IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

HY-KO PRODUCTS COMPANY LLC,	)	
	)	
Plaintiff,	)	
	)	
v.	)	**C.A. No. 2:21-cv-00197-JRG**
	)	
THE HILLMAN GROUP, INC.,	)	
	)	
Defendant.	)	

HILLMAN'S AMENDED PRELIMINARY INVALIDITY CONTENTIONS REGARDING U.S. PATENT NO. 9,656,332; U.S. PATENT NO. 9,682,432; U.S. PATENT NO. 9,687,920; AND U.S. PATENT NO. 10,421,133

Pursuant to P.R. 3-3, P.R. 3-4, and the Docket Control Order (Dkt. No. 33) in the above-captioned case, Defendant The Hillman Group, Inc. ("Hillman") hereby provides its Amended Preliminary Invalidity Contentions with respect to the claims identified by Plaintiff Hy-Ko Products Company LLC ("Hy-Ko") in its September 15, 2021 Infringement Contentions previously served in the above-captioned matter ("Infringement Contentions").

I. PRELIMINARY STATEMENT AND RESERVATION OF RIGHTS

A. ASSERTED CLAIMS

Plaintiff asserts the following patents, claims, and priority dates in its Infringement Contentions.

Asserted Patent	Asserted Claims	Asserted Priority Date
U.S. Patent No. 9,656,332 (the '332 patent)	1–2, 4, 8–11, and 13	January 23, 2006
U.S. Patent No. 9,682,432 (the '432 patent)	1– 3, 6–13, 15–20, 22–27	January 23, 2006
U.S. Patent No. 9,687,920 (the '920 patent)	1, 4–7, 9–11, 14–15, 17–20, 22–25	January 23, 2006
U.S. Patent No. 10,421,133 (the '133 patent)	1–6, 9–16, 18, 20–21, 24	January 23, 2006

Hillman contends that each of the Asserted Claims is invalid under at least one or more of 35 U.S.C. §§ 101, 102, 103, or 112. Pursuant to the Patent Rules, Hillman does not provide any contentions regarding any claims not asserted by Plaintiff. To the extent the Court permits Plaintiff to assert additional claims against Hillman in the future, Hillman reserves all rights to supplement these Preliminary Invalidity Contentions or to otherwise disclose new or supplemental invalidity contentions regarding such claims. Furthermore, because discovery is ongoing, Hillman reserves the right to revise, amend, and/or supplement the information

provided herein, including identifying, charting, and relying on additional references, should discovery yield additional information or references. Hillman further reserves the right to amend these contentions in response to any claim construction rulings, as permitted by the Patent Rules or with permission of the Court.

The Infringement Contentions are deficient in multiple respects and do not provide Hillman with sufficient information to understand the specific accused features and components and the alleged factual and evidentiary bases for Plaintiff's infringement allegations. Among other things, the Infringement Contentions lack the specificity required by P. R. 3-1, fail to properly identify accused instrumentalities, and fail to explain adequately Plaintiff's infringement theories for numerous claim elements. Plaintiff has prejudiced Hillman's ability to understand, for purposes of preparing these Preliminary Invalidity Contentions, what Plaintiff alleges to be the scope of the Asserted Claims. If Plaintiff modifies any assertion or contention in its Infringement Contentions or presents any new assertion or contention relevant to these Preliminary Invalidity Contentions to the extent allowed by the Patent Rules or the Court, Hillman reserves the right to supplement or otherwise amend these initial Invalidity Contentions.

B. PRIORITY DATE OF THE ASSERTED PATENT

Plaintiff's Infringement Contentions contain allegations regarding the priority date to which Plaintiff alleges it if entitled for each of the Asserted Claims. *See* Infringement Contentions at 3. Hillman does not agree that Plaintiff is entitled to the alleged priority dates for each of the Asserted Claims. To the extent Plaintiff modifies its alleged priority date, Hillman reserves the right to supplement its invalidity contentions.

Any reference to an "asserted priority date" in these Preliminary Invalidity Contentions refers to the priority dates identified in Plaintiff's Infringement Contentions. Reference to a

"priority date" or an "asserted priority date" should not be construed to mean that Hillman agrees that the Asserted Patents are in fact entitled to such priority date, or that Plaintiff has provided proper notice as to its contentions for a priority date. To the extent Plaintiff alleges that any prior art relied on in these Preliminary Invalidity Contentions does not actually qualify as prior art to an Asserted Patent, Hillman reserves the right to rebut those allegations (e.g., by demonstrating an earlier critical date for the challenged prior art and/or a later priority date for a particular Asserted Patent and/or Asserted Claim).[1] Likewise, to the extent Plaintiff successfully establishes an invention date before any of the prior art references relied on by Hillman, then those references evidence secondary considerations of obviousness, particularly contemporaneous invention by others.

C. CLAIM CONSTRUCTION

Because the Court has not yet construed any terms of the Asserted Claims, Hillman's Preliminary Invalidity Contentions are based on (1) Hillman's present understanding of the Asserted Claims in light of Plaintiff's assertions, and (2) the claim constructions Plaintiff appears to be proposing based on the Infringement Contentions, all without regard to whether Hillman agrees with Plaintiff's apparent or expressed claim constructions. Hillman reserves the right to supplement or otherwise amend these Preliminary Invalidity Contentions in response to any proposed claim constructions or alleged supporting evidence offered by Plaintiff, any report from any expert witness for Plaintiff regarding claim construction issues, any claim construction briefing filed by Plaintiff, and any position taken by Plaintiff concerning claim construction, infringement, or invalidity.

[1] Hillman reserves the right to rely on additional documents and evidence to rebut any efforts by Plaintiff to allege any reference was not publicly available or otherwise available as prior art.

Hillman takes no position on any matter of claim construction in these Preliminary Invalidity Contentions. If Hillman's apparent claim constructions herein are consistent with any explicit, apparent, or implied claim constructions in the Infringement Contentions, no inference is intended and no inference should be drawn that Hillman agrees with any of Plaintiff's claim constructions. Any statement herein describing or tending to describe any claim element is provided solely for the purpose of understanding and/or applying the cited prior art. Hillman expressly reserves the right to (1) propose any claim construction Hillman considers appropriate, (2) contest any claim construction proposed by Plaintiff that Hillman considers inappropriate or inaccurate, and/or (3) take positions with respect to claim construction issues that are inconsistent with, or even contradictory to, claim construction positions expressed or implied in these Preliminary Invalidity Contentions.

Prior art not included in these Preliminary Invalidity Contentions, whether now known to Hillman or not, might become relevant depending on the claim constructions proposed by Hillman and/or the Court's claim construction rulings. Hillman reserves all rights to supplement or modify the positions and information in these Preliminary Invalidity Contentions, including without limitation the prior art and grounds of invalidity set forth herein pursuant to P.R. 3-6 after the Court has construed the asserted claims.

D. ONGOING DISCOVERY AND SUPPLEMENTATION

Hillman's investigation, including its investigation of prior art and grounds for invalidity, is ongoing. Furthermore, Hillman's invalidity positions will be the subject of expert testimony. Hillman bases these Preliminary Invalidity Contentions on their current knowledge and understanding of the Asserted Claims, Plaintiff's Infringement Contentions, the prior art, and other facts and information available as of the date of these contentions. Hillman reserves the

right to supplement these Preliminary Invalidity Contentions, including, without limitation, by adding additional prior art and grounds of invalidity in accordance with the Federal Rules of Civil Procedure, the Local Rules, the local Patent Rules, the Docket Control Order, any Order issued by this Court, or otherwise.

E. PRIOR ART INDENTIFICATION AND CITATIONS THERETO

In these Preliminary Invalidity Contentions, Hillman identifies specific portions of prior art references that disclose the elements of each of the Asserted Claims. While Hillman has identified exemplary prior art references for each element, they do not necessarily identify every disclosure of the same element in each prior art reference. A person of ordinary skill in the art would read a prior art reference as a whole and in the context of other publications, literature, and general knowledge in the field and would rely upon other information including other publications and general scientific or engineering knowledge. Hillman therefore reserves the right to rely upon (1) other portions of the cited prior art references, other publications, prior art products, and the testimony of experts to establish that the alleged inventions would have been obvious to a person of ordinary skill in the art, including on the basis of modifying or combining certain cited references; (2) admissions relating to prior art in the Asserted Patents or related patents, the prosecution history of the Asserted Patents or related patents, or other admissions obtained during discovery; and (3) foreign counterparts of any U.S. patents identified in Hillman's Preliminary Invalidity Contentions.

Where Hillman identifies a particular figure in a prior art reference, the identification should be understood to encompass the caption and description of the figure as well as any text relating to the figure in the remainder of the prior art reference (e.g., if a patent reference, in the specification and prosecution history). Similarly, where an identified portion of text refers to a

figure or other material, the identification of the text should be understood to include the referenced figure or other material. In addition, where a reference is made to an earlier claim element (e.g. "See Claim 1.0"), that reference should be understood to incorporate by reference all of the evidence cited in that particular element.

Finally, Hillman's invalidity contentions are based on Hy-Ko's apparent assertions with respect to the Asserted Claims, to the extent these assertions can be understood at all. Thus, to the extent Hillman's invalidity contentions identify the same or similar disclosure in a prior art reference that Hy-Ko points to for an element of an Asserted Claim, Hillman does not necessarily admit that this disclosure satisfies the element of the Asserted Claim, including under a proper claim construction. Nevertheless, in an effort to preserve its rights, Hillman in some circumstances identifies specific passages which may satisfy a claim element under an interpretation of Hy-Ko's vague and generic infringement allegations (which Hy-Ko has refused to clarify), but Hillman does not necessarily admit that the specific passages would satisfy the claim element under a proper interpretation of the claim.

Hillman has also filed Petitions for *Inter Partes* Review ("IPRs") on each of the patents-in-suit.[2] These IPRs provide additional details and disclosure on how each element of each of the asserted claims is met under the pertinent prior art and how there is motivation to combine the pertinent prior art references to arrive at the claimed subject matter. Hillman refers Hy-Ko to those additional details and disclosure, and incorporates the details, arguments, and disclosure in the IPRs by reference in its invalidity contentions.

[2] *See* IPR2022-00168 ('332); IPR2022-00169 ('133); IPR2022-00174 ('920); and IPR2022-00175 ('432).

F. INVALIDITY, UNENFORCEABILITY AND/OR INELIGIBILITY BASED ON NON-REQUIRED DISCLOSURE(S)

Hillman reserves the right to prove the invalidity, unenforceability, and/or ineligibility of one or more of each of the Asserted Claims on bases other than those required by P.R. 3-3 to be disclosed in these disclosures.

G. INVALIDITY UNDER SECTION 102(F) PRIOR ART

Hillman reserves the right to assert that the Asserted Claims of the Asserted Patents are invalid under 35 U.S.C. § 102(f) in the event they obtain evidence that the applicants named on the Asserted Patents or related patents did not themselves "invent" the subject matter claimed. Should Hillman obtain such evidence, it will provide the name of the person(s) from whom and the circumstances under which the claimed subject matter or any part of it was derived.

H. NO PATENTABLE WEIGHT

Hillman reserves the right to argue that various portions of each of the Asserted Claims, such as an intended use or result, non-functional descriptive material, and certain preamble language, are entitled to no patentable weight. Mapping of a portion of an Asserted Claim to a prior art reference does not represent that such portion of the claim is entitled to patentable weight when comparing the claimed subject matter to the prior art.

II. INVALIDITY CONTENTIONS

As explained herein and in Exhibits A1 through D17, Hillman contends that each of the Asserted Claims are invalid under 35 U.S.C. §§ 101, 102, 103, and/or 112.

A. P.R. 3-3(A) — IDENTIFICATION OF PRIOR ART

Pursuant to P. R. 3-3(a), and subject to Hillman's reservation of rights as stated herein, Hillman identifies the prior art that anticipates or renders obvious the Asserted Claims in the

tables set forth below.[3] Each listed reference qualifies as prior art to each of the Asserted Patents.[4] Each listed reference may be asserted against any Hy-Ko Asserted Claim to invalidate such claim under an anticipation and/or obviousness analysis. Hillman refers to its attached claim charts, which provide exemplary showings of how each Asserted Claim is invalid as anticipated and/or obvious.

Hillman reserves the right to rely upon foreign counterparts of the U.S. patents identified herein; U.S. counterparts of foreign patents and foreign patent applications identified herein; and U.S. and foreign patents and patent applications corresponding to articles and publications identified herein. Hillman also reserves the right to rely upon parent or ancestor patents or patent applications from which any of the patents or patent applications identified herein claim priority to as continuation, divisional, or continuation-in-part applications.

