

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MILWAUKEE ELECTRIC TOOL CORPORATION,
Petitioner,

v.

KLEIN TOOLS, INC.,
Patent Owner.

U.S. Patent No. 11,452,327
Case No. IPR2025-00724

Petition for *Inter Partes* Review
Under 35 U.S.C. §312 and 37 C.F.R. §42.104

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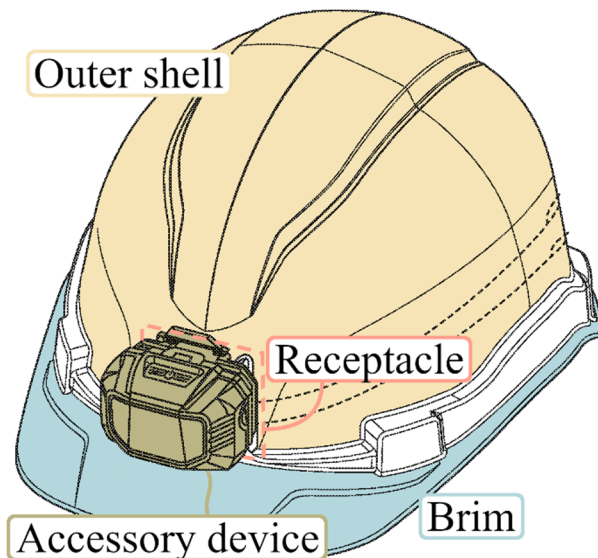
Exhibit	Description
Ex-1001	U.S. Patent No. 11,452,327 (“’327 Patent”)
Ex-1002	Declaration of Expert Dr. Per Reinhall
Ex-1003	<i>Curriculum Vitae</i> of Expert Dr. Per Reinhall
Ex-1004	Prosecution History of the application that led to the ‘327 Patent
Ex-1005	U.S. Provisional Application No. 62/622,472 (“’472 Provisional”)
Ex-1006	U.S. Provisional Application No. 62/645,491 (“’491 Provisional”)
Ex-1007	U.S. Patent Application No. 16/246,935 as filed January 14, 2019 (“’935 Application”)
Ex-1008	Comparison of the ’327 Patent and the ’935 Application
Ex-1009	Chinese Utility Model App. No. 201120014896.0 to Yan (“Yan-CN”)
Ex-1010	Klein Tools “Klein Tools’® New Hard Hats Designed for Pros—Safety, Comfort and Fit,” July 23, 2019 (“Klein News Release”)
Ex-1011	Certified Translation of Chinese Utility Model App. No. 201120014896.0 to Yan (“Yan”)
Ex-1012	U.S. Patent No. 9,993,043 to Daley (“Daley”)
Ex-1013	U.S. Patent No. 4,304,009 to Nesbitt et al. (“Nesbitt”)
Ex-1014	German Utility Model App. No. 2020-06007009 to Kiessler (“Kiessler-DE”)
Ex-1015	Certified Translation of German Utility Model App. No. 2020-06007009 to Kiessler (“Kiessler”)
Ex-1016	Complaint in International Trade Commission (ITC) investigation No. 337-TA-1442, titled <i>Certain Glow Fish Tape Systems, Safety Helmet Systems, and Components Thereof</i> (“ITC Complaint”)

Ex-1017	Webpage printout at https://www.osha.gov/Publications/osa3151.pdf (Personal Protective Equipment) OSHA 3151-12R 2004.
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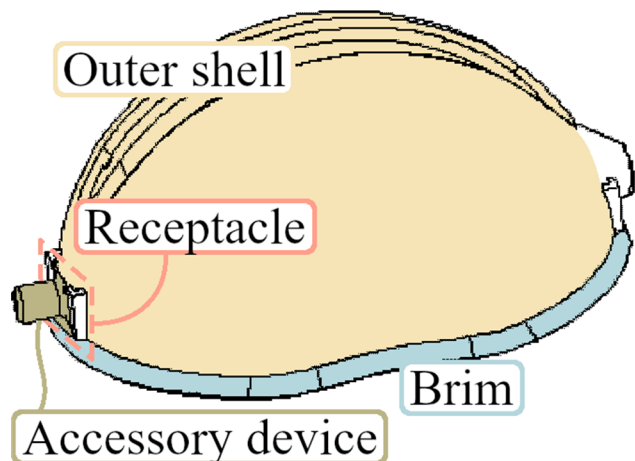
1. Introduction

Milwaukee Electric Tool Corporation (“Petitioner”) requests *Inter Partes* Review (“IPR”) of claims 1-17 (“Challenged Claims”) of U.S. Patent No. 11,452,327 (“’327 Patent,” Ex-1001), which is allegedly owned by Klein Tools, Inc. (“Patent Owner”).

The ’327 Patent purports to improve on century-old safety helmets by inventing a design with receptacles for mounting accessories on the front and back ends. However, this is not new, and it is not patent worthy. As depicted below, the patent’s alleged invention (left) is no different than the prior art (right).¹



Ex-1001, Fig. 1 (’327 Patent)



Ex-1011, Fig. 1 (Prior Art, Yan)

¹ All emphasis in quoted material and coloring of figures added throughout, unless indicated otherwise.

Petitioner relies on the following prior art references, none of which were considered during prosecution:

Yan (Ex-1009, Ex-1011): Chinese Utility Model App. No. 2011-20014896.0 was published November 9, 2011 and is prior art under §102(a)(1).

Daley (Ex-1012): U.S. Patent No. 9,993,043 issued June 12, 2018 and is prior art under §102(a)(2).

Nesbitt (Ex-1013): U.S. Patent No. 4,304,009 issued December 8, 1981 and is prior art under §102(a)(1).

Kiessler (Ex-1014, Ex-1015): German Utility Model App. No. 2020-06007009 published August 31, 2006 and is prior art under §102(a)(1).

As discussed in §5 and summarized below, under the claimed priority date, the Challenged Claims are obvious in view of Yan, with secondary references teaching the protruding nub and clip structures.

No.	Argument
1	Claims 1-17 are unpatentable under 35 U.S.C. §103 in view of Yan and Daley
2	Claims 2, 4, 9, and 12 are unpatentable under 35 U.S.C. §103 in view of Yan, Daley, and Kiessler
3	Claims 1-17 are unpatentable under 35 U.S.C. §103 in view of Yan and Nesbitt

Alternatively, given the introduction of new matter during prosecution (§4.2), the Challenged Claims are not entitled to their claimed priority date. The claims are anticipated by Patent Owner’s own news release describing its allegedly patent-practicing helmet. Thus, Ground 4 is a standalone unpatentability ground:

Klein News Release (Ex-1010): “Klein Tools’® New Hard Hats Designed for Pros—Safety, Comfort and Fit” was published July 23, 2019 and is prior art under §102(a)(1).

No.	Argument
4	Claims 1-17 are anticipated by Klein News Release under 35 U.S.C. §102

2. Grounds for Standing

Petitioner certifies that the ’327 Patent is available for IPR and that Petitioner is not barred or estopped from requesting IPR of the Challenged Claims on the asserted grounds.

3. Mandatory Notices

3.1 Real Parties-in-Interest

Petitioner certifies that it is the only real party-in-interest.

3.2 Related Matters

Patent Owner is currently asserting the ’327 Patent in the following cases:

- *Klein Tools, Inc. v Milwaukee Electric Tool Corporation*, DDE-1-25-cv-00143 (D. Del. filed February 4, 2025)
- International Trade Commission (ITC) investigation No. 337-TA-1442, titled *Certain Glow Fish Tape Systems, Safety Helmet Systems, and Components Thereof* (instituted March 13, 2025)

Out of an abundance of caution, Petitioner also notes that the '327 Patent is in the same family as U.S. Patent No. 12,268,265 and U.S. Patent App. No. 19/074,885.

3.3 Lead and Back-up Counsel

Petitioner designates Alexander B. Stein (Reg. No. 71,397) as lead counsel, with Matthew M. Walker (Reg. No. 75,810) and Peter M. Loderup (Reg. No. 79,839) as back-up counsel.

Pursuant to 37 C.F.R. §42.10(b), a Power of Attorney is filed herewith.

3.4 Service Information

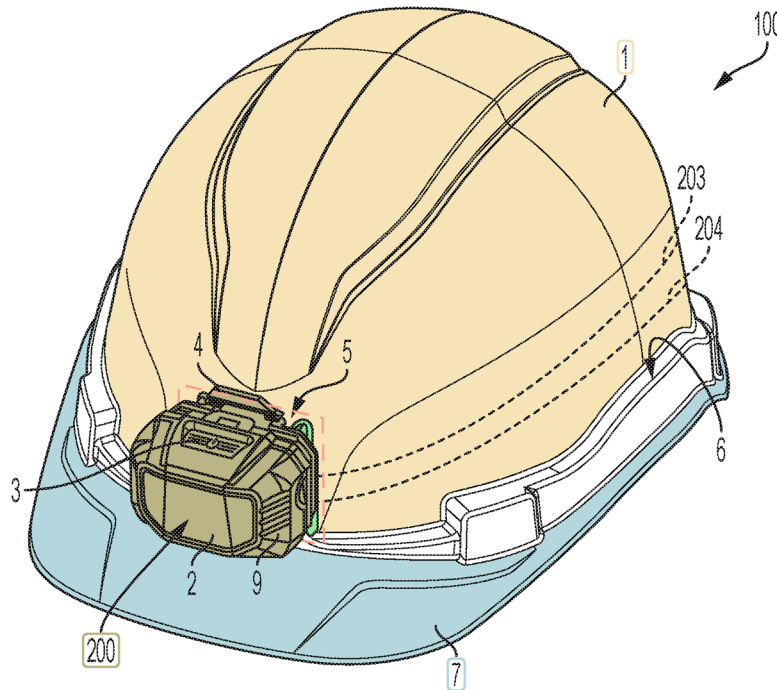
Petitioner requests service via electronic mail at 327Patent-Metco-Klein-IPR@morganlewis.com. Alternatively, service can be made via postal mail to Morgan, Lewis & Bockius LLP, 1301 Second Ave., Suite 3000, Seattle, WA (Tel. 206-274-6400; Fax 206-274-6401).

4. The '327 Patent

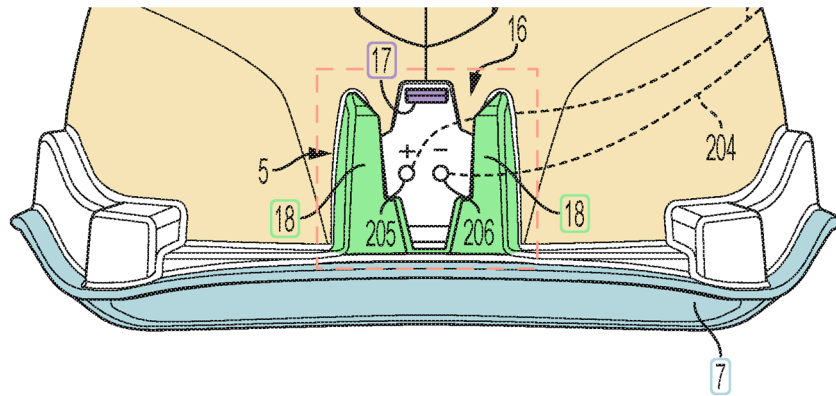
4.1 Summary

The '327 Patent issued from the '935 Application, filed on January 14, 2019, and it claims priority to the '472 Provisional, filed on January 26, 2018, and to the '491 Provisional, filed on March 20, 2018 (the '935 Application, '472 Provisional, and '491 Provisional are collectively "Priority Applications").

The Challenged Claims recite aspects of safety helmets, including an **outer shell**, a **brim**, an **accessory device**, and a **receptacle** (not labeled by Patent Owner in any of the figures) for mounting the accessory device. Ex-1001, claims 1-17. In the Challenged Claims, the receptacle includes an external slot (e.g., flanked by raised **sidewalls**) and a **protruding nub**. *See id.*, Fig. 3.



Ex-1001, Fig. 1



Ex-1001, Fig. 3 (Excerpt)

4.2 Priority Date

Grounds 1-3 are presented using January 26, 2018, the filing date of the earliest provisional, as the alleged priority date. §§5.1-5.3.

Petitioner also separately challenges the priority date because the '327 Patent differs materially from Priority Applications due to new matter added on October 21, 2021 and April 25, 2022. This new matter is present in each Challenged Claim. The priority date is, therefore, no earlier than October 21, 2021. Ground 4 relies on this priority date.² §5.4.

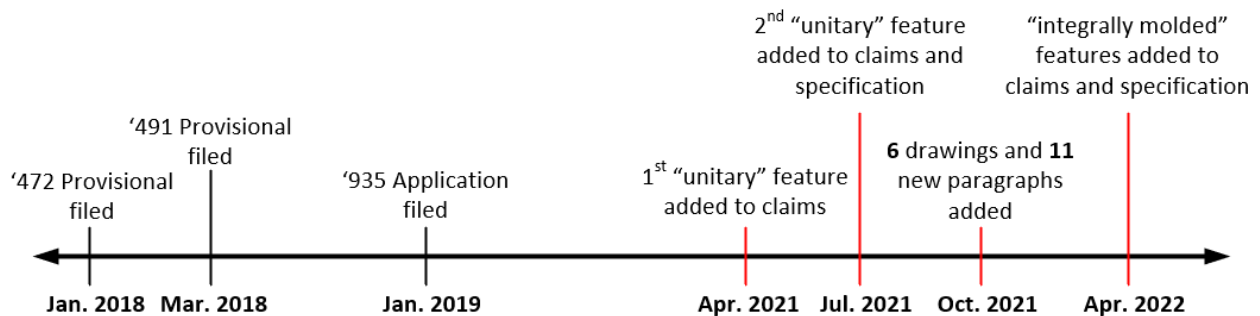
Both dates are after March 16, 2013, so the AIA statute applies to all grounds.

4.3 Prosecution History

The most notable aspect during prosecution was Patent Owner's repeated attempts to add new matter.

² The references of Grounds 1-3 also qualify as prior art under this later priority date.

As filed, Priority Applications did not include any mention of claim elements being “unitary” or “integrally molded.” Ex-1005, Ex-1006, Ex-1007. However, when Patent Owner was faced with prior art teaching each of the originally claimed elements, Patent Owner belatedly and repeatedly introduced new subject matter to subvert the prior art, as illustrated below. Ex-1004, 320.



Timeline of Added Subject Matter

First, on April 7, 2021, Patent Owner introduced language that “the front receptacle and the rear receptacle are of a unitary part of the outer shell.” Ex-1004, 309. This was rebuffed by the Examiner with a §112(b) rejection. Ex-1004, 287-288.

On July 16, 2021, Patent Owner added language that a slot (part of the front/rear receptacle) “is a unitary part of the outer shell.” Ex-1004, 260-263. This was also rebuffed by the Examiner as failing to comply with the written description requirement and adding new matter. Ex-1004, 216-217. In the following response on September 27, 2021, Patent Owner removed the “unitary” language from the

claims to avoid the §112(b) rejection, but did not address the added-matter objections. Ex-1004, 204.

