmet (10) comprising a shell (11) including a vent (front opening 14); a shock absorbing liner (liner 12 including padding 49) attached to the shell (11), the shock absorbing liner (liner 12 including padding 49) formed of a first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) that is capable of being molded to the shell and comprising a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) at least partially aligned (see Fig. 6) with the vent (front opening 14); and a shock absorbing insert (pad 47) formed of a second shock absorbing material (i.e. material containing multiple through openings; see Col. 3, line 50, and designated with a different marking indicating that the material is a different material see MPEP 37 CFR 1.84(n)) different than the first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) and positioned in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45).

Regarding the limitation "molded to the shell," it is noted that even though product-by-process claims are limited by and defined by the process, determination of

patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). The product of Sundahl is silent with regard to the shock absorbing material being molded to the shell, but is capable of being attached by the process claimed and therefore meets the claims as recited.

Regarding claim 2, Sundahl teaches the claimed invention and wherein the shock absorbing insert (pad 47) is configured to be manually deformed (grasped and pulled out; see Col.3, line 54-56) to be removed from the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45).

Regarding claim 3, Sundahl teaches the claimed invention and wherein the cavity (area between 49 and 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) has a shape configured to retain the shock absorbing insert (pad 47) based on an expansion pressure (i.e. frictionally retained; see Col. 3, lines 45-47) of sides of the insert (pad 47) against sides (i.e. the portion of the cavity between 49 and 49a) of the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45).

Regarding claim 7, Sundahl teaches the claimed invention and wherein the shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) comprises: first (sidewall at one inner edge 49a) and second (sidewall at the other inner edge 49a)

sidewalls defining the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45), the first (sidewall at one inner edge 49a) and second (sidewall at the other inner edge 49a) sidewalls angled (see Fig. 6) such that a distance between the first (sidewall at one inner edge 49a) and second (sidewall at the other inner edge 49a) sidewalls along a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) of the shock absorbing insert (pad 47) is greater than a distance (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) between the first (sidewall at one inner edge 49a) and second (sidewall at the other inner edge 49a) sidewalls along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) of the shock absorbing insert (pad 47) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell).

Regarding claim 8, Sundahl teaches the claimed invention and wherein the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) is configured such that a distance along a first curved side along a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) of the shock absorbing insert (pad 47) is greater (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a distance along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) of the shock absorbing insert (pad 47).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-15, 18-20, and 28-30 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514).

Regarding claim 13, Sundahl teaches a helmet, comprising: a shock absorbing liner (12) forming a concave shape (see Fig. 6), the shock absorbing liner (12 including padding 49) comprising a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45); and an insert (pad 47) retained (see Fig. 6) in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45); and an insert (pad 47) in the shock absorbing liner (12 including padding 49), wherein the sidewalls (i.e. sidewalls at inner edges 49a) of the shock absorbing liner (12 including padding 49) defining cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) are shaped such that a distance between the sidewalls (i.e. sidewalls at inner edges 49a) along a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) of the insert (pad 47) is greater (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a distance

between the sidewalls (i.e. sidewalls at inner edges 49a) along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) of the insert (pad 47) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell), but is silent about the shock absorbing liner being integral.

Sundahl disclosed the claimed invention except for the shock absorbing liner being integral. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to make the shock absorbing liner integral since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. See MPEP 2144.04 (V)(B).

Regarding claim 14, Sundahl teaches the claimed invention and wherein the shock absorbing liner (12 including padding 49) comprises a first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) and the insert (pad 47) comprises a second shock absorbing material (i.e. material containing multiple through openings; see Col. 3, line 50) that is different than the first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21).

Regarding claim 15, Sundahl teaches the claimed invention and wherein the second shock absorbing material (i.e. containing multiple through openings; see Col. 3, line 50) is porous (i.e. containing multiple through openings; see Col. 3, line 50).

Regarding claim 18, Sundahl teaches the claimed invention and further comprising a shell (11) attached to on an outer surface (see Fig. 6) of the shock absorbing liner (12 including padding 49).

Regarding claim 19, Sundahl teaches the claimed invention and further comprising a shell (11) attached to on an outer surface (see Fig. 6) of the shock absorbing liner (12 including padding 49).

Regarding claim 20, Sundahl teaches the claimed invention and wherein the insert (pad 47) comprises a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) adjacent an outer portion (see Fig. 6) of the shock absorbing liner (12 including padding 49) and a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell), where a distance across the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) is greater (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a corresponding distance across the second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell).

Regarding claim 28, Sundahl teaches the claimed invention and wherein a thickness of the shock absorbing insert (pad 47) is equal to or less than a thickness (see Fig. 6) of the shock absorbing liner (12).

Regarding claim 29, Sundahl teaches the claimed invention and wherein the shell (11) includes a vent (front opening 14), and wherein the vent (front opening 14) aligns with a portion (see Fig. 6) of the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45).

Regarding claim 30, Sundahl teaches the claimed invention and wherein a thickness of the insert (pad 47) is equal to or less than a thickness (see Fig. 6) of the shock absorbing liner (12).

Claims 4, 9-11, 21, and 22 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) in view of Fournier (U.S. 5,950,244).

Regarding claim 4, Sundahl teaches the claimed invention and the first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) and wherein the second shock absorbing material (i.e. containing multiple through openings; see Col. 3, line 50) is porous (i.e. has multiple through openings; see Col. 3, line 50), but is silent about the first shocking material being non-porous.

Fournier teaches a first shocking material (first material 16 is non-porous; see Fig. 4, i.e. dashed lines).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a first shock absorbing material to include Fournier's teaching of the material being non-porous since this material would be capable of absorbing and dissipating a single relatively high impact imparted on the outer shell (Col. 3, lines 63-65 of Fournier).

Regarding claim 9, Sundahl teaches the claimed invention and the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) and a shock absorbing insert (pad 47) placed in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) of the shock absorbing liner (liner 12

including padding 49), but is silent about the cavity including a recess and the shock absorbing insert including a protrusion keyed to the recess in the cavity of the shock absorbing liner.

Fournier teaches a cavity (plug hole 25) including a recess (groove 52), and the shock absorbing insert (plug 19) including a protrusion (ridge 50) keyed to the recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 10, Sundahl teaches the claimed invention and an edge (edge of pad 47) of the shock absorbing insert (pad 47) and a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) of the shock absorbing liner (liner 12 including padding 49), but is silent about the edge of the shocking absorbing insert being rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

Fournier teaches an edge (ridge 50) of the insert (plug 19) is rounded (see Fig. 5) to form a semi-ovular shape that is keyed to a recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a cavity and insert to include

Fournier's teaching of the cavity having a recess and the insert having a protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 11, Sundahl teaches the claimed invention and wherein the shock absorbing liner (liner 12 including padding 49) and cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) configured to retain the shock absorbing insert (pad 47), but does teach wherein the shock absorbing liner includes tabs protruding laterally across the cavity that are configured to retain the shock absorbing insert.

Fournier teaches the claimed invention and wherein the shock absorbing liner (16) includes tabs (ridge 27) protruding laterally across the cavity (plug hole 25) that are configured to retain the insert (plug 19; see Fig. 4; Col. 5, lines 23-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a liner and cavity to retain an insert to include Fournier's teaching of the liner having tabs since doing so would provide a secure interference fit (See Col. 5, lines 22-26 of Fournier).

Regarding claim 21, Sundahl teaches the claimed invention and an edge (edge of pad 47) of the insert (pad 47) and a cavity (area between inner edges 49 a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) of the shock absorbing liner (liner 12 including padding 49), but is silent about the edge of the shocking absorbing insert being rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

Fournier teaches an edge (ridge 50) of the insert (plug 19) is rounded (see Fig. 5) to form a semi-ovular shape that is keyed to a recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 22, Sundahl teaches the claimed invention and wherein the shock absorbing liner (12 including padding 49) comprises a plurality of cavities (e.g. openings 124, 125, 126, and area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45), but is silent about the helmet further comprising a plurality of inserts, each of the plurality of inserts having a shape configured to a shape of a respective cavity of the plurality of cavities in the shock absorbing liner.

Fournier teaches the shock absorbing liner (first material 16) comprises a plurality of cavities (plug holes 25; see Fig. 4), the helmet further comprising a plurality of inserts (19, see Fig. 4), each of the plurality of inserts having a shape configured to a shape of a respective cavity (plug hole 25; see Fig. 4) of the plurality of cavities (plug holes 25) in the shock absorbing liner (first material 16).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a liner with a plurality of cavities to

include Fournier's teaching of liner with a plurality of cavities and inserts configured to a shape of the cavities since doing so provide a mixture of liner and insert materials, the combination of which is needed to effectively and controllably absorb, displace, and dissipate varying degrees and ranges of impact imparted on outer shell 12 (see Col. 4, lines 13-16 of Fournier).

Claims 5-6, 16, 17, 31, and 32 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) in view of Sajic (U.S. 8,082,599).

Regarding claim 5, Sundahl teaches the claimed invention and wherein the shock absorbing insert (pad 47), but is silent about it being formed from a honeycomb material.

Sajic teaches a shock absorbing insert (sandwich panel) with a honeycomb material (honeycomb cells 60; Fig. 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of an insert to include Sajic's teaching of an insert with a honeycomb shape since doing so would give rise to increased energy absorbing performance, and would therefore improve the safety of the device (Col. 2, lines 2-4 of Sajic).

Regarding claim 6, the combined references of Sundahl and Sajic teach the claimed invention and wherein the honeycomb materials (honeycomb cells 60 of Sajic) include an array of energy absorbing cells (Fig. 4 and 5 of Sajic), each of the energy absorbing cells including a tube (22; see Col. 5, lines 45-47 of Sajic).

Regarding claim 16, Sundahl teaches the claimed invention and wherein the second shock absorbing material (i.e. containing multiple through openings; see Col. 3, line 50), but is silent about it includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.

Sajic teaches a second shock absorbing material (tubes 22 of Sajic) include an array of energy absorbing cells (Fig. 4 and 5; Col. 2, lines 1-5 of Sajic), each of the energy absorbing cells including a tube (22; see Col. 5, lines 45-47 of Sajic).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a second shock absorbing material to include Sajic's teaching of the material including an array of energy absorbing cells including a tube since doing so would provide a relatively constant level of energy absorption as the column is progressively buckled or crushed (See Col. 2, lines 4-6) and the tubular array results in a material which is substantially isotropic (Col. 3, lines 19-20 of Sajic).

Regarding claim 17, the combined references of Sundahl and Sajic teach the claimed invention and wherein each of the tubes (tubes 22 of Sajic) of the energy absorbing cells (Fig. 4 and 5; Col. 2, lines 1-5 of Sajic) comprises a circular cylindrical or circular conical structure (Col. 3, lines 17-18 of Sajic).

Regarding claim 31, Sundahl teaches a helmet (10), comprising: a shell (11) including a vent (front opening 14); a shock absorbing liner (liner 12 including padding 49) attached to the shell (11) and comprising a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3,

lines 42-45) at least partially aligned (see Fig. 6) with the vent (front opening 14) and an insert positioned in the cavity, but does not teach the insert being made of honeycomb material.

Sajic teaches a shock absorbing insert (sandwich panel) with a honeycomb material (honeycomb cells 60; Fig. 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of an insert to include Sajic's teaching of an insert with a honeycomb shape since doing so would give rise to increased energy absorbing performance, and would therefore improve the safety of the device (Col. 2, lines 2-4 of Sajic).

Regarding claim 32, the combined references teach the claimed invention and the shock absorbing liner (12 including 49 of Sundahl), but are silent about the liner being seamless.

Sundahl disclosed the claimed invention except for the shock absorbing liner being seamless. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to make the shock absorbing liner seamless since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. See MPEP 2144.04 (V)(B).

Claim 12 is rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) view of Weber (U.S. 2012/0198604).

Regarding claim 12, Sundahl teaches the claimed invention and wherein the shell (11) comprises at least one of polycarbonate (polycarbonate; see Col. 2, lines 17-

19) (PC) or Acrylonitrile butadiene styrene (ABS), and wherein the shock absorbing liner comprises polystyrene (Col. 2, lines 19-21), but is silent about the liner comprising expanded polystyrene (EPS).

Weber teaches helmet with a liner formed of EPS (Para. 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of a polystyrene liner to include Weber's teaching of the liner being made of EPS since doing so would give rise to a lining that would help dissipate the energy of impacts (Para. 45 of Weber), thus leading to a more protective helmet.

Response to Arguments

Applicant's arguments, see Page 6, filed 10/16/2015, with respect to the rejection of Claims 7, 13-22, 29, and 30 under 35 U.S.C. 112(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the amended claim language lacking antecedent basis and definiteness.

Applicant's arguments filed 10/16/2015 with respect to Sundahl have been fully considered, but they are not persuasive.

With respect to Sundahl and the Applicant's argument that the shock absorbing liner is "not formed of a first material", the Examiner respectfully disagrees. The shock absorbing liner of Sundahl is formed of parts 12 and 49, and these together form "a first material."

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Sundahl failing to expressly disclose a liner and padding made from the same material) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding Applicant's arguments and amendments to include "shock absorbing liner formed of a first shock absorbing material molded to the shell," it has been noted that "molded to the shell" is a product-by-process claim, and even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself.

With respect to Applicant's arguments that "Sundahl fails to disclose or suggest a shock absorbing insert formed from a honeycomb material," Examiner agrees that this limitation is not taught by Sundahl, but is taught by Sajic and the combination is proper since the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

In response to applicant's argument that the honeycomb material (as taught by Sajic) would be unsuitable for the intended purpose of pad 47 to remove perspiration (as taught by Sundahl), a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case, the pad 47 as taught by Sundahl meets the structural limitations of the insert, e.g. is formed of a second shock absorbing material (Claim 1), is configured to be manually deformed (Claim 2), is porous (Claim 4) (to allow air to flow therethrough), and this material (porous, as taught Sundahl) and has been replaced by another material (porous honeycomb, as taught by Sajic) and the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNE KOZAK whose telephone number is (571)270-0552. The examiner can normally be reached on Mon - Fri: 8AM - 5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Clinton Ostrup can be reached on (571) 272-5559. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANNE KOZAK/
Examiner, Art Unit 3765

/RICHALE QUINN/
Primary Examiner, Art Unit 3765

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	330	A42B3/12.cpc.	US-PGPUB; USPAT	OR	ON	2015/12/18 15:04
L2	219	A42B3/121.cpc.	US-PGPUB; USPAT	OR	ON	2015/12/18 15:04
L3	52	A42B3/069.cpc.	US-PGPUB; USPAT	OR	ON	2015/12/18 15:04
L4	106	A42B3/124.cpc.	US-PGPUB; USPAT	OR	ON	2015/12/18 15:04
L5	161	A42B3/127.cpc.	US-PGPUB; USPAT	OR	ON	2015/12/18 15:04
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S5	1	("7254843").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S6	1	("D703871").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:44
S8	1	("20110225706").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:44
S9	2	("20080307568" "8082599").PN.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:45
S10	11	((James) near2 (Chilson)).INV.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:46
S16	82	A42B3/124.cpc.	US-PGPUB;	OR	ON	2015/03/27 09:52

			USPAT			
S17	178	A42B3/121.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S18	140	A42B3/127.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S19	109	A42B3/063.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S20	40	A42B3/069.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S21	32	("20010032351" "2381524" "3174155" "3242500" "3501772" "3787893" "3872511" "3906546" "4075717" "4124904" "4307471" "4937888" "5150479" "5177815" "5815846" "6282724" "7089602").PN. OR ("7254843").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 09:54
S22	300	A42B3/12.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:16
S23	156	A42B3/125.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:17
S24	197	A42B3/10.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:17
S25	4	S23 and (honeycomb liner)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:23
S26	6	("20060059605" "20040117896" "6065158" "5561866" "7930771" "6387200").PN.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:26
S27	15	S22 and (honeycomb liner)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:29
S28	67	S22 and (removable pads)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:31
S29	70	S22 and (removable (pads or inserts))	US-PGPUB; USPAT	AND	ON	2015/03/27 10:33
S30	64	S22 and (removable (pads or inserts))and liner	US-PGPUB; USPAT	AND	ON	2015/03/27 10:33
S31	6	S30 and honeycomb	US-PGPUB; USPAT	AND	ON	2015/03/27 10:34
S32	1	"4985931".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:37
S33	1	"5561866".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:39
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S36	7	S35 and key\$2	US- PGPUB; USPAT	AND	ON	2015/03/27 10:53
S37	4	("2012/0036620").URPN.	USPAT	OR	ON	2015/03/27 10:58
S38	1	S18 and (honeycomb pad)	US- PGPUB; USPAT	AND	ON	2015/03/27 11:14
S39	20	S22 and (honeycomb)	US- PGPUB; USPAT	AND	ON	2015/03/27 11:14
S40	1	"5840397".pn.	US- PGPUB; USPAT	AND	ON	2015/03/27 11:21
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S43	0	("2014/0013492").URPN.	USPAT	OR	ON	2015/03/27 12:05
S44	4	("20060059605" "20040117896" "6065158" "5561866" "7930771" "6387200").PN.	USPAT	OR	ON	2015/03/27 12:07
S45	34	("20020120978" "2619639" "3055013" "3241154" "3248738" "3344433" "3447162" "3673609" "3820163" "3843970" "3859666" "3882547" "4558470" "4627114" "5315718" "5603117" "5687426" "5694649" "6105176" "6467099").PN. OR ("6883181").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2015/03/27 12:31
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S48	134	A42B3/ 122.cpc.	US- PGPUB; USPAT	OR	ON	2015/03/27 14:20
S49	10	(US-20140259314-\$ or US-20140223644-\$ or US-20070000032-\$ or US-20070226881-\$ or US-20040261157-\$ or US-20030140400- \$).did. or (US-7082623-\$ or US-5950244-\$ or US-4345338-\$ or US-3720955-\$).did.	US- PGPUB; USPAT	OR	ON	2015/03/27 16:25
S50	58	("3729744" "3783450" "3820163" "3946441" "4006496" "4081865" "4133055" "4134155" "4345338" "4484364" "4534068" "4558470" "5086520" "5269025" "5309576" "5351342" "5428846" "5581819" "5619756" "5669079" "5815846" "5833796").PN. OR ("5950244").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2015/03/30 08:21
S52	55	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or	US- PGPUB; USPAT	OR	ON	2015/03/30 11:56

		US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544-\$).did. or (US-D650132-\$ or US-D645210-\$ or US-8082599-\$ or US-7254843-\$ or US-8986798-\$ or US-8966669-\$ or US-8667618-\$ or US-8512843-\$ or US-8166574-\$ or US-7669378-\$ or US-7089602-\$ or US-6282724-\$ or US-4307471-\$ or US-6387200-\$ or US-6065158-\$ or US-5561866-\$ or US-8533869-\$ or US-4985931-\$ or US-6446271-\$ or US-6185753-\$ or US-4916759-\$ or US-6883181-\$ or US-5088129-\$ or US-5687426-\$ or US-8732869-\$ or US-7828759-\$).did. or (US-6336220-\$ or US-5840397-\$ or US-3447163-\$ or US-5694649-\$ or US-5950244-\$).did.				
S53	19	S52 and honeycomb	US-PGPUB; USPAT	OR	ON	2015/03/30 11:57
S54	18	S52 and polycarbonate	US-PGPUB; USPAT	OR	ON	2015/03/30 11:58
S55	7	S52 and (polycarbonate and honeycomb)	US-PGPUB; USPAT	OR	ON	2015/03/30 11:59
S56	1	S52 and (polycarbonate near shell)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:08
S57	0	S52 and (acrylonitrile butadiene styrene near shell)	US-PGPUB; USPAT	AND	ON	2015/03/30 12:10
S58	5	S52 and (acrylonitrile butadiene styrene)	US-PGPUB; USPAT	AND	ON	2015/03/30 12:10
S59	0	S52 and (polycarbonate near shell) and honeycomb	US-PGPUB; USPAT	OR	ON	2015/03/30 12:11
S60	17	S52 and (EPS)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:12
S61	17	S52 and "EPS"	US-PGPUB; USPAT	OR	ON	2015/03/30 12:12
S62	6	S52 and ("EPS" and polycarbonate)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:15
S63	7	S52 and (porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 13:32
S65	2	S52 and (non\$1porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:32
S66	62386	S50/.clas.	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S67	5824	S66 and helmet	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S68	74	S67 and (non\$1porous and porous)	US-	OR	ON	2015/03/30

			PGPUB; USPAT			15:34
S69	56	"L21" and (air\$1flow)	US- PGPUB; USPAT	OR	ON	2015/03/30 15:34
S70	9	S68 and (air\$1flow)	US- PGPUB; USPAT	OR	ON	2015/03/30 15:35
S71	27	S68 and (ventilat\$3)	US- PGPUB; USPAT	OR	ON	2015/03/30 16:50
S72	56	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544-\$ or US-20060101556-\$).did. or (US-D650132-\$ or US-D645210-\$ or US-8082599-\$ or US-7254843-\$ or US-8986798-\$ or US-8966669-\$ or US-8667618-\$ or US-8512843-\$ or US-8166574-\$ or US-7669378-\$ or US-7089602-\$ or US-6282724-\$ or US-4307471-\$ or US-6387200-\$ or US-6065158-\$ or US-5561866-\$ or US-8533869-\$ or US-4985931-\$ or US-6446271-\$ or US-6185753-\$ or US-4916759-\$ or US-6883181-\$ or US-5088129-\$ or US-5687426-\$ or US-8732869-\$ or US-7828759-\$).did. or (US-6336220-\$ or US-5840397-\$ or US-3447163-\$ or US-5694649-\$ or US-5950244-\$).did.	US- PGPUB; USPAT	OR	ON	2015/03/30 16:59
S73	9	S72 and cooling	US- PGPUB; USPAT	OR	ON	2015/03/30 17:00
S74	36	S72 and air	US- PGPUB; USPAT	OR	ON	2015/03/30 17:04
S76	59	("3729744" "3783450" "3820163" "3946441" "4006496" "4081865" "4133055" "4134155" "4345338" "4484364" "4534068" "4558470" "5086520" "5269025" "5309576" "5351342" "5428846" "5581819" "5619756" "5669079" "5815846" "5833796").PN. OR ("5950244").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2015/07/17 18:29
S77	94	("5083320" "5298208" "5450631" "5581819" "5651145" "5659900" "5704072" "5745924" "5774901" "5794272" "5813055" "5829065" "5887288" "5898950" "5915537" "5950244" "5983405" "5991930" "6105176" "6159324" "6292952" "6311338" "6332228" "D285980" "D299180" "D299978" "D300070" "D303851" "D309961" "D310893"	US- PGPUB; USPAT; USOCR	OR	ON	2015/07/17 18:30

		"D312148" "D319112" "D326001" "D335366" "D339427" "D340544" "D347300" "D347711" "D348545" "D348750" "D348752" "D351684" "D361407" "D361408" "D361409" "D361410" "D361411" "D363570" "D366538" "D367341" "D367548" "D371867" "D371868" "D380870" "D382370" "D382371" "D383249" "D387500" "D388551" "D389280" "D407857" "D410116" "D410304" "D410571" "D411337" "D411338" "D413185" "D415593" "D415860" "D416110" "D424246" "D426032" "D426677" "D427381" "D427727" "D428534" "D433541" "D490572" "D514259" "D518241" "D549394" "D556951" "D559468" "D572865" "D592809" "D628346" "D645210" "D645619" "D654628").PN. OR ("D672095").URPN.				
S78	13	("2006/0059605").URPN.	USPAT	OR	ON	2015/07/17 18:37
S79	13	("2006/0059605").URPN.	USPAT	OR	ON	2015/07/17 18:52
S80	56	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544-\$ or US-20060101556-\$).did. or (US-D650132-\$ or US-D645210-\$ or US-8082599-\$ or US- 7254843-\$ or US-8986798-\$ or US-8966669- \$ or US-8667618-\$ or US-8512843-\$ or US- 8166574-\$ or US-7669378-\$ or US-7089602- \$ or US-6282724-\$ or US-4307471-\$ or US- 6387200-\$ or US-6065158-\$ or US-5561866- \$ or US-8533869-\$ or US-4985931-\$ or US- 6446271-\$ or US-6185753-\$ or US-4916759- \$ or US-6883181-\$ or US-5088129-\$ or US- 5687426-\$ or US-8732869-\$ or US-6336220- \$).did. or (US-5840397-\$ or US-3447163-\$ or US-5694649-\$ or US-5950244-\$ or US- 8640267-\$).did.	US- PGPUB; USPAT	OR	ON	2015/07/17 19:05
S81	167	A42B3/28.cpc.	US- PGPUB; USPAT	OR	ON	2015/07/17 19:07
S82	74	A42B3/281.cpc.	US- PGPUB; USPAT	OR	ON	2015/07/17 19:07
S83	143	A42B3/127.cpc.	US- PGPUB; USPAT	OR	ON	2015/07/17 19:17
S84	67	("20040250339" "20040255370" "20050278834" "20060059605"	US- PGPUB;	OR	ON	2015/07/20 09:18

		"20060059606" "20060162053" "20060242752" "20060277664" "20070107112" "20070119538" "20070130673" "20070157370" "20070226881" "20080222782" "20090222964" "20110107503" "20110179557" "20120060251" "20120151663" "20120186002" "20120216339" "20120233745" "3174155" "3186004" "3320619" "3577562" "3818508" "3906546" "4101983" "4345338" "4484364" "4599752" "4845786" "4937888" "4972527" "5018220" "5204998" "5259071" "5680656" "5724681" "5930840" "5956777" "6032297" "6272692" "6389607" "6421840" "6709062" "6912736" "6931671" "7062795" "7328462" "7536731" "7676854" "7765621" "7765622" "7802321" "7832023" "7930771" "7987525" "8166573" "8209784").PN. OR ("8640267").URPN.	USPAT; USOCR			
S85	1	"4434514".pn.	US- PGPUB; USPAT	OR	ON	2015/08/27 09:45
S86	1	"1347046".pn.	US- PGPUB; USPAT	OR	ON	2015/08/27 09:46
S87	454	2/414.ccls.	US- PGPUB; USPAT	OR	ON	2015/08/28 12:09
S88	1	"4434514".pn.	US- PGPUB; USPAT	OR	ON	2015/08/28 12:10

EAST Search History (Interference)

< This search history is empty >

12/ 18/ 2015 3:18:52 PM**C:\ Users\ akozak\ Documents\ EAST\ Workspaces\ 13965703.wsp**

Search Notes 	Application/Control No. 13965703	Applicant(s)/Patent Under Reexamination CHILSON, JAMES A.
	Examiner ANNE KOZAK	Art Unit 3765

CPC- SEARCHED		
Symbol	Date	Examiner
A42B 3/063,069,12,1,124,127	4/1/2015	AK
Updated above search - conducted a fast & focused STIC search with Fern Birtwistle	8/28/2015	AK
Updated above search	12/18/2015	AK

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
2	414	4/1/2015	AK
Updated above search		8/28/2015	AK

SEARCH NOTES		
Search Notes	Date	Examiner
Conducted an IDS, Inventor, USPC and CPC search with text in EAST	4/1/2015	AK
Updated above search	8/28/2015	AK
Updated above search	12/18/2015	AK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

Doc code: RCEX

PTO/SB/30EFS (07-09)

Doc description: Request for Continued Examination (RCE)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

REQUEST FOR CONTINUED EXAMINATION(RCE)TRANSMITTAL **(Submitted Only via EFS-Web)**

Application Number	13965703	Filing Date	2013-08-13	Docket Number (if applicable)	P240940.US.01	Art Unit	3765
First Named Inventor	James A. Chilson			Examiner Name	Anne M. Kozak		

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.

Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV

SUBMISSION REQUIRED UNDER 37 CFR 1.114

Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).

☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.

☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____

☐ Other _____

☒ Enclosed

☒ Amendment/Reply

☒ Information Disclosure Statement (IDS)

☐ Affidavit(s)/ Declaration(s)

☐ Other _____

MISCELLANEOUS

☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of months _____. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(i) required)

☐ Other _____

FEES

The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.

☒ The Director is hereby authorized to charge any underpayment of fees, or credit any overpayments, to Deposit Account No 501266

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

☒ Patent Practitioner Signature

☐ Applicant Signature

Doc code: RCEX

Doc description: Request for Continued Examination (RCE)

PTO/SB/30EFS (07-09)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Signature of Registered U.S. Patent Practitioner			
Signature	/Elen Wetzel/	Date (YYYY-MM-DD)	2015-10-16
Name	Elen Wetzel	Registration Number	69563

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 13/965,703 Confirmation No. : 5250
First Named Inventor : James A. Chilson
Filed : August 13, 2013 Attorney Docket No.: P240940.US.01
Art Unit : 3765 Customer No. : 27,076
Examiner : Anne M. Kozak
Title : HELMET WITH SHOCK ABSORBING INSERTS

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Madam:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicant wishes to make known to the Patent and Trademark Office the references set forth on the attached form PTO-SB/08. Copies of the cited U.S. patents and U.S. patent application publications will not be submitted herewith in accordance with the waiver by the Office of the requirement under 37 C.F.R. § 1.98(a)(2)(i) for U.S. national patent applications filed after June 30, 2003.

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Respectfully submitted,
DORSEY & WHITNEY LLP

/Elen Wetzel/

October 16, 2015

Date

Elen Wetzel
Registration No. 69,563

EW:rar

Enclosures:
Form PTO-SB/08

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13/965,703
	Filing Date		Aug 13, 2013
	First Named Inventor	James A. Chilson	
	Art Unit	3765	
	Examiner Name	Anne M. Kozak	
	Attorney Docket Number	P240940.US.01	

U.S.PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		5915537	A	1999-06-29	Dallas et al.	
		D424246	S	2000-05-02	Ho, Chang-Hsien	
		D426032	S	2000-05-30	Ho, Chang-Hsien	
		D447604	S	2001-09-04	Watters et al.	
		D455522	S	2002-04-09	Royes, et al.	
		D464174	S	2002-10-08	Lu, Tung-feng	
		D481171	S	2003-10-21	Ho, Chang-hsien	
		D535059	S	2007-01-09	Lam, Wing Ho	
		D541480	S	2007-04-24	Turner	
		D547908	S	2007-07-31	Wise et al.	
		D549394	S	2007-08-21	Broeckl	
		D572865	S	2008-07-08	Baker, Jonathan	
		7716754	B1	2010-05-18	Ross	
		D650132	S	2011-12-06	Chilson et al.	
		D654628	S	2012-02-21	Aris et al.	
		D655048	S	2012-02-28	Moeller et al.	
		D671272	S	2012-11-20	Clement	
		D672095	S	2012-12-04	Clement	
		D677006	S	2013-02-26	Pfanner et al.	
		D683904	S	2013-06-04	Ho, Chang-Hsien	
		D683905	S	2013-06-04	Wills, Nathan	
		D691329	S	2013-10-08	Anderson, David	
U.S.PATENT APPLICATION PUBLICATIONS						
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		20020023290		2002-02-28	Watters et al.	
		20050060793		2005-03-24	Rosie	
		20090049586		2009-02-26	Wirthenstaetter	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13/965,703
	Filing Date		Aug 13, 2013
	First Named Inventor	James A. Chilson	
	Art Unit	3765	
	Examiner Name	Anne M. Kozak	
	Attorney Docket Number	P240940.US.01	

EXAMINER SIGNATURE			
Examiner Signature		Date Considered	
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			
¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.			

Electronic Patent Application Fee Transmittal				
Application Number:		13965703		
Filing Date:		13-Aug-2013		
Title of Invention:		HELMET WITH SHOCK ABSORBING INSERTS		
First Named Inventor/Applicant Name:		James A. Chilson		
Filer:		Elen Wetzel/Rowe Randi		
Attorney Docket Number:		P240940.US.01		
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Request for Continued Examination	1801	1	1200	1200
Total in USD (\$)				1200

Electronic Acknowledgement Receipt	
EFS ID:	23813487
Application Number:	13965703
International Application Number:	
Confirmation Number:	5250
Title of Invention:	HELMET WITH SHOCK ABSORBING INSERTS
First Named Inventor/Applicant Name:	James A. Chilson
Customer Number:	27076
Filer:	Elen Wetzel/Rowe Randi
Filer Authorized By:	Elen Wetzel
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File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		20151015_FOAResponse_P240940US01.pdf	118874 46b5bb4cba53fddcc74702be6453300833512f139	yes	10
	Multipart Description/PDF files in .zip description				
	Document Description	Start	End		
	Amendment Submitted/Entered with Filing of CPA/RCE	1	1		
	Claims	2	5		
	Applicant Arguments/Remarks Made in an Amendment	6	10		
Warnings:					
Information:					
2	Request for Continued Examination (RCE)	20151015_RCE_P240940US01.pdf	697801 9e417419b9ba7853d83d97fbfbc8236fe7e3f564	no	3
Warnings:					
Information:					
3		20151015_IDS_P240940US01.pdf	136630 6eb68f3a0a01f7f21b9b8b1bc26c878022d51d50	yes	3
	Multipart Description/PDF files in .zip description				
	Document Description	Start	End		
	Transmittal Letter	1	1		
	Information Disclosure Statement (IDS) Form (SB08)	2	3		
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	30831 bd68fa6f0bb7a2d721d50890d146ba6ef408299e	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			984136		

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	: 13/965,703	Confirmation No.	: 5250
First Named Inventor	: James A. Chilson		
Filed	: August 13, 2013	Attorney Docket No.:	P240940.US.01
Art Unit	: 3765	Customer No.	: 27,076
Examiner	: Anne M. Kozak		
Title	: HELMET WITH SHOCK ABSORBING INSERTS		

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE UNDER 37 C.F.R. § 1.114

Madam:

Applicants acknowledge receipt of the Office Action dated September 10, 2015.

Please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 6 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please amend claims 1, 7, and 13 and add new claims 31 and 32 as follows:

Listing of Claims:

1. (Currently Amended) A helmet, comprising:
a shell including a vent;
a shock absorbing liner attached to the shell, the shock absorbing liner formed of a first shock absorbing material molded to the shell and ~~having comprising~~ a cavity at least partially aligned with the vent; and
a shock absorbing insert formed of a second shock absorbing material different than the first shock absorbing material and positioned in the cavity.
2. (Original) The helmet of claim 1, wherein the shock absorbing insert is configured to be manually deformed to be removed from the cavity.
3. (Previously Presented) The helmet of claim 1, wherein the cavity has a shape configured to retain the shock absorbing insert based on an expansion pressure of sides of the insert against sides of the cavity.
4. (Original) The helmet of claim 1, wherein the first shock absorbing material is non-porous, and wherein the second shock absorbing material is porous.
5. (Original) The helmet of claim 1, wherein the shock absorbing insert is formed from a honeycomb material.
6. (Original) The helmet of claim 5, wherein the honeycomb material includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.

7. (Currently Amended) The helmet of claim 1, wherein shock absorbing material ~~the cavity~~ comprises:

first and second sidewalls defining the cavity,

the first and second sidewalls angled such that a distance between the first and second sidewalls along a first curved side of the shock absorbing insert is greater than a distance between the first and second sidewalls along a second curved side of the shock absorbing insert opposite the first curved side.

8. (Previously Presented) The helmet of claim 1 wherein the cavity is configured such that a distance along a first curved side of the shock absorbing insert is greater than a distance along a second curved side of the shock absorbing insert opposite the first curved side.

9. (Original) The helmet of claim 1, wherein the cavity includes a recess and the shock absorbing insert includes a protrusion keyed to the recess in the cavity of the shock absorbing liner.

10. (Previously Presented) The helmet of claim 1, wherein an edge of the shock absorbing insert is rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

11. (Previously Presented) The helmet of claim 1, wherein the shock absorbing liner includes tabs protruding laterally across the cavity that are configured to retain the shock absorbing insert.

12. (Original) The helmet of claim 1, wherein the shell comprises at least one of polycarbonate (PC) or Acrylonitrile butadiene styrene (ABS), and wherein the shock absorbing liner comprises at least one of expanded polystyrene (EPS) or expanded polypropylene (EPP).

13. (Currently Amended) A helmet, comprising:

an integral shock absorbing liner forming a concave shape, the shock absorbing liner comprising a cavity; and

an insert retained in the cavity in the shock absorbing liner,

wherein sidewalls of the shock absorbing liner defining the cavity are shaped such that a distance between the sidewalls along a first curved side of the insert is greater than a distance between the sidewalls along a second curved side of the insert opposite the first curved side.

14. (Original) The helmet of claim 13, wherein the shock absorbing liner comprises a first shock absorbing material and the insert comprises a second shock absorbing material that is different than the first shock absorbing material.

15. (Original) The helmet of claim 14, wherein the second shock absorbing material is porous.

16. (Original) The helmet of claim 15, wherein the second shock absorbing material includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.

17. (Original) The helmet of claim 16, wherein each of the tubes of the energy absorbing cells comprises a circular cylindrical or circular conical structure.

18. (Original) The helmet of claim 13, further comprising a shell attached to on an outer surface of the shock absorbing liner.

19. (Original) The helmet of claim 13, wherein the insert is configured to allow air to flow there through to the head of a wearer.

20. (Original) The helmet of claim 13, wherein the insert comprises a first curved side adjacent an outer portion of the shock absorbing liner and a second curved side opposite the first curved side, where a distance across the first curved side is greater than a corresponding distance across the second curved side.

21. (Previously Presented) The helmet of claim 13, wherein an edge of the insert includes at least one of a protrusion keyed to a recess in the cavity of the shock absorbing liner, a semi-circular shape keyed to the recess in the cavity of the shock absorbing liner, or a semi-ovular shape keyed to the recess in the cavity of the shock absorbing liner.

22. (Original) The helmet of claim 13, wherein the shock absorbing liner comprises a plurality of cavities, the helmet further comprising a plurality of inserts, each of the plurality of inserts having a shape configured to a shape of a respective cavity of the plurality of cavities in the shock absorbing liner.

23-27. (Canceled)

28. (Previously Presented) The helmet of claim 1, wherein a thickness of the shock absorbing insert is equal to or less than a thickness of the shock absorbing liner.

29. (Previously Presented) The helmet of claim 18, wherein the shell includes a vent, and wherein the vent aligns with a portion of the cavity.

30. (Previously Presented) The helmet of claim 18, wherein a thickness of the insert is equal to or less than a thickness of the shock absorbing liner.

31. (New) A helmet, comprising:
a shell including a vent;
a shock absorbing liner attached to the shell and comprising a cavity at least partially aligned with the vent; and
a honeycomb insert positioned in the cavity.

32. (New) The helmet of claim 31, wherein the shock absorbing liner is seamless.

REMARKS

This amendment is responsive to the Office Action dated September 10, 2015 (“Office Action”). Claims 11-13, 16-22, and 28-32 are pending after inclusion of the present amendment. Claims 1, 7, and 13 have been amended. New claims 31 and 32 have been added to recite features disclosed in the application as filed, including the specification, drawings, and originally filed claims. For example, support for the amendments herein can be found in the specification, e.g., at paragraphs [0014], [0015], and [0017], as well as the drawings and originally presented claims. No new matter has been added.

Claim rejections under 35 U.S.C. 112

Claims 7, 13-22, 29 and 30 were rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 7 depends from claim 1. Claim 13 is independent and claims 14-22, 29, and 30 depend from claim 13.

The Office Action states that the phrase “cavity comprises: first and second sidewalls” in claim 7 renders it indefinite because “it is unclear how the cavity could have sidewalls.” See Office Action, page 2. The Office Action further states that the phrase “sidewalls of the cavity” in claim 13 renders claim 13 indefinite because “it is unclear how the cavity could have sidewalls.” See *id.*

Without addressing or agreeing with the merits of these rejections, Claims 7 and 13 have been amended to expedite the prosecution of the application. Withdrawal of the 35 U.S.C. 112 rejections of claims 7, 13-22, 29, and 30 is respectfully requested.

Novelty over Sundahl

Claims 1-3, 7, 8, 13-15, 18-20 and 28-30 were rejected under 35 U.S.C. 102(a)(1) as being anticipated by U.S. Patent No. 4,434,514 to Sundahl et al. (“Sundahl”). Claims 1 and 13 are independent. The rejections of claims 1 and 13 are traversed.

Claim 1

Claim 1 is directed to a helmet and recites in part “a shell including a vent,” “a shock absorbing liner attached to the shell, the shock absorbing liner formed of a first shock

absorbing material...” and “a shock absorbing insert formed of a second shock absorbing material different than the first shock absorbing material and positioned in the cavity.”

The Office Action relied on Sundahl to disclose all of the features of claim 1 in the combination previously presented. See Office Action, pages 3-4. Specifically, the Office Action points to two separate components, liner 12 and padding 49, of Sundahl to correspond with applicants single component, the “shock absorbing liner formed of a first shock absorbing material.”

Sundahl describes a helmet with air flow and perspiration control. Specifically, the helmet 10 includes a thin outer shell 11 and a thicker inner liner 12. The liner 12, which can consist of a semi-flexible foam plastic such as polystyrene or polyurethane, is formed of two sections 12a and 12b meeting at transverse parting line 12c. The two sections 12a and 12b are rigidly bonded to the shell’s inner surface. See Col. 2, ll. 15-25. The helmet 10 includes a perspiration absorbing pad 47. The pad 47 is frictionally retained by inner edge 49a of the padding 49. The pad 47 is removable while padding 49 is bonded to the liner inner surface. See Col 3, ll. 45-49. When pad 47 is soaked with perspiration, it can be pulled out by the wearer to be wrung out and then replaced by the wearer during the course of a bicycle race. See col 3, ll. 54-56.

As is evident, Sundahl describes two separate components, liner 12 which consists of a semi-flexible foam plastic such as polystyrene or polyurethane and a padding 49 which is bonded to the inner surface of liner 12. Sundahl is silent as to the material from which padding 49 is made of, thus Sundahl fails to expressly disclose a liner and a padding made from the same material. Moreover, as the Examiner points out on page 3, the liner 12 and padding 49 appear to be made from different materials based on the different cross-hatch markings indicated in the cross-sectional view in FIG. 6. Accordingly, the two components 11 and 49 of Sundahl cannot properly correspond with the shock absorbing liner of claim 1 at least because they are not formed of a first material. Thus it is submitted that Sundahl does not disclose all of the features in claim 1 as previously presented and the rejection over Sundahl is improper and should be withdrawn.

To expedite the prosecution of this application and without conceding to the merits of the rejection, claim 1 has been amended and now further recites “shock absorbing liner formed of a first shock absorbing material molded to the shell.” It is respectfully submitted that

Sundahl fails to disclose this additional feature. As noted above, Sundahl instead describe two components, liner 12 and padding 49 formed of different material. The liner 12 is rigidly bonded to the shell's inner surface and the padding 49 is bonded to the liner's inner surface. Thus, Sundahl fails to disclose a "shock absorbing liner formed of a first shock absorbing material molded to the shell" in the combination of amended claim 1. Accordingly, claim 1 is allowable and an indication of the same is respectfully requested.

Claim 13

Claim 13 has been amended and the 35 U.S.C. 102 rejection of claim 13 over Sundahl is now moot. Amended claim 13 is directed to a helmet and recites in part "an integral shock absorbing liner comprising a cavity" and "an insert retained in the cavity in the shock absorbing liner."

The Office Action relied on Sundahl to disclose all of the features of claim 13 as previously presented. *See* Office Action, pages 5-6. Specifically, the Office Action points to the liner 12 and padding 49 to correspond with Applicant's "shock absorbing liner" and further points to the perspiration absorbing pad 47 to correspond with Applicant's "insert." *See id.* As discussed previously with respect to claim 1, Sundahl describes a helmet 10, which includes a liner 12 made from two sections 12a and 12b. The sections 12a and 12b are bonded to the shell's inner surface, and a separate padding 49 is bonded to the liner's inner surface. A perspiration absorbing pad 47 is retained by the inner edge 49a of the padding 49. Thus, it is submitted that Sundahl does not disclose or suggest "an integral shock absorbing liner comprising a cavity" and "an insert retained in the cavity in the shock absorbing liner" in the combination of claim 13 because Sundahl instead describes a helmet with a multi-sectioned liner and padding that are arranged to absorb perspiration of the wearer. Withdrawal of the rejection and an indication of allowance of claim 13 is respectfully requested.

Dependent Claims

Claims 2-12, 14-22 and 28-30 depend from and include all of the features of at least one of Applicant's respective independent claims discussed above. These claims are patentably distinguished over the cited references because of their dependency on patentable independent claims and also because of the additional recitations added by those claims.

In addition, Applicant submits that the Office Action fails to establish a prima facie case of obviousness, for example of dependent claim 5. Claim 5 depends from claim 1 and includes all of the features recited therein and further recites, wherein “the shock absorbing insert is formed from a honeycomb material.” The Office Action concedes that Sundahl fails to disclose or suggest a shock absorbing insert formed from a honeycomb material. See Office Action, pages 12-13. The Office Action relies on U.S. Patent No. 8,082,599 to Sajic (“Sajic”) to supply the missing features. See *id.*

Applicant submits that it would not be obvious to a person of ordinary skill in the art to use the sandwich panel 12 with honeycomb core 20 described in Sajic in place of the perspiration absorbing pad 47 described in Sundahl. It is well established that if a proposed modification would render the prior art invention unsatisfactory for its intended purpose, there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984); see also MPEP 2143.01. Substituting a honeycomb core sandwich panel in place of the perspiration absorbing pad 47 would defeat the purpose of pad 47, which is specifically designed to be removable so that the wearer of helmet 10 can quickly pull out the pad 47 to be wrung out to remove perspiration. A honeycomb core sandwich panel is not only unsuitable for perspiration absorption but it would also likely be damaged (e.g., buckling and collapsing of the honeycomb cells) from a crushing force such as wringing out. Thus, because the proposed modification would render the perspiration absorbing pad 47 of helmet 10 unsuitable for its intended purpose of quickly removing perspiration, the proposed modification is not an obvious modification. Claim 5 is allowable over Sundahl and Sajic for at least this additional reason.

Claims 6, 16, and 17, which recite analogous features, are similarly allowable over the combination of Sundahl and Sajic for analogous reasons discussed above with regards to claim 5. In the interest of brevity, Applicant has chosen not to individually discuss additional distinguishing characteristics of all of the dependent claims, nor have the merits of the 35 U.S.C 103 rejections of certain depended claims been addressed. Applicant’s silence in that regard should not be interpreted as belief that the dependent claims are patentable only by virtue of their dependence on a patentable independent claim, nor should it be interpreted as agreement with the Examiner’s characterization of the cited references.

Appl. No. 13/965,703

All claims are in condition for allowance. Favorable consideration and a timely Notice of Allowance are earnestly solicited.

Respectfully submitted,
DORSEY & WHITNEY LLP

October 16, 2015

Date

/Elen Wetzel/

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PATENT APPLICATION FEE DETERMINATION RECORD				Application or Docket Number		Filing Date		☐ To be Mailed	
Substitute for Form PTO-875				13/965,703		08/13/2013			
ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO									
APPLICATION AS FILED – PART I									
(Column 1)		(Column 2)							
FOR	NUMBER FILED	NUMBER EXTRA		RATE (\$)		FEE (\$)			
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A					
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A		N/A					
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A					
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		X \$ =					
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		X \$ =					
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).								
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))									
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL					
APPLICATION AS AMENDED – PART II									
(Column 1)		(Column 2)		(Column 3)					
AMENDMENT	10/16/2015	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	* 27	Minus	** 27	= 0	X \$80 =		0	
	Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X \$420 =		0	
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
						TOTAL ADD'L FEE		0	
(Column 1)		(Column 2)		(Column 3)					
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)		ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =			
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =			
	☐ Application Size Fee (37 CFR 1.16(s))								
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
						TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.									

