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

ATHALONZ, LLC, Plaintiff, v. UNDER ARMOUR, INC. Defendant.	C.A. No. 2:23-cv-00193-JRG **JURY TRIAL DEMANDED**

DEFENDANT UNDER ARMOUR'S INITIAL INVALIDITY CONTENTIONS

I. INTRODUCTION

Pursuant to the Court's Docket Control Order (D.I. 35) dated October 17, 2023, and Patent Rule ("P.R.") 3-3, Defendant Under Armour, Inc. ("Under Armour") by their undersigned attorneys, hereby provides initial identification of the prior art references and other grounds that render the patent claims asserted by Plaintiff, Athalonz, LLC ("Plaintiff" or "Athalonz") against Under Armour in the above captioned action invalid under 35 U.S.C. §§ 102, 103, and/or 112 ("Initial Invalidity Contentions").

According to Plaintiff's P.R. 3-1 and 3-2 Disclosure of Asserted Claims and Infringement Contentions dated September 14, 2023 ("Infringement Contentions"), Plaintiff is asserting that Under Armour infringes claims 1-5 of U.S. Patent No. 11,013,291 (the "'291 patent"); claims 1-11 of U.S. Patent No. 11,064,760 (the "'760 patent"); claims 1-8 of U.S. Patent No. 10,674,786 (the "'786 patent"); claims 1-5, 7, 9-15 and 17 of U.S. Patent No. 11,510,456 (the "'456 patent"); and claims 1-5 and 8 of U.S. Patent No. 11,013,291 (the "'768 patent") (the "Asserted Claims" of the "Asserted Patents").

In its Infringement Contentions, Plaintiff identified the alleged priority date of the Asserted Patents as March 8, 2011. If Plaintiff later seeks to assert a specific earlier invention or priority date other than the date set forth above, Under Armour reserves the right to revise, amend, and supplement these Initial Invalidity Contentions, including to identify additional information supporting prior art identified herein, and/or additional prior art, to respond to such assertions.

In these Initial Invalidity Contentions pursuant to P.R. 3-3, with respect to each claim of the Asserted Patents, Under Armour: (a) identifies currently known prior art that either anticipates or renders obvious each Asserted Claim; (b) specifies whether each such item of prior art anticipates or renders obvious the applicable claim; (c) submits charts for illustrative prior art

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references identifying where each element is disclosed or rendered obvious by the prior art; and (d) identifies the grounds for invalidating any of the Asserted Claims based on indefiniteness under pre-AIA 35 U.S.C. § 112, second paragraph, or lack of enablement or written description under pre-AIA 35 U.S.C. § 112, first paragraph.

II. RESERVATIONS

Consistent with P.R. 3-6, Under Armour reserves the right to revise, amend, and supplement these Initial Invalidity Contentions. The information and documents Under Armour produces are provisional and subject to further revision. Under Armour reserves the right to revise, amend, and supplement these disclosures and the subsequent document production should Plaintiff (1) provide any information that it failed to provide in its P.R. 3-1 and 3-2 disclosures; (2) amend its P.R. 3-1 or 3-2 disclosures in any way; or (3) attempt to rely upon any information at trial, in a hearing, or during a deposition which it failed to provide in its P.R. 3-1 and 3-2 disclosures.

Under Armour provides the information below, as well as the accompanying production of documents, for the sole purpose of complying with P.R. 3-3 and 3-4. The information provided shall not be deemed an admission regarding the scope of any claims or the proper construction of those claims or any terms contained therein. Nothing contained in these Initial Invalidity Contentions should be understood or deemed to be an express or implied admission or contention with respect to the proper construction of any terms in the Asserted Claims, or with respect to the alleged infringement of that claim. Under Armour further reserves the right to prove the invalidity of the Asserted Claims on bases other than those required to be disclosed in these disclosures and contentions pursuant to P.R. 3-3.

Discovery has only recently begun, and Under Armour's prior art investigation is not complete. Under Armour has not yet taken the deposition of any of the named inventors of the

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Asserted Patents; Under Armour has not yet taken discovery from third-parties who may have information concerning prior art identified herein and/or additional prior art; and Under Armour's investigation of prior art is ongoing. Under Armour intends to diligently pursue discovery. Accordingly, Under Armour reserves the right to revise, amend, and supplement these Initial Invalidity Contentions, including to identify additional information supporting prior art identified herein, and/or additional prior art, as it receives information from these or other parties, consistent with the Patent Rules and the Federal Rules of Civil Procedure. By way of example, Under Armour reserves the right to present additional items of prior art under 35 U.S.C. §§ 102(a), (b), (e), or (g), and § 103 located during the course of discovery or further investigation. In addition, Under Armour reserves the right to assert invalidity under 35 U.S.C. § 102(c), (d), or (f) to the extent that discovery or further investigation yield information forming the basis for such invalidity.