1. Identification of Prior Art Patents

Patent/Publication No.	**Country of Origin**	**Date of Issue/Publication[5]**
EP 0053730 B1 ("Schmalfuss")	E.U.	Published Sept. 18, 1985
US 4,666,351 ("Marchal")	U.S.A.	Issued May 19, 1987
US 4,899,391 ("Cimino")	U.S.A.	Issued Feb. 6, 1990
US 5,128,531 ("Fadel")	U.S.A.	Issued Jul. 7, 1992

[3] Hillman also hereby identifies any systems or products that embody the technology described in any patent or publication identified in these Preliminary Invalidity Contentions. Hillman reserves the right to rely on any documents or other evidence regarding any such systems.

[4] Hillman may rely on any document produced with its Invalidity Contentions to explain the background and/or state of the art to the Asserted Patents.

[5] For any patent that claims the benefit of a provisional application(s), Hillman may rely on the provisional application(s) for purposes of establishing invalidity.

EP 614717 B1 (“Eros”)	E.U.	Published Sept. 14, 1994
US 5,739,766 (“Chaloux”)	U.S.A.	Issued Apr. 14, 1998
US 5,908,273 (“Titus 273”)	U.S.A.	Issued Jun. 1, 1999
WO 99/55482 (“Almblad”)	WIPO	Published Nov. 4, 1999
US 6,064,747 (“Wills 747”)	U.S.A.	Issued May 16, 2000
WO 00/54212 (“Pacenzia”)	WIPO	Published Sept. 14, 2000
US 6,152,662 (“Titus 662”)	U.S.A.	Issued Nov. 28, 2000
US 6,175,638 (“Yanovsky”)	U.S.A.	Issued Jan. 16, 2001
US 6,839,451 B2 (“Campbell”)	U.S.A.	Issued Jan. 4. 2005
US 6,588,995 (“Wills 995”)	U.S.A.	Issued Jul. 8, 2003
US 8,451,099 B2 (“Donadini”)	U.S.A.	Issued May 28, 2013
US 3,442,174 (“Weiner”)	U.S.A.	Issued May 6, 1969
US 20070003388 (“Doong”)	U.S.A.	Published Jan. 4, 2007
WO 2011/039148 (“Donadini 148”)	WIPO	Issued Apr. 7, 2011
WO 01/57472 (“Titus 472”)	WIPO	Issued Jan. 31, 2001
US 2001/0033781 (“Wills 781”)	U.S.A.	Issued Oct. 25, 2001
US 6,836,553 (“Campbell 553”)	U.S.A.	Issued Dec. 28, 2004
US 6,175,638 (“Yanovsky”)	U.S.A.	Issued Jan. 16, 2001
US 6,543,972 (“Cimino 972”)	U.S.A.	Issued Apr. 8, 2003
US 6,406,227 (“Titus 227”)	U.S.A.	Issued June. 8, 2002
US 5,271,698 (“Heredia”)	U.S.A.	Issued Dec. 21, 1993
US 5,314,274 (“Heredia 274”)	U.S.A.	Issued May 24, 1994

U.S. Patent No. 5,608,417 ("de Vall")	U.S.A.	Issued Mar. 4, 1997
U.S. Patent No. 4,658,263 ("Urbanski")	U.S.A.	Issued Apr. 14, 1987

2. Identification of Prior Art Publications

Title, Author(s), and Publisher	**Date of Publication**
Roger F. Kromann, *Computer Vision System for Identification, Measurement, and Duplication of Machined Parts*, XVII SPIE CONFERENCE ON INTELLIGENT ROBOTS AND COMPUTER VISION 157 (1998) ("Kromann")	November 1998
Bob Sieveking, *To Clone or Not to Clone*, 70 NATIONAL LOCKSMITH, no. 9, Jul. 2000, at 26–36 ("RW2 Article")	September 1999
Sal Dulcamaro, *SpeedyPik*, 71 NATIONAL LOCKSMITH, no. 7, Sept. 1999, at 45, 52–54 ("SpeedyPik Article")	July 2000
Giles Kalvelage, *Ilco Ultracode*, 72 NATIONAL LOCKSMITH, no. 2, Feb. 2001, at 20–24 ("Ultracode Article")	February 2001
SILCA S.p.A., D425337XA Unocode 299 Operating Manual Vers. 6 (2002) ("Unocode Manual")	December 2002
SILCA S.p.A., D425714XA LectorPro Operating Manual Vers. 2 (2003) ("LectorPro Manual")	September 2003
Silca, Lector Pro Powerpoint Presentation, "Lector Pro."	2005
Walmart Key Merchandising & 2006 Updates, Presented to Roderick Stakley, Presented By: Terry Rowe, Cindi Chmura, Wendy Quam ("Walmart 2006 Presentation")	April 18, 2006
The Hillman Group, Inc., AXXCESS Precision4 Key Duplicating System Training Guide (Apr. 6, 2007) ("P4 Training Guide").	April 6, 2007

Title, Author(s), and Publisher	Date of Publication
Hy-Ko Products Co., KID+ User's Manual, Model Number: KZA-200 ("KID Manual")	June 1, 2009

3. Identification of Prior Art Sales/Public Uses

Item Offered for Sale and/or Publicly Used[6]	Date of Offer/Public Use	Person or Entity Who Made and Received Offer, Made Public Use, or Made Information Known
LectorPro System	Prior to Sept. 2003	SILCA S.p.A.
KID System[7]	Prior to Jan. 2006	Hy-Ko Products Company, LLC
KID System (KZA-200)[8]	Prior to April 29, 2010	Hy-Ko Products Company, LLC
P4 System[9]	Prior to Jan. 2006	The Hillman Group, Inc.
SpeedyPik System	Prior to Jul. 2000	SpeedyPik Corp.
Ultracode System	Prior to Feb. 2001	Ilco Unican
Silca System f	Prior to Dec. 2003	SILCA S.p.A.
RW2 System	Prior to 2003	SILCA S.p.A.
All systems or products that embody the technology described in any patent or publication identified in these Preliminary Invalidity Contentions.		

[6] Hillman notes that for the prior art systems and all systems or products that embody the technology described in any patent or publication identified in these Preliminary Invalidity Contentions, Hillman reserves the right to collect and produce additional information regarding these systems, including technical documents, source code, testimony, evidence of use, and/or additional evidence.

[7] Hy-Ko admits that its own systems, including KID systems, practice the asserted patents. (https://www.hy-ko.com/patents). Should evidence come to light that these products were available prior to the priority date or otherwise earliest date of the asserted patents, Hillman reserves the right to assert these systems as prior art.

[8] The KID System (KZA-200) was publicly available at least by April 29, 2010, one year before the filing date of 13/097,581 on April 29, 2011 (the earliest possible priority date of each of the '432 asserted claims), and likely much earlier. *See, e.g.*, Hy-Ko's Trial Brief, *Hy-Ko Products Company v. The Hillman Group, Inc.*, Dkt. 287 at 10 (N.D. Ohio Oct. 22, 2012) ("Hy-Ko placed 156 model KZA-200 key duplication machines in Wal-Mart stored in the

For each of the accused systems, Hillman asserts that the alleged system was available at least as of the dates mentioned above, and that the system as of those dates invalidated each of the asserted claims, as shown in more detail in the accompanying charts. Hillman asserts in the alternative that each of the accused systems also invalidates each of the asserted claims of each of the patents-in-suit as of the sales or use of that system prior to January 2006 and in the alternative prior to January 2007. With respect to at least the '432 patent, Hillman also asserts that each of the accused systems invalidate each of the asserted claims of the '432 patent as of the sales or use of that system prior to April 2011.

B. P.R. 3-3(B) — ANTICIPATION AND OBVIOUSNESS

Pursuant to P.R. 3-3(b) and subject to Hillman's reservation of rights, Hillman attaches claim charts hereto that are directed to the prior art references that anticipate each of the Asserted Claims under 35 U.S.C. §§ 102(a), (b), (e), and/or (g), either expressly or inherently, and/or the prior art references that, in the alternative, would have rendered the Asserted Claims obvious under 35 U.S.C. § 103. *See* Exs. A1–A15, B1–B18, B20, C1–16, and D1–D15. Any prior art reference cited herein may be combined with any other reference to demonstrate the invalidity of any of the Asserted Claims, as set forth below.

To the extent any claim limitation is construed to have a similar meaning, or to encompass similar feature(s) and/or function(s), as any other claim limitation, the citations to prior art references for each of those claim limitations in Hillman's claim charts are incorporated by reference with respect to each other.

summer of 2009.").

[9] P4 systems have also previously gone by the name "Ninja."

Hillman's claim charts provide exemplary citations to the prior art references that teach or suggest every element of the Asserted Claims. To the extent that an element of an Asserted Claim is not shown in a chart, the Asserted Claims would have been obvious based on a combination of one or more other prior art references, as set forth below.

Much of the art cited in these Preliminary Invalidity Contentions reflects common knowledge and the state of the art at the time of the earliest filing date of the Asserted Patents. Hillman may rely on additional citations, references, expert testimony, and other material to provide context or to aid in understanding the cited portions of the references and/or cited features of the systems. Hillman also may rely on expert testimony explaining relevant portions of references, relevant hardware or software products or systems, and other discovery regarding these subject matters. Additionally, Hillman may rely on other portions of any prior art reference for purposes of explaining the background and general technical subject area of the reference.

Where an individual reference is cited with respect to all elements of an Asserted Claim, Hillman contends that the reference anticipates the claim under 35 U.S.C. §§ 102(a), (b), (e), and/or (g) and also renders obvious the claim under 35 U.S.C. § 103, both by itself in view of the knowledge of a person of ordinary skill in the art and in combination with the other cited references to the extent the reference is not found to disclose one or more claim elements. A single prior art reference, for example, can establish obviousness where the differences between the disclosures within the reference and the claimed invention would have been obvious to one of ordinary skill in the art. For example, "[c]ombining two embodiments disclosed adjacent to each other in a prior art patent does not require a leap of inventiveness." *Bos. Sci. Scimed, Inc. v. Cordis Corp.*, 554 F.3d 982, 991 (Fed. Cir. 2009). To the extent Plaintiff contends that an embodiment within a particular item of prior art does not fully disclose all limitations of a claim,

Hillman accordingly reserves the right to rely on other embodiments in that prior art reference, or other information, to show single reference obviousness under 35 U.S.C. § 103(a).

Where an individual reference is cited with respect to fewer than all elements of an Asserted Claim, Hillman contends that the reference renders obvious the claim under 35 U.S.C. § 103(a) in view of each other reference and combination of references that discloses the remaining claim element(s), as indicated in the claim charts submitted herewith. "Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined." *KSR Int'l Co. v. Teleflex Inc.,* 550 U.S. 398, 406 (2007) (quoting *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17 (1966)).

Exemplary motivation to combine references are discussed below and in some instances within the accompanying charts. Hillman reserves the right to rely upon any references or assertions identified herein in connection with Hillman's contentions that each Asserted Claim is invalid under 35 U.S.C. § 103 and to rely upon expert testimony addressing such references and assertions. The fact that prior art is identified to anticipate the Asserted Claims presents no obstacle in also relying on that reference as a basis for invalidity based on obviousness. It is established that "a rejection for obviousness under § 103 can be based on a reference which happens to anticipate the claimed subject matter." *In re Meyer*, 599 F.2d 1026, 1031 (C.C.P.A. 1979). To the extent any cited prior art item may not fully disclose a limitation of an Asserted Claim or is alleged by Plaintiff to lack disclosure of the limitation, such limitation is present and identified in another prior art item as shown in the attached claim charts.

Many of the cited references cite or relate to additional references and/or products,

services, or projects. Many of the cited references also cite software, hardware, or systems. Hillman might rely upon such cited additional references and/or products and copies or exemplars of such software, hardware, or systems. Hillman will produce or make available for inspection any such cited references, products, software, hardware, or systems that it intends to rely upon. Hillman may also rely upon the disclosures of the references cited and/or discussed during the prosecution of the Asserted Patents and/or the assertions presented regarding those references.

Hillman reserves the right to further streamline and reduce the number of anticipation or obviousness references relied upon with respect to a given Asserted Claim and to exchange or otherwise modify the specific references relied upon for anticipation and within each obviousness combination for each Asserted Claim.