On October 6, 2021, rather than arguing over the existing disclosure, Patent Owner added six new drawings and amendments to existing paragraphs as well as 11 new paragraphs. Ex-1004, 149-152, 159-163. At this time, Patent Owner reintroduced the “unitary” language, claiming that the “protruding nub is a unitary feature of the outer shell,” “the outer shell forms the protruding nub,” “the outer shell forms the protruding nub,” and “the brim, the front receptacle, and the rear receptacle are a unitary feature of the outer shell.” Ex-1004, 153-156. The Examiner again objected to the new matter and issued rejections for failure to comply with the written-description requirement. Ex-1004, 121-126.

On April 25, 2022, Patent Owner added additional language about features being “integrally molded” from a common/same material. Ex-1004, 58, 62-65, 72-78. In summary, an extensive amount of subject matter was added after filing. *See* Ex-1008 (redline showing differences between the filed application and the granted patent).

To validate its position, Patent Owner resorted to a declaration by Mr. James Hill (“Hill Declaration”), its longtime employee. Ex-1004, 48-49, 73-74. Following the Hill Declaration, the Examiner relented and allowed the Challenged Claims. Ex-1004, 23. However, as explained with reference to Ground 4, the Hill

Declaration is flawed, and thus Patent Owner is not entitled to its claimed priority date. §5.4.

4.4 Ordinary Skill in the Art

A person having ordinary skill in the art (“POSA”) would have had a bachelor’s degree in mechanical engineering, civil engineering, industrial engineering, industrial design, or plastics engineering, with at least 2 years of industry experience and/or research, concerning protective gear (such as safety helmets). Ex-1002, ¶20. A POSA would have also known aspects the ‘327 Patent admits as part of the prior art, including at least: (i) forward-facing headlamps on safety helmets (Ex-1005, ¶10) and (ii) safety helmets often being worn in a reverse orientation (Ex-1005, ¶11). Ex-1002, ¶¶19-21.

4.5 Claim Construction

For this Petition, Petitioner believes plain and ordinary meanings suffice. No express constructions are required for purposes of this IPR.

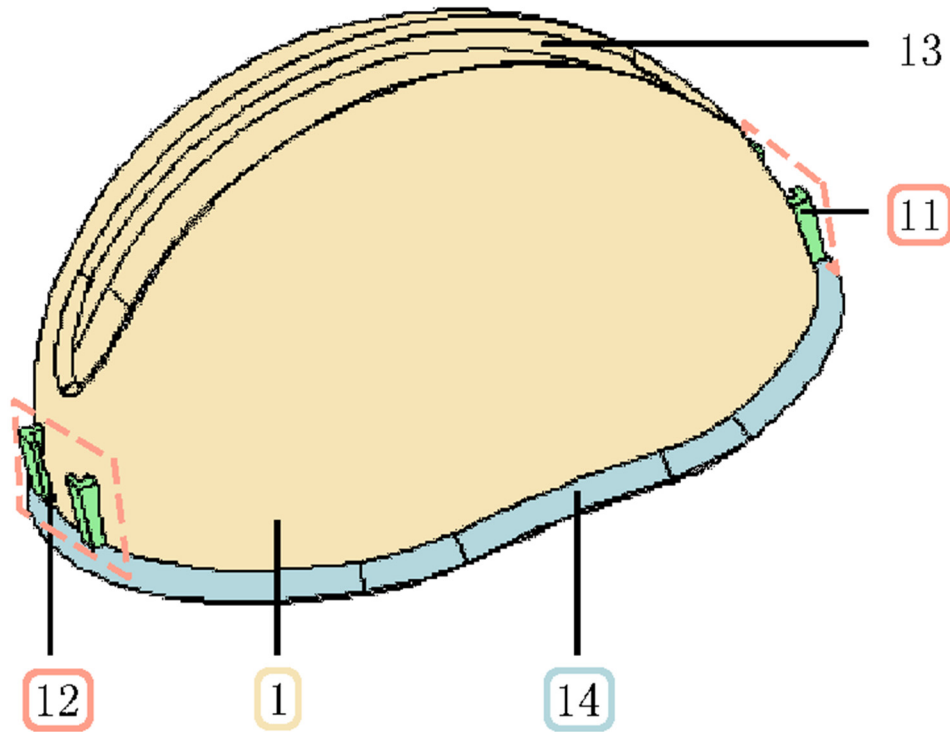
5. The Challenged Claims Are Unpatentable

5.1 Ground 1: Claims 1-17 are rendered obvious by Yan and Daley

5.1.1 Overview of Yan

Yan published on November 9, 2011 and therefore qualifies as prior art under §102(a)(1). Yan discloses a safety helmet with a **helmet body 1**, a **brim 14**,

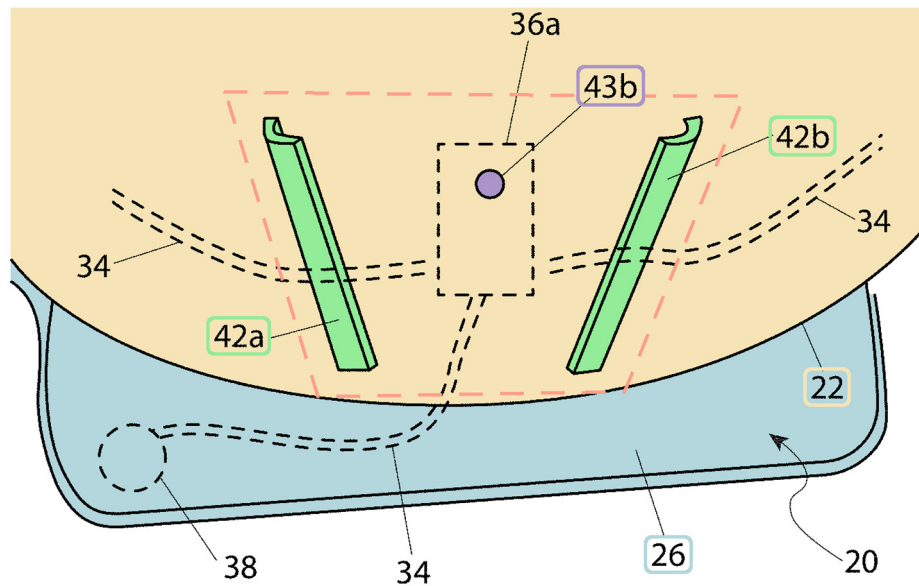
and **snap-fit slots 11 and 12**, each of which includes a respective pair of symmetrically arranged **L-shaped slots**. Ex-1011, ¶¶5, 9.



Ex-1011, Fig. 2

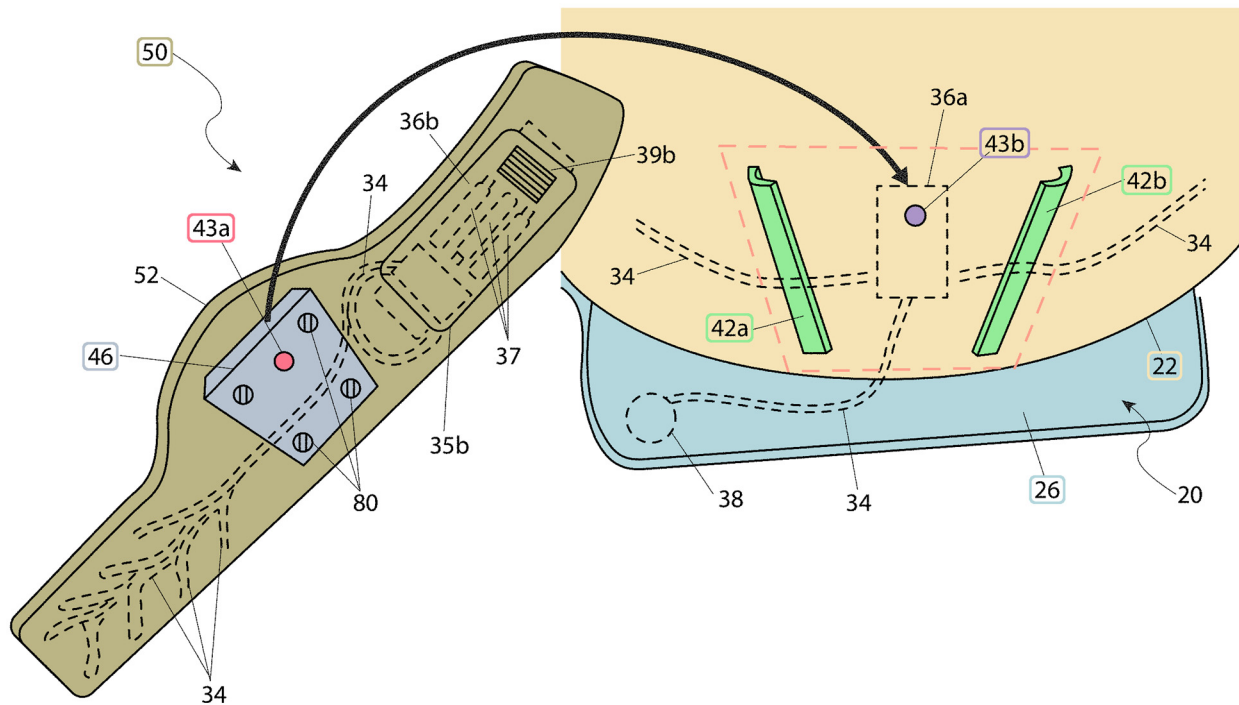
5.1.2 Overview of Daley

Daley issued on June 12, 2018, and has a filing date of March 24, 2015, and therefore qualifies as prior art under §102(a)(2). Daley discloses a safety helmet with a **shell 22**, a **brim 26**, and a **receptacle** including a pair of **locking ears 42a and 42b** with a **protrusion 43b** therebetween. Ex-1012, 1:57-66.



Ex-1012, Fig. 3 (Excerpt)

Additionally, Daley teaches a **headlight assembly 50** including “an interlocking trapezoidal-shaped male **bracket 46**.” Ex-1012, 5:27-31. Daley’s **bracket 46** includes a recessed **detent 43a**, and “[u]pon complete insertion of male **bracket 46** into the **locking ears [42a and 42b]**, the **protrusion 43b** ‘snaps’ into the **detent 43a**, thereby temporarily securing the **headlight assembly 50** to the **shell 22**.” Ex-1012, 5:39-43.



Ex-1012, Fig. 3

5.1.3 Motivation to Combine Yan and Daley

As a threshold matter, Yan and Daley qualify as analogous art at least because they are in the same field of endeavor as the '327 Patent, *i.e.*, safety helmets. Ex-1001, 3:26-27; Ex-1011, ¶1; Ex-1012, 1:10-14. At minimum, both references are at least reasonably pertinent to at least one problem allegedly solved by the claimed invention—mounted accessories slipping off from safety helmets. Ex-1001, 1:27-38. Ample motivation-to-combine also existed.

First, Yan invites a POSA to seek out “equivalent structural modifications.” Ex-1011, ¶29. Based on this, a POSA would have been expressly motivated to look to analogous references (including Daley), e.g., to help understand

certain aspects related to structural modifications of the snap-fit slot structures (particularly when seeking to construct Yan's safety helmet). Ex-1002, ¶69. Upon reviewing the analogous Daley reference, a POSA would have seen its teachings related to using a bracket with L-shaped appendages and a protrusion to snap into a detent (Ex-1012, 5:35-40), and would have been motivated to modify each of Yan's snap-fit slot structures to be molded to the helmet body and include such a protrusion. *Id.* Modifying each of the snap-fit slots in this manner would keep the snap-fit slots identical and allow for accessories to be detachably mounted to either slot in an identical manner as taught by Yan. Ex-1011, ¶25.

When modifying Yan's snap-fit slot structures to include Daley's protrusion, a POSA could adopt the teachings of Daley to integrally mold the receptacle (e.g., Yan's L-shaped slots) with a protrusion to the safety helmet shell for each snap-fit slot using at least one common (same) material. Ex-1012, 5:24-40; Ex-1002, ¶70. The POSA could also adopt Daley's positional teaching for the protrusion to centrally position the protrusion between the L-shaped slots in Yan. Ex-1012, 1:60-66; Ex-1002, ¶70. Forming such features from a common material would have been cheaper, easier, and allowed for a reduced sales price for the Yan-Daley helmet, which would have further motivated the Yan-Daley combination. Ex-1002, ¶70.

When modifying Yan's snap-fit slot structures to include Daley's protrusion, a POSA could adopt the teaching of Daley to form Daley's bracket 46 with detent 43a on the lamp body of Yan's LED lamp 2 and mining lamp 3 by following Daley's teaching of having a bracket with a detent to engage with the protrusion. Ex-1012, 5:33-37; Ex-1002, ¶71. As taught by Daley, "the headlight assembly 50 may be easily removed from the helmet assembly 20 using the male bracket 46." Ex-1012, 6:55-57.

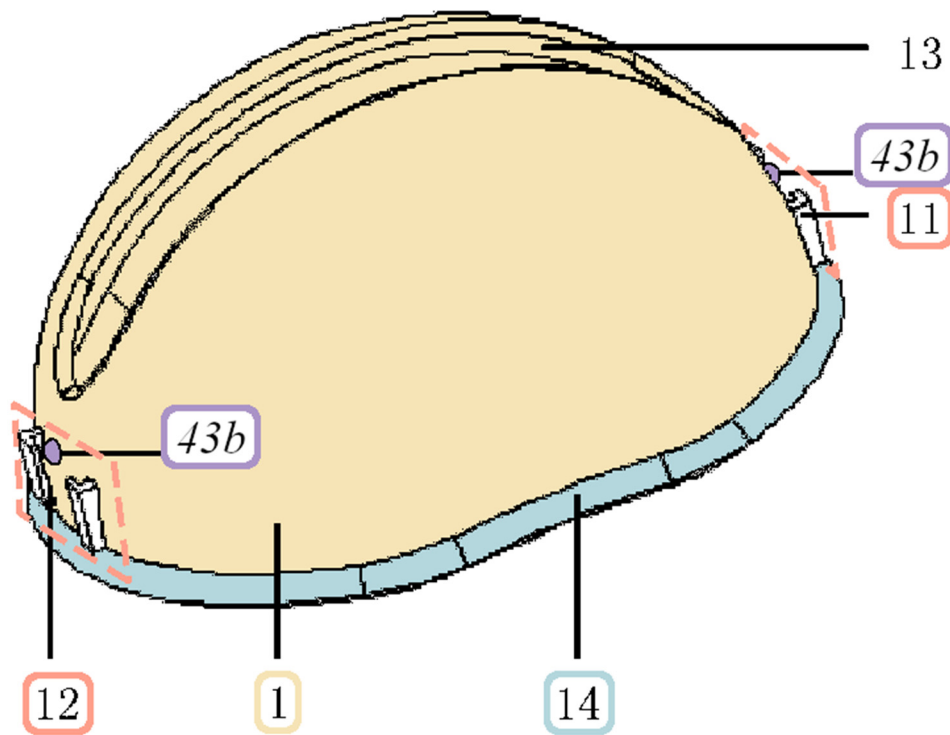
Including the protrusion feature with the snap-fit slot structures and the bracket with detent in the accessories would create a more robust securing of the accessories in the snap-fit slot structures and thus would have been a desirable structural modification. Ex-1012, 5:40-43; Ex-1002, ¶72. A more robust securing would have made the Yan-Daley helmet more attractive to potential purchasers, thereby further motivating the combination as a matter of commercial desirability. Ex-1002, ¶72.