Under Armour also reserves the right to revise, amend, and supplement these Initial Invalidity Contentions if Plaintiff later provides any information that it failed to provide in its Infringement Contentions, or if Plaintiff amends, supplements, alters, or explains its disclosures in any way. In particular, Under Armour notes that Plaintiff's Infringement Contentions fail to provide sufficient detail concerning Plaintiff's infringement theory to determine what Plaintiff contends to be infringing functionality or design or how any product offered by Under Armour satisfies any particular claim or claim limitation. Under Armour provides these Initial Invalidity Contentions consistent with the Docket Control Order currently in place but does so without waiving any right to receive from Plaintiff such full and complete specific infringement disclosures as should have been provided from the outset. Under Armour's compliance with the current schedule should not be viewed as a waiver of any rights with respect to Plaintiff's

Infringement Contentions. In view of such deficiencies, Under Armour reserves the right to revise, amend, and supplement these Initial Invalidity Contentions, including to identify additional information supporting prior art identified herein, and/or additional prior art, once Plaintiff's theories of infringement are meaningfully elucidated.

The parties have yet to begin the process of exchanging information regarding claim construction and the Court has not yet construed the claims of the Asserted Patents. Under Armour therefore reserves the right to revise, amend, and supplement these Initial Invalidity Contentions in view of the claim construction process and in particular after the Court's determination of the scope and meaning of any claim term or element. Under Armour also reserves the right to revise, amend, and supplement these contentions, including to identify additional information supporting prior art identified herein, and/or additional prior art, depending upon the positions that Plaintiff or its expert witnesses may take concerning claim interpretation, infringement, and/or invalidity issues.

In this document and in the attached Invalidity Charts, Under Armour uses what it understands is Plaintiff's apparent constructions of the Asserted Claims as provided in Plaintiff's Infringement Contentions, to the extent Under Armour can understand those contentions, because Plaintiff must use the same interpretation of its claims for infringement and validity. Nothing in this document or in the attached Invalidity Charts should be taken as an admission that Under Armour agrees with Plaintiff on the scope or interpretation of the Asserted Claims or as reflecting Under Armour's understanding of the scope or interpretation of the Asserted Claims. Under Armour is not taking any claim construction positions via these contentions. Rather, Under Armour offers these contentions in response to Plaintiff's Infringement Contentions and without prejudice to any position it may ultimately take as to any claim

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construction issues, as to the non-infringement of any Under Armour's accused products, and as to the invalidity of the Asserted Claims on any ground. Accordingly, these contentions are made in the alternative, are not necessarily intended to be consistent with each other, and should not be otherwise construed. Under Armour expressly reserves the right to take positions with respect to future claim construction or non-infringement issues that are inconsistent with, or even contradictory to, the claim construction or non-infringement positions expressed or implied in these Initial Invalidity Contentions.

Under Armour further reserves the right to rely upon the prosecution histories of the Asserted Patents and prior art cited in the prosecution histories of the Asserted Patents as invalidating references or to show the state of the art at the relevant time. Under Armour further intends to rely on the patent applicants' admissions concerning the scope of the prior art relevant to the Asserted Patents found in, *inter alia*, the patent prosecution histories for the Asserted Patents; any deposition testimony of the named inventors of the Asserted Patents; and the papers filed and any evidence submitted by Plaintiff in connection with this litigation and any proceedings involving the Asserted Patents.

Prior art not included in these Initial Invalidity Contentions, whether known or not known to Under Armour at this time, may become relevant. In particular, Under Armour is currently unaware of the extent, if any, to which Plaintiff will contend that limitations of the Asserted Claims are not disclosed in the prior art identified herein. To the extent that such an issue arises, Under Armour reserves the right to identify other references that would render obvious the allegedly missing claim(s) or claim limitation(s).

Under Armour's attached Invalidity Charts cite to representative teachings and disclosures of the prior art as applied to features of the Asserted Claims. The cited portions are

only examples, and Under Armour reserves the right to rely on uncited portions of the references and on other publications and expert testimony as aids in understanding and interpreting the cited prior art, including to provide meaningful context or evidence that the prior art discloses a claim limitation. Under Armour reserves the right to rely on uncited portions of the prior art references, other publications, prior art cited in the prosecution history files, and testimony to establish bases for invalidity, including, but not limited to, reasons to combine the prior art references with other prior art references.

The references discussed in the attached Invalidity Charts may disclose the elements of the Asserted Claims explicitly and/or inherently, and/or they may be relied upon to show the state of the art in the relevant time. The suggested obviousness combinations may be provided in the alternative to contentions that one or more claims are anticipated, and are not meant to suggest that any reference included in the combinations is not by itself anticipatory.