C. P.R. 3-3(C) — CLAIM CHARTS

Hillman attaches the following claim charts pursuant to P.R. 3-3(c):

'332 patent

- Ex. A1: '332 patent over International Publication No. WO 99/55482 to Almblad ("Almblad")
- Ex. A2: '332 patent over U.S. Patent No. 6,839,451 B2 to Campbell ("Campbell")
- Ex. A3: '332 patent over U.S. Patent No. 5,128,531 to Fadel ("Fadel")
- Ex. A4: '332 patent over Roger F. Kromann, Computer Vision System for Identification, Measurement, and Duplication of Machined Parts, XVII SPIE CONFERENCE ON INTELLIGENT ROBOTS AND COMPUTER VISION 157 (1998) ("Kromann")
- Ex. A5: '332 patent over SILCA S.p.A., D425714XA LectorPro Operating

Manual Vers. 2 (2003) ("LectorPro Manual")

- Ex. A6: '332 patent over U.S. Patent No. 4,666,351 to Marchal ("Marchal")
- Ex. A7: '332 patent over European Patent No. 0053730 B1 to Schmalfuss ("Schmalfuss")
- Ex. A8: '332 patent over Sal Dulcamaro, *SpeedyPik*, 71 NATIONAL LOCKSMITH, no. 7, Sept. 1999, at 52–54 ("SpeedyPik Article")
- Ex. A9: '332 patent over U.S. Patent No. 6,064,747 to Wills ("Wills 747")
- Ex. A10: '332 patent over U.S. Patent No. 6,588,995 to Wills ("Wills 995")
- Ex. A11: '332 patent over U.S. Patent No. 6,175,638 to Yanovsky ("Yanovsky")
- Ex. A13: '332 patent over LectorPro System
- Ex. A14: '332 patent over P4 System
- Ex. A15: '332 patent over SpeedyPik System

'432 patent

- Ex. B1: '432 patent over U.S. Patent No. 5,739,766 to Chaloux ("Chaloux")
- Ex. B2: '432 patent over U.S. Patent No. 8,451,099 B2 to Donadini ("Donadini")
- Ex. B3: '432 patent over U.S. Patent No. 6,152,662 ("Titus 662")
- Ex. B4: '432 patent over U.S. Patent No. 6,406,227 ("Titus 227")
- Ex. B5: '432 patent over SILCA S.p.A., D425714XA LectorPro Operating Manual Vers. 2 (2003) ("LectorPro Manual")
- Ex. B6: '432 patent over U.S. Patent No. 4,666,351 to Marchal ("Marchal")
- Ex. B7: '432 patent over Sal Dulcamaro, *SpeedyPik*, 71 NATIONAL LOCKSMITH, no. 7, Sept. 1999, at 45, 52–54 ("SpeedyPik Article")

- Ex. B8 '432 patent over September 1999 publication *The National Locksmith*. *The National Locksmith*, Vol. 70, No. 9, pp. 26-36, National Publishing Co. (September 1999) ("RW2 Article")
- Ex. B9: '432 patent over U.S. Patent No. 6,064,747 to Wills ("Wills 747")
- Ex. B10: '432 patent over U.S. Patent No. 6,588,995 to Wills ("Wills 995")
- Ex. B11: '432 patent over U.S. Patent No. 6,175,638 to Yanovsky ("Yanovsky")
- Ex. B12: '432 patent over U.S. Patent No. 5,128,531 to Fadel ("Fadel")
- Ex. B13: '432 patent over RW2 System
- Ex. B14: '432 patent over U.S. Patent No. 6,839,451 B2 to Campbell ("Campbell")
- Ex. B15: '432 patent over LectorPro System
- Ex. B16: '432 patent over P4 System
- Ex. B17: '432 patent over Silca System
- Ex. B18: '432 patent over SpeedyPik System
- Ex B20: '432 patent over KID System (KZA-200)[10]

'920 patent

- Ex. C1: '920 patent over International Publication No. WO 99/55482 to Almblad ("Almblad")
- Ex. C2: '920 patent over U.S. Patent No. 6,839,451 B2 to Campbell ("Campbell")

[10] Hillman asserts that the KID System (KZA-200) invalidates all asserted claims of the '432 patent, including under 35 U.S.C. 102(a) and (b). Hillman also separately asserts that the KZA-200 User Manual (HY-KO00023178-23197) cited in the chart invalidates all asserted claims of the '432 patent, including under 35 U.S.C. 102(a) and (b).

- Ex. C3: '920 patent over U.S. Patent No. 4,899,391 to Cimino ("Cimino")
- Ex C4: '920 patent over European Patent No. 614717 B1 to Eros ("Eros")
- Ex C5: '920 patent over SILCA S.p.A., D425714XA LectorPro Operating Manual Vers. 2 (2003) ("LectorPro Manual")
- Ex C6: '920 patent over U.S. Patent No. 4,666,351 to Marchal ("Marchal")
- Ex C7: '920 patent over International Patent No. WO 00/54212 to Pacenzia ("Pacenzia")
- Ex C8: '920 patent over European Patent No. 0053730 B1 to Schmalfuss ("Schmalfuss")
- Ex C9: '920 patent over Sal Dulcamaro, *SpeedyPik*, 71 NATIONAL LOCKSMITH, no. 7, Sept. 1999, at 52–54 ("SpeedyPik Article")
- Ex C10: '920 patent over U.S. Patent No. 5,908,273 to Titus ("Titus 273")
- Ex C11: '920 patent over U.S. Patent No. 6,064,747 to Wills ("Wills 747")
- Ex. C12: '920 patent over U.S. Patent No. 6,588,995 to Wills ("Wills 995")
- Ex C13: '920 patent over LectorPro System
- Ex C14: '920 patent over P4 System
- Ex C15: '920 patent over SpeedyPik System
- Ex C16: '920 patent over Ultracode System

'133 patent

- Ex D1: '133 patent over International Publication No. WO 99/55482 to Almblad ("Almblad")
- Ex D2: '133 patent over U.S. Patent No. 6,839,451 B2 to Campbell ("Campbell")

- Ex D3: '133 patent over European Patent No. 614717 B1 to Eros ("Eros")
- Ex D4: '133 patent over U.S. Patent No. 5,128,531 to Fadel ("Fadel")
- Ex D5: '133 patent over Roger F. Kromann, Computer Vision System for Identification, Measurement, and Duplication of Machined Parts, XVII SPIE CONFERENCE ON INTELLIGENT ROBOTS AND COMPUTER VISION 157 (1998) ("Kromann")
- Ex D6: '133 patent over SILCA S.p.A., D425714XA LectorPro Operating Manual Vers. 2 (2003) ("LectorPro Manual")
- Ex D7: '133 patent over U.S. Patent No. 4,666,351 to Marchal ("Marchal")
- Ex D8: '133 patent over International Patent No. WO 00/54212 to Pacenzia ("Pacenzia")
- Ex D9: '133 patent over Sal Dulcamaro, *SpeedyPik*, 71 NATIONAL LOCKSMITH, no. 7, Sept. 1999, at 52–54 ("SpeedyPik Article")
- Ex D10: '133 patent over U.S. Patent No. 6,152,662 to Titus ("Titus 662")
- Ex D11: '133 patent over U.S. Patent No. 6,064,747 to Wills ("Wills 747")
- Ex. D12: '133 patent over U.S. Patent No. 6,588,995 to Wills ("Wills 995")
- Ex D13: '133 patent over LectorPro System
- Ex D14: '133 patent over P4 System
- Ex D15: '133 patent over SpeedyPik System

The attached claim charts are based, in whole or in part, on Plaintiff's asserted theories of infringement in this case, to the extent discernible from Plaintiff's Infringement Contentions. As an initial matter, all portions of each prior art reference cited in each of the attached claim charts are relied upon to support the disclosure of each patent claim limitation, as all portions provide

general support. Representative descriptions and supporting citations are nevertheless provided but are merely exemplary; they do not necessarily reflect every instance where a particular claim term or claim limitation may be disclosed in or taught by the prior art reference. References to figures or drawings refer to the figures/drawings themselves, as well as to any accompanying text or text necessary to understand the figures or drawings. References to text refer to the text itself, as well as the accompanying figures or drawings that accompany the text. Hillman reserves the right to rely on additional, or different, portions of the prior art references, other publications, and expert testimony to establish what these references would have taught one of ordinary skill in the art or in what manner they would have motivated a particular combination of references. Moreover, in certain instances, representative documents for certain prior art systems are cited, but, again, are merely exemplary; they do not necessarily reflect or include every document relating to the prior art system that exists and that discloses or teaches a particular claim term or claim limitation. Hillman reserves the right to rely on any and all documents that describe or relate to prior art systems, including relying on the system itself. Hillman also reserves the right to rely on the testimony of the authors, named inventors, or anyone else with knowledge of the prior art references and systems identified herein, as well as expert testimony regarding any such references or systems.

D. OBVIOUSNESS AND MOTIVATION TO COMBINE

The primary references identified above, and as further described in Exhibits A1–A15, B1–B18, B20, C1–16, and D1–D15, each disclose, either expressly or inherently, every element of each of the Asserted Claims, thereby anticipating those claims. To the extent Plaintiff contends that any primary reference does not anticipate each of the Asserted Claims, it would have been obvious to combine or modify the primary references with concepts from other prior

art, as explained herein. Each of these combinations is exemplary and representative, and the below does not constitute an exhaustive list of the possible combinations of the primary references, nor the primary references in combination with any additional references noted herein. Hillman reserves the right to rely on combinations outside of the below listed, and the below combinations are merely exemplary. Additional combinations are also identified elsewhere in this pleading and in the attached charts. Hillman also notes that the references listed above can be combined in any order. For example, Wills 995 and SpeedyPik System can be either Wills 995 or SpeedyPik as the primary reference and the other reference as the secondary reference.

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- Wills 747, Wills 995, Campbell, Eros, Pacenzia, Almblad, and/or Kromann with the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, and/or SpeedyPik System/Article
- P4 System, Campbell, Eros, Pacenzia, Almblad, and/or Kromann with the LectorPro Manual, the LectorPro System, Marchal, Wills 747/995, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, and/or SpeedyPik System/Article
- Wills 747/995 and SpeedyPik Article/System
- Wills 995 and SpeedyPik System
- Wills 747 and SpeedyPik System
- Wills 995 and Lector Pro Manual
- Wills 747 and Lector Pro Manual

- Wills 995 and Lector Pro System
- Wills 747/995 and Lector Pro Manual/System
- Wills 747/995 and Yanovsky
- Wills 747 and Yanovsky
- Campbell and SpeedyPik Article
- Campbell and SpeedyPik System
- Almblad and SpeedyPik Article
- Almblad and SpeedyPik System
- Wills 995 and P4 System
- Wills 747/995 and P4 System
- Campbell and P4 System
- Kromann and SpeedyPik System
- Kromann and SpeedyPik Article
- Wills 747/995 with SpeedyPik Article/System, LectorPro Manual/System, Almblad, Yanovsky, Marchal, Cimino, Schmalfuss, P4 System, and/or Campbell[11]
- SpeedyPik Article/System with Wills 747/995, LectorPro Manual/System, Almblad, Yanovsky, Marchal, Schmalfuss, P4 System, and/or Campbell
- LectorPro Manual/System with Wills 747/995, SpeedyPik Article/System,

[11] For clarity, Hillman asserts here and in similar groups of references that any combination of these references renders the Asserted Claims invalid and may be asserted. In addition, reference to SpeedyPik Article/System should be interpreted broadly to be SpeedyPik Article and/or SpeedyPik System.

Almblad, Yanovsky, Marchal, Schmalfuss, P4 System and/or Campbell

- Almblad with LectorPro Manual/System, Wills 747/995, SpeedyPik, Yanovsky, Marchal, Schmalfuss, Cimino, P4 System, and/or Campbell
- Yanovsky with LectorPro Manual/System, Wills 747/995, SpeedyPik, Almblad, Marchal, Schmalfuss, Cimino, P4 System, and/or Campbell
- Marchal with Yanovsky, LectorPro Manual/System, Wills 747/995, SpeedyPik, Almblad, Schmalfuss, Cimino, P4 System, and/or Campbell
- Cimino, with Yanovsky, LectorPro Manual/System, Wills 747/995, SpeedyPik, Almblad, Schmalfuss, P4 System, and/or Campbell
- Schmalfuss with Wills 747/995, SpeedyPik Article/System, LectorPro Manual/System, Almblad, Yanovsky, Marchal, Cimino, P4 System, and/or Campbell
- Campbell with Wills 747/995, SpeedyPik Article/System, LectorPro Manual/System, Almblad, Yanovsky, Marchal, P4 System, and/or Cimino
- Marchal and Wills 995/747 and/or Campbell

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- Wills 747/995, the SpeedyPik Article/System, Fadel, P4 System, KID System, KZA-200 User Manual, the LectorPro Manual/System, Marchal, and/or Yanovsky with Chaloux, Donadini, and/or the Silca System, RW2 System/Article
- RW2 System/Article, Titus 227/662, the Silca System, Chaloux, Donadini, the LectorPro Manual, the LectorPro System, the Silca System, the SpeedyPik Article, the SpeedyPik System, and/or Yanovsky in combination with Fadel, Marchal, the P4 System, Wills 747, and/or Wills 995