A POSA would have been motivated to incorporate Daley's centrally located and integrally molded protrusion into each of Yan's snap-fit slot structures and the bracket with detent in the accessories to securely mount detachable accessory devices while keeping the snap-fit slots identical. Ex-1002, ¶73. Adding Daley's protrusion feature to Yan's snap-fit slot structures and the bracket with detent in the accessories would have been routine for a POSA exercising only ordinary skill, so

the modification would have been achieved with a reasonable expectation of success.
Id.

Additionally or alternatively, modifying Yan's safety helmet to include Daley's integrally molded mounting features would have been obvious to try (finite number of predictable solutions for improving the temporary security of the snap-fit slots) and/or a simple substitution of one element (a receptacle having L-shaped slots and protrusion 43b) for another (a snap-fit slot receptacle having only L-shaped slots) to obtain predictable results (an integrally molded receptacle having an external slot and protruding nub to more securely fasten Yan's lamp accessories). Ex-1002, ¶74. A POSA seeking to improve Yan's snap-fit slot structure for temporarily securing accessory devices, would have recognized incorporating Daley's integrally molded receptacle and corresponding bracket involved a known method of molding and had a predictable result (a molded receptacle having a protruding nub and a corresponding accessory having a bracket for more securely snapping in detachable accessory devices). *Id.*

Accordingly, a POSA would have been motivated to incorporate Daley's integral molding techniques, **protrusion 43b**, and corresponding accessory bracket, with Yan's safety helmet. Ex-1002, ¶¶68-75. An example depiction of the Yan-Daley helmet is below:



Ex-1011, Fig. 2 (Modified)³

5.1.4 Claim 1⁴

The Yan-Daley helmet renders obvious claim 1. Ex-1002, ¶¶76-105.

5.1.4.1 Element 1[pre]

1[pre] recites “a safety helmet.”

The ’327 Patent identifies safety helmets as “commonly also being referred to as ‘hard hats’” and being “for use to protect the wearer from falling objects.” Ex-1001, 1:15-17. The ’327 Patent acknowledges such helmets are commonly used in several industries (*Id.*, 1:17-18) such as underground mines (*Id.*, 1:50-52).

³ Example of the Yan-Daley combination.

⁴ A claim listing is at the end of this document.

Yan teaches “a safety helmet, and more specifically, ... a mining safety helmet with an emergency lighting function.” Ex-1011, ¶1. Yan’s safety helmet is modified to include Daley’s protrusion 43b and, thus, if limiting, the Yan-Daley helmet teaches a safety helmet.

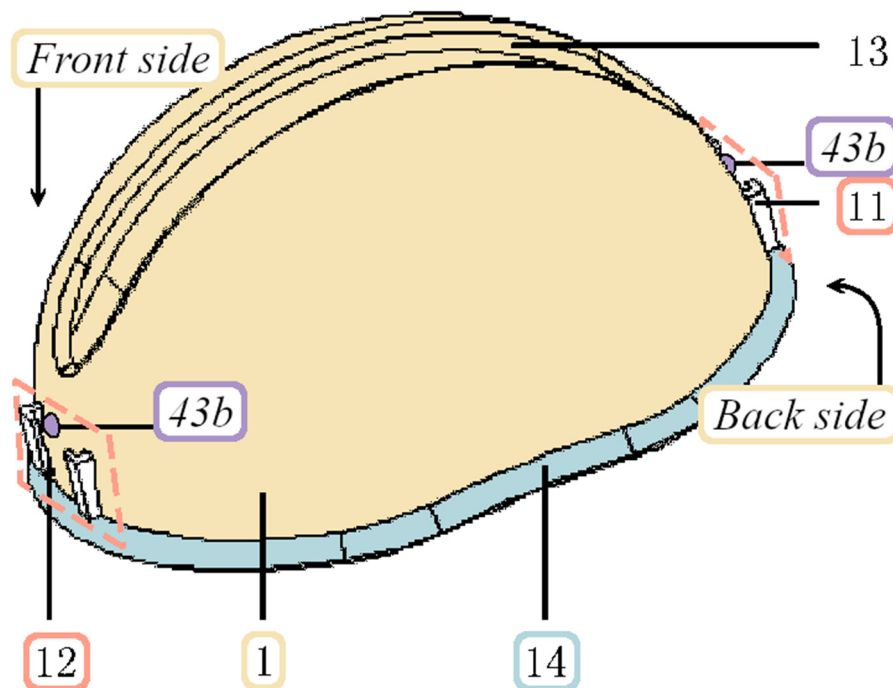
5.1.4.2 Element 1[a][i]

1[a][i] recites “an outer shell adapted to be worn by a user, the outer shell being molded from a common material and having an exterior surface defining a front side, a rear side, and a brim extending forward from the front side and configured to shield the user's eyes from sunlight or falling debris.”

First, Yan teaches “[t]he mining safety helmet is an essential tool for miners working underground” and “[i]t not only provides lighting but also effectively protects the miner’s head from falling objects.” Ex-1011, ¶2. Yan teaches the safety helmet includes a “helmet body 1.” Ex-1011, ¶16. Yan’s helmet body is an outer shell adapted to be worn by a user. Ex-1002, ¶82. Therefore, the Yan-Daley helmet teaches such an outer shell (helmet body 1) adapted to be worn by a user. *Id.*

The Yan-Daley helmet teaches the outer shell having an exterior surface defining a front side, a rear side, and a brim extending forward from the front side and configured to shield the user’s eyes from sunlight or falling debris, as illustrated in modified Figure 2 below. Yan teaches “brim 14 is located at the bottom of the

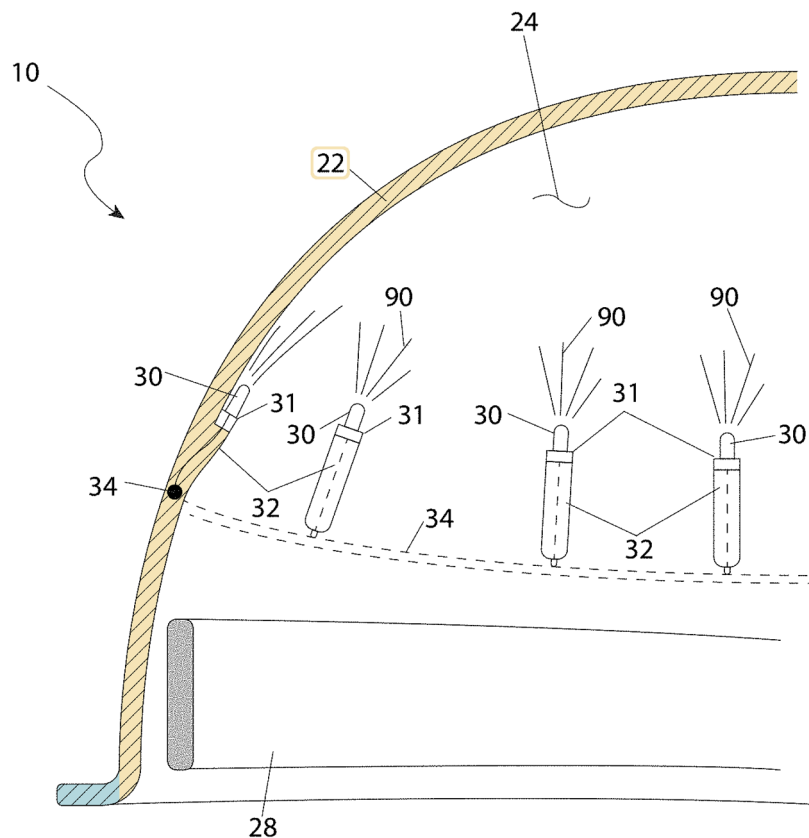
helmet body 1 and encircles the bottom edge of the helmet body 1.” Ex-1011, ¶19. A brim encircling the bottom edge of the helmet body extends forward from the front side, as illustrated in modified Figure 2 below. Ex-1002, ¶83. Yan further teaches the “function of the brim 14 is to enhance protective coverage, effectively preventing small falling debris from entering the miner’s eyes, ears, mouth, or nose.” Ex-1011, ¶19. In Figure 2, Yan illustrates a helmet **body 1** with a **brim 14** extending forward from the front side. Ex-1002, ¶83. Therefore, the Yan-Daley helmet teaches such an outer shell having an exterior surface defining a front side, a rear side, and a brim. Ex-1002, ¶83.



Ex-1011, Fig. 2 (Modified)⁵

⁵ Example of the Yan-Daley combination.

The Yan-Daley helmet teaches or suggests being molded from a common material. If Patent Owner is legally correct that line drawings alone can teach integrally molded features (as it argued during prosecution, §5.4.1), Daley teaches this as well. Daley Figure 4 illustrates a cross-sectional view of shell 22 showing consistent lines and cross-hatching pattern throughout the shell and brim of the helmet. Ex-1002, ¶84. Daley further teaches that a safety helmet includes a shell body of one material. Ex-1012, 1:58-61. The helmet shell includes “integrally-molded portions” such as protrusion 43b and locking ears 42a and 42b. Ex-1012, 5:25-27, 5:37-40.



Ex-1012, Fig. 4

Thus, a POSA would have found it obvious to mold Yan's shell using a common material throughout (as Daley teaches). Ex-1002, ¶86. Therefore, the Yan-Daley helmet teaches an outer shell (helmet body 1) adapted to be worn by a user, the outer shell being molded from a common material and having an exterior surface defining a front side, a rear side, and a brim (brim 14) extending forward from the front side and configured to shield the user's eyes from sunlight or falling debris.

5.1.4.3 Element 1[a][ii]

1[a][ii] recites "wherein the outer shell is reversible such that one of the front side or the rear side is oriented above a face of the user when the outer shell is worn by the user."

The Yan-Daley helmet is capable of being worn in reverse on a user's head as desired. As noted by the Examiner during prosecution, Patent Owner has not claimed any helmet structure that differentiates a "reversible" helmet from any other safety helmets, such as those taught by Yan and Daley. Ex-1004, 292. Moreover, workers have often worn their safety helmets backwards, as acknowledged by the inventors. Ex-1002, ¶88; Ex-1005, ¶11 ("For a variety of reasons, **it is common for typical users of safety helmets often choose to wear their safety helmets in a reverse orientation**, with the brim facing rearward. The reverse orientation is often advantageous in situations requiring the user of the safety helmet to look upward unobstructed by the brim of the helmet or simply to increase the user's field of vision.

This reverse orientation of a safety helmet is so commonly employed that several standard-promulgating organizations, including ANSI and CSA, require that helmets be safety tested in both standard and reverse orientation”).

To the extent the reversibility feature is not inherent, it would have been an obvious modification to make the Yan-Daley helmet reversible to capture more sales from users wanting reversible helmets. Ex-1002, ¶89.

5.1.4.4 Element 1[a][iii]

1[a][iii] recites “wherein the brim is configured to be disposed above the face of the user when the outer shell is worn by the user with the front side being oriented above the face of the user.”

Yan teaches a “brim 14” that “encircles the bottom edge of the helmet body 1.” Ex-1011, ¶19. Such a brim would be disposed above the face of the user when the outer shell is worn by the user with the front side being oriented above the face of the user. Ex-1002, ¶91. Therefore, the Yan-Daley helmet teaches this aspect.

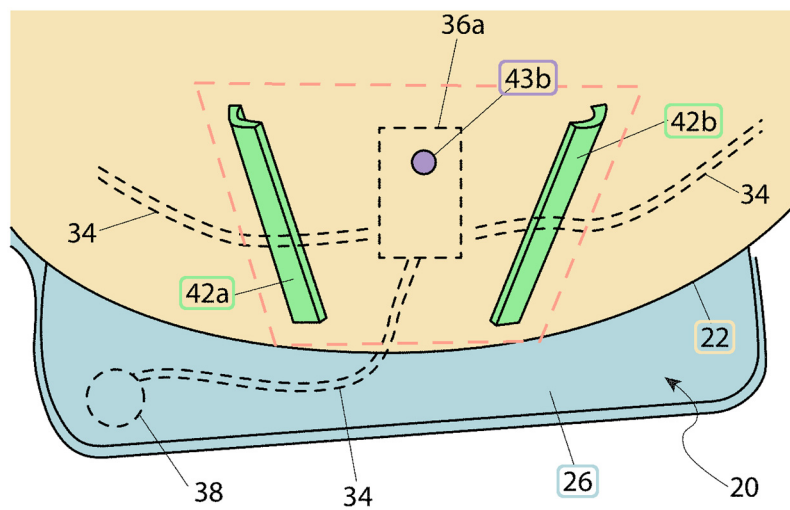
5.1.4.5 Element 1[b]

1[b] recites “a front receptacle having an external slot extending upwardly along the front side on the exterior surface of the outer shell above the brim and a protruding nub, wherein the protruding nub is integrally molded with the outer shell from the common material and is disposed centrally relative to the external slot and

directly onto the exterior surface of the outer shell at an upward location away from the brim.”

First, Yan teaches a snap-fit slot 11 (a front receptacle) located on an exterior surface of the helmet body 1 (an outer shell) and above the brim 14 of the safety helmet. Ex-1011, ¶19. The two L-shaped slots of the snap-fit slot 11 form an external slot extending upwardly along the front side on the exterior surface of the outer shell above the brim. Ex-1002, ¶93.

Additionally, Daley teaches a safety helmet with a shell 22 including “integrally-molded portions including ... protrusion 43b.” Ex-1012, 5:37-40. In Figure 3, Daley illustrates the integrally-molded **locking ears 42a and 42b** as well as the **protrusion 43b**. The protrusion 43b is disposed centrally relative to an external slot formed by the locking ears 42a and 42b and directly onto the exterior surface of the outer shell at an upward location away from the brim. Ex-1002, ¶94.