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/965,703	08/13/2013	James A. Chilson	P240940.US.01	5250
27076 7590 09/10/2015 DORSEY & WHITNEY LLP - Seattle INTELLECTUAL PROPERTY DEPARTMENT Columbia Center 701 Fifth Avenue, Suite 6100 SEATTLE, WA 98104-7043			EXAMINER KOZAK, ANNE M	
			ART UNIT 3765	PAPER NUMBER
			NOTIFICATION DATE 09/10/2015	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocket-se@dorsey.com
IPDocket_SE@dorsey.foundationip.com
gromala.kaitlyn@dorsey.com

Office Action Summary	Application No. 13/965,703	Applicant(s) CHILSON, JAMES A.	
	Examiner ANNE KOZAK	Art Unit 3765	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/9/2015.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

- 5) ☒ Claim(s) 1-22 and 28-30 is/are pending in the application.
5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-22 and 28-30 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 8/13/2013 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some** c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)	3) ☐ Interview Summary (PTO-413)
2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date ____.	Paper No(s)/Mail Date. ____.
	4) ☐ Other: ____.

DETAILED ACTION

Response to Amendment

The response filed on 7/9/2015 has been fully considered. Claims 1, 3, 7, 8, 10, 11, and 21 have been amended. Claims 1-22 and 28-30 are pending in this application.

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7, 13-22, and 29-30 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Regarding claim 7, in the phrase "...cavity comprises: first and second sidewalls" (lines 1 and 2), it is unclear how the cavity could have sidewalls, and it is therefore indefinite since it is unclear what is being claimed. For examination purposes, "first and second sidewalls" has been construed as the first and second sidewalls of the liner.

Regarding claim 13, in the phrase "sidewalls of the cavity" (line 5), it is unclear how the cavity could have sidewalls, and it is therefore indefinite since it is unclear what is being claimed. For examination purposes, "sidewalls of the cavity" has been construed as the first and second sidewalls of the liner.

Claim Rejections - 35 USC § 102

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

Claims 1-3, 7-8, 13-15, 18-20, and 28-30 are rejected under 35 U.S.C.

102(a)(1) as being anticipated by Sundahl (U.S. 4,434,514).

Regarding claim 1, Sundahl teaches a helmet (10) comprising a shell (11) including a vent (front opening 14); a shock absorbing liner (liner 12 including padding 49) attached to the shell (11), the shock absorbing liner (liner 12 including padding 49) formed of a first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) and having a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) at least partially aligned (see Fig. 6) with the vent (front opening 14); and a shock absorbing insert (pad 47) formed of a second shock absorbing material (i.e. material containing multiple through openings; see Col. 3, line 50, and designated with a different marking indicating that the material is a different material see MPEP 37 CFR 1.84(n)) different than the

first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) and positioned in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45).

Regarding claim 2, Sundahl teaches the claimed invention and wherein the shock absorbing insert (pad 47) is configured to be manually deformed (grasped and pulled out; see Col.3, line 54-56) to be removed from the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45).

Regarding claim 3, Sundahl teaches the claimed invention and wherein the cavity (area between 49 and 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) has a shape configured to retain the shock absorbing insert (pad 47) based on an expansion pressure (i.e. frictionally retained; see Col. 3, lines 45-47) of sides of the insert (pad 47) against sides (i.e. the portion of the cavity between 49 and 49a) of the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45).

Regarding claim 7, Sundahl teaches the claimed invention and wherein the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) comprises: first (sidewall at one inner edge 49a) and second (sidewall at the other inner edge 49a) sidewalls, the first (sidewall at one inner edge 49a) and second (sidewall at the other inner edge 49a) sidewalls angled (see Fig. 6) such that a distance between the first (sidewall at one inner edge 49a) and second (sidewall at the other inner edge 49a) sidewalls along a first curved side (i.e. the

top portion of pad 47, i.e. the side nearest the shell) of the shock absorbing insert (pad 47) is greater than a distance (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) between the first (sidewall at one inner edge 49a) and second (sidewall at the other inner edge 49a) sidewalls along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) of the shock absorbing insert (pad 47) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell).

Regarding claim 8, Sundahl teaches the claimed invention and wherein the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) is configured such that a distance along a first curved side along a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) of the shock absorbing insert (pad 47) is greater (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a distance along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) of the shock absorbing insert (pad 47).

Regarding claim 13, Sundahl teaches a helmet, comprising: a shock absorbing liner (12) forming a concave shape (see Fig. 6), the shock absorbing liner (12 including padding 49) comprising a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45); and an insert (pad 47) retained (see Fig. 6) in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45); and

an insert (pad 47) in the shock absorbing liner (12 including padding 49), wherein the sidewalls (i.e. sidewalls at inner edges 49a) of the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) are shaped such that a distance between the sidewalls (i.e. sidewalls at inner edges 49a) along a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) of the insert (pad 47) is greater (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a distance between the sidewalls (i.e. sidewalls at inner edges 49a) along a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) of the insert (pad 47) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell).

Regarding claim 14, Sundahl teaches the claimed invention and wherein the shock absorbing liner (12 including padding 49) comprises a first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) and the insert (pad 47) comprises a second shock absorbing material (i.e. material containing multiple through openings; see Col. 3, line 50) that is different than the first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21).

Regarding claim 15, Sundahl teaches the claimed invention and wherein the second shock absorbing material (i.e. containing multiple through openings; see Col. 3, line 50) is porous (i.e. containing multiple through openings; see Col. 3, line 50).

Regarding claim 18, Sundahl teaches the claimed invention and further comprising a shell (11) attached to on an outer surface (see Fig. 6) of the shock absorbing liner (12 including padding 49).

Regarding claim 19, Sundahl teaches the claimed invention and further comprising a shell (11) attached to on an outer surface (see Fig. 6) of the shock absorbing liner (12 including padding 49).

Regarding claim 20, Sundahl teaches the claimed invention and wherein the insert (pad 47) comprises a first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) adjacent an outer portion (see Fig. 6) of the shock absorbing liner (12 including padding 49) and a second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell) opposite the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell), where a distance across the first curved side (i.e. the top portion of pad 47, i.e. the side nearest the shell) is greater (i.e. given that the pad forms a circular arc, the top portion arc length would always be greater than the bottom portion arc length) than a corresponding distance across the second curved side (i.e. the bottom portion of pad 47, i.e. the side furthest from the shell).

Regarding claim 28, Sundahl teaches the claimed invention and wherein a thickness of the shock absorbing insert (pad 47) is equal to or less than a thickness (see Fig. 6) of the shock absorbing liner (12).

Regarding claim 29, Sundahl teaches the claimed invention and wherein the shell (11) includes a vent (front opening 14), and wherein the vent (front opening 14) aligns with a portion (see Fig. 6) of the cavity (area between inner edges 49a and

including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45).

Regarding claim 30, Sundahl teaches the claimed invention and wherein a thickness of the insert (pad 47) is equal to or less than a thickness (see Fig. 6) of the shock absorbing liner (12).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4, 9-11, 21, and 22 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) view of Fournier (U.S. 5,950,244).

Regarding claim 4, Sundahl teaches the claimed invention and the first shock absorbing material (semi-flexible foam plastic; see Col. 2, lines 20-21) and wherein the second shock absorbing material (i.e. containing multiple through openings; see Col. 3, line 50) is porous (i.e. has multiple through openings; see Col. 3, line 50), but is silent about the first shocking material being non-porous.

Fournier teaches a first shocking material (first material 16 is non-porous; see Fig. 4, i.e. dashed lines).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a first shock absorbing material to

include Fournier's teaching of the material being non-porous since this material would be capable of absorbing and dissipating a single relatively high impact imparted on the outer shell (Col. 3, lines 63-65 of Fournier).

Regarding claim 9, Sundahl teaches the claimed invention and the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) and a shock absorbing insert (pad 47) placed in the cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) of the shock absorbing liner (liner 12 including padding 49), but is silent about the cavity including a recess and the shock absorbing insert including a protrusion keyed to the recess in the cavity of the shock absorbing liner.

Fournier teaches a cavity (plug hole 25) including a recess (groove 52), and the shock absorbing insert (plug 19) including a protrusion (ridge 50) keyed to the recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 10, Sundahl teaches the claimed invention and an edge (edge of pad 47) of the shock absorbing insert (pad 47) and a cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig.

6; Col. 3, lines 42-45) of the shock absorbing liner (liner 12 including padding 49), but is silent about the edge of the shocking absorbing insert being rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

Fournier teaches an edge (ridge 50) of the insert (plug 19) is rounded (see Fig. 5) to form a semi-ovular shape that is keyed to a recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 11, Sundahl teaches the claimed invention and wherein the shock absorbing liner (liner 12 including padding 49) and cavity (area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) configured to retain the shock absorbing insert (pad 47), but does teach wherein the shock absorbing liner includes tabs protruding laterally across the cavity that are configured to retain the shock absorbing insert.

Fournier teaches the claimed invention and wherein the shock absorbing liner (16) includes tabs (ridge 27) protruding laterally across the cavity (plug hole 25) that are configured to retain the insert (plug 19; see Fig. 4; Col. 5, lines 23-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a liner and cavity to retain an insert

to include Fournier's teaching of the liner having tabs since doing so would provide a secure interference fit (See Col. 5, lines 22-26 of Fournier).

Regarding claim 21, Sundahl teaches the claimed invention and an edge (edge of pad 47) of the insert (pad 47) and a cavity (area between inner edges 49 a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45) of the shock absorbing liner (liner 12 including padding 49), but is silent about the edge of the shocking absorbing insert being rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

Fournier teaches an edge (ridge 50) of the insert (plug 19) is rounded (see Fig. 5) to form a semi-ovular shape that is keyed to a recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a cavity and insert to include Fournier's teaching of the cavity having a recess and the insert having a protrusion since doing so would provide a secure interference fit (See Col. 5, lines 40-47 of Fournier).

Regarding claim 22, Sundahl teaches the claimed invention and wherein the shock absorbing liner (12 including padding 49) comprises a plurality of cavities (e.g. openings 124, 125, 126, and area between inner edges 49a and including space 46, air channels 35 and 35, and opening 114; see Fig. 6; Col. 3, lines 42-45), but is silent about the helmet further comprising a plurality of inserts, each of the plurality of inserts having

a shape configured to a shape of a respective cavity of the plurality of cavities in the shock absorbing liner.

Fournier teaches the shock absorbing liner (first material 16) comprises a plurality of cavities (plug holes 25; see Fig. 4), the helmet further comprising a plurality of inserts (19, see Fig. 4), each of the plurality of inserts having a shape configured to a shape of a respective cavity (plug hole 25; see Fig. 4) of the plurality of cavities (plug holes 25) in the shock absorbing liner (first material 16).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a liner with a plurality of cavities to include Fournier's teaching of liner with a plurality of cavities and inserts configured to a shape of the cavities since doing so provide a mixture of liner and insert materials, the combination of which is needed to effectively and controllably absorb, displace, and dissipate varying degrees and ranges of impact imparted on outer shell 12 (see Col. 4, lines 13-16 of Fournier).

Claims 5-6, 16, and 17 are rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) in view of Sajic (U.S. 8,082,599).

Regarding claim 5, Sundahl teaches the claimed invention and wherein the shock absorbing insert (pad 47), but is silent about it being formed from a honeycomb material.

Sajic teaches a shock absorbing insert (sandwich panel) with a honeycomb material (honeycomb cells 60; Fig. 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of an insert to include Sajic's teaching of an insert with a honeycomb shape since doing so would give rise to increased energy absorbing performance, and would therefore improve the safety of the device (Col. 2, lines 2-4 of Sajic).

Regarding claim 6, the combined references of Sundahl and Sajic teach the claimed invention and wherein the honeycomb materials (honeycomb cells 60 of Sajic) include an array of energy absorbing cells (Fig. 4 and 5 of Sajic), each of the energy absorbing cells including a tube (22; see Col. 5, lines 45-47 of Sajic).

Regarding claim 16, Sundahl teaches the claimed invention and wherein the second shock absorbing material (i.e. containing multiple through openings; see Col. 3, line 50), but is silent about it includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.

Sajic teaches a second shock absorbing material (tubes 22 of Sajic) include an array of energy absorbing cells (Fig. 4 and 5; Col. 2, lines 1-5 of Sajic), each of the energy absorbing cells including a tube (22; see Col. 5, lines 45-47 of Sajic).

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to modify Sundahl's teaching of a second shock absorbing material to include Sajic's teaching of the material including an array of energy absorbing cells including a tube since doing so would provide a relatively constant level of energy absorption as the column is progressively buckled or crushed (See Col. 2, lines 4-6) and

the tubular array results in a material which is substantially isotropic (Col. 3, lines 19-20 of Sajic).

Regarding claim 17, the combined references of Sundahl and Sajic teach the claimed invention and wherein each of the tubes (tubes 22 of Sajic) of the energy absorbing cells (Fig. 4 and 5; Col. 2, lines 1-5 of Sajic) comprises a circular cylindrical or circular conical structure (Col. 3, lines 17-18 of Sajic).

Claim 12 is rejected under 35 U.S.C. 103 as being unpatentable over Sundahl (U.S. 4,434,514) view of Weber (U.S. 2012/0198604).

Regarding claim 12, Sundahl teaches the claimed invention and wherein the shell (11) comprises at least one of polycarbonate (polycarbonate; see Col. 2, lines 17-19) (PC) or Acrylonitrile butadiene styrene (ABS), and wherein the shock absorbing liner comprises polystyrene (Col. 2, lines 19-21), but is silent about the liner comprising expanded polystyrene (EPS).

Weber teaches helmet with a liner formed of EPS (Para. 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Sundahl's teaching of a polystyrene liner to include Weber's teaching of the liner being made of EPS since doing so would give rise to a lining that would help dissipate the energy of impacts (Para. 45 of Weber), thus leading to a more protective helmet.

Response to Arguments

Applicant's arguments, see Pages 7-8, filed 7/9/2015, with respect to the drawing and claim objections to claims 1, 3, 10, 11, 13, 14, and 19-22 have been fully

considered and are persuasive. The drawing and claim objections have been withdrawn.

Applicant's arguments, see Pages 8-9, filed 7/9/2015, with respect to the rejection(s) of claim(s) 4-6 and 10 under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of indefinite subject matter presented in the amended claims.

Applicant's arguments with respect to claims 1 and 13, rejected under 35 U.S.C. 102(a)(1), have been considered but are moot because the arguments do not apply to the references being used in the current rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNE KOZAK whose telephone number is (571)270-0552. The examiner can normally be reached on Mon - Fri: 8AM - 5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Clinton Ostrup can be reached on (571) 272-5559. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANNE KOZAK/
Examiner, Art Unit 3765

/RICHALE QUINN/

Primary Examiner, Art Unit 3765

Notice of References Cited	Application/Control No. 13/965,703	Applicant(s)/Patent Under Reexamination CHILSON, JAMES A.	
	Examiner ANNE KOZAK	Art Unit 3765	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-4,434,514 A	03-1984	Sundahl; James G.	A42B3/281	2/171.3
	B	US-				
	C	US-				
	D	US-				
	E	US-				
	F	US-				
	G	US-				
	H	US-				
	I	US-				
	J	US-				
	K	US-				
	L	US-				
	M	US-				

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<i>Search Notes</i> 	Application/Control No. 13965703	Applicant(s)/Patent Under Reexamination CHILSON, JAMES A.
	Examiner ANNE KOZAK	Art Unit 3765

CPC- SEARCHED		
Symbol	Date	Examiner
A42B 3/063,069,12,1,124,127	4/1/2015	
Updated above search - conducted a fast & focused STIC search with Fern Birtwistle	8/28/2015	AK

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
2	414	4/1/2015	AK
Updated above search		8/28/2015	AK

SEARCH NOTES		
Search Notes	Date	Examiner
Conducted an IDS, Inventor, USPC and CPC search with text in EAST	4/1/2015	AK
Updated above search	8/28/2015	AK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	454	2/414.ccls.	US-PGPUB; USPAT	OR	ON	2015/08/28 12:09
L2	1	"4434514".pn.	US-PGPUB; USPAT	OR	ON	2015/08/28 12:10
S2	1	("20130333100").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S3	1	("20120196147").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S5	1	("7254843").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S6	1	("D703871").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:44
S8	1	("20110225706").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:44
S9	2	("20080307568" "8082599").PN.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:45
S10	11	((James) near2 (Chilson)).INV.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:46
S16	82	A42B3/124.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:52
S17	178	A42B3/121.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S18	140	A42B3/127.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S19	109	A42B3/063.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S20	40	A42B3/069.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S21	32	("20010032351" "2381524" "3174155" "3242500" "3501772" "3787893" "3872511" "3906546" "4075717" "4124904" "4307471" "4937888" "5150479" "5177815" "5815846" "6282724" "7089602").PN. OR	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 09:54

		("7254843").URPN.				
S22	300	A42B3/12.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:16
S23	156	A42B3/125.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:17
S24	197	A42B3/10.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:17
S25	4	S23 and (honeycomb liner)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:23
S26	6	("20060059605" "20040117896" "6065158" "5561866" "7930771" "6387200").PN.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:26
S27	15	S22 and (honeycomb liner)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:29
S28	67	S22 and (removable pads)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:31
S29	70	S22 and (removable (pads or inserts))	US-PGPUB; USPAT	AND	ON	2015/03/27 10:33
S30	64	S22 and (removable (pads or inserts))and liner	US-PGPUB; USPAT	AND	ON	2015/03/27 10:33
S31	6	S30 and honeycomb	US-PGPUB; USPAT	AND	ON	2015/03/27 10:34
S32	1	"4985931".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:37
S33	1	"5561866".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:39
S34	4	("20070130670" "5119514" "5336180" "7958570").PN.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:45
S35	81	S18 and (liner and (insert or pad))	US-PGPUB; USPAT	AND	ON	2015/03/27 10:53
S36	7	S35 and key\$2	US-PGPUB; USPAT	AND	ON	2015/03/27 10:53
S37	4	("2012/0036620").URPN.	USPAT	OR	ON	2015/03/27 10:58
S38	1	S18 and (honeycomb pad)	US-PGPUB; USPAT	AND	ON	2015/03/27 11:14
S39	20	S22 and (honeycomb)	US-PGPUB; USPAT	AND	ON	2015/03/27 11:14
S40	1	"5840397".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 11:21

S41	45	("3447163" "3895152" "4422183" "4465725" "4485568" "5203607" "5416924" "5496610").PN. OR ("5840397").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2015/03/27 11:21
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S55	7	S52 and (polycarbonate and honeycomb)	US-PGPUB; USPAT	OR	ON	2015/03/30 11:59
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S61	17	S52 and "EPS"	US-PGPUB; USPAT	OR	ON	2015/03/30 12:12
S62	6	S52 and ("EPS" and polycarbonate)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:15
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S65	2	S52 and (non\$1porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:32
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S67	5824	S66 and helmet	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
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S81	167	A42B3/28.cpc.	US-PGPUB; USPAT	OR	ON	2015/07/17 19:07
S82	74	A42B3/281.cpc.	US-PGPUB; USPAT	OR	ON	2015/07/17 19:07
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EAST Search History

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S86	1	"1347046".pn.	US-PGPUB; USPAT	OR	ON	2015/08/27 09:46

EAST Search History (Interference)

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8/ 28/ 2015 12:11:05 PM

C:\ Users\ akozak\ Documents\ EAST\ Workspaces\ 13965703.wsp

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.	: 13/965,703	Confirmation No.	: 5250
First Named Inventor	: James A. Chilson		
Filed	: August 13, 2013	Attorney Docket No.:	P240940.US.01
Art Unit	: 3765	Customer No.	: 27,076
Examiner	: Anne M. Kozak		
Title	: HELMET WITH SHOCK ABSORBING INSERTS		

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RESPONSE UNDER 37 C.F.R. § 1.111

Madam:

Applicant acknowledges receipt of the Office Action dated April 9, 2015. The Commissioner is hereby authorized to charge any deficiency of fees that may be required, or credit any overpayment, to Deposit Account No. 50-1266. Please amend the above-identified application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks begin on page 7 of this paper.

Amendments to the Specification:

Please replace paragraph [014] with the following amended paragraph:

[014] Figure 3 illustrates two views of an insert 126 according to an embodiment of the invention. The shock absorbing liner 126 may be placed in the cavity 170 of Figure 2. As explained, the insert 126 may be constructed of a second shock absorbing material 120. In some embodiments, the second shock absorbing material 120 may be a porous shock absorbing material. For example, the second shock absorbing material 120 of the insert 126 may include a honeycomb material that includes an array of energy absorbing cells. In addition to providing impact absorption, each of the cells may include a tube, which may allow air to pass through, providing ventilation to the head of the wearer of the helmet 100 of Figure 1 or Figure 2. The insert 126 may have a shape relative to a shape of the cavity 170 of Figure 2 where removing the insert 126 from the cavity 170 requires manually deforming (e.g., compressing) the insert 126. Examples of shapes of the insert 126 relative to a shape of the cavity 170 are described further with reference to Figures 6A-D. The tubes may be hollow structures having any regular or irregular geometry. The honeycomb structure of the insert 126 may provide improved shock absorbing protection as compared with the material of the shock absorbing liner 130, for example, EPS material or the EPP material, or other materials. It will be appreciated that inserts 122 and 124 of Figure 2 may be formed from a similar material as the insert 126 of Figure 3. Additionally, the inserts 122 and 124 may have a shape relative to a shape of each of their respective cavity in the shock absorbing liner 130 of Figure 2 that requires compressing the inserts 122 and 124 to be removed from their respective cavity. For example, an insert may have a curved shape corresponding to a curved interior surface of a respective cavity in the shock absorbing liner in which the insert is inserted.

CLAIM AMENDMENTS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A helmet, comprising:
a shell including a vent;
a shock absorbing liner attached to the shell, the shock absorbing liner formed of a first shock absorbing material and having a cavity at least partially aligned with the vent; and
a shock absorbing insert formed of a second shock absorbing material different than the first shock absorbing material of the shock absorbing liner, wherein and positioned in the cavity is configured to retain the shock absorbing insert.
2. (Original) The helmet of claim 1, wherein the shock absorbing insert is configured to be manually deformed to be removed from the cavity.
3. (Currently Amended) The helmet of claim 1, wherein the cavity ~~having~~ has a shape configured to retain the shock absorbing insert based on an expansion pressure of sides of the insert against sides of the cavity.
4. (Original) The helmet of claim 1, wherein the first shock absorbing material is non-porous, and wherein the second shock absorbing material is porous.
5. (Original) The helmet of claim 1, wherein the shock absorbing insert is formed from a honeycomb material.
6. (Original) The helmet of claim 5, wherein the honeycomb material includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.
7. (Currently Amended) The helmet of claim 1, wherein the cavity comprises:
~~an interior surface; and~~
first and second sidewalls,

~~wherein interior angles between the first and second sidewalls angled such that and the interior surface provides a distance between the first and second sidewalls along a first curved side of the shock absorbing insert adjacent the interior surface that is greater than a distance between the first and second sidewalls along a second curved side of the shock absorbing insert opposite the first curved side.~~

8. (Currently Amended) The helmet of claim 1 wherein the cavity is configured to ~~have~~ such that a distance along a first curved side of the shock absorbing insert between sidewalls of the cavity that is greater than a distance along a second curved side of the shock absorbing insert opposite the first curved side ~~between the sidewalls.~~

9. (Original) The helmet of claim 1, wherein the cavity includes a recess and the shock absorbing insert includes a protrusion keyed to the recess in the cavity of the shock absorbing liner.

10. (Currently Amended) The helmet of claim 1, wherein an edge of the shock absorbing insert is rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

11. (Currently Amended) The helmet of claim 1, wherein the shock absorbing liner includes tabs protruding laterally across the cavity that are configured to retain the shock absorbing insert.

12. (Original) The helmet of claim 1, wherein the shell comprises at least one of polycarbonate (PC) or Acrylonitrile butadiene styrene (ABS), and wherein the shock absorbing liner comprises at least one of expanded polystyrene (EPS) or expanded polypropylene (EPP).

13. (Currently Amended) A helmet, comprising:
a shock absorbing liner forming a concave shape, the shock absorbing liner ~~having~~
~~encompassing a cavity; and~~
an insert retained in the cavity in the shock absorbing liner,
wherein ~~the insert and sidewalls of the cavity are configured~~ shaped such that a distance between the sidewalls along a first curved side of the insert is greater than a distance between the

~~sidewalls along a second curved side of the insert opposite the first curved side to require deformation of the insert to be removed from the cavity, wherein the insert and the shock absorbing liner having an inner surface configured to receive a wearer's head.~~

14. (Original) The helmet of claim 13, wherein the shock absorbing liner comprises a first shock absorbing material and the insert comprises a second shock absorbing material that is different than the first shock absorbing material.