- Chaloux, Donadini, Campbell, Fadel, the LectorPro Manual, Marchal, the SpeedyPik Article, Wills 747, Wills 995, Yanovsky, LectorPro Manual/System, the P4 System, the Silca System, and/or the SpeedyPik System in combination with U.S. Patent No. 5,608,417 to de Vall ("de Vall").
- Chaloux, Donadini, Fadel, Campbell the LectorPro Manual, Marchal, the SpeedyPik Article, Wills 747, Wills 995, Yanovsky, the KID System, the KID System (KZA-200), KZA-200 User Manual, the LectorPro Manual/System, the P4 System, the Silca System, and/or the SpeedyPik System in combination with U.S. Patent No. 4,658,263 to Urbanski ("Urbanski").
- Chaloux, Donadini, Fadel, Marchal, the SpeedyPik Article, and/or the SpeedyPik System, in combination with LectorPro Manual, the LectorPro Manual/System, the P4 System, the Silca System, Wills 747, Wills 995, and/or Yanovsky
- Wills 995 and RW2 System
- Wills 995 and RW2 Article
- Wills 747 and RW2 System
- Wills 747 and RW2 Article
- P4 System and Titus 662/227
- SpeedyPik Article and Titus 662/227
- SpeedyPik System and Titus 662/227
- Wills 747 and Titus 662/227
- Wills 995 and Titus 662/227
- Wills 747/995 and Titus 662/227 with RW2 Article/System
- Wills 747/995 and Titus 662/227 with de Vall

- Wills 747/995 and Titus 662/227 with Urbanski
- SpeedyPik Article/System and RW2 Article/System
- SpeedyPik Article/System and/or RW2 Article/System with Titus 227/662
- SpeedyPik Article/System and/or RW2 Article/System with Wills 747/995
- SpeedyPik Article/System and RW2 Article/System with Titus 227/662, Wills 747/995, Campbell, and/or Urbanski
- SpeedyPik Article/System and Chaloux
- Wills 747/995 and Chaloux
- Wills 995 and Chaloux
- Wills 747/995 and Donadini
- Wills 995 and Donadini
- Campbell and Chaloux
- Campbell and Donadini
- Campbell and RW2 Article/System
- Campbell and Titus 227/662
- Campbell and P4 System
- Wills 747/995 with RW2 Article/System, SpeedyPik Article/System, Lector Pro Manual/System, Marchal, de Vall, and/or Titus 227/662
- Wills 747/995 with RW2 Article/System, SpeedyPik Article/System, Lector Pro Manual/System, Marchal, Urbanski and/or Titus 227/662
- RW2 Article/System with Wills 747/995, SpeedyPik Article/System, Lector Pro Manual/System, Marchal, de Vall, and/or Titus 227/662

- RW2 Article/System with Wills 747/995, SpeedyPik Article/System, Lector Pro Manual/System, Marchal, Urbanski, and/or Titus 227/662
- SpeedyPik Article/System with Wills 747/995, RW2 Article/System, Lector Pro Manual/System, Marchal, de Vall, and/or Titus 227/662
- SpeedyPik Article/System with Wills 747/995, RW2 Article/System, Lector Pro Manual/System, Marchal, Urbanski and/or Titus 227/662
- Lector Pro Manual/System with Wills 747/995, RW2 Article/System, SpeedyPik Article/System, Marchal, de Vall, and/or Titus 227/662
- Lector Pro Manual/System with Wills 747/995, RW2 Article/System, SpeedyPik Article/System, Marchal, Urbanski, and/or Titus 227/662
- Marchal with Lector Pro Manual/System, Wills 747/995, RW2 Article/System, SpeedyPik Article/System, de Vall, and/or Titus 227/662Marchal with Lector Pro Manual/System, Wills 747/995, RW2 Article/System, SpeedyPik Article/System, Urbanski, and/or Titus 227/662
- SpeedyPik Article/System with Wills 747/995, RW2 Article/System, Lector Pro Manual/System, Marchal, de Vall, and/or Titus 227/662
- SpeedyPik Article/System with Wills 747/995, RW2 Article/System, Lector Pro Manual/System, Marchal, Urbanski, and/or Titus 227/662
- Titus 227/662 with SpeedyPik Article/System, Wills 747/995 ,RW2 Article/System, Lector Pro Manual/System, and/or Marchal and de Vall
- Titus 227/662 with SpeedyPik Article/System, Wills 747/995 ,RW2 Article/System, Lector Pro Manual/System, and/or Marchal and Urbanski

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- Campbell, Eros, Pacenzia, Wills 747, Wills 995, Almblad and/or Kromann with Almblad, LectorPro Manual, LectorPro System, Marchal, P4 System, Yanovsky, Fadel, Cimino, Silca System, Schmalfuss, and/or SpeedyPik Article/System
- P4 System, Campbell, Eros, Pacenzia, Almblad and/or Kromann with Almblad, LectorPro Manual, LectorPro System, Marchal, Wills 747/995, Yanovsky, Fadel, Cimino, Silca System, Schmalfuss, and/or SpeedyPik Article/System
- Wills 747/995 and SpeedyPik Article/System
- Wills 995 and SpeedyPik System
- Wills 747 and SpeedyPik System
- Wills 995 and Lector Pro Manual
- Wills 747/995 and Lector Pro Manual/System
- Wills 995 and Lector Pro System
- Wills 747 and Lector Pro System
- Wills 995 and Yanovsky
- Wills 747/995 and Yanovsky
- Campbell and SpeedyPik Article/System
- Almblad and SpeedyPik Article/System
- Almblad and SpeedyPik System
- Wills 747/995 and P4 System
- Wills 747 and P4 System
- Campbell and P4 System
- Kromann and SpeedyPik Article/System

- Kromann and SpeedyPik Article
- Wills 747/995 and Schmalfuss
- Wills 747 and Schmalfuss
- Campbell and Schmalfuss
- Marchal and Schmalfuss
- Wills 747/995 with SpeedyPik Article/System, LectorPro Manual/System, Almblad, Yanovsky, Marchal, Cimino, Schmalfuss, P4 System, and/or Campbell
- SpeedyPik Article/System with Wills 747/995, LectorPro Manual/System, Almblad, Yanovsky, Marchal, Schmalfuss, P4 System, and/or Campbell
- LectorPro Manual/System with Wills 747/995, SpeedyPik Article/System, Almblad, Yanovsky, Marchal, Schmalfuss, P4 System and/or Campbell
- Almblad with LectorPro Manual/System, Wills 747/995, SpeedyPik, Yanovsky, Marchal, Schmalfuss, Cimino, P4 System, and/or Campbell
- Yanovsky with LectorPro Manual/System, Wills 747/995, SpeedyPik, Almblad, Marchal, Schmalfuss, Cimino, P4 System, and/or Campbell
- Marchal with Yanovsky, LectorPro Manual/System, Wills 747/995, SpeedyPik, Almblad, Schmalfuss, Cimino, P4 Syste, and/or Campbell
- Cimino, with Yanovsky, LectorPro Manual/System, Wills 747/995, SpeedyPik, Almblad, Schmalfuss, P4 System, and/or Campbell
- Schmalfuss with Wills 747/995, SpeedyPik Article/System, LectorPro Manual/System, Almblad, Yanovsky, Marchal, Cimino, P4 System, and/or Campbell
- Campbell with Wills 747/995, SpeedyPik Article/System, LectorPro

Manual/System, Almblad, Yanovsky, Marchal, P4 System, and/or Cimino

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- Campbell, Eros, Pacenzia, Wills 747/995, Almblad and/or Kromann with LectorPro Manual/System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, Schmalfuss, SpeedyPik Article, and/or SpeedyPik System
- The LectorPro Manual, the LectorPro System, the Silca System, the SpeedyPik Article, the SpeedyPik System, and/or Yanovsky in combination with Fadel, Marchal, Pacenzia. the P4 System, Titus 662/227, and/or Wills 747/995
- P4 System, Campbell, Eros, Pacenzia, Almblad and/or Kromann with the LectorPro Manual/System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, and/or SpeedyPik Article/System
- Wills 995 and SpeedyPik Article
- Wills 747/995 and SpeedyPik Article/System
- Wills 995 and SpeedyPik System
- Wills 747 and SpeedyPik System
- Wills 995 and Lector Pro Manual
- Wills 747 and Lector Pro Manual
- Wills 995 and Lector Pro System
- Wills 747/995 and Lector Pro Manual/System
- Wills 995 and Yanovsky
- Wills 747/995 and Yanovsky
- Campbell and SpeedyPik Article/System
- Campbell and SpeedyPik System

- Almblad and SpeedyPik Article/System
- Almblad and SpeedyPik System
- Wills 747/995 and P4 System
- Wills 747 and P4 System
- Campbell and P4 System
- Kromann and SpeedyPik Article/System
- Kromann and SpeedyPik Article
- Marchal and SpeedyPik Article/System
- Marchal and SpeedyPik System
- Wills 747/995 with SpeedyPik Article/System, LectorPro Manual/System, Almblad, Yanovsky, Marchal, Cimino, Schmalfuss, P4 System, and/or Campbell
- SpeedyPik Article/System with Wills 747/995, LectorPro Manual/System, Almblad, Yanovsky, Marchal, Schmalfuss, P4 System, and/or Campbell
- LectorPro Manual/System with Wills 747/995, SpeedyPik Article/System, Almblad, Yanovsky, Marchal, Schmalfuss, P4 System and/or Campbell
- Almblad with LectorPro Manual/System, Wills 747/995, SpeedyPik, Yanovsky, Marchal, Schmalfuss, Cimino, P4 System, and/or Campbell
- Yanovsky with LectorPro Manual/System, Wills 747/995, SpeedyPik, Almblad, Marchal, Schmalfuss, Cimino, P4 System, and/or Campbell
- Marchal with Yanovsky, LectorPro Manual/System, Wills 747/995, SpeedyPik, Almblad, Schmalfuss, Cimino, P4 System, and/or Campbell
- Cimino, with Yanovsky, LectorPro Manual/System, Wills 747/995, SpeedyPik,

Almblad, Schmalfuss, P4 System, and/or Campbell

- Schmalfuss with Wills 747/995, SpeedyPik Article/System, LectorPro Manual/System, Almblad, Yanovsky, Marchal, Cimino, P4 System, and/or Campbell
- Campbell with Wills 747/995, SpeedyPik Article/System, LectorPro Manual/System, Almblad, Yanovsky, Marchal, P4 System, and/or Cimino

In particular, for each limitation of each of the Asserted Claims that Plaintiff contends is not met by a particular primary reference, Hillman contends that the limitation (and claim as a whole) is obvious based on a combination of that particular primary reference with (1) any other primary reference disclosing that limitation, (2) any reference identified in Exs. A1–A15, B1–B18, B20, C1–16, and D1–D16 as disclosing that limitation, and/or (3) the knowledge of a person of ordinary skill in the art and/or any of the references and concepts discussed herein regarding the relevant background and state of the art. The specific combinations of prior art that Hillman contends render the Asserted Claims obvious are readily determinable as described herein. Hillman's obviousness grounds for each dependent claim incorporate the obviousness grounds for the claim(s) from which the dependent claim depends in addition to any obviousness grounds identified in the charts for the dependent claim.

Hillman does not yet have the benefit of Plaintiff's positions on the prior art, including what (if any) elements it contends are missing in each prior art reference, whether Plaintiff agrees that a reference is in fact prior art, and whether Plaintiff agrees that a person of ordinary skill in the art would be motivated to combine specific references. Hillman reserves the right to supplement these obviousness positions (including identifying additional prior art combinations and the associated reasons to combine) as discovery in the case progresses, including expert

discovery.

1. Motivation to Combine

Each prior art reference may be combined with one or more other prior art references to render obvious each of the Asserted Claims in combination, as explained in more detail below. The disclosures of these references also may be combined with information known to persons skilled in the art at the time of the alleged invention and understood and supplemented in view of the common sense of persons skilled in the art at the time of the alleged invention, including any statements in the intrinsic record of the Asserted Patents and related applications.

A person of ordinary skill would have been motivated to combine the prior art cited in the attached claim charts based on the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art. The identified prior art references, including portions cited in the claim charts, address the same or similar technical issues and suggest the same or similar solutions to those issues as the Asserted Claims. On such bases, on an element-by-element basis, Hillman intends to combine one or more prior art references identified in the claim charts attached as Exhibits A1–A15, B1–B18, B20, C1–C16, and D1–D16 with each other to address any contention from Plaintiff that a particular prior art item supposedly lacks one or more elements of an Asserted Claim. In other words, Hillman contends that each charted prior art reference can be combined with other charted prior art references when a particular prior art item lacks or does not explicitly disclose an element or feature of an Asserted Claim. A person of ordinary skill in the art would have been motivated to make such combinations based on, for example, the below. The below list of motivations to combine is exemplary and representative, and is not an exhaustive list of motivations to combine, nor of potential combinations.

Exemplary motivations are provided below. The below is provided to the extent it is argued that the references to be combined do not teach the identified element, which Hillman does not concede. In addition to the below, any of the identified references, to the extent they do not teach the identified element, could be combined with the knowledge of a person of ordinary skill in the art for a single reference obviousness combination, as discussed in more detail in the charts attached as Exhibits A1–A15, B1–B18, B20, C1–C16, and D1–D16. Hillman notes that the combinations below should not be taken to mean that anything is lacking from the primary references, and, in many cases, Hillman has asserted the primary references to be anticipatory. However, Hillman reserves the right to provide the combinations below to the extent Hy-Ko challenges that the Asserted Claims are anticipated by the asserted references.