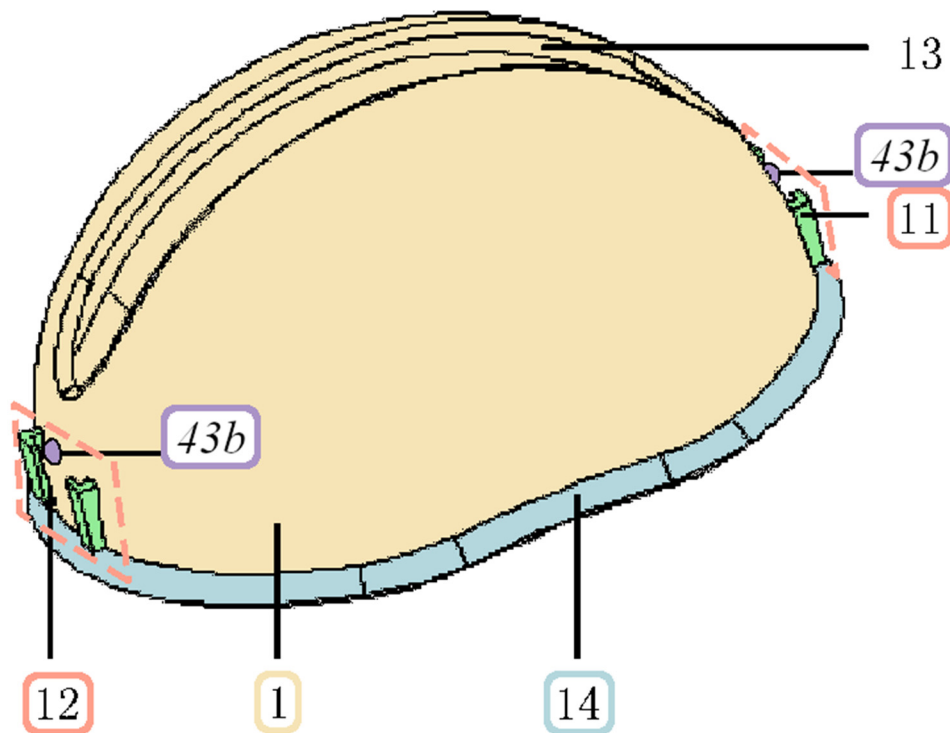


Ex-1012, Fig. 3 (Excerpt)

Thus, the protrusion 43b is a protruding nub that is integrally molded with the outer shell from the common material and is disposed centrally relative to the external slot.⁶ Ex-1002, ¶95.

Therefore, as illustrated in the Figure below, the Yan-Daley helmet teaches a front receptacle (**snap-fit slot 11**) having an external slot (formed by Yan's **L-shaped slots**) extending upwardly along the front side on the exterior surface of the outer shell (**helmet body 1**) above the brim (**brim 14**) and a protruding nub (**protrusion 43b**), wherein the protruding nub is integrally molded with the outer shell from the common material and is disposed centrally relative to the external slot and directly onto the exterior surface of the outer shell at an upward location away from the brim.

⁶ Daley also teaches that feature 43b may be a detent rather than a protrusion (with the accessory device 50 having a protrusion rather than a detent). However, a “reference is relevant for all that it teaches to those of ordinary skill in the art.” *In re Fritch*, 972 F.2d 1260, 1264 (Fed. Cir. 1992). Daley’s teaching of 43b being a protrusion should not be disregarded.



Ex-1011, Fig. 2 (Modified)⁷

5.1.4.6 Element 1[c]

1[c] recites “a rear receptacle having an additional external slot disposed on the rear side on the exterior surface of the outer shell, wherein the front receptacle and the rear receptacle are of identical construction.”

The rear receptacle is mere duplication of parts. Such duplication has no patentable significance unless a new and unexpected result is produced. *Application of Harza*, 274 F.2d 669, 671 (C.C.P.A. 1960) (“It is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected

⁷ Example of the Yan-Daley combination.

result is produced”). Here, no new or unexpected result is produced. The results (e.g., mounting an accessory in a second receptacle) are instead predictable and expected. Ex-1002, ¶99.

If 1[c] is limiting, Yan-Daley teaches this. Yan teaches “the first snap-fit slot is located at the front of the helmet body, while the second snap-fit slot is located at the rear of the helmet body.” Ex-1011, ¶7. Yan further teaches that the “first snap-fit slot 11 and the second snap-fit slot 12 have **identical structures**, each consisting of two symmetrically arranged L-shaped slots.” Ex-1011, ¶17. Yan also teaches that the “first snap-fit slot 11 and the second snap-fit slot 12 are located above the brim 14.” Ex-1011, ¶19. In Figure 2, Yan illustrates a helmet body 1 with a first snap-fit slot 11 and a second snap-fit slot 12 each located above the brim 14. It would have been obvious to a POSA to add Daley’s protrusion 43b to Yan’s snap-fit slots 11 and 12 such that the two snap-fit slots are identical (and accessories may be attached to either snap-fit slot) as taught by Yan. §5.1.3; Ex-1002, ¶100. Therefore, the Yan-Daley helmet teaches a rear receptacle (snap-fit slot 12) having an additional external slot disposed on the rear side on the exterior surface of the outer shell, wherein the front receptacle (snap-fit slot 11) and the rear receptacle (snap-fit slot 12) are of identical construction.

5.1.4.7 Element 1[d]

1[d] recites “an accessory device having a mating receptacle formed thereon, at least a portion of the mating receptacle being selectively engageable within each of the external slot of the front receptacle or the additional external slot of the rear receptacle such that the accessory device is releasably mountable onto each of the front receptacle and the rear receptacle on the exterior surface of the outer shell.”

Yan teaches the “mining lamp 3 and the LED lamp 2 are both detachably mounted on the helmet body 1.” Yan further teaches “lamp body base of the mining lamp 3 is adapted to the first snap-fit slot 11. The two sides of the lamp body base can be snapped into the two L-shaped slots of the first snap-fit slot 11.” Ex-1011, ¶20. Yan also teaches the “base of the LED lamp body 22 has the same structure as the base of the mining lamp 3. The two sides of the base of the LED lamp body 22 can be inserted into the two L-shaped slots of the second snap-fit slot 12.” Ex-1011, ¶24. Yan further teaches “the LED lamp 2 can be taken out of the second snap-fit slot 12 and then inserted into the first snap-fit slot 11.” Ex-1011, ¶27.

Furthermore, Yan teaches “[b]y using this snap-fit connection method, the mining lamp 3 is not fixed permanently on the helmet body 1, but is instead installed on the helmet body 1 in a detachable manner” (Ex-1011, ¶20) and likewise “the LED

lamp 2 is ... installed on the helmet body 1 in a detachable manner” (Ex-1011, ¶24). Thus, Yan’s lamps 2 and 3 each teach the claimed accessory device. Ex-1002, ¶103.

Additionally, Daley teaches a headlight assembly including “an interlocking trapezoidal-shaped male bracket 46.” Ex-1012, 5:27-31. Daley’s bracket includes a recessed detent 43a, and “[u]pon complete insertion of the male bracket 46 into the locking ears [42a and 42b], the protrusion 43b ‘snaps’ into the detent 43a, thereby temporarily securing the headlight assembly 50 to the shell 22.” Ex-1012, 5:39-43. It would be obvious to a POSA to modify each of lamp 2 and lamp 3 to include Daley’s bracket 46. §5.1.3; Ex-1002, ¶104.

Therefore, Yan-Daley helmet teaches an accessory device (lamp 2) having a mating receptacle (bracket 46) formed thereon, at least a portion of the mating receptacle being selectively engageable within each of the external slot (formed by Yan’s L-shaped slots) of the front receptacle (snap-fit slot 11) or the additional external slot of the rear receptacle (snap-fit slot 12) such that the accessory device is releasably mountable onto each of the front receptacle and the rear receptacle on the exterior surface of the outer shell (helmet body 1). Ex-1002, ¶105.

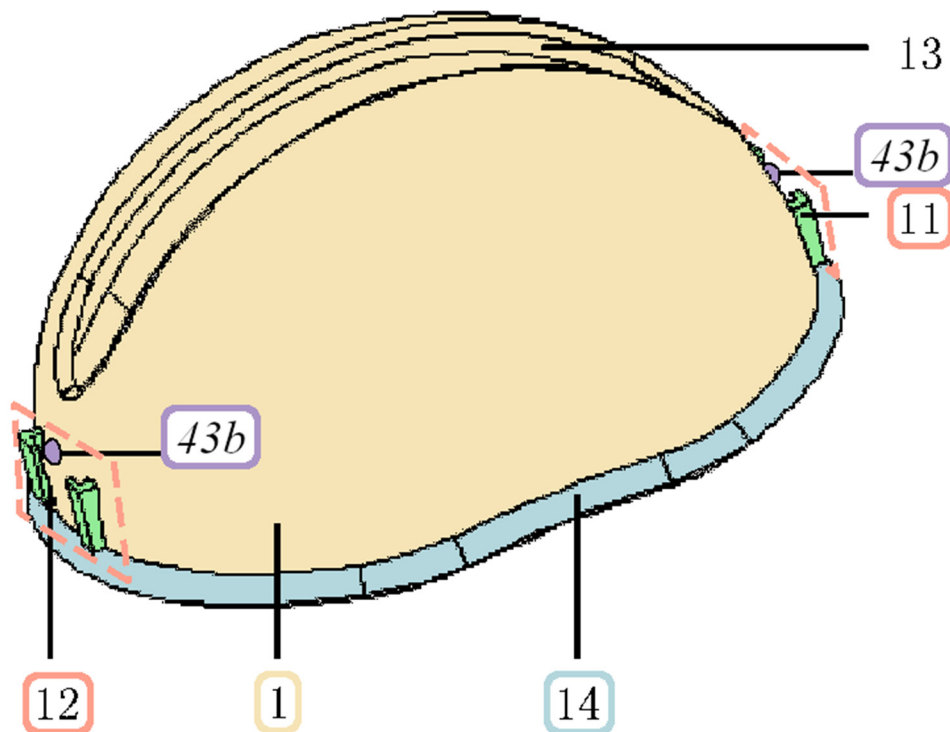
5.1.5 Claim 2

Claim 2 depends from claim 1, which is rendered obvious by Yan-Daley. §5.1.4. The Yan-Daley helmet renders obvious claim 2. Ex-1002, ¶¶106-114.

5.1.5.1 Element 2[a]

2[a] recites “wherein the external slot of the front receptacle is a receiver slot flanked by raised walls and the protruding nub comprises a stop.”

Daley teaches the shell 22 includes “integrally-molded portions including ... protrusion 43b.” Ex-1012, 5:37-40. Adding Daley’s protrusion 43b to Yan’s safety helmet teaches such a receiver slot flanked by raised walls (**L-shaped slots**) with a protruding nub comprising a stop (**protrusion 43b**).



Ex-1012, Fig. 2 (Modified)⁸

⁸ Example of the Yan-Daley combination.

To the extent Patent Owner argues a receiver slot requires tapering, this would be obvious given the teachings of Daley that the “locking ears 42 a, 42 b provide mirror-image and diverging ‘L’-shaped appendages being sized and shaped to receive an interlocking trapezoidal-shaped male bracket 46 of the headlight assembly 50 in between.” Ex-1012, 5:27-31. Therefore, the Yan-Daley helmet teaches this.

5.1.5.2 Element 2[b]

2[b] adds “wherein the accessory device includes a clip.” The ’327 Patent does not redefine the term “clip” and thus a POSA would have understood the term to have its ordinary meaning (e.g., any of various devices that grip, clasp, or hook).

Thus, the Yan-Daley helmet with lamps 2 and 3 modified to include the bracket 46 teaches that the accessory device (lamp 2 or 3) includes a clip (bracket 46). Moreover, even without adding the bracket 46 to the lamps of Yan, each lamp includes a lamp body (lamp body 22) that would function as a clip to engage with the protrusion of Daley. Ex-1002, ¶111. Additionally, an obvious design choice would have been to add a detent to the lamp body 22 to engage with the protrusion 43b. *Id.* Therefore, the Yan-Daley helmet teaches this.

5.1.5.3 Element 2[c]

2[c] adds “wherein the receiver slot aligns the accessory device therein, the raised walls retain the accessory device therebetween, and the stop engages the clip to releasably mount the accessory device in the front receptacle.”

The Yan-Daley helmet teaches that the receiver slot (formed by the L-shaped slots) aligns the accessory device (lamp 2 or 3) therein. Yan Figure 1 shows lamp 2 aligned within snap-fit slot 12 and lamp 3 aligned within snap-fit slot 11. The Yan-Daley helmet also teaches that the raised walls (the L-shaped slots) retain the accessory device (lamp 2 or 3) therebetween (as shown in Yan’s Figure 1), and the stop (protrusion 43b) engages the clip (bracket 46) to releasably mount the accessory device in the front receptacle (snap-fit slot 11).

5.1.6 Claim 3

Claim 3 depends from claim 1, which is rendered obvious by Yan-Daley.

§5.1.4. Claim 3 adds “wherein the common material is plastic.”

The selection of a known material based on its suitability for its intended use is *prima facie* obvious. *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 335 (1945) (“Reading a list and selecting a known compound to meet known requirements is no more ingenious than selecting the last piece to put into the last opening in a jig-saw puzzle. It is not invention.”); *Application of Leshin*, 277 F.2d 197, 199 (C.C.P.A. 1960) (“Mere selection of known plastics to make a container-

dispenser of a type made of plastics prior to the invention, the selection of the plastics being on the basis of suitability for the intended use, would be entirely obvious; and in view of 35 U.S.C. 103 it is a wonder that the point is even mentioned.”). Plastic safety helmets predate the ’327 Patent. Ex-1002, ¶116.

Moreover, Daley teaches integrally molding features into the helmet shell (§5.1.4.2) and using plastic injection molding. Ex-1012, 4:50-66. Therefore, it would have been obvious to a POSA to mold the Yan-Daley helmet using plastic as a common material. Ex-1002, ¶¶115-116.

5.1.7 Claim 4

Claim 4 depends from claim 1, which is rendered obvious by Yan-Daley. §5.1.4. Claim 4 includes similar limitations as claim 2. Thus, Yan-Daley renders obvious claim 4 for the prior reasons (§5.1.5) including teaching that the accessory device (lamp 2 or 3) includes a clip (bracket 46), the external slot (defined by the L-shaped slots) aligns the accessory device therein, and the protruding nub (protrusion 43b) engages the clip to releasably mount the accessory device in the front receptacle (snap-fit slot 11). Ex-1002, ¶117.

5.1.8 Claim 5

Claim 5 depends from claim 1, which is rendered obvious by Yan-Daley. §5.1.4. Claim 5 adds “wherein the external slot of the front receptacle is configured

to receive a portion of the accessory device to mount the accessory device to the front receptacle.”

Yan teaches that “using this snap-fit connection method, the mining lamp 3 is not fixed permanently on the helmet body 1 but is instead installed on the helmet body 1 in a detachable manner.” Ex-1011, ¶20. The Yan-Daley helmet teaches that the external slot (defined by the L-shaped slots) of the front receptacle (snap-fit slot 11) is configured to receive a portion (bracket 46) of the accessory device (lamp 2 or 3) to mount the accessory device to the front receptacle. §5.1.4.7; Ex-1002, ¶¶118-119.

5.1.9 Claim 6

Claim 6 depends from claim 1, which is rendered obvious by Yan-Daley. §5.1.4. Claim 6 adds “wherein: the front receptacle includes a first sidewall; the accessory device includes a bracket; and the bracket is retained by the first sidewall to mount the accessory device to the front receptacle.”