III. INVALIDITY CONTENTIONS FOR THE ASSERTED PATENTS

1. P.R. 3-3(a): "The identity of each item of prior art that allegedly anticipates each asserted claim or renders it obvious"

Under Armour identifies the prior art cited on the face of the Asserted Patents, the references cited in the prosecution histories of the Asserted Patents, and the references cited in any invalidity contentions submitted by any party, in any form, and in any action or proceeding involving the Asserted Patents, whether domestic or foreign. Under Armour also hereby identifies the prior art references in the chart below. The identification of prior art references below is not exhaustive and Under Armour's production pursuant to P.R. 3-4 contains additional references that render one or more of the Asserted Claims invalid. Under Armour reserves the right to rely upon both the listed and unlisted references produced pursuant to P.R. 3-4, as well as other art that may become known or relevant during the course of this or related proceedings.

To the extent a reference is prior art, Under Armour also reserves the right to rely upon: (i) foreign counterparts of U.S. patents identified in these contentions; (ii) U.S. counterparts of foreign patents and foreign patent applications identified in these contentions; and (iii) U.S. and foreign patents and patent applications corresponding to articles and publications identified in these contentions. Discovery is ongoing, and Under Armour also reserves the right to rely upon products embodying the references identified in these Initial Invalidity Contentions or testimony from others regarding those references, in proving the invalidity of the Asserted Claims.

Under Armour incorporates by reference any prior art references or invalidity charts provided in invalidity contentions or *inter partes* review papers that have been or will be submitted by parties in other matters involving any of the Asserted Claims, as if fully set forth herein.

Under Armour's compliance with P.R. 3-3(a) here in no way is an admission that the Asserted Claims are directed to a patent-eligible subject matter under § 101 and/or that the Asserted Claims meet the § 112 requirements. Each invaliding ground separately, and in addition to each other, invalidates the Asserted Claims.

Under Armour identifies the following prior art patents and patent applications that anticipate the Asserted Claims or render them obvious:

Reference	Date of Filing / Publication	Title
U.S. Patent No. 4,754,561	Jul. 5, 1988	GOLF SHOE
U.S. Patent No. 7.464,428	Dec. 16, 2008	SOLE ELEMENTS OF VARYING DENSITY AND METHODS OF MANUFACTURE
U.S. Patent No. 4,615,126	Oct. 7, 1986	FOOTWEAR FOR PHYSICAL EXERCISE
U.S. Patent No. 4,364,189	Dec. 21, 1982	RUNNING SHOE WITH DIFFERENTIAL CUSHIONING

U.S. Patent No. 4,704,809	Nov. 10, 1987	GOLF SHOE
U.S. Patent No. 5,448,839	Sep. 12, 1995	STAND EASY SHOE
U.S. Patent No. 6,880,266	Apr. 19, 2005	FOOTWEAR SOLE
U.S. Patent No. 7,712,231	May 11, 2010	SHOE
U.S. Patent No. 4,620,376	Nov. 4, 1986	FOREFOOT VALGUS COMPENSATED FOOTWEAR
U.S. Patent No. 2,847,769	Aug. 19, 1958	SHOES FOR GOLFERS
U.S. Patent No. 4,535,554	Aug. 20, 1985	MOLDED FOOTWEAR
U.S. Patent No. 6,604,301	Aug. 12, 2003	SHOE SOLE INSERT
U.S. Patent No. 4,642,911	Feb. 17, 1987	DUAL-COMPRESSION FOREFOOT COMPENSATED FOOTWEAR
U.S. Patent No. 6,158,151	Dec. 12, 2000	GOLF SHOES
U.S. Patent No. 5,025,573	Jun. 25, 1991	MULTI-DENSITY SHOE SOLE
U.S. Patent No. 3,789,523	Feb. 5, 1974	GOLF SHOE
U.S. Patent Publication No. 2002/0139011	Oct. 3, 2002	JOINT PROTECTIVE SHOE CONSTRUCTION
U.S. Patent Publication No. 2009/0307925	Dec. 17, 2009	SHOE SOLE ELEMENT
U.S. Patent Publication No. 2007/0107258	May 17, 2007	SHOE
U.S. Patent Publication No. 2006/0090377	May 4, 2006	SOLE FOR FOOTWEAR
G.B. Patent No. 599,832	Mar. 22, 1948	ORTHOPEDIC INSOLE
International Publication No. 2006/129951	Dec. 7, 2006	A CORRECTION INSOLE
U.S. Patent Publication No. 2004/0040181	Mar. 4, 2004	GOLF SHOE
U.S. Patent Publication No. 2010/0242307	Sep. 30, 2010	GOLF SHOE
J.P. Patent 5,438,023	Nov. 21, 2008	INSOLE FOR ARTHRITIS AND DIABETES
International Publication No. 2009/142442	Nov. 26, 2009	OUTSOLE HAVING A TILT SURFACE, AND KNEE-JOINT PROTECTING SHOE INCLUDING SAME
Korean Patent No. 20-0331191	Oct. 22, 2003	LIMB REVISION SHOE
DE Patent No. 4417563	Nov. 23, 1995	FOOTBALL BOOT WITH ADDITIONAL GRIPS ON SOLE
EP0092366	Oct. 26, 1983	RUNNING SHOES