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- A person of ordinary skill in the art would have been motivated to combine Wills 747, Wills 995, Campbell, Eros, Pacenzia, Almblad, and/or Kromann with the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, SpeedyPik Article, and/or SpeedyPik System, including for example for limitations related to the "slot," and/or "retention mechanism," as doing so would have allowed the ability to efficiently insert a key and/or leave a key on a keychain. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747, Wills 995, Campbell, Eros, Pacenzia, Almblad, and/or Kromann with the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, SpeedyPik Article, and/or SpeedyPik System, including for example for limitations related to the "housing," as doing so would have allowed the device to be user-friendly and/or shield a user from components inside the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747, Wills 995, Campbell, Eros, Pacenzia, Almblad, and/or Kromann with the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, SpeedyPik Article, and/or SpeedyPik System, including for example for limitations related to the "optical imaging device," the "silhouette image," "second image is selectively used…," "selectively capturing a second image," and/or "performing a laser scan," as doing so would have made the key blank identification and/or key duplication

system more efficient and/or better able to identify key blanks or duplicate keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 and the SpeedyPik Article/System including for example for limitations related to "an outer shell having a slot formed therein to receive a master key," "a retention mechanism configured to receive at least a portion of the master key," "receiving from a user at least a portion of said master key," and/or "positioning said master key to a desired location to align the master key with an optical imaging device, " as doing so would have increased the ability to efficiently insert a key and make the system even easier to operate. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 and the SpeedyPik Article/System for limitations related to "an outer shell having a slot formed therein to receive a master key," "a retention mechanism configured to receive at least a portion of the master key," "receiving from a user at least a portion of said master key," and/or "positioning said master key to a desired location to align the master key with an optical imaging device," as doing so would have increased the ability to efficiently insert a key and make the system even easier to operate. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Almblad, P4 System, and/or Campbell with the SpeedyPik Article/System and/or Yanovsky for limitations related to "an outer shell having a slot formed therein to receive a master key," "a retention mechanism configured to receive at least a portion of the master key," "receiving from a user at least a portion of said master key," and/or "positioning said master key to a desired location to align the master key with an optical imaging device," as doing so would have increased the ability to efficiently insert a key and make the system even easier to operate. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 and/or Campbell with P4 System for limitations related to "an outer shell having a slot formed therein to receive a master key," "a retention mechanism configured to receive at least a portion of the master key," "receiving from a user at least a portion of said master key," and/or "positioning said master key to a desired location to align the master key with an optical imaging device," as doing so would have increased the ability to efficiently insert a key and make the system even easier to operate. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995, the P4 System, and/or SpeedyPik System, with Almblad and/or Campbell including for example for limitations related to "selectively capturing a second image" and/or "performing a laser scan," as doing so would have made the key blank identification and/or key duplication system more efficient and/or better

able to identify key blanks or duplicate keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

- A person of ordinary skill in the art would have been motivated to combine Campbell, Almblad the P4 System, and/or SpeedyPik System, with Wills 995/747 including for example for limitations related to "second image is selectively used to quantify surface features of the existing key based on the type of key blank" and/or "performed when the key blank type is classified as a standard cut key" as doing so would have made the key blank identification and/or key duplication system more efficient and/or better able to identify key blanks or duplicate keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the P4 System with Wills 995/747 the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, SpeedyPik Article, and/or SpeedyPik System, including for example for limitations related to the "slot," and/or "retention mechanism" to the extent this limitation are not disclosed, as doing so would have allowed the ability to efficiently insert or retain a key and/or leave a key on a keychain. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

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- A person of ordinary skill in the art would have been motivated to combine Wills 747/995, P4 System, the KID System (KZA-200), KZA-200 User Manual, the SpeedyPik Article, the SpeedyPik System, Fadel, the LectorPro Manual, the LectorPro system, Marchal, and/or Yanovsky with Chaloux, Donadini, the Silca System, RW2 System, RW2 Article, and/or Titus 662/227, including for example for limitations related to the "transponder" and/or "antennae," as doing so would have made the system more versatile, efficient, user-friendly, and/or allowed the ability to identify additional types of keys, such as vehicular keys or transponder keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the Silca System, Chaloux, Donadini, the LectorPro Manual, the LectorPro System, the Silca System, the SpeedyPik Article, the SpeedyPik System, and/or Yanovsky with Fadel, Marchal, the P4 System, Wills 747, and/or Wills 995, including, for example for limitations related to the "cutting," as doing so would have allowed the ability to cut keys within the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747, Wills 995, the SpeedyPik Article, the SpeedyPik System, Fadel, the LectorPro Manual, the LectorPro system, Marchal, and/or Yanovsky with Chaloux, Donadini, the Silca System, and/or the KID system, RW2 System, RW2 Article, and/or Titus 662 including for example for limitations related to

"imaging," as doing so would have allowed the ability to image keys to assist with key identification and/or cutting. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

- A person of ordinary skill in the art would have been motivated to combine Chaloux, Donadini, Fadel, the LectorPro Manual, Marchal, the SpeedyPik Article, Wills 747, Wills 995, Titus 227/662, Yanovsky, the LectorPro System, the P4 System, the Silca System, and/or the SpeedyPik System with U.S. Patent No. 6,508,417 ("de Vall"), including for limitations related to "a pair of windings," as doing so would have allowed an antennae system that is more efficient and/or has greater inductance and capacitance. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Chaloux, Donadini, Fadel, the LectorPro Manual, Marchal, the SpeedyPik Article, Wills 747, Wills 995, Titus 227/662, Yanovsky, the LectorPro System, the P4 System, the Silca System, the KID System (KZA-200), KZA-200 User Manual, and/or the SpeedyPik System with U.S. Patent No. 4,658,263 to Urbanski ("Urbanski"), including for limitations related to "a pair of windings," as doing so would have allowed an antennae system that is more efficient and/or has greater inductance and capacitance. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Chaloux, Donadini, Fadel, Marchal, the SpeedyPik Article, and/or the SpeedyPik System with the LectorPro Manual, the LectorPro System, the P4 System, the Silca System, Wills 747, Wills 995, and/or Yanovsky , including for limitations related to a "user interface," as doing so would have allowed the user the ability to interact with the machine through a user interface and made the key identification process more user-friendly and/or efficient. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 with Titus 227/662, including for limitations related to "providing an antenna positioned on the machine for communicating with a transponder on the key," "determine that the master key contains a computer chip," and "a database of key blanks that includes data related to information read from microchips of keys," as doing so would have allowed Wills' system to easily and efficiently determine key duplication data and identify vehicular keys or transponder keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 and Titus 227/662, including for example for limitations related to "an outer shell" as doing so would have allowed the device to be user-friendly and/or shield a user from components inside the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 and Titus 227/662, including for example for limitations related to "the/an imaging system" and "imaging" as doing so would have allowed the

ability to image keys to assist with key identification and/or cutting. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 and Titus 227/662, including for example for limitations related to "providing a cutting member for cutting a key blank positioned within the machine" as doing so would have allowed the ability to cut keys within the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Titus 227/662 and Wills 747/995, including for example for limitations related to "a touch screen monitor," as doing so would have made the key identification process more user-friendly and/or efficient. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Titus 227/662 and Wills 747/995, including for example for limitations related to "retrieving a key blank" as doing so would have made the key identification process more user-friendly and/or efficient. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Titus 227/662 and Wills 747/995, including for example for limitations related to "a retention mechanism," as doing so would have allowed the use to more efficiently and/or effectively insert and position the key. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995, Titus 227/662, and the RW2 Article/System, including for example for limitations related to "antennae," "read a microchip," "write a code onto the microchip embedded on the key," "a write device configured to transmit data to said key," and "wherein said user interface is arranged to inform a user that the master key contains a computer chip," as doing so would have allowed the user to quickly and efficiently identify and duplicate vehicular and/or transponder keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995, Titus 227/662, and de Vall including for limitations related to "a pair of windings," as doing so would have allowed an antennae system that is more efficient and/or has greater inductance and capacitance. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995, Titus 227/662, and Urbanski including for limitations related to "a pair of windings," as doing so would have allowed an antennae system that is more efficient and/or has greater inductance and capacitance. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the SpeedyPik Article/System and the RW2 Article/System, including for example

for limitations related to "antenna," "computer chip," and "transponder," as doing so would have allowed SpeedyPik to easily and efficiently determine key duplication data and be more versatile in identifying and/or duplicating additional types of keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

- A person of ordinary skill in the art would have been motivated to combine the SpeedyPik Article/System and the RW2 Article/System, including for example for limitations related to "user interface," to the extent not disclosed by the SpeedyPik Article/System as doing so would have allowed the user the ability to interact with the machine through a user interface and made the key identification process more user-friendly and/or efficient.
- A person of ordinary skill in the art would have been motivated to combine the SpeedyPik Article/System and/or the RW2 Article/System with Titus 227/662 including for example for limitations related to "cutting," as doing so would have allowed the ability to cut keys within the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the SpeedyPik Article/System and/or the RW2 Article/System with Titus 227/662 including for example for limitations related to "a database of key blanks that includes data related to information read from microchips of keys," as doing so would have allowed SpeedyPik and/or RW2 to easily and efficiently determine key duplication data and be more versatile in identifying and/or duplicating additional types of keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the SpeedyPik Article/System and/or the RW2 Article/System with Wills 747/995 including for example for limitations related to "cutting" and "the cutting member cuts the key blank positioned at the least one key load position" as doing so would have allowed the ability to cut keys within the device at a convenient position. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the SpeedyPik Article/System and/or the RW2 Article/System with Wills 747/995 including for example for limitations related to "antenna," "computer chip," and "transponder," as doing so would have allowed SpeedyPik and/or RW2 to easily and efficiently determine key duplication data and be more versatile in identifying and/or duplicating additional types of keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine SpeedyPik Article/System and/or RW2 Article/System with Wills 747/995 including for example for limitations related to "retrieving a key blank" as doing so would have made the key identification process more user-friendly and/or efficient. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the

Campbell and/or the RW2 Article/System with Wills 747/995 including for example for limitations related to "a touch screen monitor," as doing so would have made the key identification process more user-friendly and/or efficient. Further, these references are analogous art, as they all relate to key identification and/or key duplication

- A person of ordinary skill in the art would have been motivated to combine Campbell and the RW2 Article/System, including for example for limitations related to "user interface," to the extent not disclosed by Campbell as doing so would have allowed the user the ability to interact with the machine through a user interface and made the key identification process more user-friendly and/or efficient.
- A person of ordinary skill in the art would have been motivated to combine Campbell and Chaloux, Titus 227/662, RW2 Article/System, and/or Donadini, including for example for limitations related to "user interface," to the extent not disclosed by Campbell, as doing so would have allowed the user the ability to interact with the machine through a user interface and made the key identification process more user-friendly and/or efficient.
- A person of ordinary skill in the art would have been motivated to combine the Campbell and/or the RW2 Article/System, Chaloux, and/or Donadini, with Titus 227/662 including for example for limitations related to "a database of key blanks that includes data related to information read from microchips of keys," as doing so would have allowed Campbell and/or RW2 to easily and efficiently determine key duplication data and be more versatile in identifying and/or duplicating additional types of keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the Campbell and/or the RW2 Article/System with Wills 747/995 including for example for limitations related to "cutting" and "the cutting member cuts the key blank positioned at the least one key load position" as doing so would have allowed the ability to cut keys within the device at a convenient position. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the Campbell and/or the RW2 Article/System with Wills 747/995 including for example for limitations related to "retention mechanism," to the extent this element is not disclosed in Campbell, and as doing so would have allowed the ability to hold the key in place for more accurate and/or reliable imaging. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Campbell and/or the RW2 Article/System with Wills 747/995 including for example for limitations related to "antenna," "computer chip," and "transponder," as doing so would have allowed Campbell and/or RW2 to easily and efficiently determine key duplication data and be more versatile in identifying and/or duplicating additional types of keys. Further, these references are analogous art,

as they all relate to key identification and/or key duplication.

