## IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF COLORADO

Civil Action No. 1:21-cv-2112-CMA-SKC

SMITH SPORT OPTICS, INC., a Delaware company, and KOROYD SARL, a Monaco company,

Plaintiffs,

۷.

THE BURTON CORPORATION, a Vermont company,

Defendant.

# **BURTON'S INVALIDITY CONTENTIONS**

Pursuant to Section 8.d of the Scheduling Order (D.I. 57), Defendant The Burton Corporation ("Burton") hereby serves its Invalidity Contentions for U.S. Patent No. 10,736,373 (the "373 patent"). Burton contends that each claim identified by Plaintiffs Smith Sport Optics, Inc. and Koroyd SARL ("Smith" or "Plaintiffs") as infringed in its Infringement Contentions is invalid or unenforceable at least under one or more of 35 U.S.C. §§ 102, 103, 112, 116, and/or 256.

## I. General statements and objections

## A. General Reservations

Burton reserves the right to revise or supplement these contentions in light of party and third-party discovery (such as product prior art and/or supporting documentation expected from third-parties), Smith's final infringement contentions, any claim construction order issued by the Court, review and analysis by expert witnesses, and further investigation and discovery regarding the defenses asserted by Burton. For example, Burton expressly reserves the right to amend these contentions after review of Smith's final infringement contentions, after issuance of the claim construction order, should Smith provide any information that it failed to provide in its disclosures, or if Smith amends its disclosures in any way. Further, because discovery is ongoing, Burton reserves the right to revise, amend, and/or supplement the information provided herein, including identifying, charting, and relying on additional references. Further, Burton reserves the right to revise its final contentions concerning the invalidity of the asserted claims, which may change depending upon further and ongoing investigation, the construction of the asserted claims and/or positions that Smith or expert witnesses may take concerning claim construction, infringement, and/or invalidity issues.

Prior art not included in this disclosure, whether known or not known to Burton, may become relevant. In particular, Burton is currently unaware of the extent, if any, to which Smith will contend that limitations of the asserted claims are not disclosed in the prior art identified by Burton. To the extent that such an issue arises, Burton reserves the right to identify other references that would anticipate and/or render obvious the allegedly missing limitations of the claims. Burton reserves the right to rely on any reference found in the prosecution histories of the applications leading to the asserted patent or otherwise identified in connection with this action.

To the extent that the following contentions reflect constructions of claim limitations consistent with or implicit in Smith's infringement allegations or proposed claim constructions, no inference is intended nor should any be drawn that Burton agrees with

Smith's infringement allegations or claim constructions, and Burton expressly reserves the right to contest such allegations and claim constructions. Burton offers such contentions in response to Smith's infringement allegations and its proposed and/or implicit claim constructions, and without prejudice to any position that Smith may ultimately take as to any claim construction issues. Specifically, Burton bases these invalidity contentions at least in part upon the claim scope and certain claim constructions that are implicitly or explicitly asserted by Smith, and nothing herein should be construed or represented as evidencing any express or implied agreement with any of Smith's claim construction or infringement positions.

Burton intends to rely on admissions concerning the scope of the prior art relevant to the asserted patent found in, inter alia: the asserted patent and related patents and/or patent applications; the patent prosecution histories for the asserted patent and related patents and/or patent applications (including all prior art cited therein); any deposition testimony of the named inventors on the asserted patent and related patents and/or patent applications in this matter or any other matter; evidence and testimony relating to the level of skill in the art; and the papers filed and any evidence submitted by Smith in connection with this matter.

Burton's claim charts cite to particular teachings and disclosures of the prior art as applied to features of the asserted claims. However, persons having ordinary skill in the art generally may view an item of prior art in the context of other publications, literature, products, and understanding. As such, the cited portions are only examples, and Burton reserves the right to rely on uncited portions of the prior art references and on other

publications, expert testimony, and other evidence as aids in understanding and interpreting the cited portions, as providing context thereto, and as additional evidence that the prior art discloses a claim limitation or any of the asserted claims as a whole. Burton further reserves the right to rely on uncited portions of the prior art references, other publications, and testimony, including expert testimony, to establish bases for combinations of certain cited references that render the asserted claims obvious.

The references discussed in the claim charts may disclose the elements of the asserted claims explicitly and/or inherently, and/or they may be relied upon to show the state of the art in the relevant timeframe. The suggested obviousness combinations are provided in addition to and/or in the alternative to Burton's anticipation contentions and are not to be construed to suggest that any reference included in the combinations is not by itself anticipatory.

The following discussion and exhibits provide exemplary prior art citations and obviousness positions. The citations and discussion in the charts are organized by claim (and claim limitation) for convenience, but each limitation or claim section applies to the larger context of each claim, to any related dependent or independent claims, as well as all claims containing similar limitations or elements. For example, citations as to any recited limitation or component in the claims apply wherever each such limitation or component is repeated elsewhere in the claim or patent. Where Burton cites to a particular drawing or figure in the attached claim charts, the citation encompasses the description of the drawing or figure, as well as any text associated with the drawing or figure. Similarly, where Burton cites to particular text concerning a drawing or figure, the citation

encompasses that drawing or figure as well. Relatedly, certain portions of patent or other prior art disclosures build upon other disclosures, even if they are referred to as a separate or alternative embodiment. Thus, Burton's citations to structures or functions incorporate by references all disclosures to related structures or functions, including any additional detail provided as to the operation or design of those structures or functions.

Discovery is ongoing. Burton reserves the right to assert that the asserted claims are invalid under 35 U.S.C. § 102(f) in the event Burton obtains additional evidence that the inventors of the asserted patents did not invent the subject matter claimed therein. Should Burton obtain such evidence, they will provide the name of the person(s) from whom, and the circumstances under which, the alleged invention or any part of it was derived.

## B. Asserted Claims

On December 22, 2021, Plaintiff served Burton with its Asserted Claims and Infringement Contentions that Burton infringes claims 1-3, and 7 of the '373 Patent (collectively, the "Asserted Claims"). Burton's Invalidity Contentions herein are directed only to these Asserted Claims. Burton reserves the right to revise its ultimate contentions in the event that Smith asserts claims not identified in Smith's December 22, 2021 Infringement Contentions.

## II. Invalidity Under 35 U.S.C. §§ 102 and/or 103

## A. Relevant Prior Art

Burton contends that the prior art references identified in Burton's contentions anticipate or render obvious the Asserted Claims. Based on the information reasonably available to Burton, the priority date of the asserted claims of the '373 patent is no earlier than August 13, 2013, the filing date of U.S. Patent Application No. 13/965,703 ("the '703 Application") which matured into the '373 patent.

Despite having the burden of proof, Smith has offered no evidence that any Asserted Claim of the '373 patent is entitled to a priority date earlier than August 13, 2013. Below, Burton lists some of the prior art cited in these contentions:

Prior Art Reference	Bates Numbers
U.S. Pat. App. Pub. No. 2004/0064873	BURTON-0001255 - BURTON-0001286
("Muskovitz")	
U.S. Pat. App. Pub. No. 2008/0307568	BURTON-0001287 - BURTON-0001302
("Sajic")	
U.S. Pat. No. 4,422,183	BURTON-0001368 - BURTON-0001372
("Landi")	

# 1. Patents and Printed Publications

# 2. Product Prior Art

Prior Art Reference	Knowledgeable Person(s) and/or Bates Numbers
Fox Striker Helmet	Fox Racing
	BURTON-0001056 - BURTON-0001136
Protos Integral Helmet	Koroyd
	Protos
	BURTON-0001137 - BURTON-0001236

## B. Anticipation and Obviousness

Burton attaches Exhibits A through E, which provide exemplary disclosures showing how the prior art anticipates and/or renders obvious the asserted claims of the '373 patent. The charts identify primary references, and, in some cases, secondary references, and obviousness contentions. Burton may rely on any of the primary references identified in Exhibits A through E, in combination with any secondary reference identified in those exhibits.

Burton's anticipation contentions are presented in the following exhibits, each of which describes anticipation of one or more claims of the '373 patent by a primary reference. Burton's obviousness contentions are also contained in Exhibits A - E.

Exhibit	Primary Reference
Ex. A	Muskovitz
Ex. B	Sajic
Ex. C	Landi
Ex. D	FOX Striker Helmet
Ex. E	Protos Integral Helmet

The Supreme Court emphasized in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007) that inventions arising from ordinary innovation, ordinary skill, or common sense should not be patentable. *Id.* at 402, 413, 420-421, 427-428. A patent claim may be obvious if the combination of elements was obvious to try or if there existed at the time of the invention a known problem for which there was an obvious solution encompassed by the patent's claims. "When a work is available in one field of endeavor, design incentives

and other market forces can prompt variations of it, either in the same field or a different one." *Id.* at 417. "If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability." *Id.* The Court stated that courts should "look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." *Id.* at 418. *KSR* does not mandate evidence of a motivation or suggestion to combine prior art references. *See TGIP, Inc. v. AT&T Corp.*, 527 F. Supp. 2d 561, 580-81 (E.D. Tex. 2007). "[A] court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ" to resolve the question of obviousness. *KSR*, 550 U.S. at 418.

Based on all these considerations, as further detailed in Exhibits A through E, persons of ordinary skill in the art would have combined the teachings of the prior art references discussed and charted in those exhibits with teachings from the same reference, with the knowledge of a person of skill in the art ("POSA"), and/or with teachings from other prior art references as disclosed in Exhibits A through E. The combinations of these references would have rendered obvious to one of ordinary skill in the art the subject matter of the asserted claims of the '373 patent. The references identified in Exhibits A through E are analogous prior art to the subject matter of the asserted claims and, for at least the reasons set forth below, are properly combinable. Because these prior art references exist within a single field of art, particularly one in

which individuals in the field often shared and/or collaborated on their work, it would have been obvious for a POSA to look from one piece of prior art to another to find any missing functionality they desired to implement. Therefore, these references provide interrelated teachings and one of ordinary skill would look to the concepts in any of these references when seeking to solve the problems purportedly addressed by the '373 patent.

Numerous prior art references, including those identified in the attached exhibits, reflect common knowledge and the state of the prior art before the earliest claimed effective filing date of the '373 patent. As it would be unduly burdensome to create detailed claim charts for all of the invalidating combinations, for at least the reasons described in these invalidity contentions, it would have been obvious to one of ordinary skill in the art to combine any of a number of prior art references, including any combination of those identified in the attached exhibits, to meet the limitations of the asserted claims of the '373 patent. Burton's inclusion of exemplary combinations, in view of the factors and motivations identified here, does not preclude Burton from identifying other invalidating combinations and/or motivations as appropriate.

No showing of a specific motivation to combine prior art is required to combine the references disclosed above and in the attached charts, because each combination of art would have no unexpected results, and at most would simply represent a known alternative to one of ordinary skill in the art. *See KSR*, 550 U.S. at 415-417 (rejecting the Federal Circuit's "rigid" application of the teaching, suggestion, or motivation to combine test, instead espousing an "expansive and flexible" approach). Indeed, the Supreme Court held that a person of ordinary skill in the art is "a person of ordinary creativity, not

an automaton" and "in many cases a person of ordinary skill in the art will be able to fit the teachings of multiple patents together like pieces of a puzzle." *Id.* at 420. Nevertheless, in addition to the information contained herein, Burton hereby identifies additional motivations and reasons to combine the cited art.

One or more combinations of the prior art references identified herein, with itself, the knowledge of one of skill in the art, or with other references, would have been obvious because these references would have been combined using: known methods to yield predictable results; known techniques in the same way; a simple substitution of one known, equivalent element for another to obtain predictable results; and/or a teaching, suggestion, or motivation in the prior art generally. In addition, it would have been obvious to combine the prior art references identified above because there were only a finite number of predictable solutions and/or because known work in one field of endeavor prompts variations based on predictable design incentives and/or market forces either in the same field or a different one. In addition, the combinations of the prior art references identified above because the prior art references identified above because the prior art references identified above because the prior art references either in the same field or a different one. In addition, the combinations of the prior art references identified above would have been obvious because the combinations represent the known potential options with a reasonable expectation of success.

Additional evidence that there would have been a motivation or reason to combine the prior art references identified above includes the interrelated teachings of multiple prior art references; the effects of demands known to the design community or present in the marketplace; the existence of a known problem for which there was an obvious solution; the existence of a known need or problem in the field of endeavor at the time of the invention; and the background knowledge that would have been possessed by a

person having ordinary skill in the art. For example, the prior art references are generally directed to the same problems. Thus, a skilled artisan seeking to solve these problems would look to these cited references in combination.

Thus, the motivation or reason to combine the teachings of the prior art references disclosed herein is found in the references themselves and in: (1) the nature of the problems being solved; (2) the express, implied, and inherent teachings of the prior art; (3) the knowledge of persons of ordinary skill in the art; (4) the fact that the prior art is generally directed towards the same problems; and/or (5) the predictable results obtained in combining the different elements of the prior art; (6) the use of a known technique to improve similar devices, methods, or products in the same way; (7) the predictable results obtained in applying a known technique to a known device, method, or product ready for improvement; (8) the finite number of identified predictable solutions that had a reasonable expectation of success; and (9) known work in various technological fields that could be applied to the same or different technological fields based on design incentives or other market forces.

In addition, it would have obvious to combine any of the prior art in Exhibits A through E because all of these references relate to a particular arrangement of known elements in a protective helmet, including a shock-absorbing material, vents, and use of cellular material. For example, U.S. Patent Application Publication No. 2004/0064873 ("Muskovitz") discloses a protective helmet with "plurality of ventilation ports ... designed to facilitate ambient air flow into and out of the interior of protective helmet 10." Muskovitz, ¶100. Muskovitz further discloses a shock absorbing liner (depicted in red, Ex. A) adjacent

to and attached to the shell (light blue) and comprising a cavity (purple) at least partially aligned with the plurality of vents (e.g., 28). *Id.*; Ex. A. The shock absorbing insert, depicted in green, is "designed to fit within the recess in liner 18." Muskovitz, Fig. 10; ¶87. Muskovitz also expressly suggests various types of substitutions for the shock absorbing insert, including anything with a "similar impact absorbing material" as the shock absorbing liner. *Id.*, ¶¶100-101. A POSA would have known and been motivated to use a honeycomb-like structure for the insert, such as the "array of energy absorbing cells" claimed in the '373 patent, since that structure was a "similar impact absorbing material." *Id.*, ¶¶101-103.

U.S. Patent Application Publication No. 2008/0307568 ("Sajic") discloses a helmet with "an impact surface; and an array of energy absorbing cells, wherein each of said cells comprises a tube." Sajic, ¶¶85-87; Ex. B. It would have been obvious to a POSA to include vents (as in Muskovitz) in a motorcycle helmet as described in Sajic when designing a sports helmet. Sajic, ¶118. Vents were generally accepted in sports helmets when the '373 patent was filed. *Id.*, ¶119. Moreover, a POSA would have been motivated to include vents at the back of a sports helmet aligned with Sajic's honeycomb inserts to permit airflow. *Id.*, ¶¶120 (citing U.S. Patent No. 7,673,351 at 4:9-24 (discussing use of open shock absorbing structure to allow for air flow through holes in a helmet)). In short, each of the Asserted Claims is invalid as obvious given Sajic and Muskovitz. *Id.*, ¶¶121-125.

U.S. Patent No. 4,422,183 ("Landi") is one example of a honeycomb-like structure used to absorb shock or impact that is also beneficial due to its ventilation properties. *Id.*,

**¶**¶88-89. A POSA would have had reason to use Landi's honeycomb structure as the insert in Muskovitz or any other primary reference given that Landi touted the honeycomb's shock-absorbing qualities, lightness, and capacity to permit airflow through a helmet. *Id.*, **¶**¶110-114. Landi heightens the obviousness of the '373 patent. *Id.*, **¶**¶110-114, Ex. C.

The Fox Striker Helmet ("Striker Helmet") is a mountain biking helmet that was available for sale in 2011. It discloses all the limitations of the Asserted Claims (Ex. D). Fox expressly defined the Striker Helmet's honeycomb venting inserts as "structural," making clear to a POSA that the inserts have a shock-absorbing function. Engineering tests confirm that they provide significant shock-absorption.

The Protos Integral Helmet ("Integral Helmet") is an industrial arborist helmet that was available for sale in at least November 2012, and publicly available no later than at the Bauma 2013 trade show in Munich, Germany, from April 15 through April 21, 2013. It discloses all the limitations of the Asserted Claims (Ex. E). The Integral Helmet was available both with and without Koroyd's honeycomb insert, in a vented helmet for shock absorption.

Burton incorporates by reference prior art from the prosecution histories and background sections of the '373 patent. Burton expects to rely on the testimony of one or more expert witnesses and documents referenced by those expert witnesses in support of these contentions and incorporate those forthcoming expert reports as if fully set forth herein.