Under Armour further identifies the following prior art publications that anticipate the Asserted Claims or renders them obvious:

Title	Authors	Publisher	Publication Date
A Guide to the Prevention of Running Injuries	D. B. Clement J. E. Taunton	CAN. FAM. PHYSICIAN Vol. 26	April, 1980

Under Armour further identifies the following public knowledge, use, products on-sale, or prior inventions that anticipate the Asserted Claims or renders them obvious:

- The knowledge of a person of ordinary skill in the art at the time of the alleged invention of the Asserted Patents regarding athletic shoe design, including, but not limited to, athletic shoe components, as well as their size, shape, orientation, and function, and the products known and/or in public use that implemented or utilized such knowledge.
- The Sako Super running shoe, available at least as early as 1984.
- Under Armour shoes available prior to March 8, 2011, including, but not limited to, Micro G Bloodline, Micro G Black Ice, LS800 and Vertical.

2. P.R 3-3(b): "Whether each item of prior art anticipates each asserted claim or renders it obvious"

Under Armour contends that each reference identified below, combined with the knowledge of a person of ordinary skill in the art at the relevant time, renders the Asserted Claims invalid under 35 U.S.C. §§ 102 and/or 103. The Invalidity Charts attached hereto as Exhibits A-X specify, on a claim-by-claim basis, the disclosure in the prior art that anticipates and/or renders obvious each limitation of the Asserted Claims.

The accompanying Invalidity Charts are exemplary, and not exhaustive. Under Armour has endeavored to identify relevant portions of the references. The references, however, may contain additional support for particular claim limitations. As such, the cited portions are only examples, and Under Armour reserves the right to rely on uncited portions of the prior art

references as additional evidence that the prior art discloses a claim limitation or the claimed subject matter as a whole.

Where Under Armour cites to a particular figure in a reference, the citation should be understood to encompass the caption and description of the figure and any text relating to the figure. Similarly, where Under Armour cites to a particular text referring to a figure, the citation should be understood to include the corresponding figure as well.

Under Armour's Initial Invalidity Contentions are not limited to the attached Invalidity Charts.[1] Under Armour may demonstrate the invalidity of the Asserted Claims by reference not only to prior art references, but to the person of ordinary skill in the art's pre-existing knowledge, skill, and creativity, with reference to the general state of the art, and with reference to the inventors' admissions concerning prior art, the state of the art, and non-inventive elements.

A. Anticipation

Under Armour identifies below the prior art references that anticipate any of the Asserted Claims. Under Armour contends that the references in the tables below independently anticipate one or more claims of the Asserted Claims under § 102, as set forth in the Invalidity Charts attached hereto. To the extent that Plaintiff contends that any of the anticipating references do not expressly disclose any limitation of the Asserted Claims, the prior art implicitly or inherently discloses such limitations as would be understood to a person of ordinary skill in the art at the time of the alleged invention.

[1] This is particularly so given the scarcity of details in Plaintiff's Infringement Contentions, including its Infringement Claim Charts, concerning the meaning of claim terms and its theory of infringement, and because the Court has not yet construed the Asserted Claims.

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Patent or Application No.	Inventor/Author	Anticipated Claims	Exhibit
US Patent Pub. No. 2004/0040181	Kim	‘291 patent claims 1-5	A
US Patent Pub. No. 2004/0040181	Kim	‘760 patent claims 1-3, 6-8, 11	D
US Patent No. 3,789,523	Rubin	‘760 patent claims 1-3, 6-8, 11	E
US Patent No. 4,754,561	DuFour	‘760 patent claims 1-3, 6-8, 11	F
US Patent Pub. No. 2004/0040181	Kim	‘786 patent claims 1-8	G
US Patent No. 3,789,523	Rubin	‘786 patent claims 1-3, 5, 6, 8	H
US Patent No. 4,754,561	DuFour	‘786 patent claims 1-3, 5, 6, 8	I
US Patent No. 6,158,151	Won	‘456 patent claims 1-5, 7, 9-15, 17	J
US Patent Pub. No. 2007/0107258	Umezawa, et al.	‘456 patent claims 1-5, 7, 9-15, 17	K
US Patent No. 7,464,428	Norton	‘456 patent claims 1-5, 7, 9-15, 17	L
Sako Super	N/A	‘456 patent claims 1-5, 7, 9-15, 17	M
US Patent No. 6,158,151	Won	‘768 patent claims 1-5, 8	N
US Patent Pub. No. 2007/0107258	Umezawa, et al.	‘768 patent claims 1-5, 8	O
US Patent No. 7,464,428	Norton	‘768 patent claims 1-5, 8	P
Sako Super	N/A	‘768 patent claims 1-5, 8	Q
Under Armour Prior Art Shoes	N/A	‘291 patent claims 1-5	V
Under Armour Prior Art Shoes	N/A	‘760 patent claims 1-11	W
Under Armour Prior Art Shoes	N/A	‘786 patent claims 1-8	X