15. (Original) The helmet of claim 14, wherein the second shock absorbing material is porous.

16. (Original) The helmet of claim 15, wherein the second shock absorbing material includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.

17. (Original) The helmet of claim 16, wherein each of the tubes of the energy absorbing cells comprises a circular cylindrical or circular conical structure.

18. (Original) The helmet of claim 13, further comprising a shell attached to on an outer surface of the shock absorbing liner.

19. (Original) The helmet of claim 13, wherein the insert is configured to allow air to flow there through to the head of a wearer.

20. (Original) The helmet of claim 13, wherein the insert comprises a first curved side adjacent an outer portion of the shock absorbing liner and a second curved side opposite the first curved side, where a distance across the first curved side is greater than a corresponding distance across the second curved side.

21. (Currently Amended) The helmet of claim 13, wherein an edge of the insert includes at least one of a protrusion keyed to a recess in the cavity of the shock absorbing liner, a semi-circular shape keyed to the recess in the cavity of the ~~soekshock~~ shock absorbing liner, or a semi-ovular shape keyed to the recess in the cavity of the ~~soek-shock~~ shock absorbing liner.

22. (Original) The helmet of claim 13, wherein the shock absorbing liner comprises a plurality of cavities, the helmet further comprising a plurality of inserts, each of the plurality of inserts having a shape configured to a shape of a respective cavity of the plurality of cavities in the shock absorbing liner.

23-27. (Canceled)

28. (New) The helmet of claim 1, wherein a thickness of the shock absorbing insert is equal to or less than a thickness of the shock absorbing liner.

29. (New) The helmet of claim 18, wherein the shell includes a vent, and wherein the vent aligns with a portion of the cavity.

30. (New) The helmet of claim 18, wherein a thickness of the insert is equal to or less than a thickness of the shock absorbing liner.

REMARKS

Status of Claims

Claims 1-22 and 28-30 are pending after inclusion of the present amendment. Claims 1, 3, 7, 8, 10, 11, and 21 have been amended. Claims 23-27 have been canceled without prejudice to the filing of divisional, continuation, or continuation-in-part applications. New claims 28-30 have been added to recite features disclosed in the application as filed, including the specification, drawings, and originally filed claims. No new matter has been added.

Office Action

In the Office Action dated April 9, 2015 (“Office Action”), the drawings were objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character “120” has been used to designate both second shock absorbing material (P14, line 3) and shock absorbing material (P14, lines 4 and 5). Claims 1, 3, 10, 11, 13, 14 and 19-22 were objected to because of informalities. Claims 4-6 and 10 were rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claims 1-4, 9-11, 13-15, 18, 21 and 22 were rejected under 35 U.S.C. 102(a)(1) as being anticipated by U.S. Patent No. 5,950,244 to Fournier (“Fournier”). Claims 5-8, 16, 17 and 20 were rejected under 35 U.S.C. 103 as being unpatentable over Fournier as applied to claims 1 and 13 above, and further in view of U.S. Patent No. 8,082,599 to Sajic (“Sajic”). Claim 12 is rejected under 35 U.S.C. 103 as being unpatentable over Fournier as applied to claim 1 above, and further in view of U.S. Publication No. 2012/0198604 to Weber (“Weber”). Claim 19 was rejected under 35 U.S.C. 103 as being unpatentable over Fournier as applied to claim 13 above, and further in view of U.S. Patent No. 5,694,649 to Hefling (“Hefling”).

Examiner interview

Applicant wishes to thank Examiner Kozak and Examiner Quinn for their time and courtesy during the telephonic interview held on May 13, 2015. Applicant’s representative, Elen Wetzel, and the Examiners discussed Fournier and proposed amendments to claims 1 and 13. While no agreement as to patentability was reached, the Examiners agreed that amendments

of the kind presented herein with respect to claim 13 would overcome the art cited in the Office Action.

Restriction requirement

A restriction requirement was issued requiring an election of Group I, claims 1-22 and Group II, claims 23-27. During a telephone conversation with the Examiner and Applicant's representative, Brandon Hegstrom, Applicant provisionally elected Group I, Claims 1-22 for examination. Applicant hereby affirms the oral election without traverse, and cancels claims 23-27 without prejudice, as noted above.

Objection to the drawings

The drawings were objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "120" has been used to designate both second shock absorbing material (P14, line 3) and shock absorbing material (P14, lines 4 and 5). Paragraph 14 of the application has been amended to correct typographical errors and the drawing objection is now moot. Withdrawal of the same is respectfully requested.

Claim objections

Claims 1, 3, 10, 11, 13, 14, and 19-22 were objected to for informalities. Claims 1, 3, 10, 11, and 21 have been amended to correct typographical errors and withdrawal of the objections of these claims is requested. Claim 13 has been amended and the objection regarding the recitation "surface configured" is now moot. With further regards to claim 13, and also with regards to claims 14 and 19, the Office Action states that "insert" should be replaced with "shock absorbing insert" to be "consistent with referenced part." See Office Action, page 6. It is respectfully submitted that there is no proper ground for this objection. As an initial matter, the claims do not reference any specific parts. Claim 13 is an independent claim and there is no deficiency as to form to warrant an objection to the claim. Withdrawal of the objection of independent claim 13 and dependent claims 14 and 19 is respectfully requested.

Claim rejections under 35 U.S.C. 112

Claims 4-6 and 10 were rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant

regards as the invention. Amendments to claim 1 render the rejection of claim 4 for lack of antecedent basis moot.

With regards to claim 5, the Office Action states that it is unclear what the phrase “honeycomb material” is referring to. *See* Office Action, page 7. Applicant respectfully submits that the 35 U.S.C. 112 rejection of claim 5 is improper at least because the phrase “honeycomb material” is a well understood term of art and a person of ordinary skill in the art would be appraised of the scope of the claim. Moreover, examples of “honeycomb material” are provided by the specification and illustrated by the Figures. *See e.g.*, paras. 12, 14, and 18, and Figs. 1-6. Withdrawal of the 35 U.S.C. 112 rejections of claim 5 and claim 6, which depends from claim 5, is respectfully requested.

With regards to claim 10, the Office Action states that the term “semi-ovular” renders the claim indefinite. *See* Office Action, page 7. Applicant respectfully submits that the 35 U.S.C. 112 rejection of claim 10 is improper at least because the term semi-ovular is not indefinite. For example, Merriam Webster’s dictionary defines the word semioval as “having the form of a half oval.” Additionally, an example of a semi-ovular shape is described in the specification and illustrated by the Figures. *See e.g.*, para. 27 and Fig. 27. It is respectfully submitted that a person of ordinary skill in the art would be able to determine the meets and bounds of the claimed subject matter and accordingly, the 35 U.S.C. 112 rejections of claim 10 is improper. Withdrawal of the same is respectfully requested.

Novelty over Fournier, Sajic, Weber, and Hefling

Independent claims 1 and 13 were rejected under 35 U.S.C. 102(a)(1) over Fournier. As an initial matter, claims 1 and 13 have been amended rendering the 35 U.S.C. 102(a)(1) rejection of these claims moot. Accordingly, withdrawal of the 35 U.S.C. 102(a)(1) rejection of claims 1 and 13 over Fournier is respectfully requested.

To facilitate expedient prosecution of this application, amended claims 1 and 13 are briefly discussed below with regards to the applied references. Amended claim 1 is directed toward a helmet and recites in part “a shell including a vent,” “a shock absorbing liner attached to the shell, the shock absorbing liner... having a cavity at least partially aligned with the vent,” and “a shock absorbing insert... positioned in the cavity.” Applicant submits that Fournier, alone or in combination with Sajic, Weber, and Hefling, fails to disclose, teach or suggest, at least these features in the combination recited in amended claim 1.

Amended claim 13 is directed toward a helmet and recites in part “a shock absorbing liner... comprising a cavity,” and “wherein sidewalls of the cavity are shaped such that a distance between the sidewalls along a first curved side of the insert is greater than a distance between the sidewalls along a second curved side of the insert opposite the first curved side.” As discussed during the interview and agreed by the examiners, Fournier fails to disclose at least these features in the combination recited in amended claim 13. The remaining cited references, Sajic, Weber, and Hefling, do not cure the deficiencies of Fournier with regards to amended claim 12, nor has the Examiner relied on Sajic, Weber, and Hefling in such capacity.

Accordingly, claims 1 and 13 are allowable over Fournier, Sajic, Weber, and Hefling and indication of the same is respectfully requested.

Dependent Claims

Claims 2-12, 14-22 and 28-30 depend from and include all of the features of at least one of Applicant’s respective independent claims discussed above. These claims are patentably distinguished over the cited references because of their dependency on patentable independent claims and also because of the additional recitations added by those claims. In the interest of brevity, Applicant has chosen not to individually discuss additional distinguishing characteristics of the dependent claims, nor have the merits of the 35 U.S.C 103 rejections of certain depended claims been addressed. Applicant’s silence in that regard should not be interpreted as belief that the dependent claims are patentable only by virtue of their dependence on a patentable independent claim, nor should it be interpreted as agreement with the Examiner’s characterization of the cited references.

All claims are in condition for allowance. Favorable consideration and a timely Notice of Allowance are earnestly solicited.

Respectfully submitted,
DORSEY & WHITNEY LLP

July 9, 2015

Date

EW:rar

/Elen Wetzel/

Elen Wetzel

Registration No. 69,563

Telephone No. (206) 903-2415

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 13/965,703 Confirmation No. : 5250
First Named Inventor: James A. Chilson
Filed : August 13, 2013 Attorney Docket No.: P240940.US.01
Art Unit : 3765 Customer No. : 27,076
Examiner : Anne M. Kozak
Title : HELMET WITH SHOCK ABSORBING INSERTS

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Madam:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicant wishes to make known to the Patent and Trademark Office the references set forth on the attached form PTO-SB/08. A copy of the non-patent literature reference, as required under 37 C.F.R. § 1.98(a)(2), is attached.

I hereby certify that each item of information contained in the attached form PTO-SB/08 was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. (37 C.F.R. § 1.97(e)(1)).

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Respectfully submitted,
DORSEY & WHITNEY LLP

July 9, 2015

Date

/Elen Wetzel/
Elen Wetzel
Registration No. 69,563

EW:rar

Enclosures:

Form PTO-SB/08
Cited reference (1)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		13/965,703
	Filing Date		Aug 13, 2013
	First Named Inventor	James A. Chilson	
	Art Unit	3765	
	Examiner Name	Anne M. Kozak	
	Attorney Docket Number	P240940.US.01	

U.S. PATENTS						
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
U.S. PATENT APPLICATION PUBLICATIONS						
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
NON-PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				T ⁵
		First Office Action dated 6/22/2015 received for CA Appln No. 2,858,707				
EXAMINER SIGNATURE						
Examiner Signature					Date Considered	
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.						
¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.						

Electronic Acknowledgement Receipt	
EFS ID:	22876705
Application Number:	13965703
International Application Number:	
Confirmation Number:	5250
Title of Invention:	HELMET WITH SHOCK ABSORBING INSERTS
First Named Inventor/Applicant Name:	James A. Chilson
Customer Number:	27076
Filer:	Elen Wetzel/Randi Rowe
Filer Authorized By:	Elen Wetzel
Attorney Docket Number:	P240940.US.01
Receipt Date:	09-JUL-2015
Filing Date:	13-AUG-2013
Time Stamp:	19:04:19
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment		no			
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		20150709_Response_P240940 US01.pdf	124618 ca90c362fb412d30af4b9c1061599d20d87f121c	yes	10

	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Specification		2	2	
	Claims		3	6	
	Applicant Arguments/Remarks Made in an Amendment		7	10	
Warnings:					
Information:					
2		20150709_IDS_P240940US01_.pdf	131393 19fdfea715761036b4c246af3824e69ac6e247d1	yes	2
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Transmittal Letter		1	1	
	Information Disclosure Statement (IDS) Form (SB08)		2	2	
Warnings:					
Information:					
3	Non Patent Literature	ExaminersReport_P240940CA01.pdf	3722319 9c7574d82bd222d9a66a9916796de89d46c8257c	no	6
Warnings:					
Information:					
Total Files Size (in bytes):			3978330		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					Application or Docket Number 13/965,703	Filing Date 08/13/2013	☐ To be Mailed
ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO							
APPLICATION AS FILED – PART I							
(Column 1)		(Column 2)					
FOR	NUMBER FILED	NUMBER EXTRA			RATE (\$)	FEE (\$)	
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A			N/A		
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A			N/A		
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A			N/A		
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*			X \$ =		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*			X \$ =		
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							
* If the difference in column 1 is less than zero, enter "0" in column 2.					TOTAL		
APPLICATION AS AMENDED – PART II							
(Column 1)		(Column 2)		(Column 3)			
AMENDMENT	07/09/2015	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 25	Minus	** 27	= 0	X \$80 =	0
	Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X \$420 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	0
(Column 1)		(Column 2)		(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.							

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 13/965,703 Confirmation No. : 5250
First Named Inventor: James A. Chilson
Filed : August 13, 2013 Attorney Docket No.: P240940.US.01
Art Unit : 3765 Customer No. : 27,076
Examiner : Anne M. Kozak
Title : HELMET WITH SHOCK ABSORBING INSERTS

SUBMITTAL OF DECLARATION FOR UTILITY PATENT
APPLICATION UNDER 37 C.F.R. 1.63

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir/Madam:

Pursuant to the above-referenced patent application filed on August 13, 2013, Applicant attaches herewith an executed Declaration. A \$140 surcharge was previously submitted and withdrawn from Deposit Account No. 50-1266 on August 14, 2013. The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1266.

Respectfully submitted,

Date: June 11, 2015

/Brandon P. Hegstrom/

Brandon P. Hegstrom, Reg. No. 59,432
Customer No. 27,076
Dorsey & Whitney LLP
701 Fifth Avenue, Suite 6100
Seattle, WA 98104
(206) 903-8800

First Named Inventor	James A. Chilson	DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR § 1.63) USING AN APPLICATION DATA SHEET (37 CFR § 1.76)
Attorney Docket No.	P240940.US.01	
Title: HELMET WITH SHOCK ABSORBING INSERTS		

As a below named inventor, I hereby declare that this declaration is directed to the application identified by Attorney Docket No. P240940.US.01 filed in the name of the following inventor:

James A. Chilson

The above-identified application was made or authorized to be made by me.

I believe I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Direct all correspondence to the address associated with Customer No. **27,076**.

Signature: **/James A. Chilson/**
Digitally signed by /James A. Chilson/
 DN: cn=/James A. Chilson/, o=Smith
 Optics, ou=Product,
 email=drew.chilson@smithoptics.co
 m, c=US
 Date: 2015.05.15 12:54:10 -06'00'

Date: _____

Full Name of inventor: James A. Chilson

Mailing Address : 620 West Meadow
Hailey, ID 83333

Residence : City of Hailey, County of Blaine
State of Idaho

Electronic Acknowledgement Receipt	
EFS ID:	22608633
Application Number:	13965703
International Application Number:	
Confirmation Number:	5250
Title of Invention:	HELMET WITH SHOCK ABSORBING INSERTS
First Named Inventor/Applicant Name:	James A. Chilson
Customer Number:	27076
Filer:	Brandon Paul. Hegstrom/Monica Leigh
Filer Authorized By:	Brandon Paul. Hegstrom
Attorney Docket Number:	P240940.US.01
Receipt Date:	11-JUN-2015
Filing Date:	13-AUG-2013
Time Stamp:	17:58:03
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment		no			
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		20150611_Declarataion_P240940US01.pdf	98632 324d109851344f2865abd01ab78ce5b7d063ed7b	yes	2

	Multipart Description/PDF files in .zip description		
	Document Description	Start	End
	Transmittal Letter	1	1
	Oath or Declaration filed	2	2
Warnings:			
Information:			
Total Files Size (in bytes):		98632	
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.			



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/965,703	08/13/2013	James A. Chilson	P240940.US.01	5250
27076 7590 05/19/2015 DORSEY & WHITNEY LLP - Seattle INTELLECTUAL PROPERTY DEPARTMENT Columbia Center 701 Fifth Avenue, Suite 6100 SEATTLE, WA 98104-7043			EXAMINER KOZAK, ANNE M	
			ART UNIT 3765	PAPER NUMBER
			NOTIFICATION DATE 05/19/2015	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocket-se@dorsey.com
IPDocket_SE@dorsey.foundationip.com
loges.remy@dorsey.com

<i>Applicant-Initiated Interview Summary</i>	Application No.	Applicant(s)	
	13/965,703	CHILSON, JAMES A.	
	Examiner	Art Unit	
	ANNE KOZAK	3765	

All participants (applicant, applicant's representative, PTO personnel):

(1) ANNE KOZAK. (3) ELEN WETZEL.

(2) RICHALE QUINN. (4) ____.

Date of Interview: 13 May 2015.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☒102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 1 and 13.

Identification of prior art discussed: Fournier (US 5,950,244), Sajic (US 8,082,599).

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

The Examiners thank the Applicant for providing an invention overview, which was helpful. Proposed amendments to Claims 1 and 13 were discussed. Examiners noted that the prior art of record would meet the limitations as proposed for Claim 1, and further revision of the claim language would be necessary to distinguish the invention over the prior art. Examiners noted that the Claim 13 may overcome the prior art upon further revision of the claim language to clarify the portion of the cavity being claimed. No particular agreements were reached regarding claim language, and Applicant agreed to file a formal response.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☒ Attachment

/RICHALE QUINN/ Primary Examiner, Art Unit 3765	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Doc Code: M865 or FAIREQ.INTV

PTOL-413A (10-09)
Approved for use through 07/31/2012, OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 13/965,703 First Named Applicant: Smith Optics, Inc.
Examiner: Kozak Art Unit: 3705 Status of Application: Non Final Action
mailed

Tentative Participants:

(1) Elen Wetzel (2) Kinton Eng
(3) _____ (4) _____Proposed Date of Interview: May 13, 2015 Proposed Time: 3:00 EST (AM/PM)

Type of Interview Requested:

(1) ☒ Telephonic (2) ☐ Personal (3) ☐ Video ConferenceExhibit To Be Shown or Demonstrated: ☐ YES ☒ NO

If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>35 USC 102 rejections</u>	_____	_____	☐	☐	☐
(2) _____	_____	_____	☐	☐	☐
(3) _____	_____	_____	☐	☐	☐
(4) _____	_____	_____	☐	☐	☐

☐ Continuation Sheet Attached☒ Proposed Amendment or Arguments AttachedBrief Description of Arguments to be Presented: Proposed Agenda attached

An interview was conducted on the above-identified application on _____

NOTE: This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

Elen Wetzel
Applicant/Applicant's Representative Signature_____
Examiner/SPE SignatureElen Wetzel
Typed/Printed Name of Applicant or Representative69563
Registration Number, if applicable

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Examiner Kozak**RE: Application No. 13/965,703****Proposed agenda for Examiner interview on May 13, 2015, 3:00pm EST**

Applicant thanks the Examiner for scheduling the subject telephone interview. A brief outline of Applicant's contemplated discussion is provided below.

1. Discussion proposed amendments to the claims.

1. A helmet, comprising:

a shell;

a shock absorbing liner attached to the shell, the shock absorbing liner formed of a first shock absorbing material and having a first thickness, the shock absorbing liner comprising an a cavity; and

a shock absorbing insert formed of a second shock absorbing material different than the first shock absorbing material and having a second thickness equal to or less than the first thickness of the shock absorbing liner, wherein the cavity is configured to retain the shock absorbing insert.

13. A helmet, comprising:

a shock absorbing liner forming a concave shape, the shock absorbing liner ~~having an~~ comprising a cavity; and

an insert retained in the cavity ~~in~~ of the shock absorbing liner,

wherein the ~~insert and cavity are~~ is configured to have a distance along a first curved side between sidewalls of the cavity that is greater than a distance along a second curved side between the sidewalls ~~require deformation of the insert to be removed from the cavity, wherein the insert and the shock absorbing liner having an inner surface configured to receive a wearer's head.~~

This Itinerary is for informal guidance only. It is not intended to be an exclusive list of what is to be discussed or of the deficiencies of the rejections, nor does it represent Applicant's final position on any matter.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/965,703	08/13/2013	James A. Chilson	P240940.US.01	5250

27076	7590	04/09/2015
DORSEY & WHITNEY LLP - Seattle		
INTELLECTUAL PROPERTY DEPARTMENT		
Columbia Center		
701 Fifth Avenue, Suite 6100		
SEATTLE, WA 98104-7043		

EXAMINER	
KOZAK, ANNE M	

ART UNIT	PAPER NUMBER
3765	

NOTIFICATION DATE	DELIVERY MODE
04/09/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocket-se@dorsey.com
IPDocket_SE@dorsey.foundationip.com
loges.remy@dorsey.com

Office Action Summary	Application No. 13/965,703	Applicant(s) CHILSON, JAMES A.	
	Examiner ANNE KOZAK	Art Unit 3765	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/13/2013.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

- 5) ☒ Claim(s) 1-27 is/are pending in the application.
5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-22 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☒ Claim(s) 23-27 are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 8/13/2013 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some** c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date 3/14/2014.
- 3) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 4) ☐ Other: ____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Status of Claims

Claims 1-27 are pending in this application.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I: Claims 1-22, drawn to a helmet, classified in A42B 3/125.
- II: Claims 23-27, drawn to a method for manufacturing a helmet, classified in A42B 3/06.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of making. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of making that product. See MPEP § 806.05(h). In the instant case, the process as claimed can be used to make a materially different product such as body armor sports pads or other impact protection equipment.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above

and there would be a serious search and/or examination burden if restriction were not required because one or more of the following reasons apply:

- a. the inventions have acquired a separate status in the art in view of their different classification;
- b. the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- c. the inventions required a different field of search as they require searching different classes/subclasses.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of an invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record

showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103 or pre-AIA 35 U.S.C. 103(a) of the other invention.

The examiner has required restriction between product or apparatus claims and process claims. Where applicant elects claims directed to the product/apparatus, and all product/apparatus claims are subsequently found allowable, withdrawn process claims that include all the limitations of the allowable product/apparatus claims should be considered for rejoinder. All claims directed to a nonelected process invention must include all the limitations of an allowable product/apparatus claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product/apparatus claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product/apparatus are found allowable, an otherwise proper restriction requirement between product/apparatus claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product/apparatus claim will not be rejoined. See MPEP § 821.04. Additionally, in order for rejoinder to occur, applicant is advised that the process claims should be amended during prosecution to require the limitations of the

product/apparatus claims. **Failure to do so may result in no rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

During a telephone conversation with Applicant's Attorney, Brandon Hagstrom, on March 26, 2015, a provisional election was made without traverse to prosecute Invention I, claims 1-22. Affirmation of this election must be made by applicant in replying to this Office Action. No claims are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Drawings

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "120" has been used to designate both second shock absorbing material (P14, line 3) and shock absorbing material (P14, lines 4 and 5).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims, 1, 3, 10, 11, 13, 14, and 19-22 are objected to because of the following informalities:

- "an cavity" (C1, line 3) should be "a cavity" to improve clarity
- "insert based" (C3, line 2) should be "insert is based" to improve clarity
- "insert" (C10, line 1, C11, line 2; C13, line 4; C14, line 14; C 19, line 1; C20 line 1; C21, line 1, C22, lines 2 and 3) should be "shocking absorbing insert" to be consistent with referenced part
- "surface configured" (C13, line 7) should be "surface are configured" to improve clarity
- "sock absorbing" (C21, line 4) should be "shock absorbing"

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-6 and 10 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Claim 4 recites the limitation "first shock absorbing material" (line 1) and "second shock absorbing material" (line 2). There is insufficient antecedent basis for this limitation in the claim. For examination purposes, "first shock absorbing material" has been construed as "the material of the shock absorbing liner" and the "second shock absorbing material" has been construed as the "the material of the shock absorbing insert."