- A person of ordinary skill in the art would have been motivated to combine Campbell and/or RW2 Article/System with Wills 747/995 including for example for limitations related to "retrieving a key blank" as doing so would have made the key identification process more user-friendly and/or efficient. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Campbell and/or the RW2 Article/System with Wills 747/995 including for example for limitations related to "a touch screen monitor," as doing so would have made the key identification process more user-friendly and/or efficient. Further, these references are analogous art, as they all relate to key identification and/or key duplication
- A person of ordinary skill in the art would have been motivated to combine the RW2 Article/System and/or Silca System with Wills 995/747, Campbell, the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, SpeedyPik Article, and/or SpeedyPik System, including for example for limitations related to the "capture the image of a blade" and "imaging" extent this limitation are not disclosed, as doing so would have allowed the ability to efficiently image the key. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

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- A person of ordinary skill in the art would have been motivated to combine Campbell, Eros, Pacenzia, Wills 747, Wills 995, Almblad and/or Kromann with the Almblad, the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, SpeedyPik Article, and SpeedyPik System, including for example for limitations related to the "slot," and/or "retention mechanism," as doing so would have allowed the ability to efficiently insert a key and/or leave a key on a keychain. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Campbell, Eros, Pacenzia, Wills 747, Wills 995, Almblad and/or Kromann with the Almblad, the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, SpeedyPik Article, and SpeedyPik System including for example for limitations related to the "imaging device," "imaging system," "record a tip view or substantially tip view," and/or "measure a thickness," as doing so would have made the key blank identification and/or key duplication system more efficient and/or better able to identify key blanks or duplicate keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Campbell, Eros, Pacenzia, Wills 747, Wills 995, Almblad and/or Kromann with

the Almblad, the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, SpeedyPik Article, and SpeedyPik System including for example for limitations related to the "slot," and/or "retention mechanism," as doing so would have allowed the user to more efficiently and/or effectively position the key. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 the SpeedyPik Article/System, including for example for limitations related to "outer shell," "retention mechanism," "receiving from a user at least a portion of said master key," and "positioning said master key to a desired location to align the master key with an optical imaging device" as doing so would have allowed the use to more efficiently and/or effectively position the key. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 and Schmalfuss, including for example for limitations related to "thickness," to the extent those limitations are not disclosed by Wills 747/995, as doing so would have made the key blank identification and/or key duplication system more efficient and/or better able to identify key blanks or duplicate keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Campbell and Schmalfuss and/or Eros, including for example for limitations related to "thickness" to the extent those limitations are not disclosed by Campbell, as doing so would have made the key blank identification and/or key duplication system more efficient and/or better able to identify key blanks or duplicate keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 and Schmalfuss and/or Eros, including for example for limitations related to "thickness" to the extent those limitations are not disclosed by Wills 747/995, as doing so would have made the key blank identification and/or key duplication system more efficient and/or better able to identify key blanks or duplicate keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Campbell the SpeedyPik Article/System, including for example for limitations related to "outer shell," "retention mechanism," "receiving from a user at least a portion of said master key," and "positioning said master key to a desired location to align the master key with an optical imaging device" as doing so would have allowed the use to more efficiently and/or effectively position the key. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the LectorPro Manual and/or LectorPro System with Eros, Schmalfuss, and/or Wills

747/995, including for example for limitations related to "thickness" to the extent those limitations are not disclosed by LectorPro Manual/System, as doing so would have made the key blank identification and/or key duplication system more efficient and/or better able to identify key blanks or duplicate keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

- A person of ordinary skill in the art would have been motivated to combine the LectorPro Manual and/or LectorPro System with Schmalfuss and/or Wills 747/995, including for example for limitations related to "key positioner," as doing so would have allowed the user to more efficiently and/or effectively position the key. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the LectorPro Manual and/or LectorPro System with Schmalfuss, including for example for limitations related to "the optical image of the master key is analyzed by a logic" as doing so would have made the key blank identification and/or key duplication system more efficient and/or better able to identify key blanks or duplicate keys.
- A person of ordinary skill in the art would have been motivated to combine Campbell, Wills 995/747, Cimino, and/or Schmalfuss with Lector Pro Manual/System, Almblad, Fidel, and/or P4 system including for example for limitations related to "key positioner being linearly movable from a first location adjacent to the slot to a second location away from the slot" as doing so would have allowed the use to more efficiently and/or effectively position the key. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Campbell, Cimino, Schmalfuss, Almblad, Fidel, Lector Pro Manual/System and/or P4 system with Wills 995/747, including for example for limitations related to "key positioner being linearly movable from a first location adjacent to the slot to a second location away from the slot" as doing so would have allowed the use to more efficiently and/or effectively position the key. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the P4 System with Wills 995/747 the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, SpeedyPik Article, and/or SpeedyPik System, including for example for limitations related to the "slot," "key positioner," and/or "retention mechanism" to the extent this limitation are not disclosed, as doing so would have allowed the ability to efficiently insert, position, and/or retain a key and/or leave a key on a keychain. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

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- A person of ordinary skill in the art would have been motivated to combine Campbell, Eros, Pacenzia, Wills 747, Wills 995, Almblad and/or Kromann with the Almblad, the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, Schmalfuss, SpeedyPik Article, and SpeedyPik System , including for example for limitations related to the "slot," and/or "retention mechanism," as doing so would have allowed the ability to efficiently insert a key and/or leave a key on a keychain. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Campbell, Eros, Pacenzia, Wills 747, Wills 995, Almblad and/or Kromann with the Almblad, the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, Schmalfuss, SpeedyPik Article, and SpeedyPik System , including for example for limitations related to the "housing," as doing so would have allowed the device to be user-friendly and/or shield a user from components inside the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Campbell, Eros, Pacenzia, Wills 747, Wills 995, Almblad and/or Kromann with the Almblad, the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, SpeedyPik Article, and SpeedyPik System including for example for limitations related to the "imaging device," as doing so would have made the key blank identification and/or key duplication system more efficient and/or better able to identify key blanks or duplicate keys. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the LectorPro Manual, the LectorPro System, the Silca System, the SpeedyPik Article, the SpeedyPik System, and/or Yanovsky with Fadel, Marchal, Pacenzia. the P4 System, Titus 662, Wills 747, and/or Wills 995, including, for example for limitations related to the "cutting," as doing so would have allowed the ability to cut keys within the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 and the SpeedyPik Article/ System including for example for limitations related to "slot" and/or "retention mechanism" as doing so would have increased the ability to efficiently insert a key and make the system even easier to operate. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 and the Marchal, Yanovsky, and/or Lector Pro Manual/System including for example for limitations related to "slot" and/or "retention mechanism" as doing so would have increased the ability to efficiently insert a key and make the system even easier to operate. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the

SpeedyPik Article/ System with Wills 747/995 including for example for limitations related to "housing" and "imaging zone of said housing" as doing so would have allowed the device to be user-friendly and/or shield a user from components inside the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

- A person of ordinary skill in the art would have been motivated to combine the SpeedyPik Article/System with Marchal including for example for limitations related to "an integrated key duplication system" as doing so would have made the key duplication system more efficient and/or better able to identify key blanks or duplicate keys by integrating both the imaging system and cutting system into a single duplication machine. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the SpeedyPik Article/System with Marchal including for example for limitations related to "cutting," as doing so would have allowed the ability to cut keys within the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Marchal with the SpeedyPik Article/System including for example for limitations related to "imaging," and "optical key blank identification" as doing so would have allowed the ability to image keys to assist with key identification and/or cutting. Further, these references are analogous art, as they all relate to key identification and/or key duplication. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Marchal, Wills 747/995, and the SpeedyPik Article/System including for example for limitations related to an "optical key blank identification system" and a "single apparatus," as doing so would have allowed the ability to image keys to assist with key identification and/or cutting and cut keys within the same device.
- A person of ordinary skill in the art would have been motivated to combine the Almblad and/or Campbell with Wills 747/995 including for example for limitations related to "housing" and "imaging zone of said housing" as doing so would have allowed the device to be user-friendly and/or shield a user from components inside the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the Almblad and/or Campbell with Marchal including for example for limitations related to "an integrated key duplication system" as doing so would have made the key duplication system more efficient and/or better able to identify key blanks or duplicate keys by integrating both the imaging system and cutting system into a single duplication machine. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the Almblad and/or Campbell with Marchal including for example for limitations related to "cutting," as doing so would have allowed the ability to cut keys within

the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

- A person of ordinary skill in the art would have been motivated to combine the Campbell and/or Marchal with Wills 747/995, Almblad, and/or SpeedyPik Article System, including, for example for limitations related to the "retention mechanism panel," "retention mechanism," and "slot to receive a blade of a key to be retained by the retention mechanism panel and cut," as doing so would have allowed the ability to position, retain, and/or cut keys within the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the Campbell and/or Wills 747/995 with Marchal and/or Almblad, and/or SpeedyPik Article System, including, for example for limitations related to the "retention mechanism panel," "retention mechanism," and "slot to receive a blade of a key to be retained by the retention mechanism panel and cut," as doing so would have allowed the ability to position, retain, and/or cut keys within the device. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Marchal, Campbell, and/or Almblad with Wills 747/995, SpeedyPik Article/System, including for example for limitations related to the "key blank identification system is configured operate individually from the key cutting system wherein the optical key blank identification system and the key cutting system may interact and share information," as doing so would have allowed the systems to operate individually yet still be able to interact and share information, for example, when in an integrated system. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine Wills 747/995 with Campbell, SpeedyPik Article/System, Almblad, and/or Marchal including for example for limitations related to the "key blank identification system is configured operate individually from the key cutting system wherein the optical key blank identification system and the key cutting system may interact and share information," as doing so would have allowed the systems to operate individually yet still be able to interact and share information, for example, when in an integrated system. Further, these references are analogous art, as they all relate to key identification and/or key duplication.
- A person of ordinary skill in the art would have been motivated to combine the P4 System with Wills 995/747 the LectorPro Manual, the LectorPro System, Marchal, the P4 System, Yanovsky, Fadel, Cimino, the Ultracode System, Schmalfuss, SpeedyPik Article, and/or SpeedyPik System, including for example for limitations related to the "slot," "key positioner," and/or "retention mechanism" to the extent this limitation are not disclosed, as doing so would have allowed the ability to efficiently insert, position, and/or retain a key and/or leave a key on a keychain. Further, these references are analogous art, as they all relate to key identification and/or key duplication.

The suggested obviousness combinations discussed herein are not to be construed to suggest that any reference included in the combinations is not anticipatory. Further, to the extent that Plaintiff contends that any of the anticipatory prior art fails to disclose one or more limitations of the Asserted Claims, Hillman reserves the right to identify other prior art references that, when combined with the anticipatory prior art, would render the claims obvious despite an allegedly missing limitation. Hillman will further specify the motivations to combine the prior art, including through reliance on expert testimony, at the appropriate later stage of this lawsuit.

The decision in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007) held that patents that are based on new combinations of elements or components already known in a technical field may be found to have been obvious. The Supreme Court rejected a rigid application of the "teaching, suggestion, or motivation [to combine]" test. *Id.* at 407, 418. "In determining whether the subject matter of a patent claim is obvious, neither the particular motivation nor the avowed purpose of the patentee controls. What matters is the objective reach of the claim." *Id.* at 419. "Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." *Id.* at 420. The Supreme Court emphasized the principle that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 416. A key inquiry is whether the "improvement is more than the predictable use of prior art elements according to their established function." *Id.* at 417.

The Court further held that "in many cases a person of ordinary skill will be able to fit the

teachings of multiple patents together like pieces of a puzzle." *Id.* at 420. It is sufficient that a combination of elements was "obvious to try"—"When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense." *Id.* at 421. "In that instance the fact that a combination was obvious to try might show that it was obvious under § 103." *Id.* Finally, the Supreme Court recognized that "[g]ranting patent protection to advances that would occur in the ordinary course without real innovation retards progress and may, in the case of patents combining previously known elements, deprive prior inventions of their value or utility." *Id.* at 419.

The rationale to combine or modify prior art references is significantly stronger when the references seek to solve the same problem, come from the same field, and correspond well together. *See In re Inland Steel Co.*, 265 F.3d 1354, 1362 (Fed. Cir. 2001) (allowing two references to be combined as invalidating art under similar circumstances where the art "focus[ed] on the same problem ... c[a]me from the same field of art [and] ... the identified problem found in the two references correspond[ed] well").

All of the following rationales recognized in *KSR* support a finding of obviousness with respect to each of the obviousness combinations disclosed herein: (1) combining prior art elements according to known methods to yield predictable results; (2) simple substitution of one known element for another to obtain predictable results; (3) use of a known technique to improve similar devices, methods, or products in the same way; (4) applying a known technique to a known device, method, or product ready for improvement to yield predictable results; (5) "obvious to try," that is, choosing from a finite number of identified, predictable solutions, with a

reasonable expectation of success; (6) known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art; and (7) some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention. Certain of these rationales are discussed more specifically below. The fact that other rationales are not discussed more specifically should not be interpreted as an admission or concession that the other rationales do not apply.

Multiple teachings, suggestions, motivations, and/or reasons to modify any of the references and/or to combine two or more of the prior art references set forth herein come from many sources, including the prior art itself (individual references and as a whole), common knowledge, common sense, predictability, expectations, industry trends, design incentives or need, market demand or pressure, market forces, obviousness to try, the nature of the problem faced, and/or knowledge possessed by a person of ordinary skill. Hillman reserves the right to present expert testimony on, among other things, the teachings, suggestions, motivations, and/or reasons to modify any of the references and/or to combine any two or more of the prior art references presented in Exhibits. A1–A15, B1–B18, B20, C1–16, and D1–D15.