B. Obviousness

Each anticipatory prior art reference, either alone or in combination with other prior art, also renders the Asserted Claims obvious to a person of ordinary skill in the art. In particular, each anticipatory prior art reference on its own renders the Asserted Claims obvious and also may be combined with (i) information known to a person skilled in the art at the time of the alleged invention; (ii) any of the other anticipatory prior art references; (iii) any statement in the intrinsic record of the Asserted Patents; and/or (iv) other prior art references identified in section III.1. To the extent that Plaintiff contends that any of the anticipatory prior art fails to disclose explicitly or inherently one or more limitations of the Asserted Claims, Under Armour reserves the right to argue that any difference between the reference and the corresponding Asserted Claims would have been obvious to a person of ordinary skill in the art even if it has not specifically denoted that the reference is to be combined with the knowledge of a person of ordinary skill in the art. Further, Under Armour reserves the right to identify other prior art references that, when combined with anticipatory prior art, would render the Asserted Claims obvious.

The teachings of each of the primary prior art references in Exhibits A-Q, V-X, can also be combined with other primary prior art references in Exhibits A-Q, V-X and/or each prior art references in the relevant obviousness charts at Exhibits R-U, for at least the reasons noted in the Invalidity Charts. Furthermore, in view of the state of the art at the time of the purported inventions claimed in the Asserted Claims, any elements not found in a particular reference would have been obvious to a person of ordinary skill in the art. Under Armour's contentions that the references render the Asserted Claims obvious under § 103 are in no way an admission or suggestion that each reference does not independently anticipate the asserted claims under §

102. Under Armour's obviousness contentions are raised in the alternative and should not be construed to suggest that any prior art reference included in a combination is not invalidating prior art on its own.

Under Armour also relies upon these references (as well as the state of the art known to a person of ordinary skill in the art at the time, as evidenced at least partially by the references cited during prosecution of the Asserted Patents) to provide examples of what a person of ordinary skill in the art would have known at that time, to provide examples of references a person of ordinary skill in the art would have combined to address the needs purportedly met by the Asserted Patents, and to provide evidence of such a motive to combine. The specific modifications or combinations of references and related rationales provided with respect to obviousness under § 103 are merely exemplary and are not intended to be exhaustive. Numerous additional modifications, reasons, and obviousness combinations of the references identified below are possible and apparent, and Under Armour reserves the right to use any such combinations in this action.

Plaintiff has not yet taken a position regarding which limitations, if any, it contends are missing from the prior art references. Under Armour contends that any claim limitation allegedly missing from one of the listed prior art references is disclosed in one or more of the other prior art references, as shown in the attached Invalidity Charts demonstrating obviousness of the Asserted Claims. Under Armour therefore contends that a person of ordinary skill in the art would find the Asserted Claims an obvious modification and/or an obvious combination of two or more of the prior art references listed in these Initial Invalidity Contentions. To the extent Plaintiff contends that any of the prior art fails to disclose one or more limitations of the Asserted Claims, Under Armour reserves the right to identify other prior art that would supply any such

limitation(s) which, when combined with the other prior art and/or with the knowledge of a person of ordinary skill in the art at the relevant time, would render the claimed subject matter obvious.

The United States Supreme court clarified the standard for evaluating obviousness in *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727 (2007). The Court emphasized 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 1739.

> When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. . . . [A] court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.

Id. at 1740. Moreover, the Court elaborated that any reason to combine known elements disclosed by prior art patents or other references need not be explicitly discussed in the references themselves, "for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *Id.* at 1741. The Court further observed:

> 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. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103.

Id. at 1742; s*ee also, e.g.*, *Dystar Textilfarben GmbH v. C.H. Patrick Co.*, 464 F.3d 1356, 1368 (Fed. Cir. 2006) (explaining that when the "combination of references results in a product or process that is more desirable, for example because it is stronger, cheaper, cleaner, faster, lighter,

smaller, more durable, or more efficient," there exists a motivation to combine prior art references even where there is no explicit suggestion in the references themselves "[b]ecause the desire to enhance commercial opportunities by improving a product or process is universal--and even common-sensical"); *LeapFrog Enters., Inc. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1162 (Fed. Cir. 2007) (applying *KSR* and holding that "one of ordinary skill in the art of children's learning toys would have found it obvious to combine the Bevan device with the SSR to update it using modern electronic components in order to gain the commonly understood benefits of such adaptation, such as decreased size, increased reliability, simplified operation, and reduced cost").