Burton contends that there are no secondary considerations of non-obviousness evidencing the validity of any of the asserted claims. Secondary considerations of nonobviousness, also referred to as objective indicia of non-obviousness, "can include copying, long felt but unsolved need, failure of others, commercial success, unexpected results created by the claimed invention, unexpected properties of the claimed invention, licenses showing industry respect for the invention, awards or other industry praise for the invention, and skepticism of skilled artisans before the invention." Power Integrations, Inc. v. Fairchild Semiconductor Int'l, Inc., 711 F.3d 1348, 1368 (Fed. Cir. 2013). "A nexus between the merits of the claimed invention and evidence of secondary considerations is required in order for the evidence to be given substantial weight in an obviousness decision." Ruiz v. A.B. Chance Co., 234 F.3d 654, 668 (Fed. Cir. 2000). Moreover, even if a nexus exists, secondary considerations of non-obviousness "simply cannot overcome [a] strong prima facie showing of obviousness." Sundance, Inc. v. DeMonte Fabricating Ltd., 550 F.3d 1356, 1368 (Fed. Cir. 2008). Smith has not established the existence of any objective indicia of non-obviousness or secondary considerations. Burton reserves the right to supplement its contentions to respond to any such evidence should Smith identify any. While discovery in this case is ongoing, and Burton's investigation continues (which will include expert discovery), to the extent Smith contends that one or more asserted claims is not obvious based on secondary considerations recognized by relevant authority Burton contends such allegations are without merit.

For example, Smith has provided no evidence of copying of the purported inventions of the asserted claims. Similarly, Smith has provided no evidence of any failure

of others to realize any purported inventions of the asserted claims, or any evidence of any long felt but unsolved need solved by the purported inventions of the asserted claims. Smith also has provided no evidence of unexpected results or unexpected properties in the purported inventions of the asserted claims. Additionally, there is no evidence of any licenses<sup>1</sup> showing industry respect for the purported inventions of the asserted claims. Finally, Smith does not attempt to provide evidence of any skepticism of skilled artisans prior to purported inventions of the asserted claims; to the contrary, the prior art identified herein establishes not only a lack of skepticism but an appreciation that the purported inventions of the asserted claims were known to those of skill in the art.

By contrast, Smith alleges without support that the purported inventions of the asserted claims have enjoyed commercial success. Complaint, ¶¶ 3, 20-21; Smith's Opening Preliminary Injunction Brief at 5-6. To the extent that Smith claims that sales of any Smith products constitutes commercial success, Smith has not identified any evidence of any nexus between the claimed invention and such alleged commercial success. Smith also baldly alleges that its products have garnered awards or other industry praise for the purported inventions of the asserted claims, but again fails to articulate any nexus between the claimed invention and the alleged awards or praise. Complaint, ¶ 3; Smith's Opening Preliminary Injunction Brief at 5-6, 18-19; Smith's Reply Preliminary Injunction Brief at 9. Moreover, any commercial success, awards, or praise

<sup>&</sup>lt;sup>1</sup> As detailed in Burton's Opposition to Smith's Motion for a Preliminary Injunction (D.I. 38) at 16, Plaintiffs made a series of offers to license the '373 patent to Burton. However, Burton declined given its non-infringement of the '373 patent and the '373 patent's invalidity.

of the accused products may be due to factors other than the merits of the asserted claims, including non-patented features or functionalities, marketing efforts or other financial or economic incentives related to the sale or distribution of the accused products.

## III. Invalidity Under 35 U.S.C. §§ 116 and/or 256

The '373 patent is unenforceable due to inequitable conduct. The '373 patent is unenforceable because, as detailed below, at least one of the owners of the '373 patent and/or the inventors of the '373 patent, James A. Chilson, John Lloyd, James Rogers, and Piers Storey, withheld material information from the USPTO with an intent to deceive the USPTO.

#### A. Prosecution of the '373 Patent

Smith Optics, Inc. filed U.S. Patent Application No. 13/965,703 ("the '703 Application") on August 13, 2013. The '703 Application issued as the '373 patent on August 11, 2020.

The inventors each submitted a Declaration for Utility or Design Patent application pursuant to 37 C.F.R. § 1.63 ("the August 2013 Declaration") as the "original inventor or an original joint inventor of a claimed invention in the application." Each of these declarations were executed with the knowledge 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." The first declaration was submitted with the original utility application. The three additional declarations were executed nearly seven years later. The three additional declarations were filed on July 6, 2020.

Alleged Inventor	Date of Declaration for Utility of Design Patent
James A. Chilson	August 13, 2013
Piers Storey	July 3, 2020
James Rogers	July 5, 2020
John Lloyd	Undated

Smith's counsel filed multiple Information Disclosure Statements, including on March 14, 2014, July 9, 2015, October 16, 2015, March 28, 2016, August 17, 2016, and August 17, 2017, pursuant to Smith's and Mr. Chilson's duty to disclose under 37 C.F.R. § 1.56. All of these IDS's were submitted to the Patent Office while Mr. Chilson was the only named inventor.

On December 8, 2017, the Examiner issued a rejection, rejecting pending application claim 1, among several other pending claims, under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 4,434,514 ("Sundahl") in view of U.S. Patent No. 8,087,101 ("Ferguson").

The rejected application claim 1 required a helmet comprising: a shell including a first vent and a second vent; a shock absorbing liner attached and positioned to the shell, wherein the shock absorbing liner is formed of a first shock absorbing material adjacent to the shell and comprises a first cavity at least partially aligned with the first vent and the second vent such that the first and second vents are substantially unblocked by the shock absorbing liner; and an insert received within the cavity and spanning at least the first vent and the second vent, wherein the insert is formed mesh or screen arranged in a packed array, each of the portions of mesh or screen having an exterior end and an

interior end, wherein the interior and exterior ends of each of the portions of mesh or screen are open to allow air to flow into the exterior ends of the portions of mesh or screen from an outside of the helmet, through the portions of mesh or screen, and exit out the interior ends of the portions of mesh or screen toward an interior of the helmet.

The Examiner found that each of these limitations was met by Sundahl. PLAINTIFFS 00000015 at PLAINTIFFS 00000423-426. The Examiner, however, found that Sundahl did not teach that the insert is shock absorbing, or that it is comprised of tubes arranged in a closely packed array. *Id.* at PLAINTIFFS 00000424. The Examiner instead found that Ferguson teaches a similar configuration that is shock absorbing and comprised of honeycomb material. Id. The Examiner also stated that "[i]t 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 including an impact absorbing insert comprised of open tubes since doing so would give rise to a more comfortable and protective versatile insert while also being light weight and maintaining the benefits of allowing for ventilation and dissipation of body heat and moisture." Id. at 424-425. The Examiner stated that "the device of the combined references has met the structure limitations of the [pending application] claim [1], and would therefore be expected to be capable of performing the intended use claimed, e.g. allowing air to flow into the exterior ends of the tubes from an outside of the helmet, through the tubes, and exit out the interior ends of the tubes toward an interior of the helmet." Id. at 425.

On March 8, 2018, counsel for Smith argued to the USPTO that application claim 1, as amended by the Inventors, recited "a shock absorbing insert received within the

cavity such that the shock absorbing insert substantially fills the cavity and such that a first portion of the shock absorbing insert spans at least a portion of the first vent and a second portion of the shock absorbing insert spans at least a portion of the second vent," "wherein the shock absorbing insert is formed of tubes arranged in a packed array, each of the tubes extending longitudinally across a thickness of the shock absorbing liner and having a first end positioned proximate an exterior side of the helmet and a second end positioned proximate an interior side of the helmet," and "wherein the first and second ends of a plurality of tubes of the array defining the first and second portions of the shock absorbing insert are unblocked and aligned with at least one of the first or second vents to allow air to flow into the first ends of the plurality of tubes from an outside of the helmet, through the plurality of tubes, and exit out the second ends of the plurality of tubes toward an interior of the helmet." *Id.* at 470.

Counsel for Smith further argued that this "combination of features is not disclosed or suggested by the references of record." *Id.* Specifically, counsel for Smith argued that the prior art combination "would not include an arrangement 'wherein the first and second ends of a plurality of tubes of the array defining the first and second portions of the shock absorbing insert are unblocked and aligned with at least one of the first or second vents to allow air flow into the first ends of the plurality of tubes from an outside of the helmet, through the plurality of tubes, and exit out the second ends of the plurality of tubes toward an interior of the helmet." *Id.* at 470-471.

On April 27, 2018, after receiving Smith counsel's argument, the Examiner allowed the pending claims, including claim 1. Id. at 486, 490. Claim 1 would not have issued if

the Examiner had been informed that the claimed limitations, including the alignment of the vents and shock absorbing insert, were disclosed in the prior art.

#### B. The Koroyd-Protos Helmet

On April 12, 2013, Koroyd uploaded a video entitled "Protos Integral Helmet Featuring Koroyd" to Vimeo by ("the 2013 Protos Video"). The video opens with a depiction of a deconstructed Protos Integral helmet showing the Koroyd insert which rests in the crown of the helmet. *See* <u>https://vimeo.com/63892011</u>. Rear vents can be seen in the outside shell of the Protos Integral helmet. *See id.* at 0:14-0:15; 0:42-0:43. The Koroyd insert installed in the crown of the Protos Integral helmet can also be seen in the video. *See id.* at 0:51-0:53. The marketing video expressly advertises that Koroyd® "allows air to freely flow out of the helmet." *Id.* at 1:11.

The Protos Integral helmet launched no later than April 15, 2013 at the Bauma 2013 trade show in Munich, Germany. The Protos Integral helmet was lined with Koroyd® material and included vents on the outer shell of the helmet. See https://www.facebook.com/koroydcore/photos/ms.c.eJwzNjc3MzA1MrA0MDK0MDLWM 4bwjSF8AwBkSAY9.bps.a.377604799021864/377605209021823/. While the Protos Integral Helmet was displayed and demonstrated at the Bauma 2013 trade show, Protos also represented on its website that it had sold and shipped the first Protos Integral Helmets as early as November 2012. BURTON-0001137 - BURTON-0001223.

The Protos Integral Helmet and the 2013 Protos Video both disclose the combination of Koroyd® shock absorbing insert and a vented helmet, which was a point of novelty as detailed above in the prosecution and allowance of the '373 patent.

The Protos Integral Helmet and the 2013 Protos Video are prior art to the '373 patent under 35 U.S.C. § 102(a)(1). The Protos Integral Helmet and the 2013 Protos Video does not qualify for the exceptions under 35 U.S.C. § 102(b)(1) as the subject matter is distinct from that disclosed in the claims. Upon information and belief, at least Koroyd and Messrs. Lloyd, Rogers, and Storey were aware of the Protos Integral Helmet or 2013 Protos Video and yet failed to disclose the Protos Integral Helmet or 2013 Protos Video to the USPTO. Claim 1 of the '373 patent would not have been allowed to issue if the Examiner had been aware of the 2013 Protos Video. The 2013 Protos Video is material to the patentability of at least claim 1 of the '373 patent. The 2013 Protos Video is not cumulative of the prior art of record.

Date: January 26, 2022

/s/ Michael A. Albert

Michael A. Albert malbert@wolfgreenfield.com John L. Strand jstrand@wolfgreenfield.com Bryan S. Conley bconley@wolfgreenfield.com Marie A. McKiernan mmckiernan@wolfgreenfield.com Claire E. Schuster cschuster@wolfgreenfield.com WOLF, GREENFIELD & SACKS, P.C. 600 Atlantic Avenue Boston, MA 02210 Telephone: 617.646.8000

Robert R. Brunelli rbrunelli@sheridanross.com Scott R. Bialecki sbialecki@sheridanross.com SHERIDAN ROSS P.C. 1560 Broadway, Suite 1200 Denver, Colorado 80202-5141 Telephone: 303.863.9700

Attorneys for Defendant The Burton Corporation

## **CERTIFICATE OF SERVICE**

I hereby certify that on January 26, 2022, I caused Burton's Invalidity

Contentions to be emailed to the following counsel of record:

Gregory S. Tamkin Maral J. Shoaei DORSEY & WHITNEY LLP 1400 Wewatta Street, Suite 400 Denver, Colorado 80202-5549 Telephone: (303) 629-3400 E-mail: tamkin.greg@dorsey.com shoaei.maral@dorsey.com

Mark A. Miller Brett L. Foster Elliot D. Hales 111 S. Main St., Suite 2100 Salt Lake City, Utah 84111 Telephone: (801) 933-7360 E-mail: miller.mark@dorsey.com foster.brett@dorsey.com hales.elliot@dorsey.com

Erin Kolter 701 Fifth Avenue, Suite 6100 Seattle, Washington 98104 Telephone: (206) 903-8800 E-mail: kolter.erin@dorsey.com

> <u>/s/ Michael A. Albert</u> Michael A. Albert

# **EXHIBIT** A

IPR2022-00354 Burton v. Smith Sports Optics Smith Sport's Exhibit 2009, page 24

# Exhibit A Burton's Invalidity Contentions U.S. Patent Application Publication No. 2004/0064873 ("Muskovitz")

Muskovitz was published in the United States no later than April 8, 2004 and qualifies as prior art to U.S. Patent No. 10,736,373 ("373 Patent") at least under post-AIA 35 U.S.C. § 102(a)(1) and anticipates, and alone or with other references, renders obvious one or more of claims 1, 2, 3, and 7. To the extent Muskovitz does not disclose one or more limitations of the claims, it would have been obvious to combine the teachings of Muskovitz with the knowledge of one of ordinary skill in the art and with one or more of the references below to render the claims at issue in the '373 patent invalid.

- U.S. Pat. App. Pub. No. 2008/0307568 ("Sajic")<sup>1</sup>
- U.S. Pat. No. 4,422,183 ("Landi")
- The FOX Striker Helmet
- The Protos Integral Helmet

To the extent that these Invalidity Contentions rely on or otherwise embody particular constructions of terms or phrases in the Asserted Claims, Burton is not proposing any such constructions as proper constructions of those terms or phrases. Various positions put forth in this document are predicated on Smith's incorrect and overly broad interpretation of its claims as evidenced by its infringement contentions. Those positions are not intended to and do not necessarily reflect Burton's interpretation of the true and proper scope of the Asserted Claims.

'373 Asserted Claims	Prior Art Disclosures
1[PRE]: A helmet,	To the extent the preamble is limiting, Muskovitz, alone or in combination with other
comprising:	references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet recited
	in claim 1. For example:

<sup>&</sup>lt;sup>1</sup> Burton reserves the right to rely on the combination of Muskovitz and Sajic, as articulated and described in the Petition filed with IPR-2022-00354, in the event the IPR is not instituted.