Yan teaches that each snap-fit slot has “two symmetrically arranged L-shaped slots.” Ex-1011, ¶17. Therefore, the Yan-Daley helmet teaches the front receptacle (snap-fit slot 11) includes a first sidewall (one of the L-shaped slots); the accessory device (lamp 2 or 3) includes a bracket (bracket 46); and the bracket is retained by the first sidewall to mount the accessory device to the front receptacle. Ex-1002, ¶¶120-121.

5.1.10 Claim 7

Claim 7 depends from claim 6, which is rendered obvious by Yan-Daley.

§5.1.9. Claim 7 adds “wherein: the front receptacle includes a second sidewall; and the bracket is retained by the first sidewall and the second sidewall.”

The Yan-Daley helmet teaches that the front receptacle (snap-fit slot 11) includes a second sidewall (one of the L-shaped slots); and the bracket (bracket 46) is retained by the first sidewall (the other L-shaped slot) and the second sidewall. Ex-1002, ¶¶122-123.

5.1.11 Claim 8

The Yan-Daley helmet renders obvious claim 8. Ex-1002, ¶¶124-133.

5.1.11.1 Elements 8[pre]-8[c]

The limitations of elements 8[pre]-8[c] recite a safety helmet having features found in 1[pre]-1[c], so most of 8[pre]-8[c] is taught or suggested by Yan-Daley for analogous reasons. §5.1.4.

As compared to 1[b], 8[b] adds “the front receptacle being integrally molded with the outer shell.” This is also taught or suggested by Yan-Daley.

Daley teaches “a first locking ear 42a and a second locking ear 42b, for example, being integrally-molded into the shell 22.” §5.1.2; Ex-1012, 5:25-27.

Daley further teaches that the shell 22 includes “integrally-molded portions including ... protrusion 43b.” Ex-1012, 5:37-40.

A POSA would have found it obvious to apply Daley’s integral molding teachings to the safety helmet in Yan to form snap-fit slots (receptacles) and protrusions thereon. §5.1.3; Ex-1002, ¶128. Therefore, the Yan-Daley helmet teaches this aspect.

5.1.11.2 Element 8[d]

Element 8[d] recites “a first accessory device having a first mating receptacle formed thereon, at least a portion of the first accessory device being releasably mountable onto each of the front receptacle or the rear receptacle on the exterior of the outer shell.”

The Yan-Daley helmet teaches a first accessory device (lamp 2 or 3) having a first mating receptacle (bracket 46). §5.1.4.6. A POSA would have found it obvious to form the bracket 46 on the lamp body (lamp body 22) of each of Yan’s lamp 2 and 3. §5.1.3; Ex-1002, ¶130. The Yan-Daley helmet also teaches at least a portion (bracket 46) of the first accessory device (lamp 2 or 3) being releasably mountable onto each of the front receptacle (snap-fit slot 11) or the rear receptacle (snap-fit slot 12) on the exterior of the outer shell (helmet body 1). *Id.*

5.1.11.3 Element 8[e]

8[e] recites “a second accessory device having a second mating receptacle formed thereon, at least a portion of the second accessory device being releasably mountable onto each of the front receptacle or the rear receptacle on the exterior of the outer shell.”

The second accessory device is mere duplication of parts. Such duplication has no patentable significance unless a new and unexpected result is produced. §5.1.4.6. Having multiple accessory devices mountable in the receptacles is neither new nor unexpected. Ex-1002, ¶132.

If 8[e] is limiting, Yan-Daley teaches this. Yan teaches that the “mining lamp 3 and the LED lamp 2 are both detachably mounted on the helmet body 1.” §5.1.4.6; Ex-1011, ¶15. Thus, Yan’s mining lamp 3 and LED lamp 2 each teaches second accessory device. Ex-1002, ¶133.

5.1.12 Claims 9 and 12

Claims 9 and 12 depend from claim 8, which is rendered obvious by the Yan-Daley helmet. §5.1.11. The features of claims 9 and 12 are found within claim 2. Claim 9 recites a “stop” while claim 12 recites a “protruding nub” and claim 2 recites “the protruding nub comprises a stop.” §5.1.5.1. The Yan-Daley helmet teaches all these recitations for the prior reasons. §5.1.5; Ex-1002, ¶134.

5.1.13 Claim 10

Claim 10 depends from claim 8, which is rendered obvious by Yan-Daley.

§5.1.11. Claim 10 states that the common material is “a molded plastic material” rather than just “plastic” as claim 3 recites. As with plastic, a molded plastic material is a known material selected based on its suitability for its intended use. Thus, the Yan-Daley helmet renders obvious claim 10 for the prior reasons. §5.1.6; Ex-1002, ¶135.

5.1.14 Claim 11

Claim 11 depends from claim 8, which is rendered obvious by Yan-Daley.

§5.1.11. Claim 11 includes features that are found in 1[c] and taught by the Yan-Daley helmet for reasons stated earlier. §5.1.4.6; Ex-1002, ¶136.

5.1.15 Claims 13-15

Claims 13-15 depend from claim 8, which are rendered obvious by Yan-Daley. §5.1.11. Claims 13-15 include features found in claims 5-7, respectively, merely referring to a “first accessory device” rather than an “accessory device.” Thus, claims 13-15 are obvious for the prior reasons. §5.1.8-5.1.10; Ex-1002, ¶137.

5.1.16 Claim 16

The Yan-Daley helmet renders obvious claim 16. Ex-1002, ¶¶138-140.

5.1.16.1 Elements 16[pre]-16[a] and 16[c]-16[d]

16[pre]-16[a] and 16[c]-16[d] recite a safety helmet having features found in 1[pre]-1[a] and 1[c]-1[d], respectively. The Yan-Daley helmet teaches or suggests these features for reasons stated earlier. §5.1.4.

5.1.16.2 Element 16[b]

16[b] is similar to 1[b], distinguished by reciting that “the outer shell forms the protruding nub from a same material as the outer shell.” The Yan-Daley helmet teaches a protruding nub (protrusion 43b). §5.1.4.4. It would have been obvious to a POSA to form the protruding nub (protrusion 43b) from a same (common) material as the outer shell (helmet body 1). §5.1.3. Thus, the Yan-Daley helmet teaches this. Ex-1002, ¶140.

5.1.17 Claim 17

The Yan-Daley helmet renders obvious claim 17. Ex-1002, ¶¶141-149.

5.1.17.1 Elements 17[pre]-17[d]

17[pre]-17[d] recite a safety helmet having features found in both 16[pre]-16[d] and 1[pre]-1[d]. 17[c] recites components of the rear receptacle that are the same as the components of the front receptacle, while 1[c] recites that the receptacles are of identical construction. The Yan-Daley helmet teaches both recitations. §§5.1.16, 5.1.4.

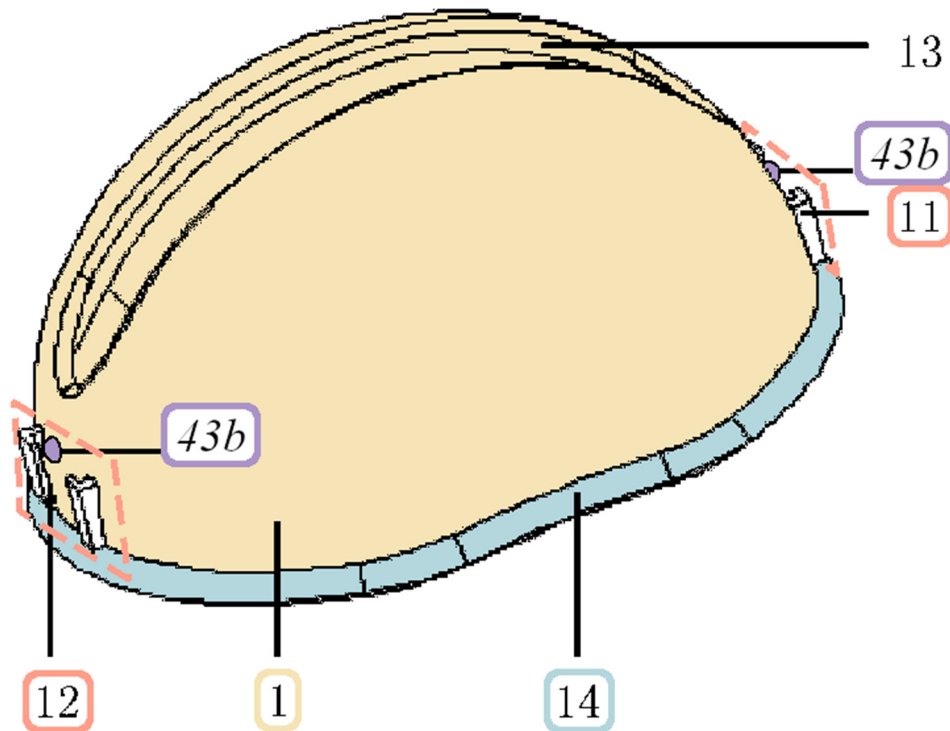
5.1.17.2 Element 17[e]

17[e] recites a second accessory device that is substantially identical to 8[e]. Even if duplication of parts imparts patentable significance (it does not), the Yan-Daley helmet teaches these features. §5.1.11.2.

5.1.17.3 Element 17[f]

17[f] recites “wherein the brim, the front receptacle, and the rear receptacle are a unitary feature of the outer shell.” Patent Owner uses the term “unitary” interchangeably with “formed by” and “integral.” Ex-1004, 44, 74.

Yan teaches “**helmet body 1** comprises a first **snap-fit slot 11**, a second **snap-fit slot 12**, a guide groove 13, and a **brim 14**.” Ex-1011, ¶16. Yan further teaches that “[t]he first snap-fit slot 11 and the second snap-fit slot 12 have identical structures.” Ex-1011, ¶17. Moreover, as described previously, the Yan-Daley helmet teaches integrally molding such features. §5.1.4.2.



Ex-1011, Fig. 2 (Modified)⁹

If Patent Owner is legally correct that a line drawing alone can alone depict unitary features (§5.4.1), Yan Figure 2 teaches or suggests this. Ex-1002, ¶147. Moreover, Yan teaches that “the helmet body 1 comprises a first snap-fit slot 11, a second snap-fit slot 12, a guide groove 13, and a brim 14.” Ex-1011, ¶16. Therefore, Yan-Daley teaches that the brim (brim 14), the front receptacle (snap-fit slot 11), and the rear receptacle (snap-fit slot 12) are a unitary feature of the outer shell (helmet body 1). Ex-1002, ¶148. Additionally, a POSA would have found it obvious to make the brim, front receptacle, and rear receptacle unitary features of the outer

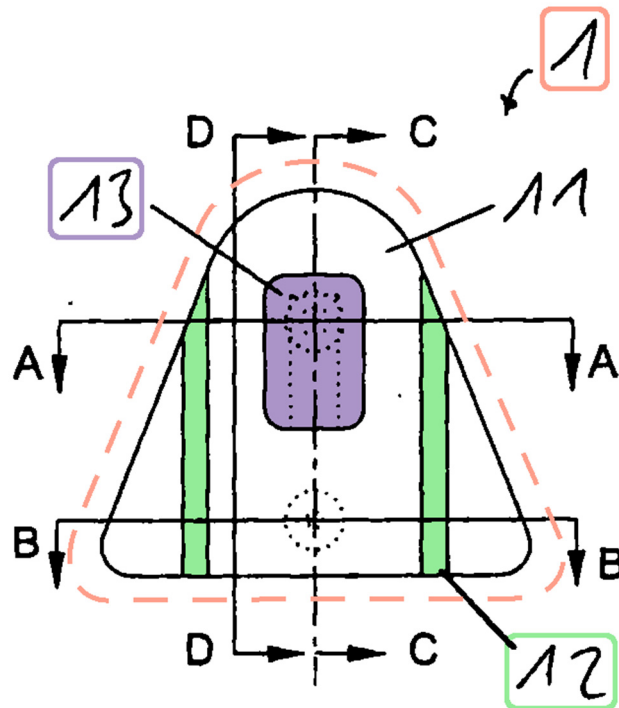
⁹ Example of the Yan-Daley combination.

shell using the molding teachings of Daley. §5.1.4.2; Ex-1002, ¶149. Thus, the Yan-Daley helmet teaches or suggests a safety helmet having a brim, front receptacle, and rear receptacle that are a unitary feature of the outer shell. Ex-1002, ¶149.

5.2 Ground 2: Claims 2, 4, 9, and 12 are rendered obvious by Yan, Daley, and Kiessler

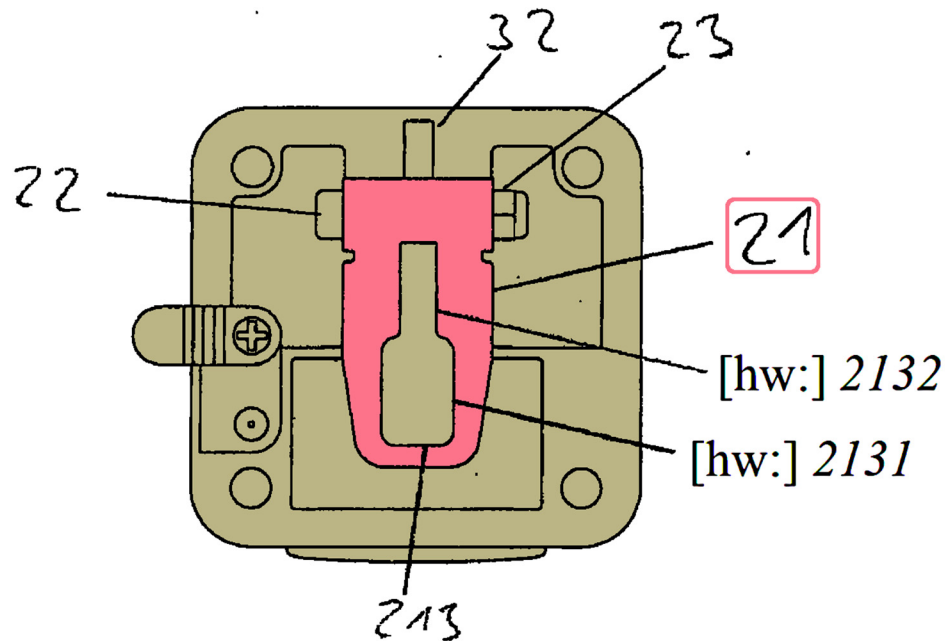
5.2.1 Overview of Kiessler

Kiessler published on August 31, 2006 and therefore qualifies as prior art under §102(a)(1). Kiessler describes a plastic, injection-molded receiver for mounting a lamp accessory, such as a miner's lamp, to a helmet. Ex-1015, ¶¶40, 46. Kiessler teaches a “**receiver 1** ... in the form of a receiving shoe 10 with molded-on lateral wings 101.” Ex-1015, ¶46. Kiessler further teaches “**groove head 13** is arranged centrally between the **stop edges 12** on the base plate 11.” Ex-1015, ¶36.