Although the applicable law does not require evidence of motivation to combine, motivation exists to combine one or more of the references disclosed herein with each other. *See, e.g.*, Exs. A-U. Beyond specific rationales and motivations identified and discussed in the present charts, rationale and motivation to modify any particular reference or to combine any two or more of the identified references comes from (a) the nature of the problem being solved; (b) the teachings of the prior art; (c) the knowledge of persons of ordinary skill in the art; (d) the fact that all of the references teach systems, apparatuses, and methods related to the subject matter and address the same technical issues of the patents-in-suit; and (e) one would be motivated by considerations of efficiency, effectiveness, convenience, cost-savings, and accessibility, to combine the various teachings. Additionally, common sense may be used in a combination to fulfill a limitation as long as there is a "reasoned explanation" for its use. *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1366 (Fed. Cir. 2016). Additionally, one would be motivated to address the alleged problems or achieve the purported objectives identified in the Background section of the Asserted Patents.

Each combination of familiar elements according to known methods is obvious because it yielded predictable results. And, in combination, each element would merely perform the same function as it would separately. The rationale to combine or modify prior art references is significantly stronger when references seek to solve similar problems, come from the same field, and correspond well. *In re Inland Steel Co.*, 265 F.3d 1354, 1362 (Fed. Cir. 2001). In addition, when a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 bars its patentability.

As seen in Exhibits A-X, numerous combinations of the identified references would have been naturally considered as part of the exercise of ordinary skill by one skilled in the art. For example, a person of ordinary skill in the art at the time of the invention would have sought to combine or modify one or more of the references in Exhibits A-Q, V-X, with the knowledge of persons of ordinary skill in the art and/or would have sought to combine or modify one or more of the references listed in A-Q, V-X with one or more other references listed in Exhibits R-U. *See, e.g.*, Exs. A-X.

The claim charts marked as Exhibits R-U disclose any element that may be missing from any primary reference and the rationales and motivations for combining the references with the primary references. Exhibits R-U provide the rationales to the extent a primary reference does not disclose any element of the Asserted Claims for one of ordinary skill in the art to modify the reference to include the element and/or combine the primary reference with any one or more of the references listed in the chart's corresponding claim.

In addition, it would have been obvious to try combining the prior art references identified above because there were only a finite number of predictable solutions and/or because

known work in one field of endeavor prompted variations based on predictable design incentives and/or market forces either in the same field or a different one. The combination of the prior art references identified above also would have been obvious because the combination represents the known potential options with a reasonable expectation of success. Additionally, one of ordinary skill in the art would have been motivated to combine the references identified above using: known methods to yield predictable results; known techniques in the same way; a simple substitution of one known, equivalent element for another to obtain predictable results; and/or a teaching, suggestion, or motivation in the prior art generally.

The combinations identified in these Initial Invalidity Contentions would have been obvious for numerous reasons, including, but not limited to, the rationales to combine identified in the charts and above, the references are in similar fields, the references seek to solve similar problems, the relevant technology is one which yields predictable results, and each element would perform the same function in the combination as it would separately.

Under Armour contends that the prior art references and/or combinations of prior art references in Exhibits A-Q, V-X, combined with the knowledge of a person of ordinary skill in the art at the time of the alleged invention of the Asserted Patents render the Asserted Claims obvious. Under Armour further identifies the following combinations of prior art references that render the Asserted Claims obvious. The combinations specifically identified below are exemplary and in no way intended to be exhaustive. Numerous additional reasons and obviousness combinations of the references identified below are possible and apparent, and Under Armour reserves the right to use any such combinations in this investigation.

Prior Art Combination	Exhibit Combination
US Patent Pub. No. 2004/0040181 with the secondary references in the '291 Patent Obviousness Chart	A+R

US Patent No. 3,789,523 with the secondary references in the '291 Patent Obviousness Chart	B+R
US Patent No. 4,754,561 with the secondary references in the '291 Patent Obviousness Chart	C+R
Under Armour Prior Art Shoes with the secondary references in the '291 Patent Obviousness Chart	V+R
US Patent Pub. No. 2004/0040181 with the secondary references in the '760 Patent Obviousness Chart	D+S
US Patent No. 3,789,523 with the secondary references in the '760 Patent Obviousness Chart	E+S
US Patent No. 4,754,561 with the secondary references in the '760 Patent Obviousness Chart	F+S
with the secondary references in the '760 Patent Obviousness Chart	W+S
US Patent Pub. No. 2004/0040181 with the secondary references in the '786 Patent Obviousness Chart	G+T
US Patent No. 3,789,523 with the secondary references in the '786 Patent Obviousness Chart	H+T
US Patent No. 4,754,561 with the secondary references in the '786 Patent Obviousness Chart	I+T
with the secondary references in the '786 Patent Obviousness Chart	X+T
US Patent No. 6,158,151 with US Patent No. 7,464,428	J+L
US Patent Pub. No. 2007/0107258 with US Patent No. 7,464,428	K+L
Sako Super with US Patent No. 7,464,428	M+L
US Patent No. 6,158,151 with the secondary references in the '768 Patent Obviousness Chart	N+U
US Patent Pub. No. 2007/0107258 with the secondary references in the '768 Patent Obviousness Chart	O+U
US Patent No. 7,464,428 with the secondary references in the '768 Patent Obviousness Chart	P+U
Sako Super with the secondary references in the '768 Patent Obviousness Chart	Q+U

Further demonstrating the invalidity of the asserted claims is the abundance of prior art that discloses the limitations the applicants relied on to get the Asserted Claims allowed during prosecution.