'373 Asserted Claims	Prior Art Disclosures
	Abstract ("The present invention provides a lightweight protective helmet having an improved ventilation system therein.").
	[0068] ("The present invention features a protective helmet and improved ventilation control system. In the preferred embodiment, and preferably throughout each of the alternative embodiments discussed and described herein, the protective helmet comprises an inner liner joined to an outer shell. The inner liner may be bonded or molded to the outer shell to create a shell/liner composite. The inner liner is constructed or manufactured from impact absorbing material and provides the helmet its impact attenuation properties, which are designed to protect the wearer of the helmet from potentially dangerous impacts or blows to the head.").
	[0075] ("FIGS. 1-9 show several variations of a first, preferred, embodiment of protective helmet 10. Specifically, FIG. 1 shows protective helmet 10 having a plurality of ventilation ports 6. Ventilation ports 6 are designed to facilitate ambient air flow into and out of the interior of protective helmet 10, and are shown as apertures that extend from the outer shell 4 through and into the interior of protective helmet 10. Protective helmet 10 is comprised of an outer shell 4 and an inner liner 18. Also shown is fluid airflow actuator 12 that is slidably coupled to protective helmet 10 and specifically outer shell 4 wherein fluid airflow actuator 12 is capable of sliding in a bidirectional manner along slotted portion 14. Slotted portion 14 therefore serves as a guide to fluid airflow actuator 12. As will be discussed in greater detail below, fluid airflow actuator 12 displaces, such that ventilation or air flow through ventilation ports 6 may be modified and controlled by the user. Air flow may be total, partial, or blocked. In its current position, as shown in FIG. 1, fluid airflow actuator 12 in a downward direction, the ambient air flow is blocked from entering ventilation port 6 using a vent shield, which is not shown in FIG. 1, but is described below. Attachment points or rivets 16 are also shown in FIG. 1 and are used to attach straps

'373 Asserted Claims	Prior Art Disclosures
	or other accessory items to protective helmet 10. Finally, FIG. 1 also shows a series of vent ports 6 positioned along the rear of helmet 10. These vent ports may serve as either intake or exhaust ports to allow air flow in and out of the interior of helmet 10 to cool the individual or to allow air and heat from the interior to escape, thus creating an increased efficiency cooling system.").
	Figs. 1-9.
	FIG. 7
1[A]: a shell comprising a plurality of vents including a first vent	Muskovitz, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shell comprising a plurality of vents including a first

'373 Asserted Claims	Prior Art Disclosures
defining a first opening and a second vent defining a second	vent defining a first opening and a second vent defining a second opening recited in claim 1. For example:
opening;	Muskovitz discloses a shell comprising a plurality of vents including a first vent defining a first opening and a second vent defining a second opening.
	Figs. 1, 7.
	[0075] ("FIG. 1 shows protective helmet 10 having a plurality of ventilation ports 6. Ventilation ports 6 are designed to facilitate ambient air flow into and out of the interior of protective helmet 10, and are shown as apertures that extend from the outer shell 4 through and into the interior of protective helmet 10.").
	[0076] ("FIG. 2 shows a front view of protective helmet 10 and depicts the preferred embodiment of the present invention wherein ventilation ports 6 facilitate ambient air flow to the interior of protective helmet 10 through only the two front facing ventilation

'373 Asserted Claims	Prior Art Disclosures
	ports 6. Although the preferred embodiment includes a ventilation system that allows the user to only modify the air flow through the front facing ventilation port 6, this is not meant to be limiting in any way, as the ventilation system of the present invention may be designed to modify or adjust air flow through any or all of ventilation ports 6 incorporated within protective helmet 10.").
	[0084] ("FIG. 7 illustrates another yet another configuration of this first embodiment of protective helmet 10, in which helmet 10 has a single actuator 12 that controls the flow of ambient air into two front vent ports 6.").
	[0098] ("FIGS. 14-A to 14-B are illustrative of a fourth, alternative, embodiment of the protective helmet of the present invention. Referring to FIG. 14-A, the present invention features the shell/liner composite protective helmet 10 having an exterior ventilation system 80 comprising various types of interchangeable insert members 84. In this embodiment, protective helmet 10 is similar to the helmet of the first embodiment, described above, where it comprises the shell/liner composite, with no second shell, and one or more ventilation ports 6 positioned or spaced at various locations therein (to allow ambient air to enter the interior of the helmet if desired). In this preferred embodiment, vent port 6 is located in an internal recessed portion 88 of shell/liner composite portion of protective helmet 10, wherein interchangeable insert member 84 is designed to fit. Interchangeable insert member 84 may comprise a self contained ventilation system (an active vent system), or a passive ventilation system, which is simply the vent port and no insert member, or an insert member that cuts off ambient airflow from entering the interior of the protective helmet altogether (a plug, or stopper insert member).").
	[0100] ("Interchangeable insert member 84 is designed and formed to fit within recessed portion 88 of protective helmet 10 and to interact with at least one vent port 6. Once self-contained ventilation system (or interchangeable insert member) 84 is

'373 Asserted Claims	Prior Art Disclosures
	inserted into recessed portion 88 of protective helmet 10, or coupled thereto if no recessed portion is used, an individual may control the amount of ambient airflow into the interior of the helmet by activating actuator 12, and displacing vent shield 20 relative to vent port 6. Specifically, in an open position, vent shield 20 is displaced such that ambient air may pass through aperture 108 in upper plate member 24, and aperture 112 in lower plate member 26, and subsequently through vent port 6 and into the interior of helmet 10. In a closed position, vent shield 20 is displaced such that ambient air is not allowed to flow through into the interior of protective helmet 10. Vent shield 20 may also be partially displaced, thus allowing variable amounts of ambient air into the interior of helmet 10 depending upon the desire of the wearer.
	Simply stated, vent port 6 may be open, closed, or partially open to ambient air depending upon the relative position of vent shield 20 with respect to vent port 6.").
	FIG. 7

'373 Asserted Claims	Prior Art Disclosures
	<ul> <li>To the extent this element is not explicitly disclosed by Muskovitz, it is disclosed by:</li> <li>FOX Striker Helmet (Ex. D), Element 1[A]</li> <li>Protos Integral Helmet (Ex. E), Element 1[A]</li> <li>A POSA would also have been motivated to combine the teachings of Muskovitz with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the FOX Striker Helmet or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Muskovitz with the layered materials found in the FOX Striker Helmet or the Protos Integral Helmet or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.</li> </ul>
1[B]: 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	Muskovitz, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the plurality of vents recited in claim 1. For example: Muskovitz discloses a shock absorbing liner (red, below) adjacent to and attached to the shell (light blue, below) and comprising a cavity (circled in purple, below) at least

'373 Asserted Claims	Prior Art Disclosures
	partially aligned with the plurality of vents (gap shown in shell and liner, below. where 28 and 24 are pointing).
	Fig. 10. [0023] ("The ventilation system comprises a vent space defined by a vent box containing a vent shield that is attached to a fluid airflow actuator located on the outside of the outer shell via an elongated member. The vent box is formed to provide a volume of space wherein the vent shield may reside, thus allowing the vent shield to displace within the vent box. It should be noted, although one ordinarily skilled in the art will most likely recognize this as obvious, that the vent shield in each of the embodiments described herein may be designed to displace in various ways, such as by sliding, rotating, elevating, pivoting, or in any other known way. However, in this preferred embodiment, the vent shield displaces in a bi-directional sliding manner within the vent box. Also located on the vent box is a slotted portion that

'373 Asserted Claims	Prior Art Disclosures
	provides a guide for the elongated member to slide within. The slotted portion of the vent box corresponds to and is directionally positioned or aligned with a matching slotted portion located on the outer shell. In essence, the fluid airflow actuator, as attached to the outer shell, is capable of sliding bi-directionally within the slotted portion existing on the outer shell, which in turn causes the coupled vent shield to slide in a bi-directional manner within the vent box. Specifically, as the fluid airflow actuator to the vent shield causes the vent shield to slide or displace accordingly along the slotted portion of the vent box. As one or a plurality of apertures or ventilation ports may exist within the outer shell, displacement of the vent shield functions to open, close, or partially close off the ventilation ports, and the resulting interior portion of the protective helmet, to the ambient air. In one embodiment, the protective helmet contains a plurality of ventilation ports, wherein two ports located in the front of the protective helmet serve as active vents and are the only ventilation ports modifiable via above described ventilation system.").
	[0067] ("The presently preferred embodiments of the invention will be best understood by reference to the drawings wherein like parts are designated by like numerals throughout.").
	[0068] ("The present invention features a protective helmet and improved ventilation control system. In the preferred embodiment, and preferably throughout each of the alternative embodiments discussed and described herein, the protective helmet comprises an inner liner joined to an outer shell. The inner liner may be bonded or molded to the outer shell to create a shell/liner composite. The inner liner is constructed or manufactured from impact absorbing material and provides the helmet its impact attenuation properties, which are designed to protect the wearer of the helmet from potentially dangerous impacts or blows to the head.").

'373 Asserted Claims	Prior Art Disclosures
	[0076] ("FIG. 2 shows a front view of protective helmet 10 and depicts the preferred embodiment of the present invention wherein ventilation ports 6 facilitate ambient air flow to the interior of protective helmet 10 through only the two front facing ventilation ports 6. Although the preferred embodiment includes a ventilation system that allows the user to only modify the air flow through the front facing ventilation port 6, this is not meant to be limiting in any way, as the ventilation system of the present invention may be designed to modify or adjust air flow through any or all of ventilation ports 6 incorporated within protective helmet 10.").
	[0078] ("FIGS. 4 and 5 serve to illustrate the relationship between each of the components that make up protective helmet 10. FIG. 4 shows vent box 22 comprising an upper portion and a lower portion defining vent space 28. Vent box 22, and particularly upper portion, is also shown having a slotted portion 40 therein that is to be positioned and aligned with slotted portion 14 located in outer shell 4, such that elongated member 42, which is attached to vent shield 20, may slide in a bi-directional manner within each respective slotted portion, thereby causing vent shield 20 to displace accordingly. Elongated member 42 has opposing ends. A first end is attached to vent shield 20 and a second end is attached to fluid airflow actuator 12. It should be noted that elongated member 42 and actuator 12 may be a single integrated piece rather than separate components, or elongated member 42, actuator 12, and vent shield 20 may also be a single integrated or formed piece.").
	raise vent shield 20 over ventilation port 6 as desired. Ventilation port 6 may be totally covered by vent shield 20, or partially or totally uncovered thereby allowing ambient air to flow through ventilation port 6 into the interior of protective helmet 10.").

'373 Asserted Claims	Prior Art Disclosures
	[0081] ("The present invention features ventilation systems integrated into an in- molded protective helmet. To form protective helmet 10 according to the present invention, outer shell 4 is obtained and inner liner 18 is molded or bonded directly to outer shell 4, a process know as inmolding, meaning the outer shell is joined to the inner protective liner using a molding or bonding process, such that the two are not each first individually created, and later assembled together, but rather each are joined together initially as part of the same manufacturing process. Inner liner 18 comprises impact absorbing material serving as the protective element for protective helmet 10. In one embodiment, prior to molding inner liner 18 directly to outer shell 4, vent box 22 and vent space 28 is created to contain or house vent shield 20 therein. As stated, to form vent box 22, upper member 24 is formed with lower member 26 to create and define volume of space 28. Upper member 24 and lower member 26 may be planar (e.g. flat) or designed with varying radius' of curvature. In any event, upper member 24 and lower member 26 are to be formed, such that a volume of space 28 is created in which vent shield 20 may be housed. However, prior to attachment of upper member 24 to lower member 26, vent box 22, is situated therein such that vent shield 20 may displace, preferably in a bi-directional sliding manner, within vent box 22.").
	[0087] ("Protective helmet 10 comprises outer shell 4 joined (molded or bonded) to liner 18 Specifically, FIG. 10 depicts protective helmet 10 having a vent space 28 defined by a portion of impact absorbing inner liner 18 being removed to form a recess therein, such that inner liner 18 forms the upper boundary of vent space 28.").
	[0088] ("As shown, removable insert 26 comprises a similar shape as the recess portion of inner liner 18, such that removable insert 26 may fit within inner liner 18 to form an integrated whole. However, removable insert 26 is not sized to fill the entire recessed portion of inner liner 18 in order to allow for and provide for the creation of vent space 28. As such, removable insert 26 forms the lower boundary of vent space

'373 Asserted Claims	Prior Art Disclosures
	28. As removable insert 26 is fit within the recess of and coupled to inner liner 18, vent space 28 is created.").
	[0119] ("The protective helmet of the present invention may be composed of expanded polystyrene foam (EPS) as a helmet liner to meet the impact attenuation safety requirements. The popularity of EPS as a protective helmet or helmet liner is due to a combination of multiple factors, including its impact attenuation capability, low cost, ease of manufacturing and light weight. However, EPS has a number of drawbacks as a protective helmet liner as well. The mechanism of impact attenuation exhibited by EPS, while highly effective, causes permanent and irreversible damage to the EPS material. The EPS material does not recover significantly after a serious impact, so that repeated impacts at the same location on the helmet do not receive the same degree of impact attenuation.").
	To the extent this element is not explicitly disclosed by Muskovitz, it is disclosed by:
	<ul> <li>Sajic (Ex. B), Element 1[B]</li> <li>FOX Striker Helmet (Ex. D), Element 1[B]</li> </ul>
	A POSA would also have been motivated to combine the teachings of Muskovitz with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Sajic, or the FOX Striker Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Muskovitz with the layered materials found in Sajic, or the FOX Striker Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so,
Prior Art Disclosures	
---	
east because the references use known variations of existing technology to solve routine d well understood problems in predictable ways.	
skovitz, alone or in combination with other references identified in this chart or elsewhere Burton's invalidity contentions, and further in light of the knowledge of a person of inary skill in the art, discloses the shock absorbing insert positioned in and substantially ng the cavity such that the shock absorbing insert is visible through and spans across at st a portion of each of the plurality of vents recited in claim 1. For example: Muskovitz (particularly, Figure 10, annotated below) discloses a shock absorbing insert (green) positioned in and substantially filling the cavity (circled in purple) such that the shock absorbing insert is visible through and spans across at least a portion of each of the plurality of vents (gap below, where 28 and 24 are pointing).	
k s 3 ii	

'373 Asserted Claims	Prior Art Disclosures
	22, and particularly upper portion, is also shown having a slotted portion 40 therein that is to be positioned and aligned with slotted portion 14 located in outer shell 4, such that elongated member 42, which is attached to vent shield 20, may slide in a bi-directional manner within each respective slotted portion, thereby causing vent shield 20 to displace accordingly. Elongated member 42 has opposing ends. A first end is attached to vent shield 20 and a second end is attached to fluid airflow actuator 12. It should be noted that elongated member 42 and actuator 12 may be a single integrated piece rather than separate components, or elongated member 42, actuator 12, and vent shield 20 may also be a single integrated or formed piece.").
	[0079] ("Upon displacing fluid airflow actuator 12, vent shield 20 is also thereby caused to displace. This action allows the user of protective helmet 10 to lower or raise vent shield 20 over ventilation port 6 as desired. Ventilation port 6 may be totally covered by vent shield 20, or partially or totally uncovered thereby allowing ambient air to flow through ventilation port 6 into the interior of protective helmet 10.").
	[0087] ("Removable insert member 26 is designed to fit within the recess in liner 18 as indicated by the arrows, but insert member 26 is also removable, thus allowing the user to place or displace insert member 26 as desired. Insert member 26 is comprised of a similar size and shape as the recess formed within liner 18 that receives insert member therein to enclose vent shield 20 and define vent space 28.").
	[0088] ("As shown, removable insert 26 comprises a similar shape as the recess portion of inner liner 18, such that removable insert 26 may fit within inner liner 18 to form an integrated whole. However, removable insert 26 is not sized to fill the entire recessed portion of inner liner 18 in order to allow for and provide for the creation of vent space 28. As such, removable insert 26 forms the lower boundary of vent space 28. As removable insert 26 is fit within the recess of and coupled to inner liner 18, vent space 28 is created.").

'373 Asserted Claims	Prior Art Disclosures
	[0089] ("Other embodiments are also contemplated wherein vent space 28 may created or defined by any layer of the protective helmet, thus, not necessarily having to comprise a separate and independently created vent box as in the first embodiment described above. For example, vent space 28 may be created and defined using one or more of the layers or component parts of the protective helmet, such as entirely defining vent space 28 with inner liner 18, wherein a space is made by providing opposing recessed sections entirely encased or enclosed within inner liner 18. In this situation, inner liner 18 would comprise both the upper boundary and the lower boundary of vent space 28, such that vent space 28 is essentially a pocket of space or volume of space existing within inner liner 18. In this version, vent shield 20 would most likely be inserted during the molding phase of manufacture."). [0106] ("As a variation to this embodiment, protective helmet 10 could be manufactured where no recess exists in the shell/liner composite. In this case, upper plate 24 is coupled to shell 4 of protective helmet 10, which still serves as the lower plate to vent box 22. In this variation, the profile of helmet 10 would not be as clean and smooth as the vent system would protrude a distance from the rest of the shell.").
	[0107] ("In addition, and also similar to the previous third embodiment, ventilation system 80 can be attached to protective helmet 10 using any known means in the art.").
	[0117] ("In this embodiment, self-contained ventilation system 158 comprises at least one releasable attachment point 146, and at least one secure attachment point 150. This allows ventilation system 80 to swivel, rotate, and/or retract a substantial distance from recessed portion 88, thus leaving vent port 6 open to ambient air. When ventilation system 80 is detached from helmet 10 via its releasable attachment

'373 Asserted Claims	Prior Art Disclosures
	point, it may be secured to or positioned at another part of shell 4 of protective helmet 10 by reattaching that point 146 to a second attachment point 154. FIG. 22-B shows how ventilation system 158 may be rotated back and secured at second attachment point 154. When ventilation system 80 is repositioned to this point, vent port 6 is reduced to a passive vent. Alternatively, a stopper insert member may be placed in ventilation port to block airflow altogether when the ventilation system is relocated or moved to this second point. The advantage of this embodiment is that ventilation system 80 is not completely removed from helmet 10, but is rather relocated while still being coupled to helmet 10. As such, the wearer does not have to carry the released ventilation system, but can better keep track of its whereabouts as it is never removed from the protective helmet. The means used to release and attach ventilation system to helmet 10 at its various points may comprise any known means in the art. In FIG. 22, snaps are used.").
	Fig. 7: "in this embodiment, the recessed portion of the shell/liner composite is designed to serve as the lower plate or member of a vent box of the ventilation system. In this embodiment, an upper plate or member, preferably having similar dimensions as the recessed portion, is designed to couple to the recessed portion. Preferably the upper plate is designed to fit within the recessed portion. In addition, the upper plate is used in conjunction with the portion of the outer shell located within the recessed portion of the bonded shell/layer to create a vent box and a resulting vent space, or it is used in conjunction with a portion of the inner liner that may be exposed within the recessed portion to create a vent box and the resulting vent space."