Regarding claim 5, in the phrase "honeycomb material," it is unclear what "honeycomb material" is referring to, and is therefore indefinite since it unclear what is being claimed. For examination purposes, "honeycomb material" has been construed as "a material formed of connected circular or hexagonal tubes."

The term "semi-ovular" in claim 10 is a relative term which renders the claim indefinite. The term "semi-ovular" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Any remaining claims are rejected as depending from a rejected base claim.

Claim Rejections - 35 USC § 102

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

Claims 1-4, 9-11, 13-15, 18, 21, and 22 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Fournier (U.S. 5,950,244) .

Regarding claim 1, Fournier teaches a shell (outer shell 12); a shock absorbing liner (first material 16) attached to the shell (12), the shock absorbing liner (16) having an cavity (plug holes 25); and a shock absorbing insert (plugs 19) formed of a material (second material 18) different than the material (first material 16; see Col. 3, lines 57-67 and Col. 4, lines 1-12)) of the shock absorbing liner (first material 16), wherein the cavity (plug holes 25) is configured to retain the shock absorbing insert (Col. 4, lines 23-25).

Regarding claim 2, Fournier teaches the claimed invention and wherein the shock absorbing insert (plug 19) is configured to be manually deformed to be removed from the cavity (Col. 5, lines 53-57; i.e. material must be compressed for insertion into the plug hole, and since it expands to grip the hole, it must also be compressed to be removed from the hole).

Regarding claim 3, Fournier teaches the claimed invention and wherein the cavity (plug 19) has a shape (see Fig. 4-6) configured to retain the shock absorbing insert (plug 19), based on an expansion pressure of sides of the insert against sides of the cavity (Col. 5, lines 53-63).

Regarding claim 4, Fournier teaches a first shock absorbing material (first material 16) is non-porous (see Fig. 4; i.e. dashed lines) and a second shock absorbing material (second material 18) is porous (see Fig. 4; i.e. holes).

Regarding claim 9, Fournier teaches the claimed invention and wherein the cavity (plug hole 25) includes a recess (groove 52), and the shock absorbing insert (plug 19) includes a protrusion (ridge 50) keyed to the recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

Regarding claim 10, Fournier teaches the claimed invention and wherein an edge (ridge 50) of the insert (plug 19) is rounded (see Fig. 5) to form a semi-ovular shape that is keyed to a recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (16; see Fig. 5).

Regarding claim 11, Fournier teaches the claimed invention and wherein the shock absorbing liner (16) includes tabs (ridge 27) protruding laterally across the cavity (plug hole 25) that are configured to retain the insert (plug 19; see Fig. 4; Col. 5, lines 23-26).

Regarding claim 13, Fournier teaches a helmet (protective device 10), a shock absorbing liner (first material 16) forming a concave shape (see Fig. 4), the shock absorbing liner (first material 16) having an cavity (plug holes 25) ; and an insert retained (Col. 5, lines 19-26) in the cavity (plug holes 25) in the shock absorbing liner (14) , wherein the insert (plug 19) and cavity (plug holes 25) are configured to require deformation of the insert to be removed from the cavity, wherein the insert (plug 19) and

the shock absorbing liner (first material 16) having an inner surface (top surface 22; Col. 4, lines 18-20) are configured to receive a wearer's head.

Regarding claim 14, Fournier teaches the claimed invention and wherein the shock absorbing liner (first material 16) comprises a first shock absorbing material (first material 16; see Col. 3, lines 57-67) and the insert (plug 19) comprises a second shock absorbing material (second material 18; Col. 4, lines 3-12) that is different than the first shock absorbing material (first material 16).

Regarding claim 15, Fournier teaches the claimed invention and a second shock absorbing material (second material 18) being porous (see Fig. 4; i.e. holes).

Regarding claim 18, Fournier teaches the claimed invention further comprising a shell (outer shell 12) attached to on an outer surface (top surface 22; see Col. 4, lines 18-20) of the shock absorbing liner (first material 16).

Regarding claim 21, Fournier teaches the claimed invention and wherein an edge (ridge 50) of the insert (plug 19) includes at least one of a protrusion (ridge 50) keyed to a recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (first material 16), a semi- circular shape (see Fig. 5) keyed to the recess (groove 52) in the cavity (plug hole 25) of the shock absorbing liner (first material 16) , or a semi- ovular shape keyed to the recess in the cavity of the shock absorbing liner.

Regarding claim 22, Fournier teaches the claimed invention and wherein the shock absorbing liner (first material 16) comprises a plurality of cavities (plug holes 25; see Fig. 4), the helmet further comprising a plurality of inserts (19, see Fig. 4), each of the plurality of inserts having a shape configured to a shape of a respective cavity (plug

hole 25; see Fig. 4) of the plurality of cavities (plug holes 25) in the shock absorbing liner (first material 16).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-8, 16,17, and 20 are rejected under 35 U.S.C. 103 as being unpatentable over Fournier (U.S. 5,950,244) as applied to claim 1 and 13 above, and further in view of Sajic (U.S. 8,082,599).

Regarding claim 5, Fournier teaches a shock absorbing insert (plug 19), but is silent about the insert being formed from a honeycomb material.

Sajic teaches a shock absorbing insert (sandwich panel) with a honeycomb material (honeycomb cells 60; Fig. 4 and 5).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fournier's teaching of an insert to include Sajic's teaching of an insert with a honeycomb shape since doing so would give rise to increased energy absorbing performance, and would therefore improve the safety of the device (Col. 2, lines 2-4).

Regarding claim 6, the combined references of Fournier and Sajic teach the claimed invention and wherein the honeycomb materials (honeycomb cells 60 of Sajic)

include an array of energy absorbing cells (Fig. 4 and 5 of Sajic), each of the energy absorbing cells including a tube (22; see Col. 5, lines 45-47 of Sajic).

Regarding claim 7, Fournier teaches the claimed invention and wherein the cavity (plug hole 25) comprises an interior surface (plug hole 25 near interior surface 13) and first and second sidewalls (ridge 27 and peripheral surface 28) but does not teach wherein interior angles between the first and second sidewalls and the interior surface provides a distance between the first and second sidewalls along a first curved side of the shock absorbing insert adjacent the interior surface that is greater than a distance between the first and second sidewalls along a second curved side of the shock absorbing insert.

Sajic teaches an insert (sandwich panel 12) in which the interior angles (A, see Ann. Fig. I) between the first and second sidewalls (B and C, see Ann. Fig. I) and the interior surface (D, see Ann. Fig. I) provides a distance between the first and second sidewalls (B and C, see Ann. Fig. I) along a first curved side (E, see Ann. Fig. I) of the shock absorbing insert (sandwich panel 12) adjacent the interior surface (D, see Ann. Fig. I) that is greater than a distance between the first and second sidewalls (B and C, see Ann. Fig. I) along a second curved side (F, see Ann. Fig. I) of the shock absorbing insert (sandwich panel 12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fournier's teaching of a cavity with an interior surface and first and second sidewalls to include Sajic's teaching of an insert to fit into a cavity with the insert having a first curved side and having an interior surface that is greater than

the distance of the second curved side between the same points since doing so would provide a space for an insert that better conforms to the shape of the helmet and head, which would give rise to a better-fitting protective helmet.

Regarding claim 8, Fournier teaches a cavity (plug hole 25) on a curved side (side of shell 12 near cavity 25; see Fig. 4 and 5), but is silent about the cavity being configured to have a distance along a first curved side between sidewalls of the cavity that is greater than a distance along a second curved side between the sidewalls.

Sajic teaches an insert (sandwich panel 12) in which the diameter of the tubes will be reduced at the inner surface and increased at the outer surface (see Col. 6, lines 42-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fournier's teaching of a cavity on curved side to include Sajic's teaching of an insert to fit in a cavity, the insert having a greater distance along a second curved side between sidewalls, since doing so would provide space for an insert that better conforms to the shape of the helmet and head, which would give rise to a better-fitting protective helmet.

Regarding claim 16, the combined references of Fournier and Sajic teach the claimed invention and wherein the second shock absorbing material (tubes 22 of Sajic) include an array of energy absorbing cells (Fig. 4 and 5; Col. 2, lines 1-5 of Sajic), each of the energy absorbing cells including a tube (22; see Col. 5, lines 45-47 of Sajic).

Regarding claim 17, the combined references of Fournier and Sajic teach the claimed invention and wherein each of the tubes (tubes 22 of Sajic) of the energy

absorbing cells (Fig. 4 and 5; Col. 2, lines 1-5 of Sajic) comprises a circular cylindrical or circular conical structure (Col. 3, lines 17-18 of Sajic).

Claim 12 is rejected under 35 U.S.C. 103 as being unpatentable over Fournier (U.S. 5,950,244) as applied to claim 1 above, and further in view of Weber (2012/0198604).

Regarding claim 12, Fournier teaches the shell (outer shell 12) made of plastic and the shock absorbing liner (first material 16) made of polystyrene or polypropylene (Col. 3, lines 65-67), but is silent about the shell being made of polycarbonate or acrylonitrile butadiene styrene and the shock absorbing liner comprising expanded polystyrene or expanded polypropylene.

Weber teaches an outer shell (106) made of polycarbonate (Para. 61) and liners formed of EPS (Para. 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fournier's teaching of a shell with a polystyrene layer to include Weber's teaching of the shell being made of polycarbonate and the liner being made of EPS since doing so would give rise to a relatively hard outer shell (Para. 39 of Weber) and with a lining that would help dissipate the energy of impacts (Para. 45 of Weber), thus leading to a more protective helmet.

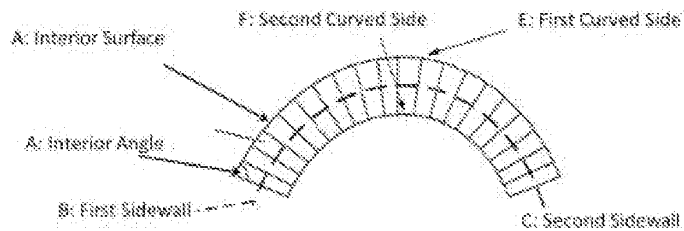
Claim 19 is rejected under 35 U.S.C. 103 as being unpatentable over Fournier (U.S. 5,950,244) as applied to claim 13 above, and further in view of Hefling (U.S. 5,694,649).

Regarding claim 19, Fournier teaches an insert (second material 18) and the first material being configured to allow air to flow (i.e. through ventilation holes 26); through to the head of a wearer, but is silent about the insert being configured to allow air flow.

Hefling teaches a helmet in which a top hole (21) extends through an insert (crown pad 19) for air circulation (Fig. 2; Col. 2, lines 40-45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Fournier's teaching of an insert to include Hefling's teaching of an insert that allows for air circulation since doing so would help to keep the wearer cool.

Annotated Figure I:



Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNE KOZAK whose telephone number is (571)270-0552. The examiner can normally be reached on Mon - Fri: 8AM - 5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Clinton Ostrup can be reached on (571) 272-5559. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANNE KOZAK/
Examiner, Art Unit 3765

/CLINTON T. OSTRUP/
Supervisory Patent Examiner, Art Unit 3765

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U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-3,447,163 A	06-1969	TOJEIRO JOHN M et al.	2/412
*	B	US-4,307,471 A	12-1981	Lovell, Peter J.	2/411
*	C	US-4,916,759 A	04-1990	Arai, Michio	2/414
*	D	US-4,985,931 A	01-1991	Wingo, Jr., James C.	2/462
*	E	US-5,088,129 A	02-1992	Kamata, Eitaro	2/411
*	F	US-5,561,866 A	10-1996	Ross, Leslie	2/410
*	G	US-5,687,426 A	11-1997	Sperber, Gerhard	2/411
*	H	US-5,694,649 A	12-1997	Hefling et al.	2/418
*	I	US-5,840,397 A	11-1998	Landi et al.	428/73
*	J	US-5,950,244 A	09-1999	Fournier et al.	2/414
*	K	US-6,065,158 A	05-2000	Rush, III, Gus A.	2/412
*	L	US-6,185,753 B1	02-2001	Arai, Michio	2/414
*	M	US-6,282,724 B1	09-2001	Abraham et al.	2/412

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
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	S					
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NON-PATENT DOCUMENTS

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	U	
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U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2001/0032351 A1	10-2001	Nakayama et al.	2/412
*	B	US-6,336,220 B1	01-2002	Sacks et al.	2/22
*	C	US-6,387,200 B1	05-2002	Ashmead et al.	156/79
*	D	US-6,446,271 B1	09-2002	Ho, Chang-Hsien	2/414
*	E	US-2005/0015855 A1	01-2005	Skiba, Joseph	002/412
*	F	US-6,883,181 B2	04-2005	Long, Richard J.	2/414
*	G	US-2006/0059606 A1	03-2006	Ferrara, Vincent R.	002/412
*	H	US-2006/0059605 A1	03-2006	Ferrara, Vincent R.	002/410
*	I	US-2006/0096011 A1	05-2006	Dennis et al.	002/414
*	J	US-2006/0101556 A1	05-2006	Goldsborough, Richard	002/171.3
*	K	US-7,089,602 B2	08-2006	Talluri, Srikrishna	2/411
*	L	US-2006/0260026 A1	11-2006	Doria et al.	002/414
*	M	US-2007/0000025 A1	01-2007	Picotte, Brooke	002/171

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
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U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2008/0184463 A1	08-2008	Sawabe, Akira	2/418
*	B	US-2008/0307568 A1	12-2008	Sajic, Peter	2/455
*	C	US-2009/0158506 A1	06-2009	Thompson et al.	2/411
*	D	US-2009/0264073 A1	10-2009	Kushnirov, Abraham	455/41.2
*	E	US-7,669,378 B2	03-2010	Tsunoda et al.	52/633
*	F	US-7,828,759 B2	11-2010	Arensdorf, Stephen C.	602/27
*	G	US-D645,210 S	09-2011	Chilson et al.	D29/106
*	H	US-2011/0252544 A1	10-2011	Abernethy, Patrick	2/413
*	I	US-D650,132 S	12-2011	Chilson et al.	D29/105
*	J	US-8,082,599 B2	12-2011	Sajic, Peter	2/411
*	K	US-2012/0036620 A1	02-2012	Harris, Kerry Sheldon	2/414
*	L	US-2012/0036619 A1	02-2012	Ytterborn et al.	2/411
*	M	US-8,166,574 B2	05-2012	Hassler, Andreas	2/413

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
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U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2012/0198604 A1	08-2012	Weber et al.	2/414
*	B	US-2013/0007950 A1	01-2013	ARAI, MICHIO	2/414
*	C	US-2013/0061375 A1	03-2013	Bologna et al.	2/414
*	D	US-8,512,843 B2	08-2013	Villata, Richard B.	428/71
*	E	US-8,533,869 B1	09-2013	Capuano, Sonya Abdow	2/411
*	F	US-2014/0013492 A1	01-2014	Bottlang et al.	2/414
*	G	US-8,667,618 B2	03-2014	Pierini et al.	2/411
*	H	US-8,732,869 B2	05-2014	Onrot et al.	2/465
*	I	US-2014/0250571 A1	09-2014	Pippillion et al.	2/414
*	J	US-2014/0338104 A1	11-2014	Vito et al.	2/414
*	K	US-2014/0366252 A1	12-2014	Mazzarolo et al.	2/414
*	L	US-2015/0047113 A1	02-2015	Stringfellow et al.	2/455
*	M	US-2015/0047110 A1	02-2015	Chilson, James A.	2/414

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
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U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-8,966,669 B2	03-2015	Hines, James M.	2/411
*	B	US-2015/0082520 A1	03-2015	CHENG et al.	2/411
*	C	US-8,986,798 B2	03-2015	Anderson et al.	428/34.1
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
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FOREIGN PATENT DOCUMENTS

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Receipt date: 03/14/2014

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Doc code: IDS

Doc description: Information Disclosure Statement (IDS) Filed

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Approved for use through 07/31/2012. OMB 0651-0031

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	13/965,703
	Filing Date	Aug 13, 2013
	First Named Inventor	James A. Chilson
	Art Unit	3765
	Examiner Name	Not Yet Allocated
	Attorney Docket Number	P240940.US.01

U.S. PATENTS								
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		US-8082599	B2	Dec 27, 2011	Sajic, Peter			
U.S. PATENT APPLICATION PUBLICATIONS								
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		US-2008/0307568	A1	Dec 18, 2008	Sajic, Peter			
FOREIGN PATENT DOCUMENTS								
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
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CONFIRMATION NO. 5250

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.		
13/965,703	08/13/2013	002	3765	P240940.US.01		
APPLICANTS Smith Optics, Inc., Ketchum, ID, Assignee (with 37 CFR 1.172 Interest); INVENTORS James A. Chilson, Hailey, ID; ** CONTINUING DATA ***** ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 08/27/2013						
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☐ No Verified and Acknowledged <u>/ANNE M KOZAK/</u> Examiner's Signature		☐ Met after Allowance Initials	STATE OR COUNTRY ID	SHEETS DRAWINGS 6	TOTAL CLAIMS 27	INDEPENDENT CLAIMS 3
ADDRESS DORSEY & WHITNEY LLP - Seattle INTELLECTUAL PROPERTY DEPARTMENT Columbia Center 701 Fifth Avenue, Suite 6100 SEATTLE, WA 98104-7043 UNITED STATES						
TITLE HELMET WITH SHOCK ABSORBING INSERTS						
FILING FEE RECEIVED 2300	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:			☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit		

<i>Index of Claims</i> 	Application/Control No. 13965703	Applicant(s)/Patent Under Reexamination CHILSON, JAMES A.
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✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47										
CLAIM		DATE								
Final	Original	04/01/2015								
	1	✓								
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Search Notes 	Application/Control No. 13965703	Applicant(s)/Patent Under Reexamination CHILSON, JAMES A.
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CPC- SEARCHED		
Symbol	Date	Examiner
A42B 3/063,069,12,1,124,127	4/1/2015	AK

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
2	414	4/1/2015	AK

SEARCH NOTES		
Search Notes	Date	Examiner
Conducted an IDS, Inventor, USPC and CPC search with text in EAST	4/1/2015	AK

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S2	1	("20130333100").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S3	1	("20120196147").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S5	1	("7254843").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:43
S6	1	("D703871").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:44
S8	1	("20110225706").PN.	US-PGPUB; USPAT	OR	OFF	2015/03/27 09:44
S9	2	("20080307568" "8082599").PN.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:45
S10	11	((James) near2 (Chilson)).INV.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:46
S16	82	A42B3/124.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:52
S17	178	A42B3/121.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S18	140	A42B3/127.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S19	109	A42B3/063.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S20	40	A42B3/069.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 09:53
S21	32	("20010032351" "2381524" "3174155" "3242500" "3501772" "3787893" "3872511" "3906546" "4075717" "4124904" "4307471" "4937888" "5150479" "5177815" "5815846" "6282724" "7089602").PN. OR ("7254843").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 09:54
S22	300	A42B3/12.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:16
S23	156	A42B3/125.cpc.	US-PGPUB;	OR	ON	2015/03/27 10:17

			USPAT			
S24	197	A42B3/10.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:17
S25	4	S23 and (honeycomb liner)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:23
S26	6	("20060059605" "20040117896" "6065158" "5561866" "7930771" "6387200").PN.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:26
S27	15	S22 and (honeycomb liner)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:29
S28	67	S22 and (removable pads)	US-PGPUB; USPAT	AND	ON	2015/03/27 10:31
S29	70	S22 and (removable (pads or inserts))	US-PGPUB; USPAT	AND	ON	2015/03/27 10:33
S30	64	S22 and (removable (pads or inserts))and liner	US-PGPUB; USPAT	AND	ON	2015/03/27 10:33
S31	6	S30 and honeycomb	US-PGPUB; USPAT	AND	ON	2015/03/27 10:34
S32	1	"4985931".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:37
S33	1	"5561866".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 10:39
S34	4	("20070130670" "5119514" "5336180" "7958570").PN.	US-PGPUB; USPAT	OR	ON	2015/03/27 10:45
S35	81	S18 and (liner and (insert or pad))	US-PGPUB; USPAT	AND	ON	2015/03/27 10:53
S36	7	S35 and key\$2	US-PGPUB; USPAT	AND	ON	2015/03/27 10:53
S37	4	("2012/0036620").URPN.	USPAT	OR	ON	2015/03/27 10:58
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S39	20	S22 and (honeycomb)	US-PGPUB; USPAT	AND	ON	2015/03/27 11:14
S40	1	"5840397".pn.	US-PGPUB; USPAT	AND	ON	2015/03/27 11:21
S41	45	("3447163" "3895152" "4422183" "4465725" "4485568" "5203607" "5416924" "5496610").PN. OR ("5840397").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/27 11:21
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S43	0	("2014/0013492").URPN.	USPAT	OR	ON	2015/03/27 12:05
S44	4	("20060059605" "20040117896" "6065158" "5561866" "7930771" "6387200").PN.	USPAT	OR	ON	2015/03/27 12:07
S45	34	("20020120978" "2619639" "3055013" "3241154" "3248738" "3344433" "3447162" "3673609" "3820163" "3843970" "3859666" "3882547" "4558470" "4627114" "5315718" "5603117" "5687426" "5694649" "6105176" "6467099").PN. OR ("6883181").URPN.	US- PGPUB; USPAT; USOCR	OR	ON	2015/03/27 12:31
S46	79	S18 and (liner and (removable insert or pad))	US- PGPUB; USPAT	AND	ON	2015/03/27 13:51

S47	22	("20040117896" "20090307827" "20110179557" "20120198604" "20120233745" "20120266366" "20120317705" "20130019384" "20130174331" "20130254978" "4307471" "5056162" "5734994" "5915537" "6065158" "6425141" "6560787" "6658671" "6704943" "7328462" "7509835" "7930771").PN.	US-PGPUB; USPAT	AND	ON	2015/03/27 13:54
S48	134	A42B3/122.cpc.	US-PGPUB; USPAT	OR	ON	2015/03/27 14:20
S49	10	(US-20140259314-\$ or US-20140223644-\$ or US-20070000032-\$ or US-20070226881-\$ or US-20040261157-\$ or US-20030140400-\$).did. or (US-7082623-\$ or US-5950244-\$ or US-4345338-\$ or US-3720955-\$).did.	US-PGPUB; USPAT	OR	ON	2015/03/27 16:25
S50	58	("3729744" "3783450" "3820163" "3946441" "4006496" "4081865" "4133055" "4134155" "4345338" "4484364" "4534068" "4558470" "5086520" "5269025" "5309576" "5351342" "5428846" "5581819" "5619756" "5669079" "5815846" "5833796").PN. OR ("5950244").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2015/03/30 08:21
S52	55	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544-\$).did. or (US-D650132-\$ or US-D645210-\$ or US-8082599-\$ or US-7254843-\$ or US-8986798-\$ or US-8966669-\$ or US-8667618-\$ or US-8512843-\$ or US-8166574-\$ or US-7669378-\$ or US-7089602-\$ or US-6282724-\$ or US-4307471-\$ or US-6387200-\$ or US-6065158-\$ or US-5561866-\$ or US-8533869-\$ or US-4985931-\$ or US-6446271-\$ or US-6185753-\$ or US-4916759-\$ or US-6883181-\$ or US-5088129-\$ or US-5687426-\$ or US-8732869-\$ or US-7828759-\$).did. or (US-6336220-\$ or US-5840397-\$ or US-3447163-\$ or US-5694649-\$ or US-5950244-\$).did.	US-PGPUB; USPAT	OR	ON	2015/03/30 11:56
S53	19	S52 and honeycomb	US-PGPUB; USPAT	OR	ON	2015/03/30 11:57
S54	18	S52 and polycarbonate	US-PGPUB; USPAT	OR	ON	2015/03/30 11:58
S55	7	S52 and (polycarbonate and honeycomb)	US-PGPUB; USPAT	OR	ON	2015/03/30 11:59
S56	1	S52 and (polycarbonate near shell)	US-PGPUB;	OR	ON	2015/03/30 12:08