The '768 patent claims were allowed because the prior art of record allegedly failed to disclose a heel section having a heel platform having a height that is substantially uniform around

its perimeter. See 1/6/2022 Appeal Brief, 3/4/2022 Notice of Allowance. The '456 patent claims were allowed without substantive analysis after a terminal disclaimer was filed to overcome a double patenting rejection over the '768 patent claims.

The '291 patent claims were allowed because the prior art allegedly failed to disclose a shoe sole having a slope between the heel section and the outside toe section, a slope between the heel section and the inside toe section, and a slope between the outside toe section and the inside toe section. 1/27/2021 Response to Office Action, 2/9/2021 Notice of Allowance.

The '760 patent claims were allowed because the prior art allegedly failed to disclose a shoe having a sole bottom that is substantially linear from the inner edge to the outer edge at the cross section of the ball of the foot. 9/30/2020 Response to Office Action, 10/13/2020 double patenting rejection, 3/24/2021 Notice of Allowance.

The '786 claims were allowed because the prior art allegedly failed to disclose a shoe having a slope along the front edge of the shoe that is greater than the slope established by the uniform height of the heel platform section. 11/1/2019 Decision on Appeal, 1/30/2020 Notice of Allowance.

All of these limitations were well-known at the time the Asserted Patents were filed.

Each of the primary references for the '768 patent disclose a heel platform having a height that is substantially uniform around its perimeter. See, e.g.:

- '428 patent and its incorporated references: '428 patent, 6:38-51, 5:56-67; '911 patent. Claim 1, Figs. 9-11; '126 patent, Figs. 1-3b; '573 patent, Figs. 1-135.
- '258 publication: Figs. 1-4, Pars. 33, 46, 52.
- '151 patent: Figs. 5-7, 1:42-54.

Each of the primary references for the '291 patent disclose a shoe sole having a slope

between the heel section and the outside toe section, a slope between the heel section and the inside toe section, and a slope between the outside toe section and the inside toe section. Likewise, each of the primary references for the '786 patent disclose a shoe having a slope along the front edge of the shoe that is greater than the slope established by the uniform height of the heel platform section. See, e.g.:

- '181 publication: Pars. 12-16, 27, 32, 36, 39, 41; Figs. 1-3b, 5b.
- '561 patent: 4:51-57, 4:67-5:6, 5:7-14, Figs 9-12.
- '523 patent: 3:9-15, 3:56-65, Figs. 1, 4.

Each of the primary references for the '760 patent disclose a shoe having a sole bottom that is substantially linear from the inner edge to the outer edge at the cross section of the ball of the foot. See, e.g.:

- '181 publication: Pars. 14, 15, 27, Figs. 1-2.
- '561 patent: Figs 9-13.
- '523 patent: Figs. 3-4.

3. P.R 3-3(c): "A chart identifying where specifically in each alleged item of prior art each element of each asserted claim is found"

The Invalidity Charts attached hereto as Exhibits A-X identify where specifically in each alleged item of prior art each element of each asserted claim is found. The accompanying Invalidity Charts are exemplary, and are not exhaustive. Under Armour has endeavored to identify relevant portions of the references. The references, however, may contain additional support for particular claim limitations. As such, the cited portions are only examples, and Under Armour reserves the right to rely on uncited portions of the prior art references as additional evidence that the prior art discloses a claim limitation or the claimed subject matter as a whole.

Where Under Armour cites to a particular figure in a reference, the citation should be understood to encompass the caption and description of the figure and any text relating to the figure. Similarly, where Under Armour cites to particular text referring to a figure, the citation should be understood to include the corresponding figure as well.

4. P.R 3-3(d): "Any grounds of invalidity based on indefiniteness under 35 U.S.C. § 112(2) or enablement or written description under 35 U.S.C. § 112(1) of any of the asserted claims"

Under Armour contends that the Asserted Claims are invalid for failure to meet one or more of the requirements of 35 U.S.C. § 112, as will be set forth in Under Armour's expert reports on invalidity, to be served in accordance with the Court's Scheduling Order.