'373 Asserted Claims	Prior Art Disclosures
	FIG. 7
	To the extent this element is not explicitly disclosed by Muskovitz, it is disclosed by:
	<ul> <li>Sajic (Ex. B), Element 1[C]</li> <li>Landi (Ex. C), Element 1[C]</li> <li>Protos Integral Helmet (Ex. E), Element 1[C]</li> </ul>
	A POSA would also have been motivated to combine the teachings of Muskovitz with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Sajic, Landi, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Muskovitz with the layered

'373 Asserted Claims	Prior Art Disclosures
	materials found in Sajic, Landi, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C1]: wherein at least a portion of the shock absorbing liner is positioned between the shell and the shock absorbing insert,	Muskovitz, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert wherein at least a portion of the shock absorbing liner is positioned between the shell and the shock absorbing insert recited in claim 1. For example: Muskovitz discloses that at least a portion of the shock absorbing liner (red, below) is positioned between the shell (light blue, below) and the shock absorbing insert (green, below).



'373 Asserted Claims	Prior Art Disclosures
	form an integrated whole. However, removable insert 26 is not sized to fill the entire recessed portion of inner liner 18 in order to allow for and provide for the creation of vent space 28. As such, removable insert 26 forms the lower boundary of vent space 28. As removable insert 26 is fit within the recess of and coupled to inner liner 18, vent space 28 is created.").
	To the extent this element is not explicitly disclosed by Muskovitz, it is disclosed by:
	<ul> <li>Sajic (Ex. B), Element 1[C1]</li> <li>FOX Striker Helmet (Ex. D), Element 1[C1]</li> </ul>
	A POSA would also have been motivated to combine the teachings of Muskovitz with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Sajic, or the FOX Striker Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Muskovitz with the layered materials found in Sajic, or the FOX Striker Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C2]: wherein the shock absorbing insert comprises an array of energy absorbing cells, each having respective	Muskovitz, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert wherein the shock absorbing insert comprises an array of energy absorbing cells, each having respective open first longitudinal ends and open second longitudinal ends recited in claim 1. For example:

'373 Asserted Claims	Prior Art Disclosures
open first longitudinal ends and open second longitudinal ends,	[0087] ("Insert member 26 may comprise various material compositions, but is preferably the same or a similar impact absorbing material as liner 18.").
	To the extent this element is not explicitly disclosed by Muskovitz, it is disclosed by:
	<ul> <li>Sajic (Ex. B), Element 1[C2]</li> <li>Landi (Ex. C), Element 1[C2]</li> <li>FOX Striker Helmet (Ex. D), Element 1[C2]</li> <li>Protos Integral Helmet (Ex. E), Element 1[C2]</li> </ul>
	A POSA would also have been motivated to combine the teachings of Muskovitz with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Sajic, Landi, the FOX Striker Helmet, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Muskovitz with the layered materials found in Sajic, Landi, the FOX Striker Helmet, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C3]: wherein the first longitudinal ends of a first plurality of adjacent cells	Muskovitz, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert wherein the first longitudinal

'373 Asserted Claims	Prior Art Disclosures
of the array of energy	ends of a first plurality of adjacent cells of the array of energy absorbing cells are positioned
absorbing cells are	within a perimeter of the first opening and the first longitudinal ends of a second plurality of
positioned within a	adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the
perimeter of the first	second opening such that air is able to flow from an exterior side of the helmet through each
opening and the first	of the first and second vents and through a respective one of the first and second plurality of
longitudinal ends of a	adjacent cells toward an interior of the helmet recited in claim 1. For example:
second plurality of	
adjacent cells of the	[0075] ("FIGS. 1-9 show several variations of a first, preferred, embodiment of
array of energy	protective helmet 10. Specifically, FIG. 1 shows protective helmet 10 having a
absorbing cells are	plurality of ventilation ports 6. Ventilation ports 6 are designed to facilitate ambient air
positioned within a	flow into and out of the interior of protective helmet 10, and are shown as apertures
perimeter of the second	that extend from the outer shell 4 through and into the interior of protective helmet
opening such that air is	10. Protective helmet 10 is comprised of an outer shell 4 and an inner liner 18. Also
able to flow from an	shown is fluid airflow actuator 12 that is slidably coupled to protective helmet 10 and
exterior side of the	specifically outer shell 4 wherein fluid airflow actuator 12 is capable of sliding in a bi-
helmet through each of	directional manner along slotted portion 14. Slotted portion 14 therefore serves as a
the first and second	guide to fluid airflow actuator 12. As will be discussed in greater detail below, fluid
vents and through a	airflow actuator 12 displaces, such that ventilation or air flow through ventilation ports
respective one of the first	6 may be modified and controlled by the user. Air flow may be total, partial, or
and second plurality of	blocked. In its current position, as shown in FIG. 1, fluid airflow actuator 12 allows
adjacent cells toward an	ambient air to flow through ventilation port 6. Upon displacing fluid airflow actuator 12
interior of the helmet.	in a downward direction, the ambient air flow is blocked from entering ventilation port
	6 using a vent shield, which is not shown in FIG. 1, but is described below.
	Attachment points or rivets 16 are also shown in FIG. 1 and are used to attach straps
	or other accessory items to protective helmet 10. Finally, FIG. 1 also shows a series
	of vent ports 6 positioned along the rear of helmet 10. These vent ports may serve as
	either intake or exhaust ports to allow air flow in and out of the interior of helmet 10 to cool the individual or to allow air and heat from the interior to escape, thus creating
	an increased efficiency cooling system.").
	an increased enforcing system. j.

'373 Asserted Claims	Prior Art Disclosures
	[0079] ("Upon displacing fluid airflow actuator 12, vent shield 20 is also thereby caused to displace. This action allows the user of protective helmet 10 to lower or raise vent shield 20 over ventilation port 6 as desired. Ventilation port 6 may be totally covered by vent shield 20, or partially or totally uncovered thereby allowing ambient air to flow through ventilation port 6 into the interior of protective helmet 10.").
	[0080] ("FIG. 5 illustrates a cut away side view of another exemplary embodiment of the protective helmet and integrated ventilation system, wherein the vent space is located between the outer shell and the inner liner. In this embodiment, vent box 22 and associated vent space 28 is comprised of an upper member 24 and a lower member 26 embedded within a recess in an outer portion of liner 18 beneath outer shell 4. Upper and lower members 24 and 26 define the upper and lower surface or boundary of the vent box 22 and vent space 28, respectively. FIG. 5-B further shows vent shield 20 as it is encased within vent box 22 and vent space 28 that results from attaching upper member or plate 24 to lower member or plate 26. As mentioned above, vent shield 20 is able to slide or displace in bi-directional, circular, or other manner within vent box 22. As it does, vent shield 20 either covers, uncovers, or partially covers ventilation ports 6 to control the flow of ambient air into the interior of protective helmet 10.").
	[0087] ("FIG. 10 illustrates a second, alternative embodiment of the protective helmet of the present invention. Protective helmet 10 comprises outer shell 4 joined (molded or bonded) to liner 18. In this embodiment, it is contemplated that vent space 28 may be created within the component parts of protective helmet 10. Specifically, FIG. 10 depicts protective helmet 10 having a vent space 28 defined by a portion of impact absorbing inner liner 18 being removed to form a recess therein, such that inner liner 18 forms the upper boundary of vent space 28. Removable insert member 26 is designed to fit within the recess in liner 18 as indicated by the arrows, but insert member 26 is also removable, thus allowing the user to place or displace insert

'373 Asserted Claims	Prior Art Disclosures
	member 26 as desired. Insert member 26 is comprised of a similar size and shape as the recess formed within liner 18 that receives insert member therein to enclose vent shield 20 and define vent space 28. Insert member 26 may comprise various material compositions, but is preferably the same or a similar impact absorbing material as liner 18. Moreover, insert member 26 may be fittable within or attached to liner 18 using any known means in the art, such as an interference fit, a hook and loop fastening system, threaded members (screws or thumb screws), tongue and groove system, and others.").
	[0088] ("As shown, removable insert 26 comprises a similar shape as the recess portion of inner liner 18, such that removable insert 26 may fit within inner liner 18 to form an integrated whole. However, removable insert 26 is not sized to fill the entire recessed portion of inner liner 18 in order to allow for and provide for the creation of vent space 28. As such, removable insert 26 forms the lower boundary of vent space 28. As removable insert 26 is fit within the recess of and coupled to inner liner 18, vent space 28 is created.").
	[0098] ("FIGS. 14-A to 14-B are illustrative of a fourth, alternative, embodiment of the protective helmet of the present invention. Referring to FIG. 14-A, the present invention features the shell/liner composite protective helmet 10 having an exterior ventilation system 80 comprising various types of interchangeable insert members 84. In this embodiment, protective helmet 10 is similar to the helmet of the first embodiment, described above, where it comprises the shell/liner composite, with no second shell, and one or more ventilation ports 6 positioned or spaced at various locations therein (to allow ambient air to enter the interior of the helmet if desired). In this preferred embodiment, vent port 6 is located in an internal recessed portion 88 of shell/liner composite portion of protective helmet 10, wherein interchangeable insert member 84 is designed to fit. Interchangeable insert member 84 may comprise a self contained ventilation system (an active vent system), or a passive ventilation system, which is simply the vent port and no insert member, or an insert member that cuts off

'373 Asserted Claims	Prior Art Disclosures
	ambient airflow from entering the interior of the protective helmet altogether (a plug, or stopper insert member).").
	To the extent this element is not explicitly disclosed by Muskovitz, it is disclosed by:
	<ul> <li>Sajic (Ex. B), Element 1[C3]</li> <li>FOX Striker Helmet (Ex. D), Element 1[C3]</li> <li>Protos Integral Helmet (Ex. E), Element 1[C3]</li> </ul>
	A POSA would also have been motivated to combine the teachings of Muskovitz with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Sajic, the FOX Striker Helmet, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Muskovitz with the layered materials found in Sajic, the FOX Striker Helmet, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
2. The helmet of claim 1, wherein the shock absorbing liner is seamless.	Muskovitz, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet of claim 1, wherein the shock absorbing liner is seamless as recited in claim 2. For example:

'373 Asserted Claims	Prior Art Disclosures
	The images shown throughout Muskovitz show that the shock absorbing liner is seamless. Moreover, a POSA at the time of Muskovitz would have known that such a seamless liner would be advantageous as the introduction of a seam may create a failure point within a helmet.
	[0081] ("The present invention features ventilation systems integrated into an in- molded protective helmet. To form protective helmet 10 according to the present invention, outer shell 4 is obtained and inner liner 18 is molded or bonded directly to outer shell 4, a process know as inmolding, meaning the outer shell is joined to the inner protective liner using a molding or bonding process, such that the two are not each first individually created, and later assembled together, but rather each are joined together initially as part of the same manufacturing process. Inner liner 18 comprises impact absorbing material serving as the protective element for protective helmet 10. In one embodiment, prior to molding inner liner 18 directly to outer shell 4, vent box 22 and vent space 28 is created to contain or house vent shield 20 therein. As stated, to form vent box 22, upper member 24 is formed with lower member 26 to create and define volume of space 28. Upper member 24 and lower member 26 may be planar (e.g. flat) or designed with varying radius' of curvature. In any event, upper member 24 and lower member 26 are to be formed, such that a volume of space 28 is created in which vent shield 20 may be housed. However, prior to attachment of upper member 24 to lower member 26, vent box 22, is situated therein such that vent shield 20 may displace, preferably in a bi-directional sliding manner, within vent box 22.").
	[0082] ("Once vent box 22 is formed, it may be positioned either directly adjacent outer shell 4 or it may be offset a substantial distance from outer shell 4. Slotted portion 40 in vent box 22 is always to align with slotted portion 14 in outer shell 4, with elongated member 42 protruding therefrom. Upon positioning vent box 22, inner liner 18 is then molded or bonded directly to outer shell 4 such that vent box 22 is

'373 Asserted Claims	Prior Art Disclosures
	entirely encased within inner liner 18. As mentioned above, inner liner 18 is comprised of an impact resistant material, preferably a material that is capable of being molded directly to outer shell 4. One ordinarily skilled in the art will recognize and understand that inner liner 18 can consist of any suitable material that is capable of providing sufficient impact attenuation properties to protective helmet 10, as well as alternative ways to manufacture protective helmet 10 in order to bond or mold liner 18 to shell 4 and to create vent space 28.").
	To the extent this element is not explicitly disclosed by Muskovitz, it is disclosed by:
	<ul> <li>Sajic (Ex. B), Claim 2</li> <li>FOX Striker Helmet (Ex. D), Claim 2</li> </ul>
	A POSA would also have been motivated to combine the teachings of Muskovitz with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Sajic, or the FOX Striker Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Muskovitz with the layered materials found in Sajic, or the FOX Striker Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
3. The helmet of claim 1, wherein the array of energy absorbing cells of	Muskovitz, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet of claim 1, wherein the array of energy

'373 Asserted Claims	Prior Art Disclosures
the shock absorbing insert comprises an array of tubes.	absorbing cells of the shock absorbing insert comprises an array of tubes as recited in claim 3. For example:
	Muskovitz discloses a shock absorbing insert and the insert could be made of an array of tubes.
	[0087] ("Insert member 26 may comprise various material compositions, but is preferably the same or a similar impact absorbing material as liner 18.").
	To the extent this element is not explicitly disclosed by Muskovitz, it is disclosed by:
	<ul> <li>Sajic (Ex. B), Claim 3</li> <li>Landi (Ex. C), Claim 3</li> <li>FOX Striker Helmet (Ex. D), Claim 3</li> <li>Protos Integral Helmet (Ex. E), Claim 3</li> </ul>
	A POSA would also have been motivated to combine the teachings of Muskovitz with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Sajic, Landi, the FOX Striker Helmet, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Muskovitz with the layered materials found in Sajic, Landi, the FOX Striker Helmet, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the various elements. As another example, one of skill in the various elements. As another example, one of skill in the various elements. As another example, one of skill in the various elements. As another example, one of skill in the various elements. As another example, one of skill in the art would find the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least

'373 Asserted Claims	Prior Art Disclosures
	because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
7. The helmet of claim 1, wherein the shock absorbing insert extends to a portion of the helmet configured to he [sic] positioned at a back of a wearer's head.	Muskovitz, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet of claim 1, wherein the shock absorbing insert extends to a portion of the helmet configured to he [sic] positioned at a back of a wearer's head as recited in claim 7. For example:
	Muskovitz provides examples of helmets with vents at various places on the helmets, including extending to the back of the wearer's head. Muskovitz further never limits where the arrangement with the insert shown in Fig. 10 could be placed on a helmet, and a POSA would understand Muskovitz to disclose that such an arrangement could be used with a vent positioned at the back of the helmet, resulting in the shock absorbing insert extending to a portion of the helmet configured to be positioned at the back of a wearer's head.
	[0066] ("It will be readily understood that the components of the present invention, as generally described and illustrated in the figures herein, could be arranged and designed in a wide variety of different configurations. Thus, the following more detailed description of the embodiments of the system and method of the present invention, and represented in FIGS. 1 through 22-B, is not intended to limit the scope of the invention, as claimed, but is merely representative of the presently preferred embodiments of the invention.").
	[0075] ("FIGS. 1-9 show several variations of a first, preferred, embodiment of protective helmet 10. Specifically, FIG. 1 shows protective helmet 10 having a plurality of ventilation ports 6. Ventilation ports 6 are designed to facilitate ambient air flow into and out of the interior of protective helmet 10, and are shown as apertures that extend from the outer shell 4 through and into the interior of protective helmet

10. Protective helmet 10 is comprised of an outer shell 4 and an inner liner 18. Also
<ul> <li>shown is fluid airflow actuator 12 that is slidably coupled to protective helmet 10 and specifically outer shell 4 wherein fluid airflow actuator 12 is capable of sliding in a bidirectional manner along slotted portion 14. Slotted portion 14 therefore serves as a guide to fluid airflow actuator 12. As will be discussed in greater detail below, fluid airflow actuator 12 displaces, such that ventilation or air flow through ventilation ports 6 may be modified and controlled by the user. Air flow may be total, partial, or blocked. In its current position, as shown in FIG. 1, fluid airflow actuator 12 allows ambient air to flow through ventilation port 6. Upon displacing fluid airflow actuator 12 in a downward direction, the ambient air flow is blocked from entering ventilation port 6 using a vent shield, which is not shown in FIG. 1, but is described below.</li> <li>Attachment points or rivets 16 are also shown in FIG. 1 and are used to attach straps or other accessory items to protective helmet 10. Finally, FIG. 1 also shows a series of vent ports 6 positioned along the rear of helmet 10. These vent ports may serve as either intake or exhaust ports to allow air flow in and out of the interior of helmet 10 to cool the individual or to allow air and heat from the interior to escape, thus creating</li> </ul>
<ul> <li>an increased efficiency cooling system.").</li> <li>[0076] ("FIG. 2 shows a front view of protective helmet 10 and depicts the preferred embodiment of the present invention wherein ventilation ports 6 facilitate ambient air flow to the interior of protective helmet 10 through only the two front facing ventilation ports 6. Although the preferred embodiment includes a ventilation system that allows the user to only modify the air flow through the front facing ventilation port 6, this is not meant to be limiting in any way, as the ventilation system of the present invention may be designed to modify or adjust air flow through any or all of ventilation ports 6 incorporated within protective helmet 10.").</li> <li>To the extent this element is not explicitly disclosed by Muskovitz, it is disclosed by:</li> <li>Sajic (Ex. B), Element 1[A]</li> </ul>

'373 Asserted Claims	Prior Art Disclosures
	FOX Striker Helmet (Ex. D), Element 1[A]
	A POSA would also have been motivated to combine the teachings of Muskovitz with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Sajic, or the FOX Striker Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Muskovitz with the layered materials found in Sajic, or the FOX Striker Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.