Ex-1015, Fig. 1

Additionally, Kiessler teaches a lamp accessory (**lamp 3**), such as an LED miner's lamp, and "a fixture 2 that corresponds to [the receiver 1] and can be attached to a lamp 3." Ex-1015, ¶34. Kiessler further teaches that the "fixture 2 comprises a **clamping lever 21**" (Ex-1015, ¶38) and a "recess 213 is provided in the clamping lever 21. The recess 213 is formed by a cutout 2131 whose inner contour essentially corresponds to the outer contour of the groove head 13 of the receiver 1" (Ex-1015, ¶39).



Ex-1015, Fig. 7

5.2.2 Motivation to Combine Yan, Daley, and Kiessler

Kiessler (like Yan and Daley) qualifies as analogous art at least because it is in the same field of endeavor as the '327 Patent, *i.e.*, safety helmets. Ex-1015, ¶1. At minimum, all references are at least reasonably pertinent to at least one problem allegedly solved by the claimed invention—mounted accessories slipping off from safety helmets. Ex-1001, 1:27-38. Ample motivation-to-combine Kiessler's teachings to modify the Yan-Daley helmet also existed. Ex-1002, ¶150.

In the Yan-Daley combination, Daley describes the need to address task illumination (a light being aimed in the right direction). Ex-1012, 1:27-35, 47-51. Daley teaches that “the headlight assembly 50” provides a spot-light effect. Ex-1012, 5: 1-7. In building the Yan-Daley helmet and in view of these disclosures, a

POSA would have been motivated to look to analogous references (including Kiessler), e.g., to help identify ways of providing an adjustable spot-light effect to improve task illumination. Ex-1002, ¶151.

Upon reviewing the analogous Kiessler reference, a POSA would have seen its teachings related to using a lamp 3 (accessory device) with a clamping lever 21 (clip) in conjunction with a helmet receptacle having a groove head (protruding nub) and would have been motivated to modify the Yan-Daley helmet to include such features, e.g., to allow the lamp to be aligned relative to the helmet. Ex-1015, ¶13; Ex-1002, ¶152. As taught by Kiessler, including such features in the Yan-Daley helmet would also improve temporarily securing accessories in the snap-fit slot structures. Ex-1015, ¶5 (“The invention relates to a device for attaching a lamp to a helmet, which ensures that the lamp is securely fixed to the helmet even when subjected to vertical impacts from below. The latching means prevents the fixture from slipping out of the receptacle.”).

Adding Kiessler’s clamping lever 21 and groove head 13 to the Yan-Daley helmet would have been routine for a POSA exercising only ordinary skill, so the modification would have been achieved with a reasonable expectation of success. Ex-1002, ¶153.

Additionally, modifying the Yan-Daley helmet to include Kiessler’s clamping lever 21 and groove head 13 features would have been obvious to try (finite

number of predictable solutions for improving adjustable task illumination via a safety helmet lamp). Ex-1002, ¶154. A POSA seeking to improve the Yan-Daley helmet's task illumination functionality and detachable mounting, would have recognized that incorporating Kiessler's clip-based accessory devices involved a known method of molding and had a predictable result (a safety helmet with front and rear receiver slots for clip-based accessory devices). *Id.*

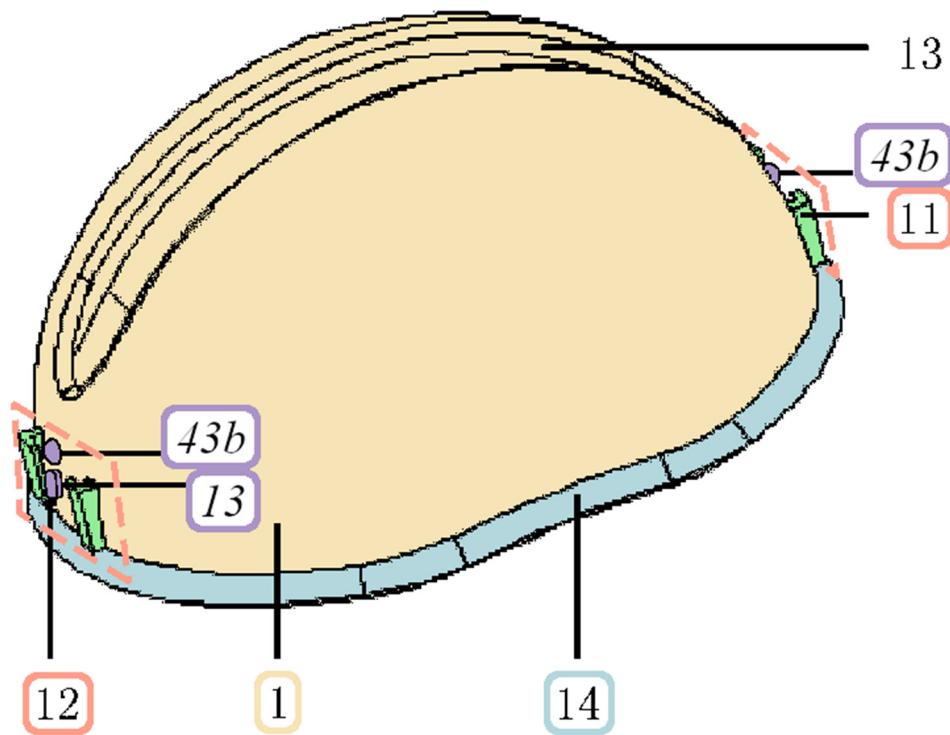
Accordingly, a POSA would have been motivated to incorporate Kiessler's molded groove head and corresponding accessory with clamping lever with the Yan-Daley helmet. Ex-1002, ¶¶150-154.

5.2.3 Claim 2

Claim 2 depends from claim 1, which is rendered obvious by Yan-Daley. §5.1.4. The Yan-Daley-Kiessler helmet renders obvious claim 2. Ex-1002, ¶¶155-160.

5.2.3.1 Element 2[a]

To the extent that a receiver slot requires tapering, this would be obvious given the teachings of Daley. §5.1.5.1. Additionally, as illustrated below, the Yan-Daley-Kiessler helmet teaches the external slot of the front receptacle (**snap-fit slot 11**) being a receiver slot flanked by raised walls (**L-shaped slots**). The combination further teaches the protruding nub including a stop (**groove head 13**). Ex-1015, ¶36; Ex-1002, ¶156.



Ex-1012, Fig. 2 (Modified)¹⁰

5.2.3.2 Element 2[b]

The Yan-Daley-Kiessler helmet teaches an accessory device (lamp 3) that includes a clip (clamping lever 21). §5.2.2.

5.2.3.3 Element 2[c]

A POSA would have understood that the L-shaped slots in the Yan-Daley-Kiessler helmet align and retain the lamp 2 or 3 as the groove head 13 engages with the clamping lever 21. Ex-1002, ¶159. Thus, the Yan-Daley-Kiessler helmet teaches that the receiver slot (defined by L-shaped slots) aligns the accessory device

¹⁰ Example of the Yan-Daley-Kiessler combination.

(lamp 2 or 3) therein, the raised walls (L-shaped slots) retain the accessory device therebetween, and the stop (groove head 13) engages the clip (clamping lever 21) to releasably mount the accessory device in the front receptacle (snap-fit slot 11).

5.2.4 Claim 4

Claim 4 depends from claim 1, which is rendered obvious by Yan-Daley.
§5.1.4.

Additionally, the Yan-Daley-Kiessler helmet teaches that the accessory device (lamp 2 or 3) includes a clip (clamping lever 21), the external slot (defined by the L-shaped slots) aligns the accessory device therein, and the protruding nub (groove head 13) engages the clip to releasably mount the accessory device in the front receptacle (snap-fit slot 11). Ex-1002, ¶162.

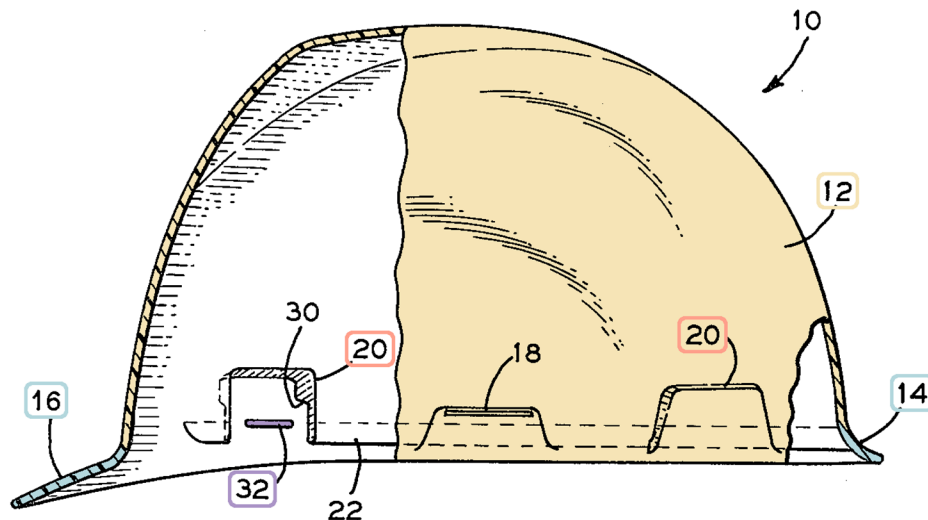
5.2.5 Claims 9 and 12

Claims 9 and 12 depend from claim 8, which is rendered obvious by the Yan-Daley helmet. §5.1.11. The added features of claims 9 and 12 are found within claim 2. Claim 9 recites a “stop” while claim 12 recites a “protruding nub” and claim 2 recites “the protruding nub comprises a stop.” §5.2.3. The Yan-Daley-Kiessler helmet teaches all these recitations for the prior reasons. §5.2.3; Ex-1002, ¶163.

5.3 Ground 3: Claims 1-17 are rendered obvious by Yan and Nesbitt

5.3.1 Overview of Nesbitt

Nesbitt published on December 8, 1981, and therefore qualifies as prior art under §102(a)(1). Nesbitt teaches a safety helmet having a polyethylene **shell 12** and a **brim 14** having a peak 16 extending therefrom. Ex-1013, 2:56-64. Nesbitt further teaches that the helmet includes a plurality of **sockets 20** that are integrally molded into the shell (Ex-1013, 2:65-67), each socket including a **nub 32** (Ex-1013, 3:1-6).



Ex-1013, Fig. 8

5.3.2 Motivation to Combine Yan and Nesbitt

As a threshold matter, Yan and Nesbitt qualify as analogous art at least because they are in the same field of endeavor as the '327 Patent, *i.e.*, safety helmets.

Ex-1001, 3:26-27; Ex-1011, ¶1; Ex-1013, 1:5-7. At minimum, both references are at least reasonably pertinent to at least one problem allegedly solved by the claimed invention—mounted devices slipping off from safety helmets. Ex-1001, 1:27-38; Ex-1013, 2:22-33. Ample motivation-to-combine also existed. Ex-1002, ¶164.

First, Yan invites a POSA to seek out “equivalent structural modifications.” Ex-1011, ¶29. Based on this, a POSA would have been expressly motivated to look to analogous references (including Nesbitt), e.g., to help understand certain aspects related to structural modifications of the snap-fit slot structures (particularly when seeking to construct Yan’s safety helmet). Ex-1002, ¶165. Upon reviewing the analogous Nesbitt reference, a POSA would have seen its teachings related to using a plurality of integrally formed sockets at different locations on a safety helmet, each having a respective nub, to detachably retain devices (Ex-1013, 2:22-31), and would have been motivated to modify each of Yan’s snap-fit slot structures to be molded to the helmet body and include such a nub. Ex-1002, ¶166. Modifying each of the snap-fit slots in this manner would keep the snap-fit slots identical and allow for accessories to be detachably mounted to either slot in an identical manner as taught by Yan. Ex-1011, ¶25.

When modifying Yan’s snap-fit slot structures to include Nesbitt’s nubs, a POSA could adopt the teachings of Nesbitt to integrally mold the receptacle (Yan’s L-shaped slots) with a nub to the helmet shell for each snap-fit slot using at least one

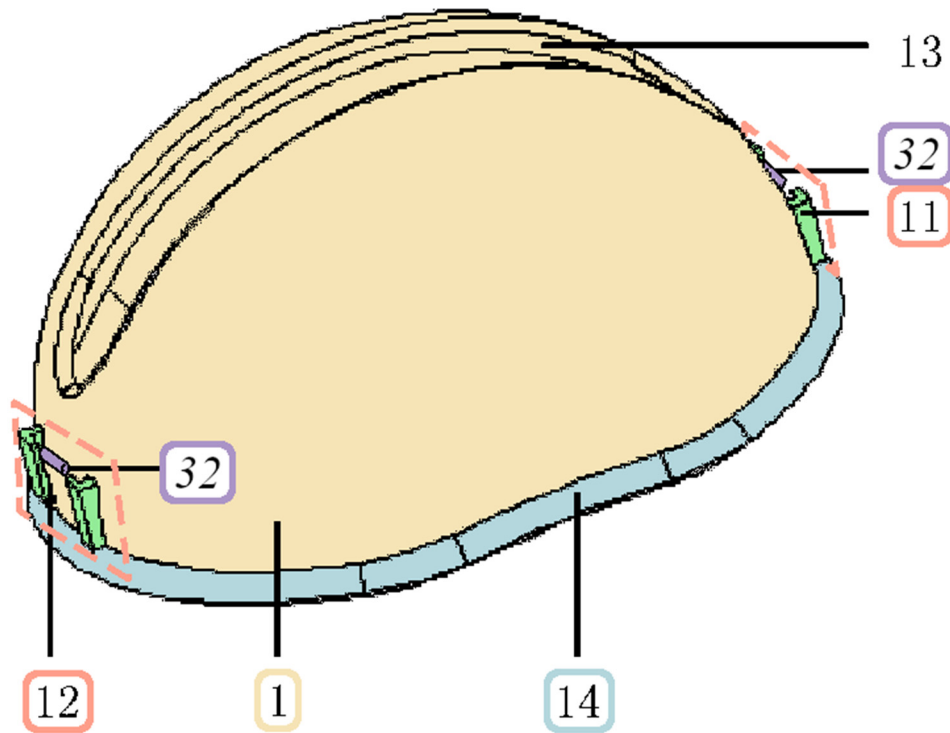
common (same) material, such as polyethylene. Ex-1013, 2:57-67; Ex-1002, ¶167. The POSA could also adopt Nesbitt's positional teaching for each nub to centrally position the nub between the L-shaped slots in Yan. Ex-1013, Fig. 8. Forming such features from a common material would have been cheaper, easier, and allowed for a reduced sales price for the Yan-Nesbitt helmet, which would have further motivated the Yan-Nesbitt combination. Ex-1002, ¶167.