Invalidity under § 112 may depend upon the Court's claim construction as well as Plaintiff's Infringement Contentions and the claim scope asserted by Plaintiff. Consequently, Under Armour is identifying only those issues of invalidity under § 112 of which they are currently aware, and based upon Plaintiff's asserted scope of the claims as set forth in its Infringement Contentions. Under Armour's contentions that any claim of the Asserted Patents are invalid under § 112 are in no way an admission or suggestion as to the correct construction or scope of the asserted claims. Under Armour reserves the right to modify these contentions in light of any claim construction order(s) by the Court or if and when Plaintiff revises, amends, or supplements its Infringement Contentions or takes claim construction positions. Under Armour has not yet had an opportunity to take any depositions related to the conception and/or reduction to practice of the alleged inventions. Under Armour has therefore been unable to evaluate or formulate fully these and other invalidity contentions. Under Armour specifically reserves the right to revise, amend, and supplement these Invalidity Contentions based on a failure to comply with the requirements of § 112.

Subject to the foregoing reservations, the Asserted Claims are invalid under § 112, ¶ 1 and/or ¶ 2. The Asserted Claims are not adequately described in the specification such that it shows that the inventor was in possession of the claimed invention at the time of filing, or that a person of ordinary skill in the art could practice the claimed invention without undue experimentation after reading the specification. Further, the Asserted Claims do not particularly point out and distinctly define the metes and bounds of the claimed invention.

The following claim limitations render the claims invalid because the specification does not meet the written description requirement of § 112, ¶ 1:

- '768 patent - "a heel platform having a first height that is substantially uniform around a perimeter of the heel platform"
- '768 patent – "a resilient material of varying density to provide a compressible gradient to provide the gradient compression factor."
- '456 patent – "a heel platform having a first height that is substantial uniform from an inner edge of the sole section to an outer edge of the sole section"
- '456 patent – "a resilient material of varying density to provide a compressible gradient to provide the gradient compression factor"
- '786 patent – "a heel platform section that has a uniform height from an outer edge to an inner edge of the apparatus at the rear edge of the apparatus, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the apparatus"
- '786 patent – "the heel platform section has a uniform platform height, wherein, from a front edge of the heel platform to the rear edge of the apparatus, the uniform platform height has the reference slope"

- ‘760 patent – “wherein, from an inner edge to an outer edge of the left/right shoe, the left/right heel area has substantially no slope”
- ‘760 patent – “wherein, from the inner edge to the outer edge of the left/right shoe at a cross section at a ball of ball, a bottom of the left sole is substantially linear”
- ‘760 patent – “a heel section that, from the inner edge to the outer edge of the left/right shoe, has substantially no slope”
- ‘760 patent – “a heel platform that includes a surface having substantially no slope from the inner edge to the outer edge of the left/right shoe and for a length of the surface”

Additionally, the Asserted Claims are invalid because the claims do not particularly point out and distinctly claim the purported invention. At least the following claim terms/phrases are indefinite and do not meet the § 112, ¶ 2 requirements. These terms/phrases fail to reasonably apprise a person of ordinary skill in the art of their scope, and thus fail to put the public on notice of what is and is not covered by the asserted claims.

- ‘768 patent - “a heel platform having a first height that is substantially uniform around a perimeter of the heel platform”
- ‘768 patent – “a resilient material of varying density to provide a compressible gradient to provide the gradient compression factor.”
- ‘456 patent – “a heel platform having a first height that is substantial uniform from an inner edge of the sole section to an outer edge of the sole section”
- ‘456 patent – “a resilient material of varying density to provide a compressible gradient to provide the gradient compression factor”

- ‘786 patent – “a heel platform section that has a uniform height from an outer edge to an inner edge of the apparatus at the rear edge of the apparatus, wherein the uniform height establishes a reference slope from the outer edge to the inner edge, the reference slope substantially parallel to a bottom surface of the apparatus”
- ‘786 patent – “the heel platform section has a uniform platform height, wherein, from a front edge of the heel platform to the rear edge of the apparatus, the uniform platform height has the reference slope”
- ‘760 patent – “wherein, from an inner edge to an outer edge of the left/right shoe, the left/right heel area has substantially no slope”
- ‘760 patent – “wherein, from the inner edge to the outer edge of the left/right shoe at a cross section at a ball of ball, a bottom of the left sole is substantially linear”
- ‘760 patent – “a heel section that, from the inner edge to the outer edge of the left/right shoe, has substantially no slope”
- ‘760 patent – “a heel platform that includes a surface having substantially no slope from the inner

IV. DOCUMENT PRODUCTION

Under Armour is producing herewith documents containing copies of any items of prior art identified in these Initial Invalidity Contentions that do not appear in the file histories of the Asserted Patents. Under Armour reserves the right to rely on additional prior art to: (1) disclose the state of the art at the time of the alleged invention of the Asserted Patents; (2) disclose any motivation to combine prior art references; (3) refute any secondary indicia of non-obviousness raised by Plaintiff; and (4) respond to any arguments raised by Plaintiff regarding the prior art identified in these Initial Invalidity Contentions.

Dated: November 30, 2023

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that on, the foregoing document and accompanying exhibits and document production were electronically served upon all counsel of record.

November 30, 2023 *<u>/s/ Robert E. Bugg</u>*

Robert E. Bugg