## **EXHIBIT B**

IPR2022-00354 Burton v. Smith Sports Optics Smith Sport's Exhibit 2009, page 57

## Exhibit B Burton's Invalidity Contentions U.S. Patent No. 2008/0307568 ("Sajic")

Sajic was published in the United States on December 18, 2008, and qualifies as prior art to U.S. Patent No. 10,736,373 ("373 Patent") at least under post-AIA 35 U.S.C. § 102(a)(1) and anticipates, and alone or with other references, renders obvious one or more of claims 1, 2, 3, and 7. To the extent Sajic does not disclose one or more limitations of the claims, it would have been obvious to combine the teachings of Sajic with the knowledge of one of ordinary skill in the art and with one or more of the references below to render the claims at issue in the '373 patent invalid.

- U.S. Pat. App. Pub. No. 2004/0064873 ("Muskovitz")
- U.S. Pat. No. 4,422,183 ("Landi")
- The FOX Striker Helmet
- The Protos Integral Helmet

To the extent that these Invalidity Contentions rely on or otherwise embody particular constructions of terms or phrases in the Asserted Claims, Burton is not proposing any such constructions as proper constructions of those terms or phrases. Various positions put forth in this document are predicated on Smith's incorrect and overly broad interpretation of its claims as evidenced by its infringement contentions. Those positions are not intended to and do not necessarily reflect Burton's interpretation of the true and proper scope of the Asserted Claims.

'373 Asserted Claims	Prior Art Disclosures
1[PRE]: A helmet, comprising:	To the extent the preamble is limiting, Sajic, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet recited in claim 1. For example:
	[0001] ("the invention relates to the energy absorbing materials used in devices having a relatively large curvature such as safety helmets").

'373 Asserted Claims	Prior Art Disclosures
	[0042] ("Preferably the body protecting device comprises a safety helmet. Alternatively, the body protecting device comprises a safety pad or a liner for a garment. The term "body protecting device" is also intended to include a liner for a safety helmet, safety pad or the like.").
	[0020] ("Preferably the body protecting device has an outer layer providing the impact surface.").
	[0097] ("FIGS. 1 (a) and (b) shows a first embodiment of a body protecting device in the form of a safety helmet 10.").
	[0113] ("FIG. 9 shows a body protecting device for wearing by a user, again a safety helmet 100, according to a fourth aspect of the present invention.").
	10 $30$ $40$ $20$ $5$
	Fig. 1a Fig. 1b

'373 Asserted Claims	Prior Art Disclosures
	$100 \\ 100 \\ 130 \\ 120 \\ 120 \\ 130 \\ 120 \\ 130 \\ 120 \\ 151 \\ 160 \\ 160 \\ 160 \\ 160 \\ 160 \\ 160 \\ 160 \\ 160 \\ 151 \\ 153 \\ 153 \\ Fig. 11$
1[A]: a shell comprising a plurality of vents including a first vent defining a first opening and a second vent defining a second opening;	Sajic, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shell comprising a plurality of vents including a first vent defining a first opening and a second vent defining a second opening recited in claim 1. For example: [0002] ("Safety helmets conventionally comprise a substantially spheroidal outer skin of tough plastics material and an inner skin of resilient material such as a hard foam. The rigid outer skin acts as an impact surface to transmit an impact load more evenly to the inner skin which absorbs the energy imparted by the impact load.").
	<ul> <li>[0020] ("Preferably the body protecting device has an outer layer providing the impact surface.").</li> <li>[0097] ("The outer layer 30 provides an impact surface.").</li> <li>[0117] ("For some of the inserts 122, 124, the axis of the tubes are arranged at an oblique angle to an impact surface 102 of the helmet 100.").</li> <li>Figs. 9-11.</li> </ul>



'373 Asserted Claims	Prior Art Disclosures
	To the extent this element is not explicitly disclosed by Sajic, it is disclosed by: • Muskovitz (Ex. A), Element 1[A] • Landi (Ex. C), Element 1[A] • FOX Striker Helmet (Ex. D), Element 1[A] • Protos Integral Helmet (Ex. E), Element 1[A] • Protos Integral Helmet (Ex. E), Element 1[A] A POSA would also have been motivated to combine the teachings of Sajic with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Landi, the FOX Striker Helmet, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Sajic with the layered structure of materials found in Muskovitz, Landi, the FOX Striker Helmet, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[B]: a shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned	Sajic, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the plurality of vents recited in claim 1. For example:

'373 Asserted Claims	Prior Art Disclosures
with the plurality of vents; and	Fig. 9.
	[0002] ("Safety helmets conventionally comprise a substantially spheroidal outer skin of tough plastics material and an inner skin of resilient material such as a hard foam.").
	[0020] ("Preferably the body protecting device includes an inner layer providing the inner surface.").
	[0046] ("According to a fourth aspect of the present invention there is provided a body protecting device for wearing by a user comprising: a spacing member formed from a first material and defining one or more receptacles in the plane of the spacing member; and one or more inserts formed from a second material, the or each insert located at a receptacle of the spacing member.").
	[0114] ("The helmet 100 comprises a spacing member 110 formed from a first material, which is an expanded polystyrene foam. The spacing member 110 defines a number of receptacles or cavities 112 at selected locations in the (arcuate) major plane of the spacing member 110.").
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	Fig. 9

'373 Asserted Claims	Prior Art Disclosures
	To the extent this element is not explicitly disclosed by Sajic, it is disclosed by: • Muskovitz (Ex. A), Element 1[B] • Landi (Ex. C), Element 1[B] • FOX Striker Helmet (Ex. D), Element 1[B] A POSA would also have been motivated to combine the teachings of Sajic with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Landi, or the FOX Striker Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Sajic with the layered structure of materials found in Muskovitz, Landi, the FOX Striker Helmet, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C]: a shock absorbing insert positioned in and substantially filling the cavity such that the shock absorbing insert is visible through and spans across at least a portion	Sajic, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert positioned in and substantially filling the cavity such that the shock absorbing insert is visible through and spans across at least a portion of each of the plurality of vents recited in claim 1. For example: Fig. 9 (annotated below) is a cross sectional side view of a portion of a safety helmet in accordance with a fourth aspect of the present invention.

'373 Asserted Claims	Prior Art Disclosures
of each of the plurality of vents,	$100 \\ 130 \\ 112 \\ 132 \\ 112 \\ 132 \\ 110 \\ 110 \\ Fig. 9$
	[0020] ("Preferably the body protecting device [100] has an inner surface and the axis of the one or more tubes [green] extend from the impact surface towards the inner surface. Preferably the body protecting device includes an inner layer providing the inner surface. Preferably the body protecting device includes an intermediate layer providing the array of energy absorbing cells.").
	[0023] ("Preferably each of the plurality of arrays comprises an insert [green] provided at a spacing member [red]. Preferably the spacing member is formed from at least a foam material.").
	[0046] ("According to a fourth aspect of the present invention there is provided a body protecting device for wearing by a user comprising: a spacing member [red] formed from a first material and defining one or more receptacles in the plane of the spacing member; and one or more inserts [green] formed from a second material, the or each insert located at a receptacle of the spacing member.").
	[0106] ("It has been found that the present invention can outperform arrangements in which the tubes are parallel or normal to the loading. It is believed that the main reason for this is that the angled arrangement of tubes produces a reaction load

'373 Asserted Claims	Prior Art Disclosures
	which has both a parallel and a normal component relative to the loading. The normal component causes lateral deflection of the impacting object relative to the body protecting device during deformation of the tubes. The overall angled displacement of the head form results in a longer total time period for the impact event. Also, deflection of the impacting object reduces the magnitude of the loading in the parallel direction. Thus, the total impact energy is absorbed at a lower magnitude over a longer time period.").
	[0107] ("Another reason for the superior performance of the invention may be the contribution of bending of the tubes without buckling. There is therefore another mode of absorbing energy in addition to the mode of progressive buckling exhibited by both a conventional arrangement and the invention.").
	[0115]-[0116] ("An insert 120, 122, 124 formed from a second material, is encapsulated within each cavity [purple].").
	[0117] ("Each insert 120, 122, 124 comprises an array of energy absorbing tubes as described for the first embodiment of the invention. For some of the inserts 122, 124, the axis of the tubes are arranged at an oblique angle to an impact surface 102 of the helmet 100. Also, the specific oblique angle may differ for these inserts 122, 124. For the remainder of the inserts 120, the axis of the tubes are arranged at an angle which is normal to the impact surface 102.").
	[0123] ("The inserts 120, 122 provide a high level of protection from impact loads. The arrays are located at particular predetermined areas where impacts occur more frequently or which are adjacent to parts of the body of a user which are more prone to injury, or the effects of injury are more severe. Moreover, the orientation of the tubes can be arranged to provide the optimum protection for a particular location.").

'373 Asserted Claims	Prior Art Disclosures
'373 Asserted Claims	Prior Art Disclosures         Alternatively, apertures or recesses can be formed in the spacing member 110.         Methods of providing such formations in foam materials are well known. The inserts 120, 122, 124 may be positioned during forming of the spacing member 110 or inserted afterwards, such as by forming pockets in the spacing member 110.");         [0123] ("The inserts 120, 122 provide a high level of protection from impact loads.").         To the extent this element is not explicitly disclosed by Sajic, it is disclosed by:         • Muskovitz (Ex. A), Element 1[C]         • Landi (Ex. C), Element 1[C]         • FOX Striker Helmet (Ex. D), Element 1[C]         • Protos Integral Helmet (Ex. E), enclose a protection, and air circulation.         • Striker Helmet, or the Protos Integral Helmet charted in these         Invalidity Contentions. For example, a POSA would have been motivated to combine Sajic         with the layered structure of materials found in Muskovitz, Landi, the FOX Striker Helmet, or         further,

'373 Asserted Claims	Prior Art Disclosures
1[C1]: wherein at least a portion of the shock absorbing liner is positioned between the shell and the shock absorbing insert,	Sajic, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert wherein at least a portion of the shock absorbing liner is positioned between the shell and the shock absorbing insert recited in claim 1. For example:
absorbing insert,	Fig. 9 (annotated below).
	100 $102$ $130$ $122$ $120$ $120$ $112$ $110$ $Fig. 9$
	[0115]-[0116] ("An insert 120, 122, 124 formed from a second material [green], is encapsulated within each cavity [circled in purple]. Alternatively, apertures or recesses can be formed in the spacing member 110. Methods of providing such formations in foam materials are well known. The inserts [green] 120, 122, 124 may be positioned during forming of the spacing member 110 or inserted afterwards, such as by forming pockets in the spacing member 110.").
	To the extent this element is not explicitly disclosed by Sajic, it is disclosed by:
	Muskovitz (Ex. A), Element 1[C1]

'373 Asserted Claims	Prior Art Disclosures
	FOX Striker Helmet (Ex. D), Element 1[C1]
	A POSA would also have been motivated to combine the teachings of Sajic with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, or the FOX Striker Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Sajic with the layered structure of materials found in Muskovitz or the FOX Striker Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C2]: wherein the shock absorbing insert comprises an array of energy absorbing cells, each having respective open first longitudinal	Sajic, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert wherein the shock absorbing insert comprises an array of energy absorbing cells, each having respective open first longitudinal ends and open second longitudinal ends recited in claim 1. For example:
ends and open second	Figs. 2, 3A-3B, 9.
longitudinal ends,	Abstract ("A body protecting device for wearing by a user comprising: an impact surface; and an array of energy absorbing cells, wherein each of said cells comprises a tube, and wherein the longitudinal axis of the tubes of one or more of said cells is arranged at an oblique angle to the impact surface.").

'373 Asserted Claims	Prior Art Disclosures
	[0003] ("It is desirable to provide a device, or material for the device, in which the stiffness or energy absorbing response can be easily varied. It is not known to provide a liner which uses different materials or different geometrical arrangements at different locations.").
	[0005] ("A body protecting device which includes an array of energy absorbing tubes is disclosed in WO 2005/060778. The tubes are arranged such that in use they are axially loaded. The device outperforms conventional devices using a hard foam material to absorb impact energy.").
	[0009] ("Regardless of the material used, arrays of independent columns arranged parallel or coaxial to the load have generally been found to provide efficient energy absorbing performance and improve the stability of the safety device. Columns tend to produce a relatively constant level of energy absorption as the column is progressively buckled or crushed.").
	[0015] ("The term "tube" is used to denote a hollow structure having any regular or irregular geometry.")
	[0022] ("Preferably one or more of the plurality of arrays include tubes which are orientated at a different oblique angle to the tubes of the other of the plurality of arrays. Preferably the device also includes one or more arrays of tubes in which the axis of one or more tubes is arranged at an angle which is normal to the impact surface.").
	[0053] ("Preferably the or each insert comprises an array of energy absorbing cells, wherein each cell comprises a tube. Preferably the body protecting device has an impact surface and the axis of one or more tubes is arranged at an oblique angle to the impact surface. Alternatively or in addition, the axis of one or more tubes may be arranged at an angle which is normal to the impact surface.").

'373 Asserted Claims	Prior Art Disclosures
	[0067] ("Preferably the second material comprises polycarbonate, polypropylene, polyethylene, polyetherimide, polyethersulphone, polyphenylsulphone, polyvinyl chloride, polyethylene terephthalate, ethylene vinyl acetate or acrylonitrile butadiene styrene. Preferably the second material comprises Tubus Honeycombs™.").
	[0068] ("Preferably the array defines a first and second discontinuous surface. Preferably a sealing material is provided at one or both of the first and second discontinuous surfaces.").
	[0082] ("Preferably the array defines a first and second discontinuous surface. Preferably the method includes providing a sealing material at one or both of the first and second discontinuous surfaces.")
	[0086] ("FIG. 2 is a plan view of a tubular array of cells used in the safety helmet of FIG. 1 (a)").
	[0087] ("FIG. 3 is a side view of a tubular array of cells used in the safety helmet of FIG. 1 (a)").
	[0098] ("The core has a tubular structure which may be a cylindrical arrangement as shown in FIG. 2. The tubes 22 are arranged in a close packed array such that the gap between adjacent tubes is minimised.").
	[0099] ("FIG. 3 (a) shows a first arrangement of tubes 22 according to the invention when subject to a load 50. The load 50 is normal to the plane of the core 20. Each tube 22 has a longitudinal axis 24 which is at an oblique angle 26 to the direction of the load 50. The longitudinal axis 24 of each tube 22 is also at a reciprocal oblique angle 26 to the plane of the core.").

'373 Asserted Claims	Prior Art Disclosures
	[0100] ("FIG. 3 (b) shows a second arrangement of tubes 22 according to the invention when subject to a load 50 which is applied in a first direction. In this case, each tube 22 has a longitudinal axis 24 which is normal to the plane of the core 20. However, the core 20 is arranged such that the plane of the core 20 is at an oblique angle 26 to the first direction. This arrangement represents another method of absorbing the energy imparted by an impact load.").
	[0117] ("Each insert 120, 122, 124 comprises an array of energy absorbing tubes as described for the first embodiment of the invention. For some of the inserts 122, 124, the axis of the tubes are arranged at an oblique angle to an impact surface 102 of the helmet 100. Also, the specific oblique angle may differ for these inserts 122, 124. For the remainder of the inserts 120, the axis of the tubes are arranged at an angle which is normal to the impact surface 102.").
	[0122] ("Each array defines a first 130 and second 132 discontinuous surface. A sealing material (not shown) is provided at both of these discontinuous surfaces. This prevents the foam material from entering the open ends of the tubes.").