Including the nub feature with the snap-fit slot structures would create a more robust securing of the accessories in the snap-fit slot structures and thus would have been a desirable structural modification. Ex-1002, ¶168. In having a more robust securing, this would have made the Yan-Nesbitt helmet more attractive to potential purchasers, thereby further motivating the combination as a matter of commercial desirability. *Id.*

A POSA would have been motivated to incorporate Nesbitt's centrally located and integrally molded nub into each of Yan's snap-fit slot structures to securely mount detachable accessory devices while keeping the snap-fit slots identical. Ex-1002, ¶169. Adding Nesbitt's nub to Yan's snap-fit slot structures would have been routine for a POSA exercising only ordinary skill, so the modification would have been achieved with a reasonable expectation of success. *Id.*

Additionally or alternatively, modifying Yan's helmet to include Nesbitt's integrally molded mounting features would have been obvious to try (finite number of predictable solutions for improving the temporary security of the snap-fit slots) and/or a simple substitution of one element (a receptacle having L-shaped slots and a nub) for another (a snap-fit slot receptacle having only L-shaped slots) to obtain predictable results (an integrally molded receptacle having a protruding nub to more securely fasten Yan's lamp accessories). Ex-1002, ¶170. A POSA seeking to improve Yan's **snap-fit slot** structure for temporarily securing accessory devices, would have recognized that incorporating Nesbitt's integrally molded socket features involved a known method of molding and had a predictable result (a molded receptacle having a **protruding nub** for more securely snapping in detachable accessory devices). *Id.*

Accordingly, a POSA would have been motivated to incorporate Nesbitt's integrally molded nubs with Yan's safety helmet. Ex-1002, ¶¶164-171. An example depiction of the combination Yan-Nesbitt helmet is below:



Ex-1011, Fig. 2 (Modified)¹¹

5.3.3 Claim 1

Yan-Nesbitt renders obvious claim 1. Ex-1002, ¶¶172-196.

5.3.3.1 1[pre]

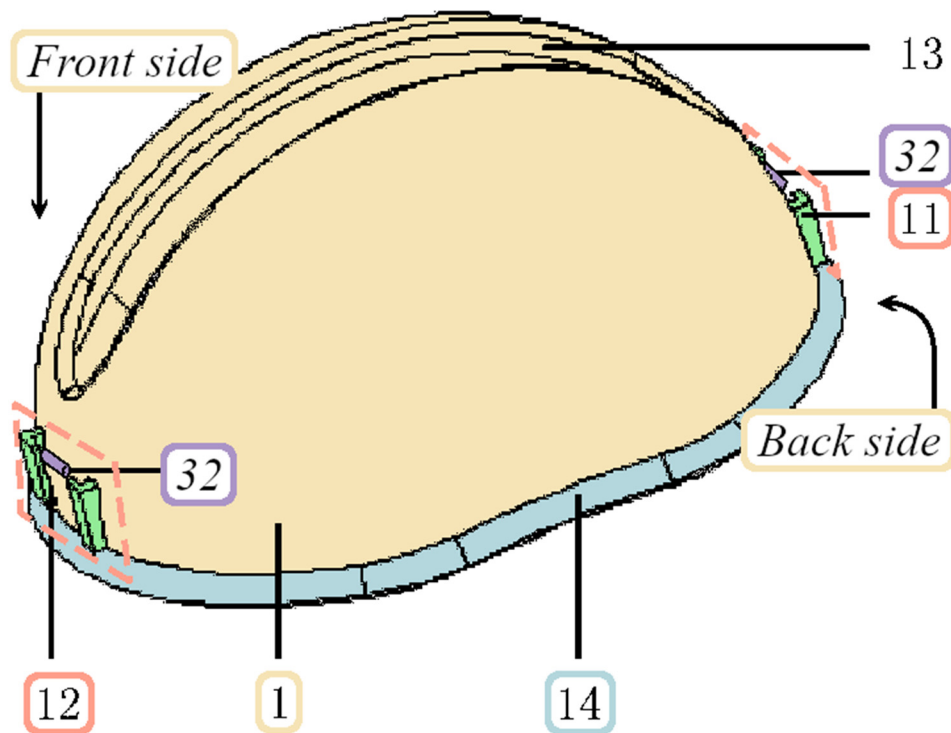
If limiting, Yan-Nesbitt teaches this. Yan teaches “a safety helmet, and more specifically, ... a mining safety helmet with an emergency lighting function.” Ex-1011, ¶1. Yan’s safety helmet is modified to include Nesbitt’s nub 32 and, thus, the Yan-Nesbitt helmet teaches a safety helmet.

¹¹ Example of the Yan-Nesbitt combination.

5.3.3.2 Element 1[a][i]

First, the Yan-Nesbitt helmet teaches an outer shell adapted to be worn by a user. Yan teaches that “[t]he mining safety helmet is an essential tool for miners working underground” and that “[i]t not only provides lighting but also effectively protects the miner’s head from falling objects.” Ex-1011, ¶2. Yan also teaches that the helmet includes a “helmet body 1.” Ex-1011, ¶16. Yan’s helmet body is an outer shell adapted to be worn by a user. Ex-1002, ¶176. Therefore, the Yan-Nesbitt helmet teaches such an outer shell adapted to be worn by a user. *Id.*

Second, the Yan-Nesbitt helmet teaches the outer shell having an exterior surface defining a front side, a rear side, and a brim extending forward from the front side and configured to shield the user’s eyes from sunlight or falling debris. Yan teaches that “**brim 14** is located at the bottom of the **helmet body 1** and encircles the bottom edge of the **helmet body 1**.” Ex-1011, ¶19. A brim encircling the bottom edge of the helmet body extends forward from the front side. Ex-1002, ¶177. Yan further teaches that the “function of the **brim 14** is to enhance protective coverage, effectively preventing small falling debris from entering the miner’s eyes, ears, mouth, or nose.” Ex-1011, ¶19.



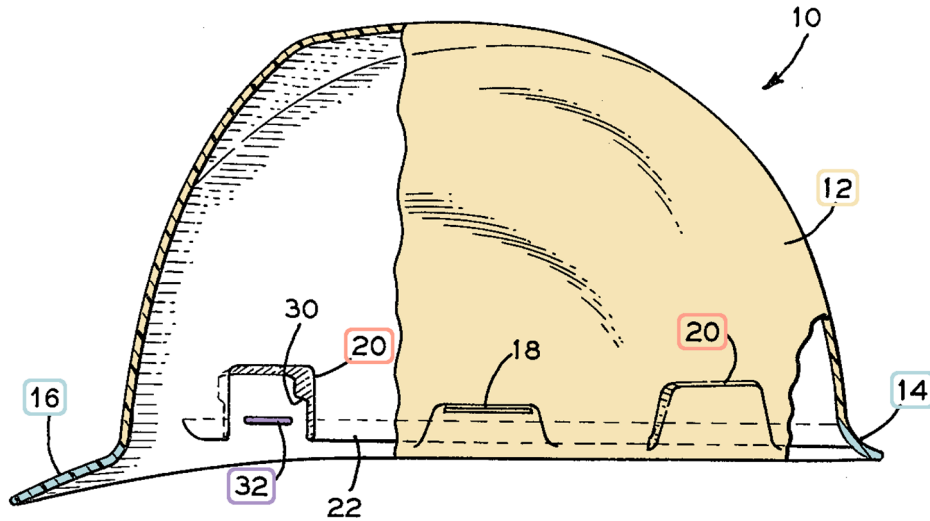
Ex-1011, Fig. 2 (Modified)¹²

Therefore, the Yan-Nesbitt helmet teaches such an outer shell (**helmet body 1**) having an exterior surface defining a front side, a rear side, and a brim (**brim 14**). Ex-1002, ¶178.

Third, the Yan-Nesbitt helmet teaches or suggests being molded from a common material. If Patent Owner is legally correct that line drawings alone can teach integrally molded features (as it argued during prosecution, §5.4.1), Nesbitt includes a line drawing (Figure 8) illustrating a cross-sectional view of the shell 12

¹² Example of the Yan-Nesbitt combination.

showing unbroken lines and a cross-hatching pattern throughout the shell and brim of the safety helmet. Ex-1002, ¶179.



Ex-1013, Fig. 8

Additionally, Nesbitt teaches a safety helmet with a **shell 12** that includes “plurality of **sockets 20** ... integrally molded into the **shell 12**.” Ex-1013, 2:65-67. Nesbitt further teaches “Lands 30 bridge the **shell 12** with the end surfaces 26 over the recess 28. **Nub 32** partially extends into the recess 28.” Ex-1013, 3:1-7. Thus, the **nub 32** is a protruding nub that is integrally molded with the **shell** from the common material and is disposed centrally relative to the socket. Ex-1002, ¶180.

Thus, a POSA would have found it obvious to mold Yan’s shell using a common material throughout (as Nesbitt teaches). Ex-1002, ¶181. Therefore, the Yan-Nesbitt helmet teaches an outer shell (helmet body 1) adapted to be worn by a user, the outer shell being molded from a common material (polyethylene) and

having an exterior surface defining a front side, a rear side, and a brim (brim 14) extending forward from the front side and configured to shield the user's eyes from sunlight or falling debris. *Id.*

5.3.3.3 Element 1[a][ii]

The Yan-Nesbitt helmet is capable of being worn in reverse on a user's head as desired. As noted by the Examiner during prosecution, Patent Owner has not claimed any helmet structure that differentiates a "reversible" helmet from any other safety helmets, such as those taught by Yan and Nesbitt. Ex-1004, 292. Moreover, workers often wear their safety helmets backwards, as acknowledged by the inventors. §5.1.4.3. To the extent the reversibility feature is not inherent, it would have been an obvious modification to make the Yan-Nesbitt helmet reversible to capture more sales from users wanting reversible helmets. Ex-1002, ¶183.

5.3.3.4 Element 1[a][iii]

Yan teaches a "brim 14" that "encircles the bottom edge of the helmet body 1." §5.3.3.2; Ex-1011, ¶19. Such a brim would be disposed above a user's face of the user when the outer shell is worn with the front side being oriented above the user's face. Ex-1002, ¶184. Therefore, the Yan-Nesbitt helmet teaches this aspect.

5.3.3.5 Element 1[b]

Yan teaches a snap-fit slot 11 (a front receptacle) that is located on an exterior surface of the helmet body 1 (an outer shell) and above the brim 14 of the safety helmet. Ex-1011, ¶19. The two L-shaped slots of the snap-fit slot 11 form an external slot extending upwardly along the front side on the exterior surface of the outer shell above the brim. Ex-1002, ¶186.

Nesbitt teaches a safety helmet with a shell 12 that includes “plurality of sockets 20 ... integrally molded into the shell 12” (Ex-1013, 2:65-67) with each socket comprising a nub 32 (Ex-1013, 3:1-7). §5.3.3.2. Thus, the nub 32 is a protruding nub that is integrally molded with the shell from the common material and is disposed centrally relative to the external slot. Ex-1002, ¶187.

Therefore, the Yan-Nesbitt helmet teaches a front receptacle (snap-fit slot 11) having an external slot (formed by Yan’s L-shaped slots) extending upwardly along the front side on the exterior surface of the outer shell (helmet body 1) above the brim (brim 14) and a protruding nub (nub 32), wherein the protruding nub is integrally molded with the outer shell from the common material (polyethylene) and is disposed centrally relative to the external slot and directly onto the exterior surface of the outer shell at an upward location away from the brim.

5.3.3.6 Element 1[c]

The rear receptacle is mere duplication of parts without a new and unexpected result. §5.1.4.2.

If 1[c] is limiting, Yan-Nesbitt teaches this. Yan teaches that “the first snap-fit slot is located at the front of the helmet body, while the second snap-fit slot is located at the rear of the helmet body.” Ex-1011, ¶7. Yan further teaches that the “first snap-fit slot 11 and the second snap-fit slot 12 have **identical structures**, each consisting of two symmetrically arranged L-shaped slots.” Ex-1011, ¶17.

It would have been obvious to a POSA to add Nesbitt’s nub 32 to each of Yan’s snap-fit slots 11 and 12 such that the two snap-fit slots are identical (and accessories may be attached to either snap-fit slot) as taught by Yan. §5.3.2; Ex-1002, ¶191.

Therefore, the Yan-Nesbitt helmet teaches a rear receptacle (snap-fit slot 12) having an additional external slot disposed on the rear side on the exterior surface of the outer shell, wherein the front receptacle (snap-fit slot 11) and the rear receptacle (snap-fit slot 12) are of identical construction. Ex-1002, ¶192.

5.3.3.7 Element 1[d]

Yan teaches that the “mining lamp 3 and the LED lamp 2 are both detachably mounted on the helmet body 1.” Yan further teaches that “lamp body base of the mining lamp 3 is adapted to the first snap-fit slot 11. The two sides of

the lamp body base can be snapped into the two L-shaped slots of the first snap-fit slot 11.” Ex-1011, ¶20. Yan also teaches that the “base of the LED lamp body 22 has the same structure as the base of the mining lamp 3. The two sides of the base of the LED lamp body 22 can be inserted into the two L-shaped slots of the second snap-fit slot 12.” Ex-1011, ¶24. Yan further teaches that “the LED lamp 2 can be taken out of the second snap-fit slot 12 and then inserted into the first snap-fit slot 11.” Ex-1011, ¶27.

Furthermore, Yan teaches that “[b]y using this snap-fit connection method, the mining lamp 3 is not fixed permanently on the helmet body 1, but is instead installed on the helmet body 1 in a detachable manner” (Ex-1011, ¶20) and likewise “the LED lamp 2 is ... is instead installed on the helmet body 1 in a detachable manner” (Ex-1011, ¶24). Thus, Yan’s lamps 2 and 3 each teach the claimed accessory device. Ex-1002, ¶195.

Therefore, Yan-Nesbitt helmet teaches an accessory device (lamp 2) having a mating receptacle (lamp body 22) formed thereon, at least a portion of the mating receptacle being selectively engageable within each of the external slot (formed by Yan’s L-shaped slots) of the front receptacle (snap-fit slot 11) or the additional external slot of the rear receptacle (snap-fit slot 12) such that the accessory device is releasably mountable onto each of the front receptacle and the rear receptacle on the exterior surface of the outer shell (helmet body 1). Ex-1002, ¶196.

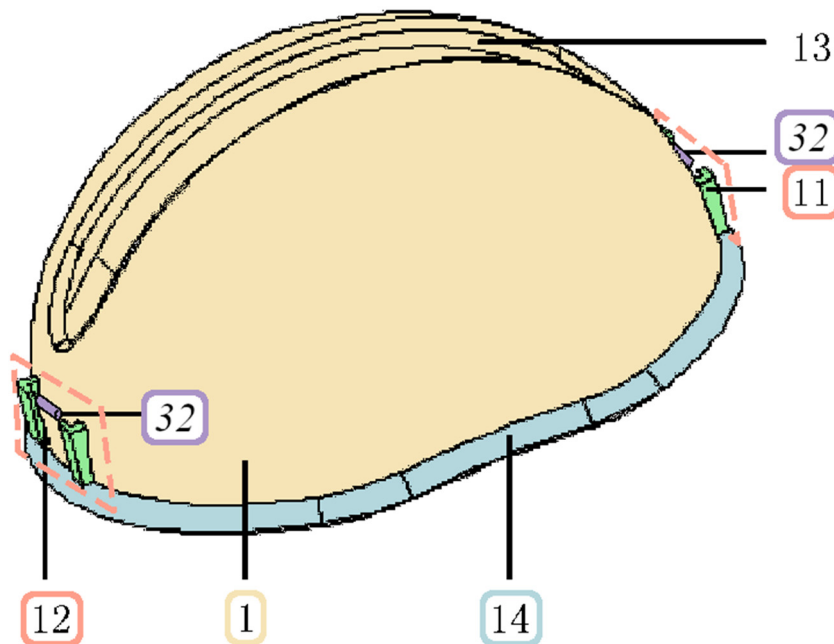
5.3.4 Claim 2

Claim 2 depends from claim 1, which is rendered obvious by Yan-Nesbitt.