Hillman further contends that the prior art identified in these Preliminary Invalidity Contentions is evidence of simultaneous or near-simultaneous independent invention by others of the alleged invention as recited in one or more of the Asserted Claims. Hillman reserves its right to rely on the simultaneous or near-simultaneous independent invention by others as further evidence of the obviousness of the Asserted Claims.

Each limitation of each of the Asserted Claims was well-known to those of ordinary skill

in the art at the time. At best, the elements recited in the Asserted Claims are a mere combinations and modifications of these well-known elements. A person of ordinary skill in the art would be able, and motivated, to improve the existing technology in the same or similar manner by combining or modifying the individual elements that were already known in the art to yield predictable results.

2. Background and State of the Art

Hillman sets forth below a summary of its current understanding of the state of the art as understood as of the asserted priority dates of the Asserted Patents for the general subject matter of the Asserted Patents. The information discussed in this section may have formed the background knowledge of a person of ordinary skill in the art at the time the Asserted Patents were filed and may have been used in determining whether and how to combine references to achieve the claimed inventions. *See Randall Mfg. v. Rea*, 733 F.3d 1355, 1362 (Fed. Cir. 2013) (stating that "the knowledge [of a person of ordinary skill in the art] is part of the store of public knowledge that must be consulted when considering whether a claimed invention would have been obvious"). Hillman expressly reserves the right to rely on each of the prior art references, systems, concepts, and technologies discussed in this Section with respect to the Asserted Patents.

Hillman contends that, to the extent the primary references identified in these Preliminary Invalidity Contentions do not anticipate the Asserted Claims, it would have been obvious to combine any of the references, systems, concepts, or technologies discussed in this Section with those primary references. Hillman also reserves the right to rely on the discussions of the state of the art and prior art in the Asserted Patents' specifications and their file histories, including file histories of related patents and foreign file histories of related patents in explaining the state of

the art. Hillman further expressly reserves the right to supplement its summary of the background and state of the art, including, for example, with information from any of the authors or named inventors on any of the prior art references, by personnel familiar with systems based on any of the prior art references, or any prior art systems related to prior art references, or by technical experts retained on behalf of any party. Hillman also expressly reserves the right to rely on any admissions by any of the named inventors, institutions with which they were associated, and Plaintiff, regarding the state of the art.

Every limitation in Hy-Ko's Asserted Claims was known in the art at least one year before the alleged priority date of Jan. 23, 2006. For example, Hillman's own prior art, including for example in the references to Wills (*e.g.* Wills '995 and Wills '747) shows that every element of the Asserted Claims of the '133, '920, '332, and'432 patents-in-suit were already known by Jan. 23, 2005. For example, it was well-known to have optical key blank identification, to identify key blanks, to have optical imaging to determine a key cutting pattern, and to cut keys. It was also well-known to place a key into a slot, to have a retention mechanism, and to have a housing of a key duplication device. Each of these elements is shown in the attached charts to Wills, as well as numerous other references. The Hy-Ko patents added nothing novel. In addition, it was well-known by January 23, 2005 to use a transponder for key blank identification, as shown for example, by the references to Titus, as well as other references charted for the '432.

3. Secondary Considerations

A patentee bears the burden of production with respect to evidence of secondary considerations of non-obviousness. *ZUP, LLC v. Nash Mfg., Inc.*, 896 F.3d 1365, 1373 (Fed. Cir. 2018). As of the date of these Preliminary Invalidity Contentions, Plaintiff has not identified any

evidence of secondary considerations. As shown in these Preliminary Invalidity Contentions, other companies and individuals described, built, and/or patented the exact same concepts in the Asserted Patents before Plaintiff ever did—often many years before. Even where others' invention occurred around the same time as the Asserted Patents, such simultaneous invention demonstrates the obviousness of the Asserted Patents.

Additionally, potentially relevant evidence includes any prior art reference cited herein that occurred before or around the alleged inventions claimed in the Asserted Patents. This also includes any prior art asserted in these Preliminary Invalidity Contentions that Plaintiff is able to pre-date based on its asserted priority dates by proving, *inter alia*, corroborated conception and diligent reduction to practice.

Hillman reserves all rights to further respond to any secondary considerations of non-obviousness raised by Plaintiff, including by updating, modifying, and/or adding to these Preliminary Invalidity Contentions. Hillman is not aware of any unexpected results, long felt need, commercial success (or any nexus to any allegedly successful commercial embodiment), or awards for the alleged inventions of the Asserted Patents.

E. IMPROPER INVENTORSHIP

Hillman reserves the right to argue that the patents-in-suit are invalid for improper inventorship. Hillman has not had the opportunity to take discovery in this case, including of the named inventors or patent prosecution counsel. However, based on even a cursory review of the file histories of the patents-in-suit, Hy-Ko has made assertions to the Patent Office on inventorship that were incorrect, and has filed Certificates of Correction in an attempt to purportedly correct the inventorship.

E. INEQUITABLE CONDUCT/UNENFORCEABILITY/PROSECUTION

LACHES

Hillman reserves the right to argue that the patents-in-suit are unenforceable for any reason, including inequitable conduct and prosecution laches. Hillman has not had the opportunity to take discovery in this case, including of the names inventors or patent prosecution counsel. However, based on a cursory review, it appears that Hy-Ko claims its patents-in-suit allegedly have a 2006 priority date, yet it did not file the applications leading to the patents-in-suit until September 12, 2016, over a decade later. On that date, Hy-Ko appears to have filed four patent applications which it now claims read on Hillman's KeyKrafter product, which was also released in 2016. Hy-Ko also dumped over 400 prior art references on the Patent Examiner shortly after filing its four applications. There is no indication in the file history that Hy-Ko indicated that the Examiner should focus on any of these references, nor is there any indication that Hy-Ko informed the Patent Examiner that many of these references (which appear in the attached claim charts) invalidate claims that Hy-Ko is asserting.

F. P.R. 3-3(D): INVALIDITY UNDER 35 U.S.C. §112

As set forth below, Hillman contends that the Asserted Claims are invalid under 35 U.S.C. § 112 because the claims (1) are indefinite; (2) fail to satisfy the enablement requirement; and/or (3) fail to satisfy the written description requirement.

Hillman's contentions that the Asserted Claims identified in this section are made in the alternative and do not constitute, and should not be interpreted as, admissions regarding the construction or scope of the Asserted Claims identified herein or that the Asserted Claims identified herein would not have been anticipated and/or obvious in light of the prior art.

Plaintiff has not yet provided a claim construction for any of the terms or phrases that Hillman anticipates will be in dispute. Hillman, therefore, cannot provide a complete list of § 112

defenses because Hillman does not know whether Plaintiff will proffer a construction for certain terms and phrases that is broader than, or inconsistent with, the construction that would be supportable by the disclosure set forth in the specification. Hillman offers these contentions without prejudice to any position they may ultimately take as to any claim construction issues.

Accordingly, Hillman reserves the right to supplement, amend, and/or modify these § 112 invalidity contentions as discovery progresses.

1. Invalidity under 35 U.S.C. § 112, ¶ 1

35 U.S.C. § 112, ¶ 1 requires that the specification contain a written description of the invention. "[T]he hallmark of written description is disclosure." *Bos. Sci. Corp. v. Johnson & Johnson*, 647 F.3d 1353, 1361-62 (Fed. Cir. 2011) (citation omitted). The test for whether a specification adequately describes an invention is "whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date .... [T]he test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art .... [It] is a question of fact." *Ariad Pharms., Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc); *Bos. Sci.*, 647 F.3d at 1362.

The enablement requirement of § 112 demands that the patent specification enable "those skilled in the art to make and use the full scope of the claimed invention without 'undue experimentation.'" *Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361, 1365 (Fed. Cir. 1997) (quoting *In re Wright*, 999 F.2d 1557, 1561 (Fed. Cir. 1993)). "[T]he scope of the claims must be less than or equal to the scope of the enablement." *Nat'l Recovery Tech., Inc. v. Magnetic Separation Sys., Inc.*, 166 F.3d 1190, 1196 (Fed. Cir. 1999).

Hillman contends that the following Asserted Claims are invalid under 35 U.S.C. § 112, ¶

1. Each Asserted Claim identified below is invalid under ¶ 1 because the specification of the Asserted Patent fails to provide a sufficient written description, enabling disclosure and/or fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention and the meaning of the term(s) and/or phrase(s):

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity Under 35 U.S.C. §112 ¶ 1
'332 patent	1	"the silhouette image is used to aid in determining the proper key blank"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "the silhouette image is used to aid in determining the proper key blank," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'332 patent	1, 11	"retention mechanism configured to receive at least a portion of a master key"/"receiving from a user at least a portion of said master key"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "at least a portion of said master key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'332 patent	1	"at least one additional light configured to direct at least a portion of the light toward a front surface of the master key"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "at least one additional light configured to direct at least a portion of the light toward a front surface of the master key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention. For example, while the specification provides cursory brief disclosure of backlighting, it does not provide sufficient disclosure of this claim element regarding "at least one additional light…"

'332 patent	1	"an optical imaging device configured to capture a silhouette image while the backlight is turned on, and to capture a second image when said at least one additional light is turned on"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "an optical imaging device configured to capture a silhouette image while the backlight is turned on, and to capture a second image when said at least one additional light is turned on," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention. For example, while the specification provides some cursory disclosure of backlighting, it does not provide sufficient disclosure of this claim element regarding capturing a second image when "at least one additional light is turned on."
'332 patent	1	"the second image is selectively used to quantify surface features of the existing key based on the type of the key blank"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, the specification does not disclose "selectively" using a second image "based on the type of key blank."

'332 patent	8	"said second image is analyzed by a logic to define features of said master key"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "said second image is analyzed by a logic to define features of said master key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'332 patent	9	"a logic is arranged to analyze said silhouette image and adjust the backlight to capture said second image"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "a logic is arranged to analyze said silhouette image and adjust the backlight to capture said second image," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'332 patent	11	"positioning said master key to a desired location to align the master key with an optical imaging device"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "positioning said master key to a desired location to align the master key with an optical imaging device," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'332 patent	11	"determining a key blank type based at least in part on the back lit image"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "determining a key blank type based at least in part on the back lit image," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'332 patent	11	"selectively capturing a second image"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, the specification does not provide sufficient disclosure of "selectively capturing a second image" within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention
'332 patent	11	"performing a laser scan"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "performing a laser scan," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'432	1, 8, 13	"a method for identifying a key"/ "a method for identifying and duplicating a key"	These claims are invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, with respect to "a method for identifying a key" and "a method for identifying and duplicating a key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention. For example, there appears to be no disclosure of a method of identifying a key with the method steps identified in these claims.
'432 patent	1, 8, 13	"providing an antennae positioned on the machine for communicating with a transponder on the [master] key"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "providing an antennae positioned on the machine for communicating with a transponder on the [master] key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'432 patent	2	"transmitting data to the key through the antenna"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, the specification does not appear to disclose transmitting data *to* the claimed key. *See* '432 patent at 18:2–5.
'432 patent	3	"receiving data from the key through the antennae"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "receiving data from the key through the antennae," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'432 patent	7, 10, 16	"the machine is arranged to determine that the master key contains a computer chip"	These claims are invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "the machine is arranged to determine that the master key contains a computer chip," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'432 patent	8	"providing an imaging system within the key duplication machine for capturing data related to said master key or key blank at the at least one key load position"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "providing an imaging system within the key duplication machine for capturing data related to said master key or key blank at the at least one key load position," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'432 patent	8	"providing an antennae positioned on the machine for communicating with a transponder on the master key or key blank"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "providing an antennae positioned on the machine for communicating with a transponder on the master key or key blank," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'432 patent	11	"the imaging system is arranged to capture the image of a blade of the master key including a key pattern to analyze the key pattern"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "the imaging system is arranged to capture the image of a blade of the master key including a key pattern to analyze the key pattern," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'432 patent	12	"imaging system aids in determining the key blank"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "imaging system aids in determining the key blank," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'432 patent	18	"antenna is arranged to read a microchip embedded within the key and write a code onto the microchip embedded on the key"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "antenna is arranged to read a microchip embedded within the key and write a code onto the microchip embedded on the key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'432 patent	19	"machine communicates with a database of key blanks"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "antenna is arranged to read a microchip embedded within the key and write a code onto the microchip embedded on the key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'432 patent	20	"an antennae for communicating with a transponder on the master key"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "an antennae for communicating with a transponder on the master key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'432	22	"wherein said antenna is a read device configured to receive data from said key"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "wherein said antenna is a read device configured to receive data from said key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'432	23	"wherein said antenna is a write device configured to transmit data to said key"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "wherein said antenna is a write device configured to transmit data to said key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'432	24	"wherein said antenna comprises at least one pair of windings"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "wherein said antenna comprises at least one pair of windings," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'432 patent	27	"user interface is arranged to inform a user that the master key contains a computer chip"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "user interface is arranged to inform a user that the master key contains a computer chip," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'920 patent	1, 19	"at least one key positioner linearly moveable from a first location adjacent to the slot to a second location away from the slot"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "at least one key positioner linearly moveable from a first location adjacent to the slot to a second location away from the slot," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'920 patent	20	"at least one key positioner is moveable along an x-axis to position said master key relative to said outer shell"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "at least one key positioner is moveable along an x-axis to position said master key relative to said outer shell," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'920 patent	10	"at least one key positioner configured to engage said master key, while exposing a tip end of the master key"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "at least one key positioner configured to engage said master key, while exposing a tip end of the master key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'920 patent	10	"an optical imaging device to record a tip view or substantially tip view of the master key"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "an optical imaging device to record a tip view or substantially tip view of the master key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention. In addition, there is no disclosure of recording "substantially tip view."