'373 Asserted Claims	Prior Art Disclosures
	Protos Integral Helmet (Ex. E), Element 1[C2]
	A POSA would also have been motivated to combine the teachings of Sajic with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Landi, the FOX Striker Helmet, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Sajic with the layered structure of materials found in Muskovitz, Landi, the FOX Striker Helmet, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C3]: wherein the first longitudinal ends of a first plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the first opening and the first longitudinal ends of a second plurality of adjacent cells of the array of energy	Sajic, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert wherein the first longitudinal ends of a first plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the first opening and the first longitudinal ends of a second plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the second opening such that air is able to flow from an exterior side of the helmet through each of the first and second vents and through a respective one of the first and second plurality of adjacent cells toward an interior of the helmet recited in claim 1. For example: Figs. 2, 3A-3B, 9.
absorbing cells are	

'373 Asserted Claims	Prior Art Disclosures
positioned within a perimeter of the second opening such that air is able to flow from an	Abstract ("A body protecting device for wearing by a user comprising: an impact surface; and an array of energy absorbing cells, wherein each of said cells comprises a tube, and wherein the longitudinal axis of the tubes of one or more of said cells is arranged at an oblique angle to the impact surface.").
exterior side of the helmet through each of the first and second vents and through a respective one of the first and second plurality of	[0003] ("It is desirable to provide a device, or material for the device, in which the stiffness or energy absorbing response can be easily varied. It is not known to provide a liner which uses different materials or different geometrical arrangements at different locations.").
adjacent cells toward an interior of the helmet.	[0005] ("A body protecting device which includes an array of energy absorbing tubes is disclosed in WO 2005/060778. The tubes are arranged such that in use they are axially loaded. The device outperforms conventional devices using a hard foam material to absorb impact energy.").
	[0009] ("Regardless of the material used, arrays of independent columns arranged parallel or coaxial to the load have generally been found to provide efficient energy absorbing performance and improve the stability of the safety device. Columns tend to produce a relatively constant level of energy absorption as the column is progressively buckled or crushed.").
	[0022] ("Preferably one or more of the plurality of arrays include tubes which are orientated at a different oblique angle to the tubes of the other of the plurality of arrays. Preferably the device also includes one or more arrays of tubes in which the axis of one or more tubes is arranged at an angle which is normal to the impact surface.").
	[0062] ("Preferably substantially each tube is near or adjacent to at least three other tubes. Preferably substantially each tube is near or adjacent to six other tubes.").

'373 Asserted Claims	Prior Art Disclosures
	[0063] ("Preferably each tube has a diameter of between 2 and 25 mm. Preferably each tube has a diameter of about 8 mm.").
	[0064] ("Preferably the thickness of the side wall of each tube is less than 0. 5 mm. Preferably the thickness of the side wall of each tube is between 0. 1 and 03 mm.").
	[0098] ("The core has a tubular structure which may be a cylindrical arrangement as shown in FIG. 2. The tubes 22 are arranged in a close packed array such that the gap between adjacent tubes is minimised.").
	[0099] ("FIG. 3 (a) shows a first arrangement of tubes 22 according to the invention when subject to a load 50. The load 50 is normal to the plane of the core 20. Each tube 22 has a longitudinal axis 24 which is at an oblique angle 26 to the direction of the load 50. The longitudinal axis 24 of each tube 22 is also at a reciprocal oblique angle 26 to the plane of the core.").
	[0100] ("FIG. 3 (b) shows a second arrangement of tubes 22 according to the invention when subject to a load 50 which is applied in a first direction. In this case, each tube 22 has a longitudinal axis 24 which is normal to the plane of the core 20. However, the core 20 is arranged such that the plane of the core 20 is at an oblique angle 26 to the first direction. This arrangement represents another method of absorbing the energy imparted by an impact load.").
	[0103] ("The use of these geometric values, particularly the low thickness used, results in a stable failure mode of progressive buckling being achieved, even though the tubes are at an angle to the loading. Instability, which could lead to a global buckling failure mode, is avoided since the tubes are connected to, and supported by, adjacent tubes. Being connected to six other tubes which are circumferentially spaced around the tube provides such support in any direction normal to the axis of the tube.")

'373 Asserted Claims	Prior Art Disclosures
	[0117] ("Each insert 120, 122, 124 comprises an array of energy absorbing tubes as described for the first embodiment of the invention. For some of the inserts 122, 124, the axis of the tubes are arranged at an oblique angle to an impact surface 102 of the helmet 100. Also, the specific oblique angle may differ for these inserts 122, 124. For the remainder of the inserts 120, the axis of the tubes are arranged at an oblique angle may differ for these inserts 122, 124.
	[0122] ("Each array defines a first 130 and second 132 discontinuous surface. A sealing material (not shown) is provided at both of these discontinuous surfaces. This prevents the foam material from entering the open ends of the tubes.").
	50
	$\begin{array}{c} 22 \\ 24 \\ 22 \\ 20 \end{array}$
	Fig. 2 Fig. 3a

'373 Asserted Claims	Prior Art Disclosures
	100 102 130 122 120 120 120 120 Fig. 9
	To the extent this element is not explicitly disclosed by Sajic, it is disclosed by:
	<ul> <li>Muskovitz (Ex. A), Element 1[C3]</li> <li>FOX Striker Helmet (Ex. D), Element 1[C3]</li> <li>Protos Integral Helmet (Ex. E), Element 1[C3]</li> </ul> A POSA would also have been motivated to combine the teachings of Sajic with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, the FOX Striker Helmet, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Sajic with the layered structure of materials found in Muskovitz, the FOX Striker Helmet, or the Protos Integral Helmet, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.

'373 Asserted Claims	Prior Art Disclosures
2. The helmet of claim 1, wherein the shock absorbing liner is seamless.	Sajic, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet of claim 1, wherein the shock absorbing liner is seamless as recited in claim 2. For example:
	[0093] ("FIG. 9 is a cross sectional side view of a portion of a safety helmet in accordance with a fourth aspect of the present invention.").
	[0118] ("FIG. 10 is a plan view of the helmet 100 with the arrow 140 pointing outwards from the front of the helmet 100.").
	Figs. 9-10 show a single piece for the shock absorbing liner.
	100 + 140 + 120
	To the extent this element is not explicitly disclosed by Sajic, it is disclosed by:
	Muskovitz (Ex. A), Claim 2

'373 Asserted Claims	Prior Art Disclosures
	• FOX Striker Helmet (Ex. D), Claim 2 A POSA would also have been motivated to combine the teachings of Sajic with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, or the FOX Striker Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Sajic with the layered structure of materials found in Muskovitz or the FOX Striker Helmet for improved stability, head protection, and air
	circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
3. The helmet of claim 1, wherein the array of energy absorbing cells of the shock absorbing insert comprises an array of tubes.	Sajic, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet of claim 1, wherein the array of energy absorbing cells of the shock absorbing insert comprises an array of tubes as recited in claim 3. For example:
	Abstract ("an array of energy absorbing cells, wherein each of said cells comprises a tube."). [0005] ("A body protecting device which includes an array of energy absorbing tubes is disclosed in WO 2005/060778. The tubes are arranged such that in use they are axially loaded.").

'373 Asserted Claims	Prior Art Disclosures
	[0022] ("Preferably one or more of the plurality of arrays include tubes which are orientated at a different oblique angle to the tubes of the other of the plurality of arrays. Preferably the device also includes one or more arrays of tubes in which the axis of one or more tubes is arranged at an angle which is normal to the impact surface.").
	[0053] ("Preferably the or each insert comprises an array of energy absorbing cells, wherein each cell comprises a tube. Preferably the body protecting device has an impact surface and the axis of one or more tubes is arranged at an oblique angle to the impact surface. Alternatively or in addition, the axis of one or more tubes may be arranged at an angle which is normal to the impact surface.")
	[0098] ("The core has a tubular structure which may be a cylindrical arrangement as shown in FIG. 2. The tubes 22 are arranged in a close packed array such that the gap between adjacent tubes is minimised.").
	[0099] ("FIG. 3 (a) shows a first arrangement of tubes 22 according to the invention when subject to a load 50. The load 50 is normal to the plane of the core 20. Each tube 22 has a longitudinal axis 24 which is at an oblique angle 26 to the direction of the load 50. The longitudinal axis 24 of each tube 22 is also at a reciprocal oblique angle 26 to the plane of the core.").
	[0100] ("FIG. 3 (b) shows a second arrangement of tubes 22 according to the invention when subject to a load 50 which is applied in a first direction. In this case, each tube 22 has a longitudinal axis 24 which is normal to the plane of the core 20.").
	[0117] ("Each insert 120, 122, 124 comprises an array of energy absorbing tubes as described for the first embodiment of the invention. For some of the inserts 122, 124, the axis of the tubes are arranged at an oblique angle to an impact surface 102 of the helmet 100.").



'373 Asserted Claims	Prior Art Disclosures
	<ul> <li>Landi (Ex. C), Claim 3</li> <li>FOX Striker Helmet (Ex. D), Claim 3</li> <li>Protos Integral Helmet (Ex. E), Claim 3</li> </ul>
	A POSA would also have been motivated to combine the teachings of Sajic with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Landi, the FOX Striker Helmet, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Sajic with the layered structure of materials found in Muskovitz, Landi, the FOX Striker Helmet, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
7. The helmet of claim 1, wherein the shock absorbing insert extends to a portion of the helmet configured to he [sic] positioned at a back of a wearer's head.	Sajic, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet of claim 1, wherein the shock absorbing insert extends to a portion of the helmet configured to he [sic] positioned at a back of a wearer's head as recited in claim 7. For example: [0118] ("FIG. 10 is a plan view of the helmet 100 with the arrow 140 pointing outwards from the front of the helmet 100.").

1272 Accorted Claims	Drier Art Disclosures
'373 Asserted Claims	Prior Art Disclosures
	[0119] ("At the front and rear of the helmet 100, which have a smaller radius section,
	the helmet 100 is more stiff and using an insert 120 with an angle of 90° to the impact
	surface 102 is beneficial.").
	Fig. 10
	Fig. 10.
	▲ 140
	100
	120
	120 (
	Fig. 10
	To the extent this element is not explicitly disclosed by Sajic, it is disclosed by:
	Muskovitz (Ex. A), Claim 7
	<ul> <li>FOX Striker Helmet (Ex. D), Claim 7</li> </ul>
	A POSA would also have been motivated to combine the teachings of Sajic with the
	knowledge of a person of ordinary skill in the art, and/or this reference combined with the
	Muskovitz or the FOX Striker Helmet charted in these Invalidity Contentions. For example, a
	POSA would have been motivated to combine Sajic with the layered structure of materials
	found in Muskovitz or the FOX Striker Helmet for improved stability, head protection, and air

'373 Asserted Claims	Prior Art Disclosures
	circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.

## **EXHIBIT C**

IPR2022-00354 Burton v. Smith Sports Optics Smith Sport's Exhibit 2009, page 86

## Exhibit C Burton's Invalidity Contentions U.S. Patent No. 4,422,183 ("Landi")

Landi was known by others, and published in the in the United States no later than December 27, 1983, the date the patent was issued, and qualifies as prior art to U.S. Patent No. 10,736,373 ("373 Patent") at least under post-AIA 35 U.S.C. § 102(a)(1) and anticipates, and alone or with other references, renders obvious one or more of claims 1, 2, 3, and 7. To the extent Landi does not disclose one or more limitations of the claims, it would have been obvious to combine the teachings of Landi with the knowledge of one of ordinary skill in the art and with one or more of the references below to render the claims at issue in the '373 patent invalid.

- U.S. Pat. App. Pub. No. 2004/0064873 ("Muskovitz")
- U.S. Pat. App. Pub. No. 2008/0307568 ("Sajic")
- The FOX Striker Helmet
- The Protos Integral Helmet

To the extent that these Invalidity Contentions rely on or otherwise embody particular constructions of terms or phrases in the Asserted Claims, Burton is not proposing any such constructions as proper constructions of those terms or phrases. Various positions put forth in this document are predicated on Smith's incorrect and overly broad interpretation of its claims as evidenced by its infringement contentions. Those positions are not intended to and do not necessarily reflect Burton's interpretation of the true and proper scope of the Asserted Claims.

'373 Asserted Claims	Prior Art Disclosures
1[PRE]: A helmet, comprising:	To the extent the preamble is limiting, Landi, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet recited in claim 1. For example:
	1:14-15 ("The head may be protected with a rigid, padded helmet").

Prior Art Disclosures
1:41-44 ("Although hard shells placed over foam pads tend to spread impacts over a wider area, as set forth above, the hard shells themselves can cause injuries if the impact is not normal to the thickness of the pad.").
To the extent this element is not explicitly disclosed by Landi, it is disclosed by:
Muskovitz (Ex. A), Claim 1 Preamble
Sajic (Ex. B), Claim 1 Preamble
FOX Striker Helmet (Ex. D), Claim 1 Preamble
<ul> <li>Protos Integral Helmet (Ex. E), Claim 1 Preamble</li> </ul>
A POSA would also have been motivated to combine the teachings of Landi with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Sajic, the FOX Striker Helmet, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Landi with the layered structure of materials found in Muskovitz, Sajic, the FOX Striker Helmet, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
Landi, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary
skill in the art, discloses the shell comprising a plurality of vents including a first vent

'373 Asserted Claims	Prior Art Disclosures
defining a first opening and a second vent defining a second	defining a first opening and a second vent defining a second opening recited in claim 1. For example:
opening;	Landi discloses using foam in hard shells (prior art) and using the protective shield in a cover. 1:41-44 ("Although hard shells placed over foam pads tend to spread impacts over a wider area"); 2:61-63 ("if the shield is to be placed in an enclosing cover, the various elements can be held in place by their containing cover."). Landi further discloses that an out "resilient layer" shall have vents or perforations. 4:35-37 ("The device also includes perforations 15 for purposes of ventilating and cooling the user.); 3:63-66 (re Fig. 1: "The resilient layer is preferably perforated with openings 15 on both the inside and outside portions to provide ventilation for the wearer in order to dissipate body heat.").
	Fig.1
	To the extent this element is not explicitly disclosed by Landi, it is disclosed by:

'373 Asserted Claims	Prior Art Disclosures
	<ul> <li>Muskovitz (Ex. A), Element 1[A]</li> <li>FOX Striker Helmet (Ex. D), Element 1[A]</li> <li>Protos Integral Helmet (Ex. E), Element 1[A]</li> <li>Protos Integral Helmet (Ex. E), Element 1[A]</li> <li>A POSA would also have been motivated to combine the teachings of Landi with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, the FOX Striker Helmet, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Landi with the layered structure of materials found in Muskovitz, the FOX Striker Helmet, or the Protos Integral Helmet, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least</li> </ul>
	because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[B]: a shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the plurality of vents;	Landi, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the plurality of vents recited in claim 1. For example:
and	2:30-32 ("The device of this invention also includes a resilient layer over both open ends of the cells. The layer is soft, flexible, resilient material, preferably a foam elastomer.").

'373 Asserted Claims	Prior Art Disclosures
	3:63-66 (re Fig. 1: "The resilient layer is preferably perforated with openings 15 on both the inside and outside portions to provide ventilation for the wearer in order to dissipate body heat.").
	4:35-37 (re Fig. 2: "The device also includes perforations 15 for purposes of ventilating and cooling the user.").
	Fig.1



'373 Asserted Claims	Prior Art Disclosures
	variations of existing technology to solve routine and well understood problems in predictable ways.
1[C]: a shock absorbing insert positioned in and substantially filling the cavity such that the shock absorbing insert is visible through and spans across at least a portion of each of the plurality of vents,	Landi, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert positioned in and substantially filling the cavity such that the shock absorbing insert is visible through and spans across at least a portion of each of the plurality of vents recited in claim 1. For example: Landi discloses a shock absorbing core or insert, annotated on Figure 1 in green below.