			USPAT			
S57	0	S52 and (acrylonitrile butadiene styrene near shell)	US-PGPUB; USPAT	AND	ON	2015/03/30 12:10
S58	5	S52 and (acrylonitrile butadiene styrene)	US-PGPUB; USPAT	AND	ON	2015/03/30 12:10
S59	0	S52 and (polycarbonate near shell) and honeycomb	US-PGPUB; USPAT	OR	ON	2015/03/30 12:11
S60	17	S52 and (EPS)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:12
S61	17	S52 and "EPS"	US-PGPUB; USPAT	OR	ON	2015/03/30 12:12
S62	6	S52 and ("EPS" and polycarbonate)	US-PGPUB; USPAT	OR	ON	2015/03/30 12:15
S63	7	S52 and (porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 13:32
S65	2	S52 and (non\$1porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:32
S66	62386	S50/.clas.	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S67	5824	S66 and helmet	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S68	74	S67 and (non\$1porous and porous)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S69	56	"L21" and (air\$1flow)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:34
S70	9	S68 and (air\$1flow)	US-PGPUB; USPAT	OR	ON	2015/03/30 15:35
S71	27	S68 and (ventilat\$3)	US-PGPUB; USPAT	OR	ON	2015/03/30 16:50
S72	56	(US-20150047110-\$ or US-20080307568-\$ or US-20010032351-\$ or US-20140366252-\$ or US-20140250571-\$ or US-20140013492-\$ or US-20060059605-\$ or US-20150047113-\$ or US-20060059606-\$ or US-20150082520-\$ or US-20050015855-\$ or US-20140338104-\$ or US-20130061375-\$ or US-20130007950-\$ or US-20060260026-\$ or US-20120036620-\$ or US-20090264073-\$ or US-20090158506-\$ or US-20080184463-\$ or US-20060096011-\$ or US-20120036619-\$ or US-20070000025-\$ or US-20120198604-\$ or US-20110252544-\$ or US-20060101556-\$).did. or (US-D650132-\$ or US-D645210-\$ or US-8082599-\$ or US-7254843-\$ or US-8986798-\$ or US-8966669-	US-PGPUB; USPAT	OR	ON	2015/03/30 16:59

		\$ or US-8667618-\$ or US-8512843-\$ or US-8166574-\$ or US-7669378-\$ or US-7089602-\$ or US-6282724-\$ or US-4307471-\$ or US-6387200-\$ or US-6065158-\$ or US-5561866-\$ or US-8533869-\$ or US-4985931-\$ or US-6446271-\$ or US-6185753-\$ or US-4916759-\$ or US-6883181-\$ or US-5088129-\$ or US-5687426-\$ or US-8732869-\$ or US-7828759-\$).did. or (US-6336220-\$ or US-5840397-\$ or US-3447163-\$ or US-5694649-\$ or US-5950244-\$).did.				
S73	9	S72 and cooling	US-PGPUB; USPAT	OR	ON	2015/03/30 17:00
S74	36	S72 and air	US-PGPUB; USPAT	OR	ON	2015/03/30 17:04

4/ 1/ 2015 4:50:18 PM

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/965,703	08/13/2013	James A. Chilson	P240940.US.01

CONFIRMATION NO. 5250

27076

DORSEY & WHITNEY LLP - Seattle
INTELLECTUAL PROPERTY DEPARTMENT
Columbia Center
701 Fifth Avenue, Suite 6100
SEATTLE, WA 98104-7043

PUBLICATION NOTICE



OC000000073475761

Title:HELMET WITH SHOCK ABSORBING INSERTS

Publication No.US-2015-0047110-A1

Publication Date:02/19/2015

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publicly available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently <http://www.uspto.gov/patft/>.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently <http://pair.uspto.gov/>. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	13/965,703
	Filing Date	Aug 13, 2013
	First Named Inventor	James A. Chilson
	Art Unit	3765
	Examiner Name	Not Yet Allocated
	Attorney Docket Number	P240940.US.01

U.S. PATENTS								
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		US-8082599	B2	Dec 27, 2011	Sajic, Peter			
U.S. PATENT APPLICATION PUBLICATIONS								
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
		US-2008/0307568	A1	Dec 18, 2008	Sajic, Peter			
FOREIGN PATENT DOCUMENTS								
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
NON-PATENT LITERATURE DOCUMENTS								
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						T ⁵
EXAMINER SIGNATURE								
Examiner Signature				Date Considered				
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.								
¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.								

Electronic Acknowledgement Receipt	
EFS ID:	18479010
Application Number:	13965703
International Application Number:	
Confirmation Number:	5250
Title of Invention:	HELMET WITH SHOCK ABSORBING INSERTS
First Named Inventor/Applicant Name:	James A. Chilson
Customer Number:	27076
Filer:	Brandon Paul. Hegstrom/Cecilia Tri
Filer Authorized By:	Brandon Paul. Hegstrom
Attorney Docket Number:	P240940.US.01
Receipt Date:	14-MAR-2014
Filing Date:	13-AUG-2013
Time Stamp:	15:46:23
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment		no			
File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		P240940US01_IDS_031414.pdf	363269 0155ffdcac638d91a0336662e67c5609724355e1	yes	2

	Multipart Description/PDF files in .zip description		
	Document Description	Start	End
	Transmittal Letter	1	1
	Information Disclosure Statement (IDS) Form (SB08)	2	2
Warnings:			
Information:			
Total Files Size (in bytes):		363269	
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.			

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 13/965,703	Confirmation No. : 5250
First Named Inventor : James A. Chilson	
Filed : August 13, 2013	Attorney Docket No.: P240940.US.01
Art Unit : 3765	Customer No. : 27,076
Examiner : Not Yet Allocated	
Title : HELMET WITH SHOCK ABSORBING INSERTS	

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicant wishes to make known to the Patent and Trademark Office the references set forth on the attached form PTO-SB/08. Copies of the cited U.S. patent and U.S. patent application publication will not be submitted herewith in accordance with the waiver by the Office of the requirement under 37 C.F.R. § 1.98(a)(2)(i) for U.S. national patent applications filed after June 30, 2003.