'920	1, 10, 18	"receive at least a portion of a master key"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "receive at least a portion of a master key," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention. In addition, there is no disclosure of recording "substantially tip view."
'920 patent	5, 9, 23	"analyzed by a logic"	These claims are invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "analyzed by a logic," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'920 patent	18	"an imaging system configured to measure a thickness"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, the specification does not appear to include the term "thickness," let alone provide sufficient disclosure of "measure a thickness."
'133	1	"integrated key duplication machine"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "integrated key duplication machine," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'133	1, 11, 24	"key blank identification system is configured to operate individually from the key cutting system"	These claims are invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "key blank identification system is configured to operate individually from the key cutting system," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'133	1, 11, 24	"key blank identification system and key cutting system may interact and share information"	These claims are invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "interact and share information," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'133	1, 24	"retention mechanism panel"	These claims are invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "retention mechanism panel," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'133	2	"said logic identifies features of the master key, and said logic compares said features . . . with data in said database"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "said logic identifies features of the master key, and said logic compares said features . . . with data in said database," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'133	5, 15	"said logic aids in determining a proper key blank"	These claims are invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "said logic aids in determining a proper key blank," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'133	6, 16	"said logic aids in selecting the proper key blank"	These claims are invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "said logic aids in selecting the proper key blank," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

'133	7	"said logic validates said key blank"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to "said logic validates said key blank," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.
'133	11	"plurality of key duplication systems"	This claim is invalid for lack of written description and enablement because the specification fails to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to teach persons of ordinary skill in the art how to make and use the alleged invention. For example, to the extent the specification provides any disclosure related to plurality of key duplication systems," it does not provide sufficient disclosure of this element within the meaning of the claim to confirm that the Applicant had possession of the claimed invention and/or teach persons of ordinary skill in the art how to make and use the alleged invention.

As to the terms listed above, the specifications of the Asserted Patents fail to inform a person with ordinary skill in the art that the Applicant had possession of the invention and/or fails to provide an enabling disclosure.

2. Invalidity under 35 U.S.C. §112, ¶ 2

Claims are indefinite under 35 U.S.C. § 112, ¶ 2 when they "fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014).

In addition to Hillman's reservation of rights stated above, Hillman notes that the Court's Docket Control Order contemplates that all indefiniteness issues be brought to the Court's attention through the Markman briefing process. Hillman's detailed arguments as to indefiniteness will be presented at that time, *i.e.*, through the Markman meet and confer and briefing process.

Hillman Contents that the Asserted Claims are invalid under 35 U.S.C. § 112, ¶ 2. The Asserted Claims identified below are invalid under ¶ 2 because they fail to inform, with reasonable certainty, those skilled in the art about the scope of the claimed invention:

Asserted Patent	**Asserted Claim(s)**	**Claim Term(s) and/or Phrase(s)**	**Invalidity under 35 U.S.C. § 112, ¶ 2**
'332 patent	1	"selectively used to quantify surface features of the existing key based on a type of key blank	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'332 patent	1, 13	"receive [receiving from a user] at least a portion of a master key"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity under 35 U.S.C. § 112, ¶ 2
'332 patent	1	"at least one additional light configured to direct at least a portion of the light toward a front surface of the master key"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'332 patent	1	"an optical imaging device configured to capture a silhouette image while the backlight is turned on, and to capture a second image when said at least one additional light is turned on"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'332 patent	8–9	"logic"	These claims are invalid for indefiniteness because the claim limitations, when viewed in light of the specification and other intrinsic evidence "fail[] to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity under 35 U.S.C. § 112, ¶ 2
'332 patent	11	"positioning said master key to a desired location to align the master key with an optical imaging device"	These claims are invalid for indefiniteness because the claim limitations, when viewed in light of the specification and other intrinsic evidence "fail[] to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'332 patent	11	"selectively capturing a second image"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'332 patent	11	"performing a laser scan across a blade of said master key"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'332 patent	13	"standard cut key"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity under 35 U.S.C. § 112, ¶ 2
'432 patent	1, 8, 13	"identifying a key"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'432 patent	1, 13	"outer shell with an opening positioned about a key load position for receiving a key"	These claims are invalid for indefiniteness because the claim limitations, when viewed in light of the specification and other intrinsic evidence "fail[] to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'432 patent	1	"capturing data related to said key at said key load position"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'432 patent	1, 13	"providing the machine with an imaging system for capturing data related to said key at said key load position"	These claims are invalid for indefiniteness because the claim limitations, when viewed in light of the specification and other intrinsic evidence "fail[] to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity under 35 U.S.C. § 112, ¶ 2
'432 patent	8	"providing an imaging system within the key duplication machine for capturing data related to said master key or key blank at the at least one key load position"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'432 patent	8	"providing an antenna positioned on the machine for communicating with a transponder on the master key or key blank"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'432 patent	8	"at one opening positioned about at least one key load position"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'432 patent	11	"key pattern"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity under 35 U.S.C. § 112, ¶ 2
'432 patent	20	"an opening positioned about a key load position"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'432 patent	20	"identification system for duplicating keys"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'432 patent	20	"antenna for communicating with a transponder on the master key"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'432 patent	20	"wherein said retention mechanism and said optical imaging device are incorporated into a single apparatus"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity under 35 U.S.C. § 112, ¶ 2
'432 patent	20	"wherein the apparatus includes an outer shell with an opening positioned about a key load position to receive said master key"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'432 patent	22	"read device"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'432 patent	23	"write device"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'432 patent	24	"windings"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity under 35 U.S.C. § 112, ¶ 2
'920 patent	1, 19	"key positioner being linearly movable from a first location adjacent to the slot to a second location away from the slot"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'920 patent	10	"at least one key positioner configured to engage said master key, while exposing a tip end of the master key"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'920 patent	2, 3, 15, 16, 20, 21	"position . . . relative to . . .outer shell"	These claims are invalid for indefiniteness because the claim limitations, when viewed in light of the specification and other intrinsic evidence "fail[] to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity under 35 U.S.C. § 112, ¶ 2
'920 patent	10	"tip view or substantially tip view"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).). For example, the claim refers to "substantially tip view" with no antecedent basis in the claim. The claim, when viewed in light of the specification and other intrinsic evidence, does not inform those skilled in the art how a "tip view" differs from a "substantially tip view," or the meets and bounds of the claims.
'920 patent	12	"cross-sectional view or substantially cross-sectional view"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014). For example, the claim refers to "substantially cross-sectional view" with no antecedent basis in the claim. The claim, when viewed in light of the specification and other intrinsic evidence, does not inform those skilled in the art how a "cross-sectional view" differs from a "substantially cross-sectional view," or the metes and bounds of the claim.

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity under 35 U.S.C. § 112, ¶ 2
'920 patent	18	"the housing"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014). For example, the claim refers to "the housing" with no antecedent basis in the claim for housing. The claim, when viewed in light of the specification and other intrinsic evidence, does not inform those skilled in the art whether "the housing" is intending to refer to 'the outer shell' disclosed earlier in the claim, a different feature, or something else entirely.
'920 patent	18	"imaging system configured to measure a thickness of the master key"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'920 patent	1, 10, 18	"receive at least a portion of a master key"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity under 35 U.S.C. § 112, ¶ 2
'133 patent	1	"integrated key duplication machine"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'133 patent	1, 11, 24	"key blank identification system is configured to operate individually from the key cutting system"	These claims are invalid for indefiniteness because the claim limitations, when viewed in light of the specification and other intrinsic evidence "fail[] to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014). For example, neither the specification nor the claims describe when a system is "configured to operate individually" from another system.
'133 patent	11	"plurality of key duplication systems"	The claim is invalid for indefiniteness because the claim limitation, when viewed in light of the specification and other intrinsic evidence "fails to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity under 35 U.S.C. § 112, ¶ 2
'133 patent	1, 24	"a portion of said key is positioned outside of said housing"	These claims are invalid for indefiniteness because the claim limitations, when viewed in light of the specification and other intrinsic evidence "fail[] to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'133 patent	1, 24	"retention mechanism panel"	These claims are invalid for indefiniteness because the claim limitations, when viewed in light of the specification and other intrinsic evidence "fail[] to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).
'133 patent	2, 5, 6, 7, 12, 15, 16	"logic"	These claims are invalid for indefiniteness because the claim limitations, when viewed in light of the specification and other intrinsic evidence "fail[] to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

Asserted Patent	Asserted Claim(s)	Claim Term(s) and/or Phrase(s)	Invalidity under 35 U.S.C. § 112, ¶ 2
'133 patent	3, 13	"relates to key blanks"	These claims are invalid for indefiniteness because the claim limitations, when viewed in light of the specification and other intrinsic evidence "fail[] to inform, with reasonable certainty, those skilled in the art about the scope of the invention" See, e.g., *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

F. PATENT ELIGIBLE SUBJECT MATTER

Hillman contends the Asserted Claims are not directed toward patent eligible subject matter and reserve the right to challenge the validity of the Asserted Claims under 35 U.S.C. § 101 at the appropriate time. Attached hereto as Exhibits A16, B19, C17, and D16 are Hillman's Subject Matter Eligibility Contentions. At the most basic level, the claims of the Asserted Patents relate to identifying features of a key and/or duplicating those features. Under Alice step 1, those ideas are abstract, as they relate to fundamental long prevalent practice. See *Intell. Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1314 (Fed. Cir. 2016). A claim is drawn to an abstract idea when "humans have always performed [the claims'] functions." *Content Extraction & Transmission LLC v. Wells Fargo Bank, NA*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Limiting the invention to a particular technological environment "do[es] not render the otherwise abstract concept any less abstract." *Intell. Ventures I LLC v. Cap. One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017).

The Asserted Claims of the Asserted Patents do not contain any inventive concept. At the time of the alleged inventions, the elements of the asserted claims, including using optical key

blank identification to identify key blanks, using optical imaging to determine a key cutting pattern, cutting keys, placing a key into a slot, using a retention mechanism, and having a housing of a key duplication device, and/or using a transponder for communicating with a master key, were well understood, routine, and/or conventional in the key duplication industry. The Asserted Claims employ well-known components or functionality, as shown Hillman's invalidity contentions involving anticipation and/or obviousness in this case, which is not enough to impart patent eligibility of an abstract idea. See Exhibits A16, B19, C17, and D16.

III. ACCOMPANYING DOCUMENT PRODUCTION

Pursuant to P.R. 3-4(a), Hillman is producing documentation sufficient to show the operation of any aspects or elements of each Accused Instrumentality identified by Plaintiff in its P.R. 3-1(c) charts.

Additionally, pursuant to P.R. 3-4(b), Hillman is producing herewith a copy of each prior art reference identified above pursuant to P.R. 3-3(a) which does not appear in the file histories of the Asserted Patents as well as additional prior art references. To the extent any such prior art reference is not in English, Hillman has produced to Plaintiff or will produce to Plaintiff an English translation of the portion(s) of the non-English prior art reference(s) relied upon by Hillman.

DATED: December 10 ~~November 10~~, 2021

Respectfully submitted,

By: *s/ Sam Baxter*
Samuel F. Baxter
sbaxter@mckoolsmith.com
Jennifer L. Truelove
jtruelove@mckoolsmith.com
MCKOOL SMITH P.C.
104 East Houston, Suite 300
Marshall, Texas 75670
(903) 923-9000
Fax: (903) 923-9099

John C. Briody
jbriody@mckoolsmith.com
Radu A. Lelutiu
rlelutiu@mckoolsmith.com
Kevin Schubert
kschubert@mckoolsmith.com
Christopher P. McNett
cmcnett@mckoolsmith.com
Mariel Talmage
mtalmage@mckoolsmith.com
MCKOOL SMITH P.C.
One Manhattan West
395 Ninth Avenue, 50th Floor
New York, New York 10001
(212) 402-9400
Fax: (212) 402-9444

ATTORNEYS FOR DEFENDANT THE HILLMAN GROUP, INC.

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the above and foregoing document has been served on counsel of record on December 10, 2021 ~~November 10, 2021~~, via electronic mail.

By: *s/ Kevin Schubert*