'373 Asserted Claims	Prior Art Disclosures
	<ul> <li>2:10-28 ("The honeycomb material used in the device of this invention is preferably made of nylon-coated paper. One suitable material is an article of commerce made by the DuPont Company and sold under the trademark NOMEX. Force applied to a honeycomb material in the direction parallel to the axes of the cells is resisted by the stiffness of the honeycomb material and such forces are absorbed and widely distributed by the buckling of the side walls of the cells. When one wall of a cell buckles, the other walls of the same cell must also buckle because they are all connected to one another, and since all walls of the cell are also walls of adjacent cells, the walls of adjacent cells also buckle under the effect of a force. This effect gives the honeycomb core of this invention the ability to absorb a great deal of energy from an impact and in addition the energy of impact that is not absorbed is distributed over a wide area beneath the core even though it may be focused on a small area where it occurs.").</li> <li>2:41-42 ("The thin cells can absorb a great deal of shock by buckling.").</li> <li>3:17-18 ("The resilient material need only be thick enough to blunt the sharp edges of the cells because the impact forces are absorbed by the core.").</li> <li>5:25-27 ("In all cases in FIGS. 4, 5 and 6, a force applied to the cells perpendicular to the plane of the paper would be strongly resisted by the stiff cell walls in that direction.").</li> </ul>



'373 Asserted Claims	Prior Art Disclosures
	success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C1]: wherein at least a portion of the shock absorbing liner is positioned between the shell and the shock absorbing insert,	<ul> <li>To the extent this element is not explicitly disclosed by Landi, it is disclosed by:</li> <li>Muskovitz (Ex. A), Element 1[C1]</li> <li>Sajic (Ex. B), Element 1[C1]</li> <li>FOX Striker Helmet (Ex. D), Element 1[C1]</li> </ul> A POSA would also have been motivated to combine the teachings of Landi with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Sajic, or the FOX Striker Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Landi with the layered structure of materials found in Muskovitz, Sajic, or the FOX Striker Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C2]: wherein the shock absorbing insert comprises an array of energy absorbing cells, each having respective	Landi, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert wherein the shock absorbing insert comprises an array of energy absorbing cells, each having respective open first longitudinal ends and open second longitudinal ends recited in claim 1. For example:

'373 Asserted Claims	Prior Art Disclosures
open first longitudinal	
ends and open second	Landi describes a core of energy absorbing cells with open ends positioned to allow
longitudinal ends,	air flow. Abstract ("A protective body shield including a honeycomb core arranged with the axis of each cell perpendicular to the body of the wearer").
	1:61-2:3 ("The protective shield of this invention includes a core of lightweight, flexible, cellular honeycomb material with the axes of the cells perpendicular to the longest dimension of the protector. Specifically, the cells are always aligned with their walls perpendicular to the body of the wearer. In other words, the body shield of this invention is constructed of many short, honeycomb cells side by side. The term honeycomb in this specification shall mean an array of side by side cells with parallel walls where each cell has its walls in common with the walls of adjoining cells.").
	3:19-22 ("Perforations in the resilient material will provide a breathable shield in that the open nature of the core is no impediment to ventilation no matter how thick it is.").
	3:56-60 ("a honeycomb core 11 having a resilient flexible material covering the open ends of the cores that are on the body side of the device 12 and a layer of resilient material covering the open ends of the cells on the outside 13.").
	3:66-4:1 ("For purposes of illustration, the edges of the resilient layer 12 are turned up to illustrate the open ends of the cells 11.").
	6:35-37 ("The device also includes perforations 15 for purposes of ventilating and cooling the user.").
	To the extent this element is not explicitly disclosed by Landi, it is disclosed by:
	Muskovitz (Ex. A), Element 1[C2]
	Sajic (Ex. B), Element 1[C2]

'373 Asserted Claims	Prior Art Disclosures
	<ul> <li>FOX Striker Helmet (Ex. D), Element 1[C2]</li> <li>Protos Integral Helmet (Ex. E), Element 1[C2]</li> </ul>
	A POSA would also have been motivated to combine the teachings of Landi with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Sajic, the FOX Striker Helmet, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Landi with the layered structure of materials found in Muskovitz, Sajic, the FOX Striker Helmet, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C3]: wherein the first longitudinal ends of a first plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the first	<ul> <li>To the extent this element is not explicitly disclosed by Landi, it is disclosed by:</li> <li>Muskovitz (Ex. A), Element 1[C3]</li> <li>Sajic (Ex. B), Element 1[C3]</li> <li>FOX Striker Helmet (Ex. D), Element 1[C3]</li> <li>Protos Integral Helmet (Ex. E), Element 1[C3]</li> </ul>
perimeter of the first opening and the first longitudinal ends of a second plurality of adjacent cells of the array of energy	A POSA would also have been motivated to combine the teachings of Landi with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Sajic, the FOX Striker Helmet, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Landi

'373 Asserted Claims	Prior Art Disclosures
absorbing cells are	with the layered structure of materials found in Muskovitz, Sajic, the FOX Striker Helmet, or
positioned within a	the Protos Integral Helmet for improved stability, head protection, and air circulation.
perimeter of the second	Further, one of skill in the art would find the combination obvious to try, due at least to the
opening such that air is	similarity of the technical teachings of the art. As another example, one of skill in the art
able to flow from an	would find that the teachings could be predictably interchanged by, for example, simple
exterior side of the	substitution, at least because of the predictability of the art and the known interchangeability
helmet through each of the first and second	of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so,
vents and through a	at least because the references use known variations of existing technology to solve routine
respective one of the first	and well understood problems in predictable ways.
and second plurality of	
adjacent cells toward an	
interior of the helmet.	
2. The helmet of claim 1,	To the extent this element is not explicitly disclosed by Landi, it is disclosed by:
wherein the shock absorbing liner is	= Muckovitz (Ex. A) Claim 2
seamless.	Muskovitz (Ex. A), Claim 2
Scamess.	<ul> <li>Sajic (Ex. B), Claim 2</li> <li>FOX Striker Helmet (Ex. D), Claim 2</li> </ul>
	• FOX Striker Heimet (EX. D), Glaim 2
	A POSA would also have been motivated to combine the teachings of Landi with the
	knowledge of a person of ordinary skill in the art, and/or this reference combined with the
	Muskovitz, Sajic, or the FOX Striker Helmet charted in these Invalidity Contentions. For
	example, a POSA would have been motivated to combine Landi with the layered structure
	of materials found in Muskovitz, Sajic, or the FOX Striker Helmet for improved stability, head
	protection, and air circulation. Further, one of skill in the art would find the combination
	obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably
	interchanged by, for example, simple substitution, at least because of the predictability of
	the art and the known interchangeability of the various elements. As another example, one

'373 Asserted Claims	Prior Art Disclosures
	of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
3. The helmet of claim 1, wherein the array of energy absorbing cells of the shock absorbing insert comprises an array of tubes.	Landi, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet of claim 1, wherein the array of energy absorbing cells of the shock absorbing insert comprises an array of tubes as recited in claim 3. For example:
	1:61-2:3 ("The protective shield of this invention includes a core of lightweight, flexible, cellular honeycomb material with the axes of the cells perpendicular to the longest dimension of the protector. Specifically, the cells are always aligned with their walls perpendicular to the body of the wearer. In other words, the body shield of this invention is constructed of many short, honeycomb cells side by side. The term honeycomb in this specification shall mean an array of side by side cells with parallel walls where each cell has its walls in common with the walls of adjoining cells.").



'373 Asserted Claims	Prior Art Disclosures
	similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
7. The helmet of claim 1, wherein the shock absorbing insert extends to a portion of the helmet configured to he [sic]	<ul> <li>To the extent this element is not explicitly disclosed by Landi, it is disclosed by:</li> <li>Muskovitz (Ex. A), Claim 7</li> <li>Sajic (Ex. B), Claim 7</li> <li>FOX Striker Helmet (Ex. D), Claim 7</li> </ul>
positioned at a back of a wearer's head.	A POSA would also have been motivated to combine the teachings of Landi with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Sajic, or the FOX Striker Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine Landi with the layered structure of materials found in Muskovitz, Sajic, or the FOX Striker Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.

## **EXHIBIT D**

## Exhibit D Burton's Invalidity Contentions The FOX Striker Helmet (2011)

The FOX Striker Helmet was known by others, used by others, offered for sale, on sale, and sold no later than 2011<sup>1</sup> and qualifies as prior art to U.S. Patent No. 10,736,373 ("373 Patent") at least under post-AIA 35 U.S.C. § 102(a)(1) and anticipates, and alone or with other references, renders obvious one or more of claims 1, 2, 3, and 7. To the extent the FOX Striker Helmet does not disclose one or more limitations of the claims, it would have been obvious to combine the teachings of the FOX Striker Helmet with the knowledge of one of ordinary skill in the art and with one or more of the references below to render the claims at issue in the '373 patent invalid.

- U.S. Pat. App. Pub. No. 2004/0064873 ("Muskovitz")
- U.S. Pat. App. Pub. No. 2008/0307568 ("The FOX Striker Helmet")
- U.S. Pat. No. 4,422,183 ("Landi")
- The Protos Integral Helmet

To the extent that these Invalidity Contentions rely on or otherwise embody particular constructions of terms or phrases in the Asserted Claims, Burton is not proposing any such constructions as proper constructions of those terms or phrases. Various positions put forth in this document are predicated on Smith's incorrect and overly broad interpretation of its claims as evidenced by its infringement contentions. Those positions are not intended to and do not necessarily reflect Burton's interpretation of the true and proper scope of the Asserted Claims.

'373 Asserted Claims	Prior Art Disclosures
1[PRE]: A helmet, comprising:	To the extent the preamble is limiting, the FOX Striker Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet recited in claim 1. For example:

<sup>&</sup>lt;sup>1</sup> BURTON-0001056 - BURTON-0001080: 2011 Websites Showing Sale

'373 Asserted Claims	Prior Art Disclosures
	BURTON-0001081 (Catalog: FOX MTB 2011 Collection) at BURTON-0001086-BURTON- 0001087 ("New for 2011, the Striker helmet from Fox is a premium trail riding and XC helmet, for riders seeking light weight and comprehensive protection. Taking style cues from our best selling Flux helmet, we've designed the next evolution in mountain bike helmets. Sleek, lightweight and race ready, the Striker is sure to turn some heads while protecting yours.").
	STRIKER N Helmet No. 20012 Avail 1/2/2011 New for 2011, the Striker helmet from Fox is a premium trail riding and XC helmet, for riders seeking light weight and comprehensive protection. Taking style cues from our best selling Flux helmet, we've designed the next evolution in mountain bike helmets. Sleek, lightweight and race ready, the Striker is sure to turn some heads while protecting yours.
1[A]: a shell comprising a plurality of vents including a first vent defining a	The FOX Striker Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shell comprising a plurality of vents including a first vent defining a first opening and a second vent defining a second opening recited in claim 1. For example:
first opening and a second vent defining a second opening;	BURTON-0001081 (Catalog: FOX MTB 2011 Collection) at BURTON-0001086-BURTON-0001087 ("22 vents for excellent airflow").

'373 Asserted Claims	Prior Art Disclosures
	<ul> <li>Deep rear profile of the EPS shell offers more comprehensive coverage than traditional XC helmets</li> <li>22 vents for excellent airflow</li> <li>Passes the following test standards for safety: CPSC 1203, EN 1078: 1997, AS/NZS 2063: 2008</li> <li>Removable visor</li> <li>Detox II retention system to dial in perfect fit</li> <li>Structural Honeycomb venting inserts in the lower back shell</li> </ul>
	<image/>
	<ul> <li>To the extent this element is not explicitly disclosed by the FOX Striker Helmet, it is disclosed by:</li> <li>Muskovitz (Ex. A), Element 1[A]</li> <li>Sajic (Ex. B), Element 1[A]</li> <li>Landi (Ex. C), Element 1[A]</li> </ul>

'373 Asserted	Prior Art Disclosures
Claims	<ul> <li>Protos Integral Helmet (Ex. E), Element 1[A]</li> <li>A POSA would also have been motivated to combine the teachings of the FOX Striker Helmet with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Sajic, Landi, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the FOX Striker Helmet with the layered structure of materials found in Muskovitz, Sajic, Landi, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As</li> </ul>
	another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[B]: 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	The FOX Striker Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the plurality of vents recited in claim 1. For example:

'373 Asserted Claims	Prior Art Disclosures
	Shock Absorbing Liner
'373 Asserted Claims	Prior Art Disclosures
--	--
	<ul> <li>To the extent this element is not explicitly disclosed by the FOX Striker Helmet, it is disclosed by:</li> <li>Muskovitz (Ex. A), Element 1[B]</li> <li>Sajic (Ex. B), Element 1[B]</li> </ul>
	A POSA would also have been motivated to combine the teachings of the FOX Striker Helmet with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz or Sajic charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the FOX Striker Helmet with the layered structure of materials found in Muskovitz or Sajic for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C]: a shock absorbing insert positioned in and substantially filling the cavity such that the shock	The FOX Striker Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert positioned in and substantially filling the cavity such that the shock absorbing insert is visible through and spans across at least a portion of each of the plurality of vents recited in claim 1. For example:
absorbing insert is visible through and spans across at least a portion	BURTON-0001081 (Catalog: FOX MTB 2011 Collection) at BURTON-0001086-BURTON- 0001087 ("Structural Honeycomb venting inserts in the lower back shell").



'373 Asserted Claims	Prior Art Disclosures
	A POSA would have understood that a "structural honeycomb" element to a helmet would have a shock absorbing function, in particular because a POSA would have recognized that the honeycomb could be crushed down either by a direct impact along the longitudinal axis of the honeycombs, or from an impact at an angle oblique to the longitudinal axis of the honeycombs.
	Moreover, the engineers at Wavecel tested the Striker Helmet insert and found that it had substantial shock absorbing properties, even more so than the Koroyd material that Smith uses: "For the Fox honeycomb insert, the improvement in performance of 46% over Koroyd is significant and clearly indicates a key function of the Fox honeycomb insert to absorb shock." Burton's Opposition to Plaintiffs' Motion for Preliminary Injunction, Bottlang Decl., ¶ 48. The honeycomb insert in the Striker Helmet is therefore a shock absorbing insert. <i>Id.</i>
	To the extent this element is not explicitly disclosed by the FOX Striker Helmet, it is disclosed by:
	<ul> <li>Muskovitz (Ex. A), Element 1[C]</li> <li>Sajic (Ex. B), Element 1[C]</li> <li>Landi (Ex. C), Element 1[C]</li> <li>Protos Integral Helmet (Ex. E), Element 1[C]</li> </ul>
	A POSA would also have been motivated to combine the teachings of the FOX Striker Helmet with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Sajic, Landi, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the FOX Striker Helmet with the layered structure of materials found in Muskovitz, Sajic, Landi, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably

'373 Asserted Claims	Prior Art Disclosures
	interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C1]: wherein at least a portion of the shock absorbing liner is positioned between the shell and the shock absorbing insert,	The FOX Striker Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert wherein at least a portion of the shock absorbing liner is positioned between the shell and the shock absorbing insert recited in claim 1. For example: shell with vents shock-absorbing liner (EPS) shock-absorbing insert (honeycomb) cavity in EPS liner Cavity must be partially aligned with vent Portion of EPS liner between shell and insert
	Insert must permit ventilation through vent
	To the extent this element is not explicitly disclosed by the FOX Striker Helmet, it is disclosed by:

1272 Accorted	Prior Art Disclosures
'373 Asserted Claims	Prior Art Disclosures
	<ul> <li>Muskovitz (Ex. A), Element 1[C1]</li> <li>Sajic (Ex. B), Element 1[C1]</li> <li>A POSA would also have been motivated to combine the teachings of the FOX Striker Helmet with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz or Sajic charted in these Invalidity Contentions. For example, a POSA would have been</li> </ul>
	motivated to combine the FOX Striker Helmet with the layered structure of materials found in Muskovitz or Sajic for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C2]: wherein the shock absorbing insert comprises an array of energy absorbing cells, each having respective open first longitudinal ends and open second longitudinal ends,	The FOX Striker Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert wherein the shock absorbing insert comprises an array of energy absorbing cells, each having respective open first longitudinal ends and open second longitudinal ends recited in claim 1. For example:

'373 Asserted Claims	Prior Art Disclosures
	Array of energy absorbing cells
	<ul> <li>To the extent this element is not explicitly disclosed by the FOX Striker Helmet, it is disclosed by:</li> <li>Muskovitz (Ex. A), Element 1[C2]</li> </ul>
	<ul> <li>Sajic (Ex. B), Element 1[C2]</li> <li>Landi (Ex. C), Element 1[C2]</li> <li>Protos Integral Helmet (Ex. E), Element 1[C2]</li> </ul>
	A POSA would also have been motivated to combine the teachings of the FOX Striker Helmet with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Sajic, Landi, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the FOX Striker Helmet with the layered structure of materials found in Muskovitz, Sajic, Landi, or the Protos Integral, and or the Protos Integral Helmet charted in the set.