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Respectfully submitted,

DORSEY & WHITNEY LLP

/Brandon P. Hegstrom/

March 14, 2014

~~~~~  
Date \_\_\_\_\_

Brandon P. Hegstrom  
Registration No. 59,432

BPH:et

Enclosures:  
Form PTO-SB/08

| <b>PATENT APPLICATION FEE DETERMINATION RECORD</b><br>Substitute for Form PTO-875                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                               |                                  |          |                                    |               | Application or Docket Number<br>13/965,703 |                    |                               |                    |                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|----------|------------------------------------|---------------|--------------------------------------------|--------------------|-------------------------------|--------------------|--------------------|
| <b>APPLICATION AS FILED - PART I</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                               |                                  |          |                                    |               |                                            |                    |                               |                    |                    |
| (Column 1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                               | (Column 2)                       |          | SMALL ENTITY                       |               | OR<br>OTHER THAN SMALL ENTITY              |                    |                               |                    |                    |
| FOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | NUMBER FILED                                                                                                                                                                                                                  | NUMBER EXTRA                     | RATE(\$) | FEE(\$)                            |               | RATE(\$)                                   | FEE(\$)            |                               |                    |                    |
| BASIC FEE<br><small>(37 CFR 1.16(a), (b), or (c))</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                 | N/A                                                                                                                                                                                                                           | N/A                              | N/A      |                                    |               | N/A                                        | 280                |                               |                    |                    |
| SEARCH FEE<br><small>(37 CFR 1.16(k), (j), or (m))</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                | N/A                                                                                                                                                                                                                           | N/A                              | N/A      |                                    |               | N/A                                        | 600                |                               |                    |                    |
| EXAMINATION FEE<br><small>(37 CFR 1.16(o), (p), or (q))</small>                                                                                                                                                                                                                                                                                                                                                                                                                                           | N/A                                                                                                                                                                                                                           | N/A                              | N/A      |                                    |               | N/A                                        | 720                |                               |                    |                    |
| TOTAL CLAIMS<br><small>(37 CFR 1.16(i))</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 27                                                                                                                                                                                                                            | minus 20 =<br>*                  | 7        |                                    |               | x 80 =                                     | 560                |                               |                    |                    |
| INDEPENDENT CLAIMS<br><small>(37 CFR 1.16(h))</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 3                                                                                                                                                                                                                             | minus 3 =<br>*                   |          |                                    |               | x 420 =                                    | 0.00               |                               |                    |                    |
| APPLICATION SIZE FEE<br><small>(37 CFR 1.16(s))</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                   | If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). |                                  |          |                                    |               |                                            | 0.00               |                               |                    |                    |
| MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                               |                                  |          |                                    |               |                                            | 0.00               |                               |                    |                    |
| * If the difference in column 1 is less than zero, enter "0" in column 2.                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                               |                                  |          | TOTAL                              |               | TOTAL                                      | 2160               |                               |                    |                    |
| <b>APPLICATION AS AMENDED - PART II</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                               |                                  |          |                                    |               |                                            |                    |                               |                    |                    |
| (Column 1)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                               | (Column 2)                       |          | (Column 3)                         |               | SMALL ENTITY                               |                    | OR<br>OTHER THAN SMALL ENTITY |                    |                    |
| AMENDMENT A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                               | CLAIMS REMAINING AFTER AMENDMENT |          | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE(\$)                                   | ADDITIONAL FEE(\$) |                               | RATE(\$)           | ADDITIONAL FEE(\$) |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Total<br><small>(37 CFR 1.16(i))</small>                                                                                                                                                                                      | *                                | Minus    | **                                 | =             | x                                          | =                  |                               | x                  | =                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Independent<br><small>(37 CFR 1.16(h))</small>                                                                                                                                                                                | *                                | Minus    | ***                                | =             | x                                          | =                  |                               | x                  | =                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Application Size Fee (37 CFR 1.16(s))                                                                                                                                                                                         |                                  |          |                                    |               |                                            |                    |                               |                    |                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))                                                                                                                                                               |                                  |          |                                    |               |                                            |                    |                               |                    |                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                               |                                  |          |                                    |               | TOTAL<br>ADD'L FEE                         |                    |                               | TOTAL<br>ADD'L FEE |                    |
| AMENDMENT B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                               | CLAIMS REMAINING AFTER AMENDMENT |          | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | RATE(\$)                                   | ADDITIONAL FEE(\$) |                               | RATE(\$)           | ADDITIONAL FEE(\$) |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Total<br><small>(37 CFR 1.16(i))</small>                                                                                                                                                                                      | *                                | Minus    | **                                 | =             | x                                          | =                  |                               | x                  | =                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Independent<br><small>(37 CFR 1.16(h))</small>                                                                                                                                                                                | *                                | Minus    | ***                                | =             | x                                          | =                  |                               | x                  | =                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Application Size Fee (37 CFR 1.16(s))                                                                                                                                                                                         |                                  |          |                                    |               |                                            |                    |                               |                    |                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))                                                                                                                                                               |                                  |          |                                    |               |                                            |                    |                               |                    |                    |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                               |                                  |          |                                    |               | TOTAL<br>ADD'L FEE                         |                    |                               | TOTAL<br>ADD'L FEE |                    |
| <div style="font-size: x-small;">           * If the entry in column 1 is less than the entry in column 2, write "0" in column 3.<br/>           ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".<br/>           *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".<br/>           The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.         </div> |                                                                                                                                                                                                                               |                                  |          |                                    |               |                                            |                    |                               |                    |                    |



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| APPLICATION<br>NUMBER | FILING or<br>371(c) DATE | GRP ART<br>UNIT | FIL FEE REC'D | ATTY. DOCKET NO. | TOT CLAIMS | IND CLAIMS |
|-----------------------|--------------------------|-----------------|---------------|------------------|------------|------------|
| 13/965,703            | 08/13/2013               | 3765            | 2300          | P240940.US.01    | 27         | 3          |

CONFIRMATION NO. 5250

27076  
DORSEY & WHITNEY LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
Columbia Center  
701 Fifth Avenue, Suite 6100  
SEATTLE, WA 98104-7043

FILING RECEIPT



\*OC000000063475886\*

Date Mailed: 09/03/2013

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. **If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections**

**Inventor(s)**

James A. Chilson, Hailey, ID;

**Applicant(s)**

Smith Optics, Inc., Ketchum, ID

**Assignment For Published Patent Application**

Smith Optics, Inc., Ketchum, ID

**Power of Attorney:** The patent practitioners associated with Customer Number 27076

**Domestic Applications for which benefit is claimed - None.**

*A proper domestic benefit claim must be provided in an Application Data Sheet in order to constitute a claim for domestic benefit. See 37 CFR 1.76 and 1.78.*

**Foreign Applications** for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

*Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.*

Permission to Access - A proper **Authorization to Permit Access to Application by Participating Offices** (PTO/SB/39 or its equivalent) has been received by the USPTO.

**If Required, Foreign Filing License Granted:** 08/27/2013

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 13/965,703**

**Projected Publication Date:** 02/19/2015

**Non-Publication Request:** No

**Early Publication Request:** No  
**Title**

HELMET WITH SHOCK ABSORBING INSERTS

**Preliminary Class**

002

**Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications:** No

## **PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES**

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

**LICENSE FOR FOREIGN FILING UNDER**  
**Title 35, United States Code, Section 184**  
**Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

**NOT GRANTED**

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

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UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 13/965,703         | 08/13/2013            | James A. Chilson      | P240940.US.01          |

**CONFIRMATION NO. 5250**

27076  
DORSEY & WHITNEY LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
Columbia Center  
701 Fifth Avenue, Suite 6100  
SEATTLE, WA 98104-7043

**NOTICE**



Date Mailed: 09/03/2013

**INFORMATIONAL NOTICE TO APPLICANT**

Applicant is notified that the above-identified application contains the deficiencies noted below. No period for reply is set forth in this notice for correction of these deficiencies. However, if a deficiency relates to the inventor's oath or declaration, the applicant must file an oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each actual inventor no later than the expiration of the time period set in the "Notice of Allowability" to avoid abandonment. See 37 CFR 1.53(f).

The item(s) indicated below are also required and should be submitted with any reply to this notice to avoid further processing delays.

- A properly executed inventor's oath or declaration has not been received for the following inventor(s):  
James A. Chilson

Applicant may submit the inventor's oath or declaration at any time before the Notice of Allowance and Fee(s) Due, PTOL-85, is mailed.



UNITED STATES PATENT AND TRADEMARK OFFICE

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| APPLICATION NUMBER | FILING OR 371(C) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|-----------------------|-----------------------|------------------------|
| 13/965,703         | 08/13/2013            | James A. Chilson      | P240940.US.01          |

**CONFIRMATION NO. 5250**

**POA ACCEPTANCE LETTER**

27076  
DORSEY & WHITNEY LLP  
INTELLECTUAL PROPERTY DEPARTMENT  
Columbia Center  
701 Fifth Avenue, Suite 6100  
SEATTLE, WA 98104-7043



Date Mailed: 09/03/2013

**NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY**

This is in response to the Power of Attorney filed 08/13/2013.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/hteshome/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

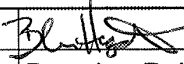


|                                                                                                                                             |  |                                                  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------|--|
| <b>UTILITY<br/>PATENT APPLICATION<br/>TRANSMITTAL</b><br><br><small>(Only for new nonprovisional applications under 37 CFR 1.53(b))</small> |  | Attorney Docket No. <b>P240940.US.01</b>         |  |
|                                                                                                                                             |  | First Named Inventor <b>James A. Chilson</b>     |  |
|                                                                                                                                             |  | Title <b>HELMET WITH SHOCK ABSORBING INSERTS</b> |  |
|                                                                                                                                             |  | Express Mail Label No. <b>Not Applicable</b>     |  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>APPLICATION ELEMENTS</b><br><small>See MPEP chapter 600 concerning utility patent application contents.</small>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>ADDRESS TO:</b><br><b>Commissioner for Patents</b><br><b>P.O. Box 1450</b><br><b>Alexandria, VA 22313-1450</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 1. <input type="checkbox"/> <b>Fee Transmittal Form</b><br><small>(PTO/SB/17 or equivalent)</small><br>2. <input type="checkbox"/> <b>Applicant asserts small entity status.</b><br><small>See 37 CFR 1.27</small><br>3. <input type="checkbox"/> <b>Applicant certifies micro entity status.</b> See 37 CFR 1.29.<br><small>Applicant must attach form PTO/SB/15A or B or equivalent.</small><br>4. <input checked="" type="checkbox"/> <b>Specification</b> [Total Pages <u>16</u> ]<br><small>Both the claims and abstract must start on a new page.<br/>         (See MPEP § 608.01(a) for information on the preferred arrangement)</small><br>5. <input checked="" type="checkbox"/> <b>Drawing(s)</b> (35 U.S.C. 113) [Total Sheets <u>6</u> ]<br>6. <b>Inventor's Oath or Declaration</b> [Total Pages _____]<br><small>(including substitute statements under 37 CFR 1.64 and assignments<br/>         serving as an oath or declaration under 37 CFR 1.63(e))</small><br>a. <input type="checkbox"/> Newly executed (original or copy)<br>b. <input type="checkbox"/> A copy from a prior application (37 CFR 1.63(d))<br>7. <input checked="" type="checkbox"/> <b>Application Data Sheet</b> * See note below.<br><small>See 37 CFR 1.76 (PTO/AIA/14 or equivalent)</small><br>8. <b>CD-ROM or CD-R</b><br><small>in duplicate, large table, or Computer Program (Appendix)</small><br><input type="checkbox"/> Landscape Table on CD<br>9. <b>Nucleotide and/or Amino Acid Sequence Submission</b><br><small>(if applicable, items a. – c. are required)</small><br>a. <input type="checkbox"/> Computer Readable Form (CRF)<br>b. <input type="checkbox"/> Specification Sequence Listing on:<br>i. <input type="checkbox"/> CD-ROM or CD-R (2 copies); or<br>ii. <input type="checkbox"/> Paper<br>c. <input type="checkbox"/> Statements verifying identity of above copies | <b>ACCOMPANYING APPLICATION PAPERS</b><br>10. <input type="checkbox"/> <b>Assignment Papers</b><br><small>(cover sheet &amp; document(s))</small><br><small>Name of Assignee _____</small><br>11. <input type="checkbox"/> <b>37 CFR 3.73(c) Statement</b> <input checked="" type="checkbox"/> <b>Power of Attorney</b><br><small>(when there is an assignee)</small><br>12. <input type="checkbox"/> <b>English Translation Document</b><br><small>(if applicable)</small><br>13. <input type="checkbox"/> <b>Information Disclosure Statement</b><br><small>(PTO/SB/08 or PTO-1449)</small><br><input type="checkbox"/> Copies of citations attached<br>14. <input type="checkbox"/> <b>Preliminary Amendment</b><br>15. <input type="checkbox"/> <b>Return Receipt Postcard</b><br><small>(MPEP § 503) (Should be specifically itemized)</small><br>16. <input type="checkbox"/> <b>Certified Copy of Priority Document(s)</b><br><small>(if foreign priority is claimed)</small><br>17. <input type="checkbox"/> <b>Nonpublication Request</b><br><small>Under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35<br/>         or equivalent.</small><br>18. <input checked="" type="checkbox"/> <b>Other:</b> <u>General Authorization; Transmittal for Power of Attorney</u><br>_____<br>_____<br>_____ |

\*Note: (1) Benefit claims under 37 CFR 1.78 and foreign priority claims under 1.55 **must** be included in an Application Data Sheet (ADS).  
 (2) For applications filed under 35 U.S.C. 111, the application must contain an ADS specifying the applicant if the applicant is an assignee, person to whom the inventor is under an obligation to assign, or person who otherwise shows sufficient proprietary interest in the matter. See 37 CFR 1.46(b).

|                                                                                                                                                         |  |                 |                                                 |                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|--|-----------------|-------------------------------------------------|----------------|
| <b>19. CORRESPONDENCE ADDRESS</b>                                                                                                                       |  |                 |                                                 |                |
| <input checked="" type="checkbox"/> The address associated with Customer Number: <u>27,076</u> OR <input type="checkbox"/> Correspondence address below |  |                 |                                                 |                |
| Name _____                                                                                                                                              |  |                 |                                                 |                |
| Address _____                                                                                                                                           |  |                 |                                                 |                |
| City _____                                                                                                                                              |  | State _____     |                                                 | Zip Code _____ |
| Country _____                                                                                                                                           |  | Telephone _____ |                                                 | Email _____    |
| Signature                                                            |  |                 | Date <u>August 13, 2013</u>                     |                |
| Name (Print/Type) <b>Brandon P. Hegstrom</b>                                                                                                            |  |                 | Registration No. (Attorney/Agent) <b>59,432</b> |                |

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

First Named Inventor: James A. Chilson

Filed : Concurrently Herewith

Attorney Docket No.: P240940.US.01

Title : HELMET WITH SHOCK ABSORBING INSERTS

---

**GENERAL AUTHORIZATION**

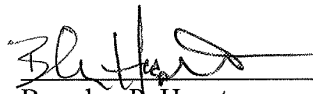
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

With respect to the above-identified application, the Commissioner is authorized to charge any fees under 37 C.F.R. §§ 1.16 and 1.17 which may be required and to treat any concurrent or future reply requiring a petition for an extension of time under 37 C.F.R. § 1.136(a)(3) for its timely submission as incorporating a petition therefor for the appropriate length of time and to charge any fees which may be required during the pendency of the application, or credit any overpayment, to Deposit Account No. 50-1266.

Date

AUGUST 13, 2013



Brandon P. Hegstrom  
Registration No. 59,432

BPH:ct

DORSEY & WHITNEY LLP  
701 Fifth Avenue, Suite 6100  
Seattle, Washington 98104-7043  
(206) 903-8800 (telephone)  
(206) 299-9288 (fax)

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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                     |                        |               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------------------|---------------|
| <b>Application Data Sheet 37 CFR 1.76</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                     | Attorney Docket Number | P240940.US.01 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                     | Application Number     |               |
| Title of Invention                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | HELMET WITH SHOCK ABSORBING INSERTS |                        |               |
| <p>The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76.</p> <p>This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.</p> |                                     |                        |               |

**Secrecy Order 37 CFR 5.2**

|                          |                                                                                                                                                                                                                                       |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.) |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Inventor Information:**

|                                                                                                                                                                             |            |                 |             |                      |    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------|-------------|----------------------|----|
| Inventor 1 <span style="float: right;">Remove</span>                                                                                                                        |            |                 |             |                      |    |
| Legal Name                                                                                                                                                                  |            |                 |             |                      |    |
| Prefix                                                                                                                                                                      | Given Name | Middle Name     | Family Name | Suffix               |    |
|                                                                                                                                                                             | James      | A.              | Chilson     |                      |    |
| Residence Information (Select One) <input checked="" type="radio"/> US Residency <input type="radio"/> Non US Residency <input type="radio"/> Active US Military Service    |            |                 |             |                      |    |
| City                                                                                                                                                                        | Hailey     | State/Province  | ID          | Country of Residence | US |
| Mailing Address of Inventor:                                                                                                                                                |            |                 |             |                      |    |
| Address 1                                                                                                                                                                   |            | 620 West Meadow |             |                      |    |
| Address 2                                                                                                                                                                   |            |                 |             |                      |    |
| City                                                                                                                                                                        | Hailey     | State/Province  | ID          |                      |    |
| Postal Code                                                                                                                                                                 | 83333      | Country         | i           | US                   |    |
| All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the Add button. <span style="float: right;">Add</span> |            |                 |             |                      |    |

**Correspondence Information:**

|                                                                                                                                    |       |           |              |
|------------------------------------------------------------------------------------------------------------------------------------|-------|-----------|--------------|
| Enter either Customer Number or complete the Correspondence Information section below. For further information see 37 CFR 1.33(a). |       |           |              |
| <input type="checkbox"/> An Address is being provided for the correspondence Information of this application.                      |       |           |              |
| Customer Number                                                                                                                    | 27076 |           |              |
| Email Address                                                                                                                      |       | Add Email | Remove Email |

**Application Information:**

|                                         |                                     |                                           |                          |
|-----------------------------------------|-------------------------------------|-------------------------------------------|--------------------------|
| Title of the Invention                  | HELMET WITH SHOCK ABSORBING INSERTS |                                           |                          |
| Attorney Docket Number                  | P240940.US.01                       | Small Entity Status Claimed               | <input type="checkbox"/> |
| Application Type                        | Nonprovisional                      |                                           |                          |
| Subject Matter                          | Utility                             |                                           |                          |
| Suggested Class (if any)                |                                     | Sub Class (if any)                        |                          |
| Suggested Technology Center (if any)    |                                     |                                           |                          |
| Total Number of Drawing Sheets (if any) | 6                                   | Suggested Figure for Publication (if any) |                          |

|                                           |                                     |                        |               |
|-------------------------------------------|-------------------------------------|------------------------|---------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                     | Attorney Docket Number | P240940.US.01 |
|                                           |                                     | Application Number     |               |
| Title of Invention                        | HELMET WITH SHOCK ABSORBING INSERTS |                        |               |

**Publication Information:**

|                          |                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input type="checkbox"/> | Request Early Publication (Fee required at time of Request 37 CFR 1.219)                                                                                                                                                                                                                                                                                                                      |
| <input type="checkbox"/> | <b>Request Not to Publish.</b> I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application <b>has not and will not</b> be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing. |

**Representative Information:**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                  |                                              |                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------|---------------------------------------------------------|
| Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing. |                                                  |                                              |                                                         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                  |                                              |                                                         |
| Please Select One:                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input checked="" type="radio"/> Customer Number | <input type="radio"/> US Patent Practitioner | <input type="radio"/> Limited Recognition (37 CFR 11.9) |
| Customer Number                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 27076                                            |                                              |                                                         |

**Domestic Benefit/National Stage Information:**

|                                                                                                                                                                                                                                                                                                                      |                 |                          |                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|--------------------------|--------------------------|
| This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, or 365(c) or indicate National Stage entry from a PCT application. Providing this information in the application data sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78. |                 |                          |                          |
| Prior Application Status                                                                                                                                                                                                                                                                                             |                 |                          | <a href="#">Remove</a>   |
| Application Number                                                                                                                                                                                                                                                                                                   | Continuity Type | Prior Application Number | Filing Date (YYYY-MM-DD) |
|                                                                                                                                                                                                                                                                                                                      |                 |                          |                          |
| Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the <b>Add</b> button.                                                                                                                                                                                                |                 |                          |                          |

**Foreign Priority Information:**

|                                                                                                                                                                                                                                                                                                             |                      |                          |                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--------------------------|---------------------------------------------------------------|
| This section allows for the applicant to claim benefit of foreign priority and to identify any prior foreign application for which priority is not claimed. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55(a). |                      |                          |                                                               |
| <a href="#">Remove</a>                                                                                                                                                                                                                                                                                      |                      |                          |                                                               |
| Application Number                                                                                                                                                                                                                                                                                          | Country <sup>1</sup> | Filing Date (YYYY-MM-DD) | Priority Claimed                                              |
|                                                                                                                                                                                                                                                                                                             |                      |                          | <input checked="" type="radio"/> Yes <input type="radio"/> No |
| Additional Foreign Priority Data may be generated within this form by selecting the <b>Add</b> button.                                                                                                                                                                                                      |                      |                          |                                                               |

|                                           |                                     |                        |               |
|-------------------------------------------|-------------------------------------|------------------------|---------------|
| <b>Application Data Sheet 37 CFR 1.76</b> |                                     | Attorney Docket Number | P240940.US.01 |
|                                           |                                     | Application Number     |               |
| Title of Invention                        | HELMET WITH SHOCK ABSORBING INSERTS |                        |               |

## Authorization to Permit Access:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Authorization to Permit Access to the Instant Application by the Participating Offices |
| <p>If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the instant patent application is filed access to the instant patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the instant patent application is filed to have access to the instant patent application.</p> <p>In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect to: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the instant patent application; and 3) any U.S. application-as-filed from which benefit is sought in the instant patent application.</p> <p>In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing this Authorization.</p> |                                                                                        |

## Applicant Information:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                        |                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------|--------------------------------------|
| Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                        |                                      |
| <b>Applicant 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                        |                                      |
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|                                           |                                     | Application Number     |               |
| Title of Invention                        | HELMET WITH SHOCK ABSORBING INSERTS |                        |               |

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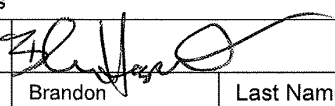
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| Title of Invention                        | HELMET WITH SHOCK ABSORBING INSERTS |                        |               |