'373 Asserted	Prior Art Disclosures
Claims	stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C3]: wherein the first longitudinal ends of a first plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the first opening and the first longitudinal ends of a second plurality of adjacent cells of the array of energy absorbing cells are positioned within a	The FOX Striker Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert wherein the first longitudinal ends of a first plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the first opening and the first longitudinal ends of a second plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the first opening such that air is able to flow from an exterior side of the helmet through each of the first and second vents and through a respective one of the first and second plurality of adjacent cells toward an interior of the helmet recited in claim 1. For example:

'373 Asserted Claims	Prior Art Disclosures
perimeter of the second opening such that air is able to flow from an exterior side of the helmet through each of the first and second vents and through a respective one of the first and second plurality of adjacent cells toward an interior of the helmet.	Purality of the array of energy to sorbing cells position of within a perimeter
	As shown, limitation 1[C3] was used on the Fox Striker helmet, including that the longitudinal ends of the honeycomb cells are positioned within a perimeter of the opening.
	To the extent this element is not explicitly disclosed by the FOX Striker Helmet, it is disclosed by:
	Muskovitz (Ex. A), Element 1[C3]

'373 Asserted	Prior Art Disclosures
Claims	
	<ul> <li>Sajic (Ex. B), Element 1[C3]</li> <li>Protos Integral Helmet (Ex. E), Element 1[C3]</li> </ul>
	A POSA would also have been motivated to combine the teachings of the FOX Striker Helmet with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Sajic, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the FOX Striker Helmet with the layered structure of materials found in Muskovitz, Sajic, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
2. The helmet of claim 1, wherein the shock absorbing liner is seamless.	The FOX Striker Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet of claim 1, wherein the shock absorbing liner is seamless as recited in claim 2. For example: As is traditional in the manufacture of EPS foam helmets, the shock absorbing liner of the
	Striker Helmet is seamless, i.e., one piece. To the extent this element is not explicitly disclosed by the FOX Striker Helmet, it is disclosed by:
	Muskovitz (Ex. A), Claim 2

'373 Asserted	Prior Art Disclosures
Claims	
	<ul> <li>Sajic (Ex. B), Claim 2</li> <li>A POSA would also have been motivated to combine the teachings of the FOX Striker Helmet with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz or Sajic charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the FOX Striker Helmet with the layered structure of materials found in Muskovitz or Sajic for improved stability, head protection, and air size layer of a person of ordinary shall in the art.</li> </ul>
	Muskovitz or Sajic for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
3. The helmet of claim 1, wherein the array of energy absorbing cells of the shock	The FOX Striker Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet of claim 1, wherein the array of energy absorbing cells of the shock absorbing insert comprises an array of tubes as recited in claim 3. For example:
absorbing insert comprises an array of tubes.	As can be seen in the images of the rear vents on the Striker Helmet, the shock absorbing insert is made of a honeycomb, and using the definition of "tube" that Smith apparently adopts, each hexagonal "honeycomb" results in a separate tube, resulting in the shock absorbing insert comprising an array of tubes.
	<ul> <li>To the extent this element is not explicitly disclosed by the FOX Striker Helmet, it is disclosed by:</li> <li>Muskovitz (Ex. A), Claim 3</li> </ul>

'373 Asserted	Prior Art Disclosures
Claims	FIIOT AIL DISCIOSULES
	<ul> <li>Sajic (Ex. B), Claim 3</li> <li>Landi (Ex. C), Claim 3</li> <li>Protos Integral Helmet (Ex. E), Claim 3</li> </ul>
	A POSA would also have been motivated to combine the teachings of the FOX Striker Helmet with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz, Sajic, Landi, or the Protos Integral Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the FOX Striker Helmet with the layered structure of materials found in Muskovitz, Sajic, Landi, or the Protos Integral Helmet for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
7. The helmet of claim 1, wherein the shock absorbing insert extends to a portion of the helmet configured	The FOX Striker Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet of claim 1, wherein the shock absorbing insert extends to a portion of the helmet configured to he [sic] positioned at a back of a wearer's head as recited in claim 7. For example:
extends to a portion of the	claim 7. For example:

'373 Asserted Claims	Prior Art Disclosures
back of a wearer's head.	
	To the extent this element is not explicitly disclosed by the FOX Striker Helmet, it is disclosed by:
	<ul> <li>Muskovitz (Ex. A), Claim 7</li> <li>Sajic (Ex. B), Claim 7</li> </ul>
	A POSA would also have been motivated to combine the teachings of the FOX Striker Helmet with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the Muskovitz or Sajic charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the FOX Striker Helmet with the layered structure of materials found in Muskovitz or Sajic for improved stability, head protection, and air circulation. Further, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the

'373 Asserted Claims	Prior Art Disclosures
	predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.

## **EXHIBIT E**

IPR2022-00354 Burton v. Smith Sports Optics Smith Sport's Exhibit 2009, page 122

## Exhibit E Burton Invalidity Contentions The Protos Integral Helmet (2012)

The Protos Integral Helmet was known by others, used by others, offered for sale, on sale, and sold no later than 2012<sup>1</sup> and displayed at a publicly accessible trade show, Bauma 2013, in Munich, Germany in 2013<sup>2</sup> and qualifies as prior art to U.S. Patent No. 10,736,373 ("373 Patent") at least under post-AIA 35 U.S.C. § 102(a)(1) and anticipates, and, alone or with other references, renders obvious one or more of claims 1, 2, 3, and 7. To the extent the Protos Integral Helmet does not disclose one or more limitations of the claims, it would have been obvious to combine the teachings of the Protos Integral Helmet with the knowledge of one of ordinary skill in the art and with one or more of the references below to render the claims at issue in the '373 patent invalid.

- U.S. Pat. App. Pub. No. 2004/0064873 ("Muskovitz")
- U.S. Pat. App. Pub. No. 2008/0307568 ("Sajic")
- U.S. Pat. No. 4,422,183 ("Landi")
- The FOX Striker Helmet

To the extent that these Invalidity Contentions rely on or otherwise embody particular constructions of terms or phrases in the Asserted Claims, Burton is not proposing any such constructions as proper constructions of those terms or phrases. Various positions put forth in this document are predicated on Smith's incorrect and overly broad interpretation of its claims as evidenced by its infringement contentions. Those positions are not intended to and do not necessarily reflect Burton's interpretation of the true and proper scope of the Asserted Claims.

<sup>&</sup>lt;sup>1</sup> BURTON-0001166 - BURTON-0001223: 2012 Websites Showing Sale

<sup>&</sup>lt;sup>2</sup> BURTON-0001137 - BURTON-0001154: Bauma 2013 and Videos

'373 Asserted Claims	Prior Art Disclosures
'373 Asserted Claims 1[PRE]: A helmet, comprising:	Prior Art Disclosures         To the extent the preamble is limiting, the Protos Integral Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet recited in claim 1.         Protos Integral YouTube Video <a href="https://www.youtube.com/watch?v=kDDGa1iC8Mg">https://www.youtube.com/watch?v=kDDGa1iC8Mg</a> (Protos Helmet Video)
	BURTON-0001145: Photograph posted by Koroyd on Facebook on April 17, 2013 ("Class leading impact protection. Exceeding: EN397 Industrial Safety Helmets, EN12492 Helmets for Mountaineers").







'373 Asserted Claims	Prior Art Disclosures
	BURTON-0001139: Photograph posted by Koroyd on Facebook on April 17, 2013. Photograph depicts a prototype version of the Protos Integral Helmet with a clear shell exterior.

'373 Asserted Claims	Prior Art Disclosures
1[A]: a shell comprising a plurality of vents including a first vent defining a first opening and a second vent defining a second opening;	The Protos Integral Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shell comprising a plurality of vents including a first vent defining a first opening and a second vent defining a second opening recited in claim 1. Protos Integral YouTube Video <u>https://www.youtube.com/watch?v=kDDGa1iC8Mg</u> (Protos Helmet Video)



'373 Asserted Claims	Prior Art Disclosures
	First Vent Second Vent
	BURTON-0001139: Photograph posted by Koroyd on Facebook on April 17, 2013. Photograph depicts a prototype version of the Protos Integral Helmet with a clear shell exterior.

'373 Asserted Claims	Prior Art Disclosures
	First Vent Second Vent
	To the extent that this element is not explicitly disclosed, a POSA would have found it obvious in light of this reference. A POSA would also have been motivated to combine the teachings of this reference with the knowledge of a person of ordinary skill in the art, and/or this reference combined with the other references charted for this patent in these Invalidity Contentions. For example, one of skill in the art would find the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find the treatment by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would have a reasonable expectation of

'373 Asserted Claims	Prior Art Disclosures
	success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
	Burton's Invalidity Contentions are based on Plaintiffs apparent proposed construction of the term "plurality of vents." Burton will provide Plaintiffs and the Court with its full proposed claim construction and analysis for this claim limitation at the time dictated under the Court's Scheduling Order (D.I. 57).
1[B]: a shock absorbing liner adjacent to and attached to the shell and comprising a cavity at least partially aligned with the plurality of vents;	<ul> <li>To the extent this element is not explicitly disclosed by the Protos Integral Helmet, it is disclosed by:</li> <li>Muskovitz (Ex. A), Element 1[B]</li> <li>Sajic (Ex. B), Element 1[B]</li> <li>FOX Striker Helmet (Ex. D), Element 1[B]</li> </ul>
and	A POSA would also have been motivated to combine the teachings of the Protos Integral Helmet with the knowledge of a person of ordinary skill in the art and/or Muskovitz, Sajic, or the FOX Striker Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the Protos Integral Helmet with the layered materials found in Muskovitz, Sajic, or the FOX Striker Helmet for improved stability and head protection. Further, one of skill in the art would have found the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.

'373 Asserted Claims	Prior Art Disclosures
'373 Asserted Claims 1[C]: a shock absorbing insert positioned in and substantially filling the cavity such that the shock absorbing insert is visible through and spans across at least a portion of each of the plurality of vents,	Prior Art Disclosures The Protos Integral Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert positioned in and substantially filling the cavity such that the shock absorbing insert is visible through and spans across at least a portion of each of the plurality of vents recited in claim 1. Protos Integral YouTube Video <a href="https://www.youtube.com/watch?v=kDDGa1iC8Mg">https://www.youtube.com/watch?v=kDDGa1iC8Mg</a> (Protos Helmet Video)



'373 Asserted Claims	Prior Art Disclosures
	Shock Absorbing hsert *
	To the extent this element is not explicitly disclosed by the Protos Integral Helmet, it is disclosed by:
	<ul> <li>Sajic (Ex. B), Element 1[C]</li> <li>Landi (Ex. C), Element 1[C]</li> </ul>
	A POSA would also have been motivated to combine the teachings of the Protos Integral Helmet with the knowledge of a person of ordinary skill in the art and/or Sajic, or Landi charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the Protos Integral Helmet with the layered materials found in Sajic or Landi for improved stability and head protection. Further, one of skill in the art would have found the combination obvious to try, due at least to the similarity of the technical teachings of the art.

'373 Asserted Claims	Prior Art Disclosures
	As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C1]: wherein at least a portion of the shock absorbing liner is	To the extent this element is not explicitly disclosed by the Protos Integral Helmet, it is disclosed by:
positioned between the shell and the shock absorbing insert,	<ul> <li>Muskovitz (Ex. A), Element 1[C1]</li> <li>Sajic (Ex. B), Element 1[C1]</li> </ul>
	A POSA would also have been motivated to combine the teachings of the Protos Integral Helmet with the knowledge of a person of ordinary skill in the art and/or Muskovitz or Sajic charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the Protos Integral Helmet with the layered materials found in Muskovitz or Sajic for improved stability and head protection. Further, one of skill in the art would have found the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C2]: wherein the shock absorbing insert	The Protos Integral Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of

'373 Asserted Claims	Prior Art Disclosures
comprises an array of	a person of ordinary skill in the art, discloses the shock absorbing insert wherein the shock
energy absorbing cells,	absorbing insert comprises an array of energy absorbing cells, each having respective open
each having respective open first longitudinal	first longitudinal ends and open second longitudinal ends recited in claim 1.
ends and open second	Protos Integral YouTube Video <a href="https://www.youtube.com/watch?v=kDDGa1iC8Mg">https://www.youtube.com/watch?v=kDDGa1iC8Mg</a>
longitudinal ends,	(Protos Helmet Video)
	Array of Knergy         Absorber cells         Absorber cells         Absorber cells         BURTON-0001137: Photograph posted by Koroyd on Facebook on April 17, 2013.

'373 Asserted Claims	Prior Art Disclosures
	Array of Energy Absorbing Cells
	BURTON-0001139: Photograph posted by Koroyd on Facebook on April 17, 2013. Photograph depicts a prototype version of the Protos Integral Helmet with a clear shell exterior.





'373 Asserted Claims	Prior Art Disclosures
	have been motivated to combine the Protos Integral Helmet with the layered materials found in Sajic, Landi, or the FOX Striker Helmet for improved stability and head protection. Further, one of skill in the art would have found the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
1[C3]: wherein the first longitudinal ends of a first plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the first opening and the first longitudinal ends of a second plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the second opening such that air is able to flow from an exterior side of the helmet through each of	The Protos Integral Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the shock absorbing insert wherein the first longitudinal ends of a first plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the first opening and the first longitudinal ends of a second plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the first opening the first opening and the first longitudinal ends of a second plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the second opening such that air is able to flow from an exterior side of the helmet through each of the first and second vents and through a respective one of the first and second plurality of adjacent cells toward an interior of the helmet recited in claim 1. Protos Integral YouTube Video https://www.youtube.com/watch?v=kDDGa1iC8Mg (Protos Helmet Video). On information and belief, the first longitudinal ends of a first plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the first opening and the first longitudinal ends of a second plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the first opening and the first longitudinal ends of a second plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the first opening and the first longitudinal ends of a second plurality of adjacent cells of the array of energy absorbing cells are positioned within a perimeter of the second opening.

## '373 Asserted Claims

the first and second vents and through a respective one of the first and second plurality of adjacent cells toward an interior of the helmet.

## <section-header><section-header>

BURTON-0001139: Photograph posted by Koroyd on Facebook on April 17, 2013. Photograph depicts a prototype version of the Protos Integral Helmet with a clear shell exterior.



'373 Asserted Claims	Prior Art Disclosures
	Further, one of skill in the art would have found the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
	Burton's Invalidity Contentions are based on Plaintiffs apparent proposed construction of the term "plurality of vents." Burton will provide Plaintiffs and the Court with its full proposed claim construction and analysis for this claim limitation at the time dictated under the Court's Scheduling Order (D.I. 57).
2. The helmet of claim 1, wherein the shock absorbing liner is seamless.	To the extent this element is not explicitly disclosed by the Protos Integral Helmet, it is disclosed by: <ul> <li>Muskovitz (Ex. A), Claim 2</li> <li>Sajic (Ex. B), Claim 2</li> <li>FOX Striker Helmet (Ex. D), Claim 2</li> </ul>
	A POSA would also have been motivated to combine the teachings of the Protos Integral Helmet with the knowledge of a person of ordinary skill in the art and/or Muskovitz, Sajic, or the FOX Striker Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the Protos Integral Helmet with the layered materials found in Muskovitz, Sajic, or the FOX Striker Helmet for improved stability and head protection. Further, one of skill in the art would have found the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple

'373 Asserted Claims	Prior Art Disclosures
	substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
3. The helmet of claim 1, wherein the array of energy absorbing cells of the shock absorbing insert comprises an array of tubes.	The Protos Integral Helmet, alone or in combination with other references identified in this chart or elsewhere in Burton's invalidity contentions, and further in light of the knowledge of a person of ordinary skill in the art, discloses the helmet of claim 1, wherein the array of energy absorbing cells of the shock absorbing insert comprises an array of tubes as recited in claim 3.
	Protos Integral YouTube Video <u>https://www.youtube.com/watch?v=kDDGa1iC8Mg</u> (Protos Helmet Video).
	Array of Tubes

'373 Asserted Claims	Prior Art Disclosures
	To the extent this element is not explicitly disclosed by the Protos Integral Helmet, it is disclosed by:
	<ul> <li>Sajic (Ex. B), Claim 3</li> <li>Landi (Ex. C), Claim 3</li> </ul>
	A POSA would also have been motivated to combine the teachings of the Protos Integral Helmet with the knowledge of a person of ordinary skill in the art and/or Sajic, or Landi charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the Protos Integral Helmet with the layered materials found in Sajic, or Landi for improved stability and head protection. Further, one of skill in the art would have found the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.
7. The helmet of claim 1, wherein the shock absorbing insert extends to a portion of the helmet	<ul> <li>To the extent this element is not explicitly disclosed by the Protos Integral Helmet, it is disclosed by:</li> <li>Muskovitz (Ex. A), Claim 7</li> </ul>
configured to he [sic] positioned at a back of a	<ul> <li>Sajic (Ex. B), Claim 7</li> <li>FOX Striker Helmet (Ex. D), Claim 7</li> </ul>
wearer's head.	
	A POSA would also have been motivated to combine the teachings of the Protos Integral Helmet with the knowledge of a person of ordinary skill in the art and/or Muskovitz, Sajic, or

'373 Asserted Claims	Prior Art Disclosures
	the FOX Striker Helmet charted in these Invalidity Contentions. For example, a POSA would have been motivated to combine the Protos Integral Helmet with the layered materials found in Muskovitz, Sajic, or the FOX Striker Helmet for improved stability and head protection. Further, one of skill in the art would have found the combination obvious to try, due at least to the similarity of the technical teachings of the art. As another example, one of skill in the art would find that the teachings could be predictably interchanged by, for example, simple substitution, at least because of the predictability of the art and the known interchangeability of the various elements. As another example, one of skill in the art would be motivated to combine the references, and would have a reasonable expectation of success in doing so, at least because the references use known variations of existing technology to solve routine and well understood problems in predictable ways.