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## **HELMET WITH SHOCK ABSORBING INSERTS**

### **BACKGROUND OF THE INVENTION**

[001] Helmets are used in many outdoor activities to protect the wearer from head injuries that may occur during the activity. For example, helmets worn during cycling sports protect the rider's head in the event of a fall or crash, as well as from equipment (e.g., bike) that may strike the wearer in the head.

[002] Consumers measure the desirability of a helmet based on various criteria. For example, helmets should provide good protection to the head in the event of an impact, but should also be relatively light in weight and provide sufficient ventilation when worn. Helmets should also be affordable and have a design that facilitates manufacturability. Additionally, a helmet should be esthetically pleasing.

[003] Often, these various criteria compete with one another. For example, a helmet that is light in weight and provides adequate ventilation is generally less impact resistant than one that has a heavier design. That is, a helmet can be designed with a harder shell material that is generally heavier than other lighter shell materials resulting in a helmet that provides greater protection but is not as light as desirable. A helmet may be designed to have less ventilation cavities to improve coverage of the head in the event of an impact, but this results in a helmet having less ventilation than is desirable. Additionally, a helmet providing good head protection and is light in weight may be complicated to manufacture and can be expensive.

[004] Therefore, there is a need for alternative helmet designs that can balance various competing factors that are used in measuring the desirability of a helmet.

### **BRIEF DESCRIPTION OF THE DRAWINGS**

[005] Figure 1 is an isometric view of the front, top, and left side of a helmet according to an embodiment of the invention.



[006] Figure 2 is an isometric view of the left side and the inside of the helmet of Figure 1 including shock absorbing inserts according to an embodiment of the invention.

[007] Figure 3 includes isometric views of the shock absorbing inserts of Figure 2.

[008] Figure 4 is a left to right vertical cross-sectional view of the helmet of Figure 1 including a cross-section of a front shock absorbing insert.

[009] Figure 5 is a front to back vertical cross-sectional view of the helmet of Figure 1 including a cross-section of the front shock absorbing insert, and a cross-section of a cavity for a rear shock absorbing insert.

[010] Figures 6A-D are cross sectional views of shock absorbing insert shapes according to various embodiments of the invention.

#### DETAILED DESCRIPTION

[011] The present invention is generally directed to a helmet formed having a shell, a shock absorbing liner formed from a first shock absorbing material (e.g., expanded polystyrene (EPS) material, expanded polypropylene (EPP) material, or another suitable shock absorbing material). The shock absorbing liner includes one or more cavities (e.g., openings, recesses, etc.) having a shape to receive a shock absorbing insert formed from a second shock absorbing material (e.g., a honeycomb material). The shape of the insert relative to a shape of a cavity (or cavity) in the first shock absorbing material is such that the insert must be deformed (e.g., compressed) in order to be removed from the cavity in the first shock absorbing material. Many of the specific details of certain embodiments of the invention are presented in the following description and in Figures 1-6A-D to provide a thorough understanding of such embodiments. One skilled in the art will understand, however, that the present invention may have additional embodiments, or that the present invention may be practiced without several of the details described in the following description.

[012] Figure 1 illustrates a helmet 100 according to an embodiment of the invention. The helmet 100 includes a shell 110 having vents 109 to provide ventilation to the head of a wearer. Viewed from inside the helmet 100, the shell 110 generally forms a bowl shape. Visible through the vents 109 of the shell 110 are inserts 122 and 124 constructed of a second shock absorbing material 120. As will be described further, in some embodiments the second shock absorbing material 120 may be a honeycomb material. A honeycomb material may be used to provide impact absorption and have tubes that allow air to freely flow through the tubes in the shell 110 to the head of the wearer. For example, the honeycomb material includes tubes arranged in a closely packed array. In some embodiments, a visor (not shown) may be optionally included with the helmet 100. The visor may be attached to a front of the shell 110, or alternatively, integrally formed with a front of the shell 110.

[013] Figure 2 illustrates the helmet 100 depicted in Figure 1 from another view. As explained above, the shell generally forms a bowl shape, and the shock absorbing liner 130 lines at least a portion of the interior of the shell 110. The shock absorbing liner 130 may include cavities into which inserts 122 and 124 are inserted. The cavities may be shaped to hold inserts 122 and 124 made of the second shock absorbing material 120. Note that an insert 126 is removed to show a cavity (e.g., an opening, a recess, etc.) 170 of the shock absorbing liner 130 in which the insert 126 may be inserted. Together, the shock absorbing liner 130 and the installed inserts 122, 124, and 126 generally form a bowl shape having a concave portion that is configured to receive a wearer's head.

[014] Figure 3 illustrates two views of an insert 126 according to an embodiment of the invention. The shock absorbing liner 126 may be placed in the cavity 170 of Figure 2. As explained, the insert 126 may be constructed of a second shock absorbing material 120. In some embodiments, the shock absorbing material 120 may be a porous shock absorbing material. For example, the shock absorbing material 120 of the insert 126 may include a honeycomb material that includes an array of energy absorbing cells. In addition to providing impact absorption, each of the cells may include a tube, which may allow air to

pass through, providing ventilation to the head of the wearer of the helmet 100 of Figure 1 or Figure 2. The insert 126 may have a shape relative to a shape of the cavity 170 of Figure 2 where removing the insert 126 from the cavity 170 requires manually deforming (e.g., compressing) the insert 126. Examples of shapes of the insert 126 relative to a shape of the cavity 170 are described further with reference to Figures 6A-D. The tubes may be hollow structures having any regular or irregular geometry. The honeycomb structure of the insert 126 may provide improved shock absorbing protection as compared with the material of the shock absorbing liner 130, for example, EPS material or the EPP material, or other materials. It will be appreciated that inserts 122 and 124 of Figure 2 may be formed from a similar material as the insert 126 of Figure 3. Additionally, the inserts 122 and 124 may have a shape relative to a shape of each of their respective cavity in the shock absorbing liner 130 of Figure 2 that requires compressing the inserts 122 and 124 to be removed from their respective cavity. For example, an insert may have a curved shape corresponding to a curved interior surface of a respective cavity in the shock absorbing liner in which the insert is inserted.

[015] The shock absorbing liner 130 may be formed to have an inner surface that is configured to receive the wearer's head with one or more cavities, such as the cavity 170. The cavity 170 may extend all of the way through the shock absorbing liner 130. In some embodiments, one or more cavities may not extend all of the way through the shock absorbing liner 130. The shock absorbing liner 130 may be attached (e.g., bonded) to an inner surface of the shell 110. The shock absorbing liner 130 may be seamless, aside from the seam formed with the inserts 122, 124, and 126. For example, the shock absorbing liner 130 may not be interrupted by joints or seams that may compromise the shock absorbing capabilities and/or the structural integrity of the shock absorbing liner 130 during impact of the helmet 100. That is, forming the shock absorbing liner 130 to have an inner surface that is seamless may result in greater structural strength than an inner surface that includes seams between different portions of the shock absorbing liner 130. Although a seamed shock absorbing liner 130 may be less desirable than one having a seamless inner surface, such a construction is within the scope of the present invention.

[016] Figure 2 depicts the cavity 170 in the shock absorbing liner 130 without the insert 124 installed. The depth and shape of the cavity 170 may be based on, for example, a desired level of shock absorbing protection, the shock absorbing characteristics of the first and second shock absorbing materials, and the size of the inner concave portion for receiving a wearer's head. Generally, a shape of the inserts 122, 124, 126 relative to a shape of the respective cavity 170 is such that the insert 122, 124, or 126 is required to be manually deformed (e.g., compressed) in order to be removed from the cavity 170. The inserts 122, 124, and 126 may be retained in the respective cavity 170 based on an expansion pressure of the sides of the insert 122, 124, and 126 against the sides of the respective cavity 170. In other embodiments, the insert 122, 124, 126 may be keyed to the cavity 170 in such a way that prevents removal of the insert 122, 124, and 126 from the cavity 170 without manually deforming the insert 122, 124, and 126. Thus, the inserts 122, 124, and 126 may be retained in the cavity 170 without being bonded or using an adhesive material. In some embodiments, the insert 122, 124, and 126 may have a thickness less than or equal to a thickness of the shock absorbing liner 130.

[017] The shell 110 may be formed from polycarbonate (PC), Acrylonitrile butadiene styrene (ABS). The shell 110 may be formed from materials suitable for use in an in-mold manufacturing process. The shock absorbing liner 130 may be formed from various materials, for example, EPS material, EPP material, or other suitable shock absorbing materials. In some embodiments, the shell 110 and shock absorbing liner 130 components may be formed using in-mold technology. For example, the shell 110 may be formed by injection molding techniques, or from a PC flat sheet which is first thermally formed and then installed in the final EPS mold to heat bond with the final foam shape. As known, the shells may be insert molded. The shell 110 may be formed from other materials and/or using other manufacturing techniques as well. Thus the present invention is not limited to the particular materials previously described or made using an in-mold process.

[018] As previously described, the second shock absorbing material 120 of the inserts 122, 124, and 126 may be a honeycomb material. The honeycomb material may have tubes

that allow air to freely flow through to the head of the wearer. The honeycomb material may include an array of energy absorbing cells. Each of the cells may include a tube. In an embodiment, the tubes may be oriented along a thickness of the insert. In some embodiments, a tube of the insert may be generally oriented along a longitudinal axis that is normal to an adjacent point on the inner surface of the shell 110. For example, the longitudinal axis of a tube of a cell may be arranged at an angle of between  $0^{\circ}$  and  $45^{\circ}$  to a line normal to the adjacent point on the inner surface of the outer shell 110. The tubes may be a hollow structure having any regular or irregular geometry. In some embodiments, the tubes have a circular cylindrical structure or circular conical structure. As depicted in Figure 1, at least a portion of one or more of the inserts 122, 124, and 126 may align with a vent 109 in the shell 110 to provide ventilation. Thus, a vent 109 of the shell 110 overlaps (e.g., aligns) with a portion of the cavity 170 of the shock absorbing liner 130. The vent 109 aligned with the insert 122, 124, or 126 is configured to allow air to flow through the vent 109 and the insert 122, 124, and 126 to the head of a wearer.

[019] Helmet straps (not shown) may be attached to the shell 110 and/or the shock absorbing liner 130, and used to secure the helmet to a wearer's head. In some embodiments, the helmet straps are attached to helmet strap loops, which may be attached to the shock absorbing liner 130, for example, by having a portion embedded in the shock absorbing liner 130. Other attachment techniques may be used as well, for example, adhesive or other bonding techniques.

[020] It will be appreciated that while Figure 2 depicts three inserts 122, 124, and 126 in the first shock absorbing material, it would be recognized that the helmet may include more or less than three inserts. Further, the total area of the inserts may cover more than 50% of the inner surface that receives the wearer's head, and, in some embodiments, more than 90%.

[021] Figure 4 illustrates a vertical cross section of the helmet 100 of Figure 1, including a cross section the insert 122 having the second shock absorbing material 120. The insert 122 is shown inserted having the second shock absorbing material 120. The

cavity 170 is shown without the insert 126 installed. As previously described, a shape of the inserts 122, 124, 126 relative to a shape of the respective cavity 170 is such that the inserts 122, 124, or 126 are required to be manually deformed in order to be removed from the respective cavity 170. The cavity in which the insert 122 is inserted is configured such that the distance along the curved side 450 between the sidewalls 414 of the cavity is greater than the distance along the curved side 460 between the sidewalls 414. Forming the cavity in the shock absorbing liner 130 in this manner causes the insert 122 to be retained in the cavity, and removal of the insert 122 may require deforming the insert 122. As a result of the cavity in the shock absorbing liner 130 being configured to cause a distance along the curved side 450 from point 410 to point 430 that is greater than a distance along the curved side 460 from point 420 to point 440, the insert 122 may be retained in the cavity without bonding or use of an adhesive material.

[022] The insert 122 may be removed from the cavity, for example, by deforming the insert to cause the curved side 450 to fit through the opening between points 420 and 440. The cavity may be configured to have an interior angle 418 formed by sidewall 414 relative to an interior surface 424 of the cavity to provide a distance between sidewalls 414 along the curved side 450 to be longer than a distance between sidewalls 414 along the curved side 460. In some embodiments, the interior angle 418 is 90 degrees or less. In some embodiments, the interior angle 418 is acute. Other configurations of cavities may be used in the alternative, or in combination to retain the insert 122 in the respective cavity without bonding or use of adhesive material. Examples of other configurations of cavities will be described in more detail with reference to Figures 6A-D.

[023] Figure 5 illustrates a front to back vertical cross section of the helmet 100 of Figure 1, including a cross section of the insert 122, and a cross section of the cavity 170 configured to receive the insert 126. Similar to the description with reference to Figure 4, the cavity 170 may be configured to have a front to back distance along the curved side 550 to be greater than the front to back distance along the curved side 560. The cavity may be further configured to have an interior angle 518 formed by sidewall 514 relative to an

interior surface 524 of the cavity to provide a front to back distance along the curved side 550 to be greater than a front to back distance along the curved side 560. In some embodiments, the interior angle 518 is 90 degrees or less. In some embodiments, the interior angle 518 is acute. Thus, the insert 122 (and the corresponding cavity in the shock absorbing liner 130) having the distance across the curved side 550 from point 510 to point 530 that is greater than the corresponding distance across the curved side 560 from point 520 to point 540. The insert 122 may be removed from the cavity by deforming the insert 122 to cause the curved side 550 to fit through the opening between points 520 and 540. Other configurations for cavities will be described with reference to Figures 6A-D.

**[024]** Figures 6A-D depicts embodiments of cross sections of cavities that are configured to retain a shock absorbing insert. Figure 6A illustrates an embodiment including a curved shape with straight sidewalls 601. Figure 6B illustrates an embodiment includes a curved shape with recesses in the sidewalls that receive a corresponding protrusion formed in the shock absorbing insert. Figure 6C illustrates an embodiment including a flat rectangular shape with a semicircular recess at each sidewall that receives a corresponding semicircular portion formed in the shock absorbing insert. Figure 6D illustrates an embodiment including a flat rectangular shape with straight sidewalls and a lip configured to retain the shock absorbing insert. The cavities and corresponding shock absorbing inserts of Figures 6A-6B may be used in addition, or in the alternative, to the cavities and correspondence shock absorbing inserts previously discussed.

**[025]** The embodiment depicted in Figure 6A is similar to the cross sections of insert 122 in Figures 4 and 5. The cavity in the first shock absorbing material 130 is such that the distance across the curved side 652 of the insert 620 is greater than the corresponding distance across the curved side 650 of the insert 620.

**[026]** The embodiment 602 depicted in Figure 6B includes protrusions (e.g., or keys) 660 around at least a portion of an edge (e.g., sidewall) of the insert 622 to retain the insert in the cavity of the first shock absorbing material 130. The protrusions 660 may be keyed to a recess in the shock absorbing liner 130. Thus, in order to remove the insert 622 from the cavity of the first shock absorbing material 130, the insert 622 may have to be compressed

to release the protrusions 660 from the respective recesses in the shock absorbing liner 130. The protrusions 660 may have rounded or square corners. While the protrusions are located in the center of an edge of the insert 622, they may be placed off-center. Further, a size of the protrusions 660 may protrude further out from the edge of the insert 622 than depicted, and the recesses may be deeper into the shock absorbing liner 130 than depicted. Additionally, it will be recognized that the insert 622 may include more than one protrusion on each edge. The insert 622 may have similar curved side as those depicted in Figure 6A, relative distance and angles of sides of the insert 622 may be the same as those described with reference to Figure 4, 5, and 6A. In other embodiments, the distance across the curved side 653 may be equal to or less than the corresponding distance across the curved side 651. In other embodiments, sides 651 and 653 may be straight and have equal distances.

**[027]** The embodiment 603 depicted in Figure 6C includes the insert 624 with rounded edges (e.g., sidewalls) 670 to retain the insert in the cavity of the first shock absorbing material 130. A recess may be formed in the shock absorbing liner 130 that matches a shape of the rounded edges 670. Thus, in order to remove the insert 624 from the cavity of the first shock absorbing material 130, the insert 624 may have to be compressed to release the rounded edges 670 from the respective recesses in the shock absorbing material 130. The rounded edges 670 may form a semicircular shape or a semi-ovular shape. The insert 624 may have straight sides, where a distance across of side 672 is equal to a corresponding distance across side 674. In other embodiments, the sides 672 and 674 may be curved as described with reference to Figures 6A and 6B, where the distance across side 674 is greater than the corresponding distance across side 672.

**[028]** The embodiment 604 depicted in Figure 6D includes tabs 680 formed in the first shock absorbing material (or affixed to the first shock absorbing material) that protrude laterally across the cavity and are configured to retain the insert 626 in the cavity of the first shock absorbing material 130. Thus, in order to remove the insert 626 from the cavity of the first shock absorbing material 130, the insert 624 may have to be compressed to bypass the tabs 680 from the respective from the cavity of the 130. Each of the tabs 680 may extend under the insert 626 by an equal amount. The insert 626 may have straight sides, where a



distance across side 686 is equal to a corresponding distance across side 688. In other embodiments, the sides 686 and 688 may be curved as described with reference to Figures 6A and 6B, where the distance across side 688 is greater than the corresponding distance across side 686.

**[029]** The above description of illustrated embodiments of the invention is not intended to be exhaustive or to limit the invention to the precise form disclosed. While specific embodiments of, and examples of, the invention are described in the foregoing for illustrative purposes, various equivalent modifications are possible within the scope of the invention, as those skilled in the relevant art will realize. Moreover, the various embodiments described above can be combined to provide further embodiments. Accordingly, the invention is not limited by the disclosure, but instead the scope of the invention is to be determined entirely by the following claims.

CLAIMS

What is claimed is:

1. A helmet, comprising:  
a shell;  
a shock absorbing liner attached to the shell, the shock absorbing liner having an cavity; and  
a shock absorbing insert formed of a material different than the material of the shock absorbing liner, wherein the cavity is configured to retain the shock absorbing insert.
2. The helmet of claim 1, wherein the shock absorbing insert is configured to be manually deformed to be removed from the cavity.
3. The helmet of claim 1, wherein the cavity having a shape configured to retain the shock absorbing insert based on an expansion pressure of sides of the insert against sides of the cavity.
4. The helmet of claim 1, wherein the first shock absorbing material is non-porous, and wherein the second shock absorbing material is porous.
5. The helmet of claim 1, wherein the shock absorbing insert is formed from a honeycomb material.
6. The helmet of claim 5, wherein the honeycomb material includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.
7. The helmet of claim 1, wherein the cavity comprises:  
an interior surface; and  
first and second sidewalls,

wherein interior angles between the first and second sidewalls and the interior surface provides a distance between the first and second sidewalls along a first curved side of the shock absorbing insert adjacent the interior surface that is greater than a distance between the first and second sidewalls along a second curved side of the shock absorbing insert.

8. The helmet of claim 1 wherein the cavity is configured to have a distance along a first curved side between sidewalls of the cavity that is greater than a distance along a second curved side between the sidewalls.

9. The helmet of claim 1, wherein the cavity includes a recess and the shock absorbing insert includes a protrusion keyed to the recess in the cavity of the shock absorbing liner.

10. The helmet of claim 1, wherein an edge of the insert is rounded to form a semi-ovular shape that is keyed to a recess in the cavity of the shock absorbing liner.

11. The helmet of claim 1, wherein the shock absorbing liner includes tabs protruding laterally across the cavity that are configured to retain the insert.

12. The helmet of claim 1, wherein the shell comprises at least one of polycarbonate (PC) or Acrylonitrile butadiene styrene (ABS), and wherein the shock absorbing liner comprises at least one of expanded polystyrene (EPS) or expanded polypropylene (EPP).

13. A helmet, comprising:  
a shock absorbing liner forming a concave shape, the shock absorbing liner having an cavity; and  
an insert retained in the cavity in the shock absorbing liner,

wherein the insert and cavity are configured to require deformation of the insert to be removed from the cavity, wherein the insert and the shock absorbing liner having an inner surface configured to receive a wearer's head.

14. The helmet of claim 13, wherein the shock absorbing liner comprises a first shock absorbing material and the insert comprises a second shock absorbing material that is different than the first shock absorbing material.

15. The helmet of claim 14, wherein the second shock absorbing material is porous.

16. The helmet of claim 15, wherein the second shock absorbing material includes an array of energy absorbing cells, each of the energy absorbing cells including a tube.

17. The helmet of claim 16, wherein each of the tubes of the energy absorbing cells comprises a circular cylindrical or circular conical structure.

18. The helmet of claim 13, further comprising a shell attached to on an outer surface of the shock absorbing liner.

19. The helmet of claim 13, wherein the insert is configured to allow air to flow there through to the head of a wearer.

20. The helmet of claim 13, wherein the insert comprises a first curved side adjacent an outer portion of the shock absorbing liner and a second curved side opposite the first curved side, where a distance across the first curved side is greater than a corresponding distance across the second curved side.

21. The helmet of claim 13, wherein an edge of the insert includes at least one of a protrusion keyed to a recess in the cavity of the shock absorbing liner, a semi-circular shape keyed to the recess in the cavity of the shock absorbing liner, or a semi-ovular shape keyed to the recess in the cavity of the shock absorbing liner.

22. The helmet of claim 13, wherein the shock absorbing liner comprises a plurality of cavities, the helmet further comprising a plurality of inserts, each of the plurality of inserts having a shape configured to a shape of a respective cavity of the plurality of cavities in the shock absorbing liner.

23. A method of manufacturing a helmet, comprising:  
forming shock absorbing liner component;  
forming a cavity in the shock absorbing liner; and  
forming an insert to be installed in the cavity of the shock absorbing liner,  
wherein a shape of the cavity of the shock absorbing liner is such that the insert must be deformed to be removed from the cavity in the shock absorbing liner.

24. The method of claim 23, wherein forming an insert to be installed in the cavity of the shock absorbing liner comprises forming an array of energy absorbing cells.

25. The method of claim 23, wherein forming the insert comprises forming a protrusion around an edge of the insert that is keyed to a recess in the cavity of the shock absorbing liner.

26. The method of claim 23, wherein forming the insert comprises forming a semi-circular edge on the insert that is keyed to a recess in the cavity of the shock absorbing liner.

27. The method of claim 23, wherein forming the cavity in the shock absorbing liner comprises forming a tab on protruding laterally across the cavity of the shock absorbing liner that is configured to retain the insert.

ABSTRACT

Helmets and methods for manufacturing a helmet are described. An example helmet includes a shell and a shock absorbing liner attached to the shell. The shock absorbing liner includes a cavity. The helmet a shock absorbing insert formed of a material different than the material of the shock absorbing liner. The cavity is configured to retain the shock absorbing insert.

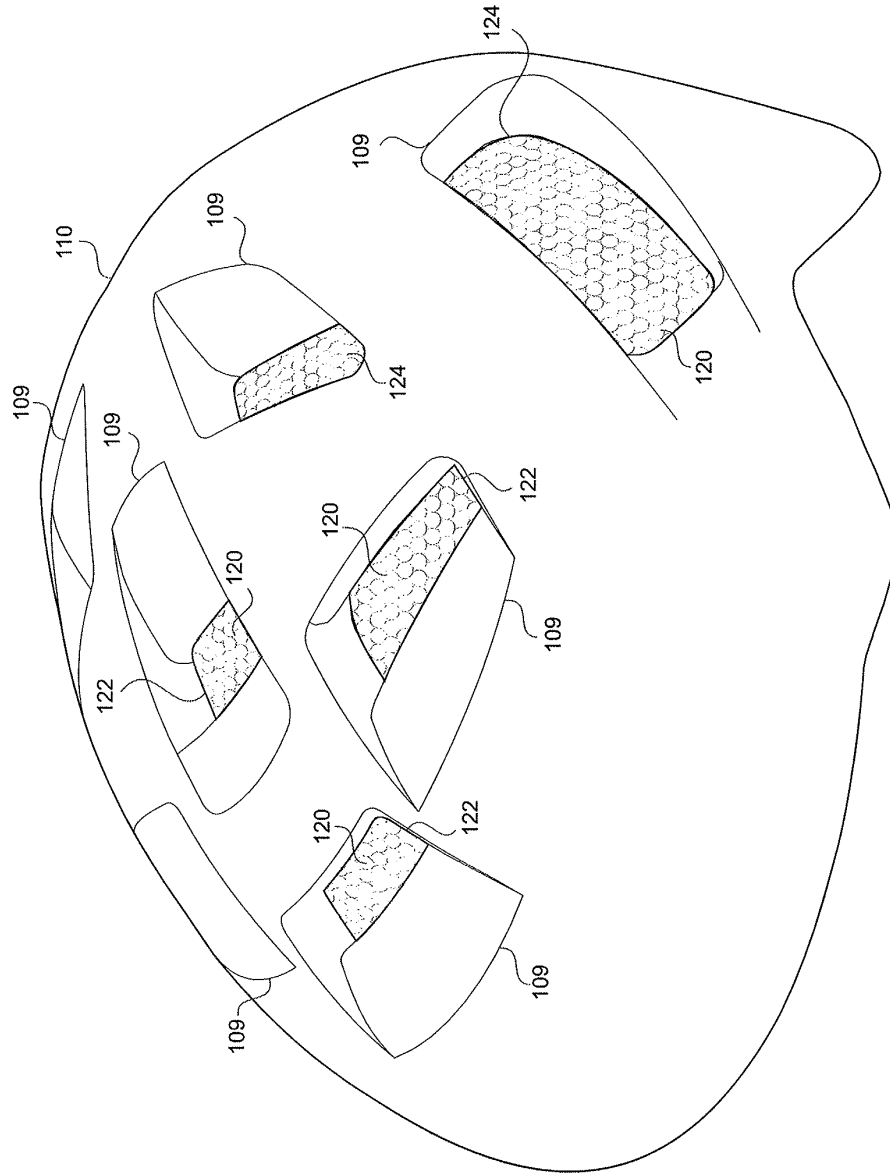


FIG. 1



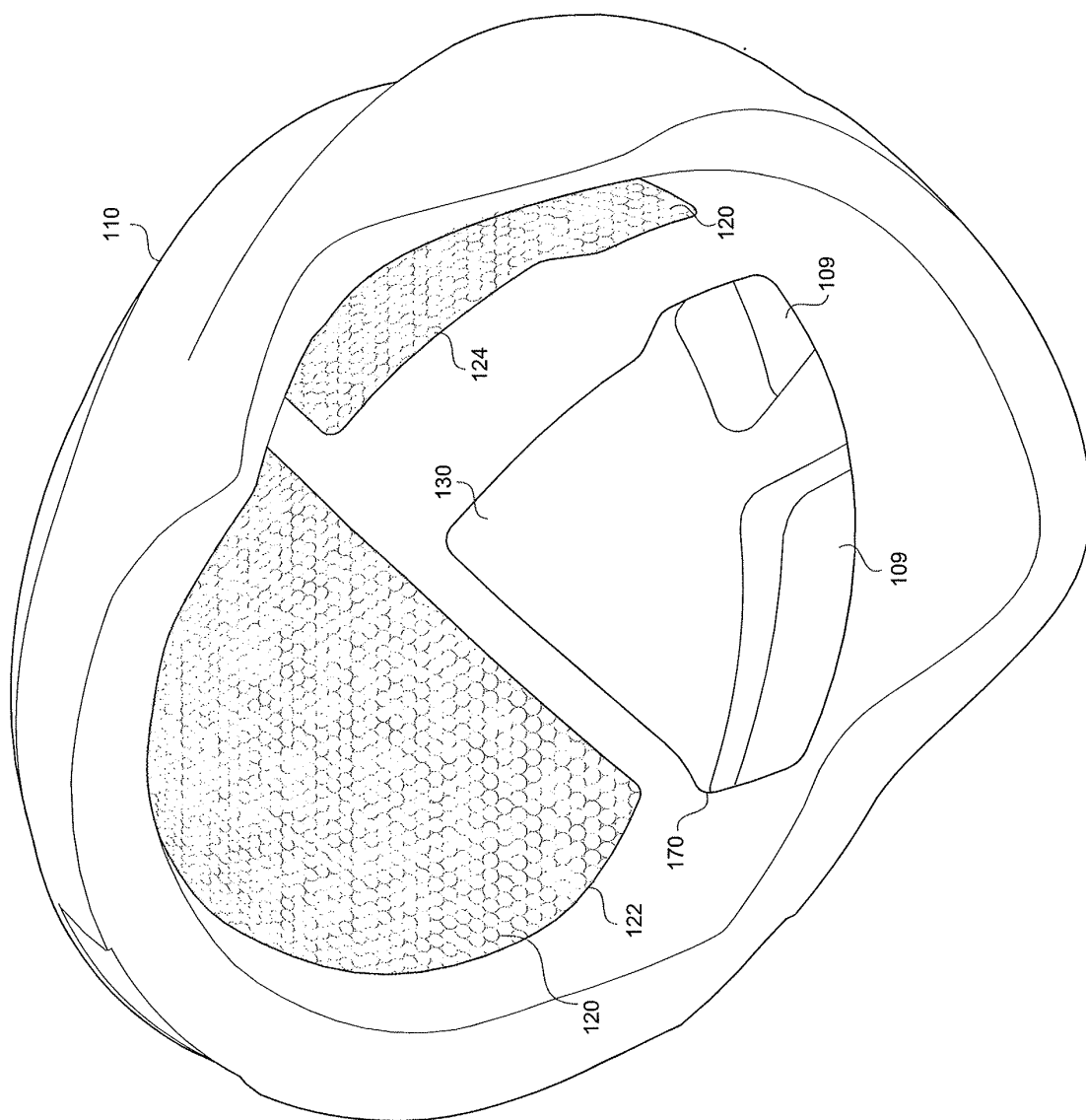


FIG. 2

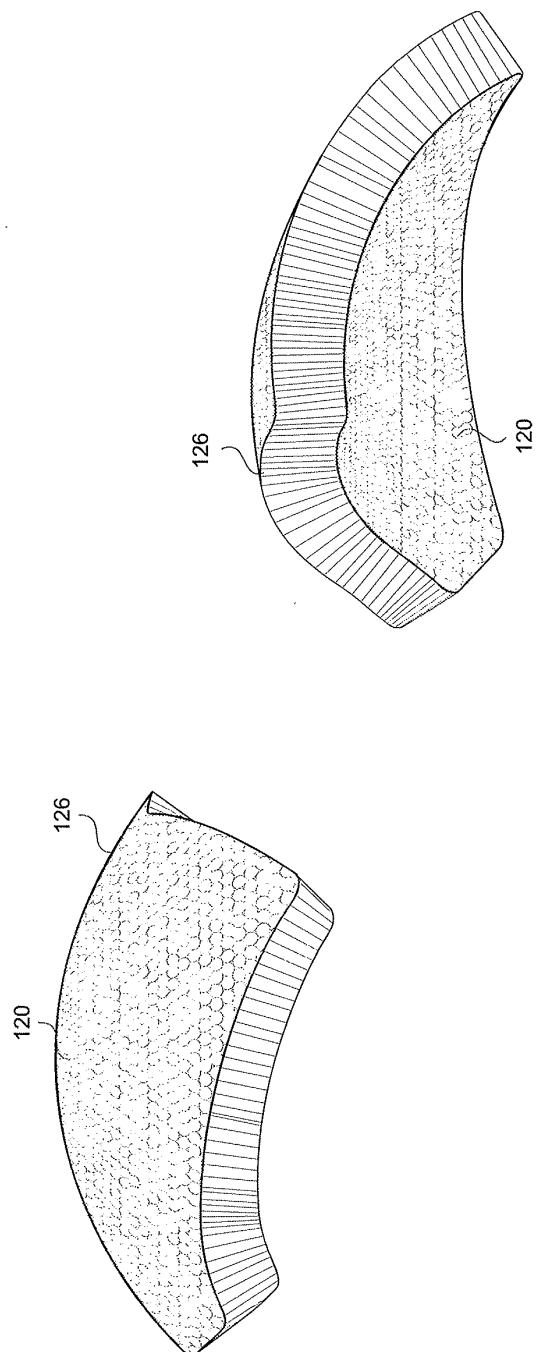


FIG. 3

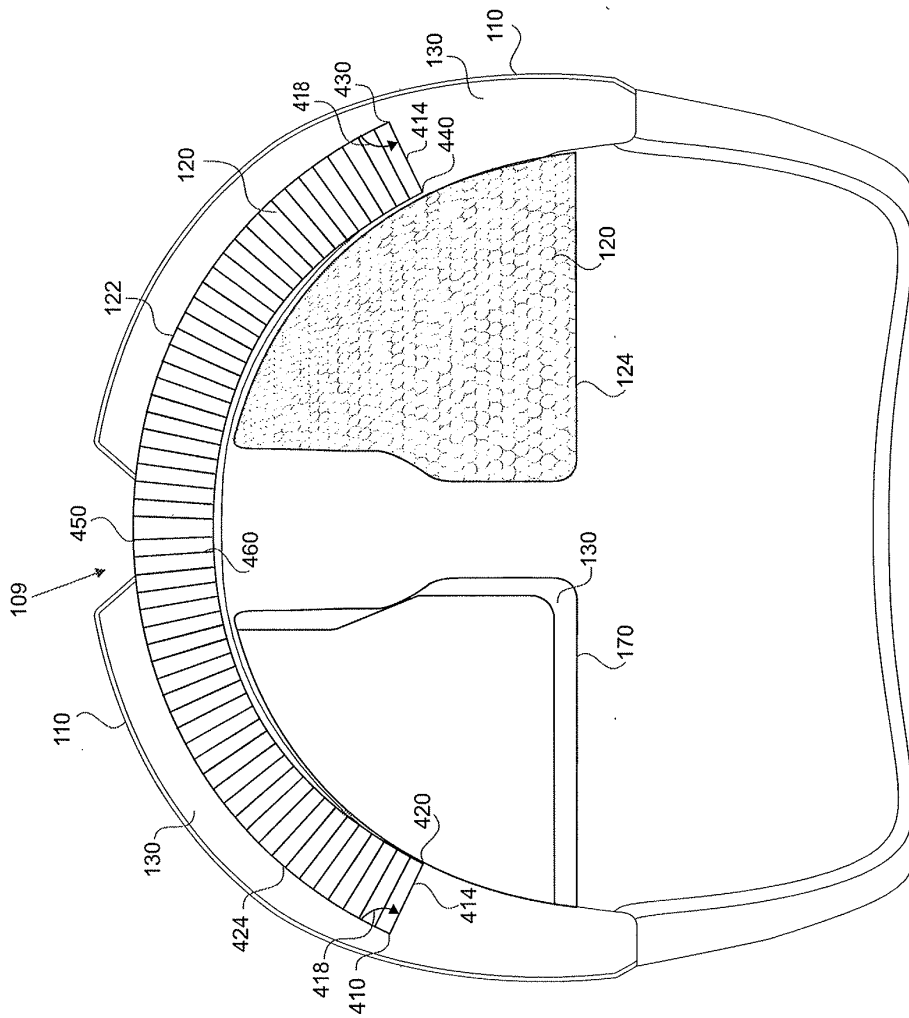
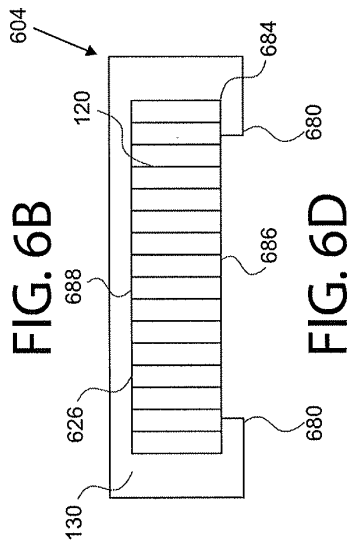
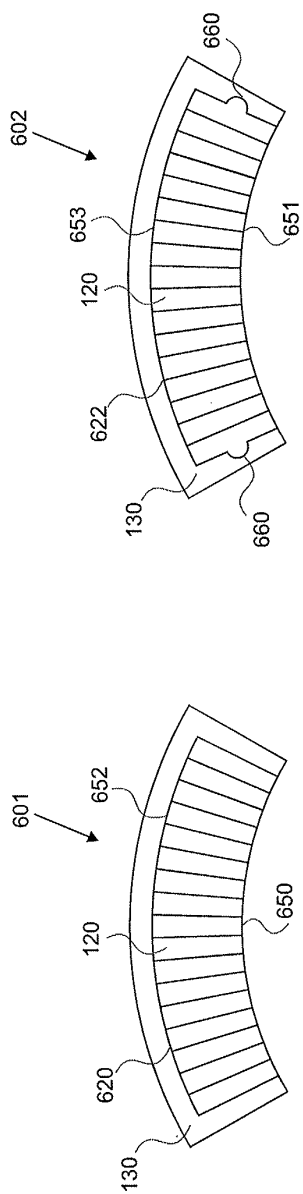


FIG. 4



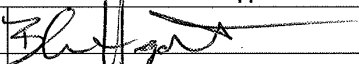


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**NOTE:** This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B or equivalent) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5. If the Power of Attorney by Applicant form is not accompanied by this transmittal form or an equivalent, the Power of Attorney will not be recognized in the application.

|                        |                                     |
|------------------------|-------------------------------------|
| Application Number     | Filed Concurrently Herewith         |
| Filing Date            | Filed Concurrently Herewith         |
| First Named Inventor   | James A. Chilson                    |
| Title                  | HELMET WITH SHOCK ABSORBING INSERTS |
| Art Unit               | Not Yet Allocated                   |
| Examiner Name          | Not Yet Allocated                   |
| Attorney Docket Number | P240940.US.01                       |

### SIGNATURE of Applicant or Patent Practitioner

|                     |                                                                                    |           |                 |
|---------------------|------------------------------------------------------------------------------------|-----------|-----------------|
| Signature           |  | Date      | August 13, 2013 |
| Name                | Brandon P. Hegstrom                                                                | Telephone | 206-903-8769    |
| Registration Number | 59,432                                                                             |           |                 |

**NOTE:** This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications.

☒ \*Total of 1 (ONE) forms are submitted.

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27,076

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I am the Applicant:

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☐ Legal Representative of a Deceased or Legally Incapacitated Inventor  
☒ Assignee or Person to Whom the Inventor is Under an Obligation to Assign  
☐ Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document)

SIGNATURE of Applicant for Patent

Signature

Date

Name

Ron Hayes

Telephone

208-726-4477

Title and Company

CFO, Smith Optics, Inc.

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| Electronic Patent Application Fee Transmittal |          |                                     |        |                      |
|-----------------------------------------------|----------|-------------------------------------|--------|----------------------|
| Application Number:                           |          |                                     |        |                      |
| Filing Date:                                  |          |                                     |        |                      |
| Title of Invention:                           |          | HELMET WITH SHOCK ABSORBING INSERTS |        |                      |
| First Named Inventor/Applicant Name:          |          | James A. Chilson                    |        |                      |
| Filer:                                        |          | Brandon Paul. Hegstrom/Cecilia Tri  |        |                      |
| Attorney Docket Number:                       |          | P240940.US.01                       |        |                      |
| Filed as Large Entity                         |          |                                     |        |                      |
| Utility under 35 USC 111(a) Filing Fees       |          |                                     |        |                      |
| Description                                   | Fee Code | Quantity                            | Amount | Sub-Total in USD(\$) |
| Basic Filing:                                 |          |                                     |        |                      |
| Utility application filing                    | 1011     | 1                                   | 280    | 280                  |
| Utility Search Fee                            | 1111     | 1                                   | 600    | 600                  |
| Utility Examination Fee                       | 1311     | 1                                   | 720    | 720                  |
| Pages:                                        |          |                                     |        |                      |
| Claims:                                       |          |                                     |        |                      |
| Claims in Excess of 20                        | 1202     | 7                                   | 80     | 560                  |
| Miscellaneous-Filing:                         |          |                                     |        |                      |
| Late Filing Fee for Oath or Declaration       | 1051     | 1                                   | 140    | 140                  |



| Description                              | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
|------------------------------------------|----------|----------|--------|----------------------|
| <b>Petition:</b>                         |          |          |        |                      |
| <b>Patent-Appeals-and-Interference:</b>  |          |          |        |                      |
| <b>Post-Allowance-and-Post-Issuance:</b> |          |          |        |                      |
| <b>Extension-of-Time:</b>                |          |          |        |                      |
| <b>Miscellaneous:</b>                    |          |          |        |                      |
| <b>Total in USD (\$)</b>                 |          |          |        | <b>2300</b>          |

| Electronic Acknowledgement Receipt          |                                     |
|---------------------------------------------|-------------------------------------|
| <b>EFS ID:</b>                              | 16577253                            |
| <b>Application Number:</b>                  | 13965703                            |
| <b>International Application Number:</b>    |                                     |
| <b>Confirmation Number:</b>                 | 5250                                |
| <b>Title of Invention:</b>                  | HELMET WITH SHOCK ABSORBING INSERTS |
| <b>First Named Inventor/Applicant Name:</b> | James A. Chilson                    |
| <b>Customer Number:</b>                     | 27076                               |
| <b>Filer:</b>                               | Brandon Paul. Hegstrom/Cecilia Tri  |
| <b>Filer Authorized By:</b>                 | Brandon Paul. Hegstrom              |
| <b>Attorney Docket Number:</b>              | P240940.US.01                       |
| <b>Receipt Date:</b>                        | 13-AUG-2013                         |
| <b>Filing Date:</b>                         |                                     |
| <b>Time Stamp:</b>                          | 15:42:13                            |
| <b>Application Type:</b>                    | Utility under 35 USC 111(a)         |

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| Submitted with Payment                                                                                                                                                                                                                                                                                                                                                                   | yes             |
| Payment Type                                                                                                                                                                                                                                                                                                                                                                             | Deposit Account |
| Payment was successfully received in RAM                                                                                                                                                                                                                                                                                                                                                 | \$2300          |
| RAM confirmation Number                                                                                                                                                                                                                                                                                                                                                                  | 2414            |
| Deposit Account                                                                                                                                                                                                                                                                                                                                                                          | 501266          |
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| Document Number                                                                                   | Document Description                                       | File Name                         | File Size(Bytes)/<br>Message Digest                                | Multi Part /.zip | Pages (if appl.) |
| 1                                                                                                 |                                                            | P240940US01_AppAsFiled_081313.pdf | 1724662<br><small>dcee07eb21270fda0a2124e0ebf8fd1825352c28</small> | yes              | 31               |
|                                                                                                   | <b>Multipart Description/PDF files in .zip description</b> |                                   |                                                                    |                  |                  |
|                                                                                                   | <b>Document Description</b>                                | <b>Start</b>                      | <b>End</b>                                                         |                  |                  |
|                                                                                                   | Transmittal of New Application                             | 1                                 | 1                                                                  |                  |                  |
|                                                                                                   | Authorization for Extension of Time all replies            | 2                                 | 2                                                                  |                  |                  |
|                                                                                                   | Application Data Sheet                                     | 3                                 | 7                                                                  |                  |                  |
|                                                                                                   | Specification                                              | 8                                 | 17                                                                 |                  |                  |
|                                                                                                   | Claims                                                     | 18                                | 22                                                                 |                  |                  |
|                                                                                                   | Abstract                                                   | 23                                | 23                                                                 |                  |                  |
|                                                                                                   | Drawings-only black and white line drawings                | 24                                | 29                                                                 |                  |                  |
|                                                                                                   | Power of Attorney                                          | 30                                | 31                                                                 |                  |                  |
|                                                                                                   | <b>Warnings:</b>                                           |                                   |                                                                    |                  |                  |
| <b>Information:</b>                                                                               |                                                            |                                   |                                                                    |                  |                  |
| 2                                                                                                 | Fee Worksheet (SB06)                                       | fee-info.pdf                      | 38197<br><small>d9c9f44a0b04e3093ea376ffdd3089f998e309c</small>    | no               | 2                |
| <b>Warnings:</b>                                                                                  |                                                            |                                   |                                                                    |                  |                  |
| <b>Information:</b>                                                                               |                                                            |                                   |                                                                    |                  |                  |
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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.