§5.3.3. The Yan-Nesbitt helmet renders obvious claim 2. Ex-1002, ¶¶197-200.

5.3.4.1 Element 2[a]

Nesbitt teaches a safety helmet with a shell 12 that includes “plurality of sockets 20 ... integrally molded into the shell 12” (Ex-1013, 2:65-67) with each socket comprising a nub 32 (Ex-1013, 3:1-7). §5.3.3.2. Adding Nesbitt’s nub to Yan’s helmet teaches such a receiver slot flanked by raised walls (**L-shaped slots**) with a stop (**nub 32**).



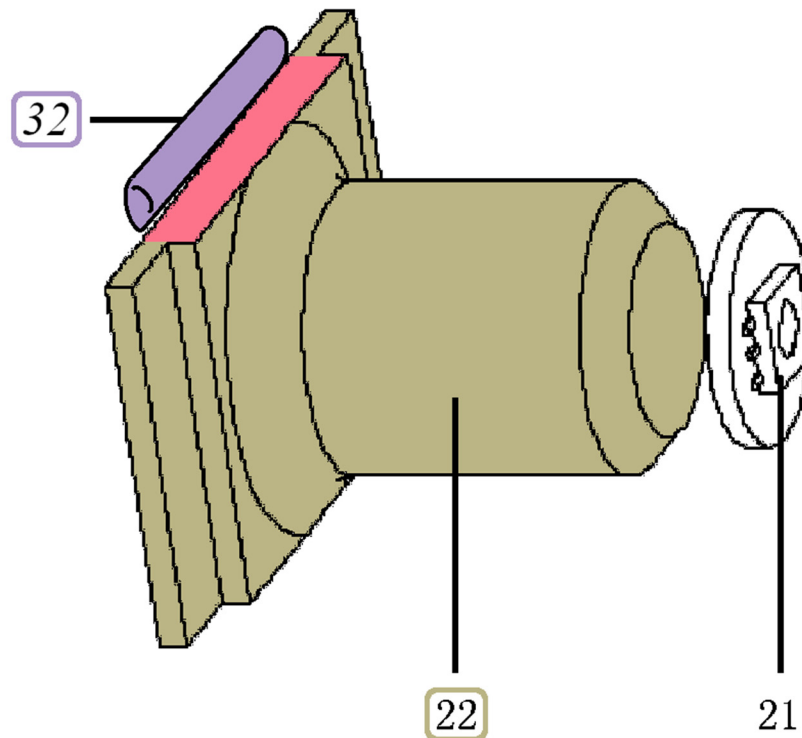
Ex-1011, Fig. 2 (Modified)¹³

¹³ Example of the Yan-Nesbitt combination.

5.3.4.2 Element 2[b]

Yan teaches that “the LED lamp 2 comprises ... an LED lamp body 22.”

Ex-1011, ¶21. As shown in Figure 3, the lamp body includes a top portion (a **clip**) that would engage with the **nub 32**. Ex-1002, ¶199.



Ex-1011, Fig. 3 (Modified excerpt)¹⁴

5.3.4.3 Element 2[c]

The L-shaped slots of Yan form a receiver slot that aligns the lamp accessories and retains the lamp accessories therebetween. Ex-1002, ¶200.

¹⁴ Example of the Yan-Nesbitt combination.

Therefore, the Yan-Nesbitt helmet teaches that the receiver slot aligns the accessory device (lamp 2 or 3) therein, the raised walls (L-shaped slots) retain the accessory device therebetween, and the stop (nub 32) engages the clip (lamp body 22) to releasably mount the accessory device in the front receptacle (snap-fit slot 11). *Id.*

5.3.5 Claim 3

Claim 3 depends from claim 1, which is rendered obvious by Yan-Nesbitt.

§5.3.3.

The selection of plastic for the common material is *prima facie* obvious.

§5.1.6. Additionally, Yan-Nesbitt teaches this.

Nesbitt teaches “a safety helmet 10 having an impact-resistant polyethylene shell 12.” Ex-1013, 2:57-59. Nesbitt further teaches that “the sockets 20 are formed by an indentation 24 integrally formed within the shell 12” (Ex-1013, 3:1-5) and “a nub is formed within the shell, the nub substantially disposed between the extensions” (Ex-1013, 4:54-57). Polyethylene is a well-known and commonly produced plastic. Ex-1002, ¶203.

Thus, a POSA would have found it obvious to use plastic, as taught by Nesbitt, as a common material of the Yan-Nesbitt helmet. Ex-1002, ¶¶201-204.

5.3.6 Claim 4

Claim 4 depends from claim 1, which is rendered obvious by Yan-Nesbitt.

§5.3.3. Claim 4 includes similar limitations as claim 2. The Yan-Nesbitt helmet

teaches the accessory device (lamp 2 or 3) includes a clip (lamp body 22), the external slot (defined by the L-shaped slots) aligns the accessory device therein, and the protruding nub (nub 32) engages the clip to releasably mount the accessory device in the front receptacle (snap-fit slot 11). §5.3.4; Ex-1002, ¶205.

5.3.7 Claim 5

Claim 5 depends from claim 1, which is rendered obvious by Yan-Nesbitt. §5.3.3.

The Yan-Nesbitt helmet renders obvious claim 5. Yan teaches that “using this snap-fit connection method, the mining lamp 3 is not fixed permanently on the helmet body 1 but is instead installed on the helmet body 1 in a detachable manner.” Ex-1011, ¶20. The Yan-Nesbitt helmet teaches that the external slot (defined by the L-shaped slots) of the front receptacle (snap-fit slot 11) is configured to receive a portion (lamp body 22) of the accessory device (lamp 2 or 3) to mount the accessory device to the front receptacle. §5.3.3.7; Ex-1002, ¶¶206-207.

5.3.8 Claim 6

Claim 6 depends from claim 1, which is rendered obvious by Yan-Nesbitt. §5.3.3.

The Yan-Nesbitt helmet renders obvious claim 6. Yan teaches each snap-fit slot has “two symmetrically arranged L-shaped slots.” Ex-1011, ¶17. Therefore, the Yan-Nesbitt helmet teaches the front receptacle (snap-fit slot 11) includes a first

sidewall (one of the L-shaped slots); the accessory device (lamp 2 or 3) includes a bracket (lamp body 22); and the bracket is retained by the first sidewall to mount the accessory device to the front receptacle. Ex-1002, ¶¶208-209.

5.3.9 Claim 7

Claim 7 depends from claim 6, which is rendered obvious by Yan-Nesbitt. §5.3.8.

The Yan-Nesbitt helmet renders obvious claim 7. The Yan-Nesbitt helmet teaches that the front receptacle (snap-fit slot 11) includes a second sidewall (one of the L-shaped slots); and the bracket (lamp body 22) is retained by the first sidewall (the other L-shaped slot) and the second sidewall. §5.3.8; Ex-1002, ¶¶210-211.

5.3.10 Claim 8

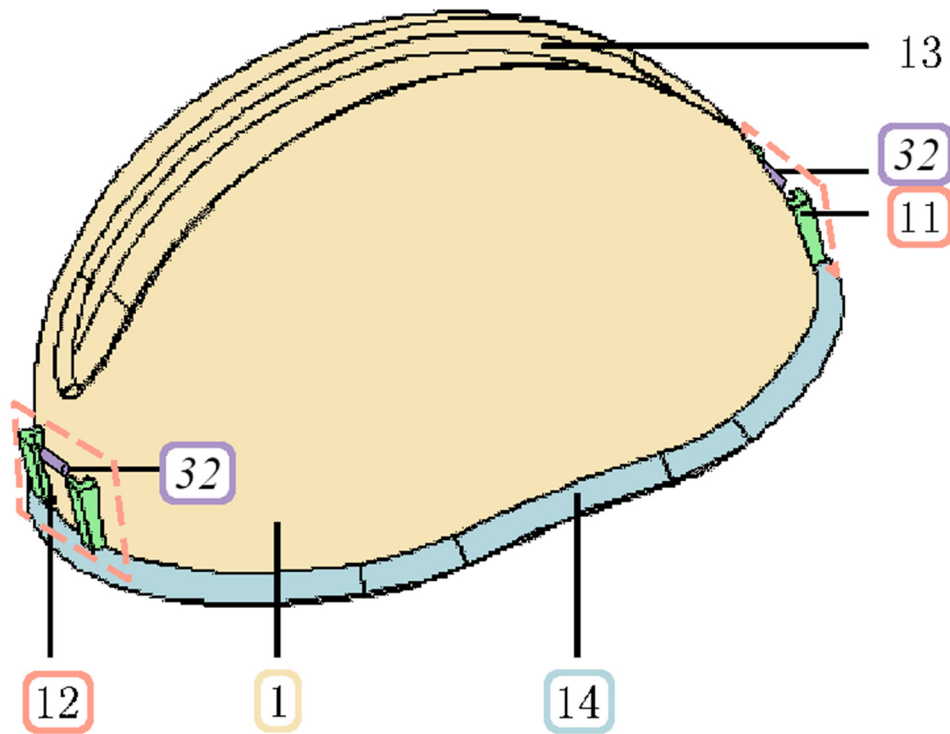
Yan-Nesbitt renders obvious claim 8. Ex-1002, ¶¶212-220.

5.3.10.1 Elements 8[pre]-8[c]

8[pre]-8[c] recite a safety helmet having features found in 1[pre]-1[c], so most of 8[pre]-8[c] is taught or suggested by Yan-Nesbitt for analogous reasons. §5.3.3.

As compared to 1[b], 8[b] adds “the front receptacle being integrally molded with the outer shell.” Nesbitt teaches a plurality of **sockets 20** that are integrally molded into the shell (Ex-1013, 2:65-67), each socket including a **nub 32** (Ex-1013, 3:1-6). §5.3.1. A POSA would have found it obvious to apply Nesbitt’s

integral molding teachings to the helmet in Yan to form snap-fit slots (receptacles) and nubs thereon. §5.3.2; Ex-1002, ¶216. Therefore, the Yan-Nesbitt helmet teaches this aspect. Ex-1002, ¶216.



Ex-1011, Fig. 2 (Modified)¹⁵

5.3.10.2 Element 8[d]

The Yan-Nesbitt helmet teaches a first accessory device (lamp 2 or 3) having a first mating receptacle (lamp body 22). §5.3.3.7. The Yan-Nesbitt helmet also teaches at least a portion (lamp body 22) of the first accessory device (lamp 2 or 3) being releasably mountable onto each of the front receptacle (snap-fit slot 11)

¹⁵ Example of the Yan-Nesbitt combination.

or the rear receptacle (snap-fit slot 12) on the exterior of the outer shell (helmet body 1). Ex-1002, ¶217.

5.3.10.3 Element 8[e]

The second accessory device is mere duplication of parts with no patentable significance. §5.1.4.5.

If 8[e] is limiting, Yan-Nesbitt teaches this. Yan teaches that the “mining lamp 3 and the LED lamp 2 are both detachably mounted on the helmet body 1.” §5.3.4.6; Ex-1011, ¶15. Thus, Yan’s mining lamp 3 and LED lamp 2 each teaches the claimed second accessory device. Ex-1002, ¶219.

5.3.11 Claims 9 and 12

Claims 9 and 12 depend from claim 8, which is rendered obvious by Yan-Nesbitt. §5.3.10. The added features of claims 9 and 12 are found within claim 2. Claim 9 recites a “stop” while claim 12 recites a “protruding nub” and claim 2 recites “the protruding nub comprises a stop.” §5.3.4.1. The Yan-Nesbitt helmet teaches all these recitations for the prior reasons. §5.3.4; Ex-1002, ¶221.

5.3.12 Claim 10

Claim 10 depends from claim 8, which is rendered obvious by Yan-Nesbitt. §5.3.10. Claim 10 states that the common material is “a molded plastic material” rather than just “plastic” as claim 3 recites. As with plastic, a molded plastic material is a known material selected based on its suitability for its intended

use. Thus, the Yan-Nesbitt helmet renders obvious claim 10 for the prior reason.

§5.3.5; Ex-1002, ¶222.

5.3.13 Claim 11

Claim 11 depends from claim 8, which is rendered obvious by Yan-Nesbitt. §5.3.10.

Claim 11 has limitations found in 1[c] and taught by the Yan-Nesbitt helmet for reasons stated earlier. §5.3.3.6; Ex-1002, ¶223.

5.3.14 Claims 13-15

Claims 13-15 depend from claim 8, which are rendered obvious by Yan-Nesbitt. §5.3.10. Claims 13-15 include features found in claims 5-7, respectively, and are therefore obvious for the prior reasons. §§5.3.7-5.3.9; Ex-1002, ¶224.

5.3.15 Claim 16

Yan-Nesbitt renders obvious claim 16. Ex-1002, ¶¶225-227.

5.3.15.1 Elements 16[pre]-16[a] and 16[c]-16[d]

16[pre]-16[a] and 16[c]-16[d] recite a safety helmet having features found in 1[pre]-1[a] and 1[c]-1[d], respectively. The Yan-Nesbitt helmet teaches or suggests these features for reasons stated earlier. §5.3.3.

5.3.15.2 Element 16[b]

16[b] is similar to 1[b], distinguished by reciting that “the outer shell forms the protruding nub from a same material as the outer shell.” The Yan-Nesbitt helmet

teaches a protruding nub (nub 32), and it would have been obvious to a POSA to form the protruding nub (nub 32) from a same material (polyethylene) as the outer shell (helmet body 1). §5.3.1; Ex-1002, ¶227. Thus, the Yan-Nesbitt helmet teaches this. Ex-1002, ¶227.

5.3.16 Claim 17

Yan-Nesbitt renders obvious claim 17. Ex-1002, ¶¶228-233.

5.3.16.1 Elements 17[pre]-17[d]

17[pre]-17[d] recite a safety helmet having features found in both 16[pre]-16[d] and 1[pre]-1[d]. 17[c] recites components of the rear receptacle that are the same as the components of the front receptacle, while 1[c] recites that the receptacles are of identical construction. The Yan-Nesbitt helmet teaches both recitations. §§5.3.15, 5.3.3.

5.3.16.2 Element 17[e]

17[e] recites a second accessory device that is substantially identical to 8[e]. Even if this duplication of parts imparts patentable significance (it does not), the Yan-Nesbitt helmet teaches or suggests these features. §5.3.10.2.

5.3.16.3 Element 17[f]

Yan teaches or suggests this. §5.1.17.2.

Additionally, a POSA would have found it obvious to make the brim, front receptacle, and rear receptacle unitary features of the outer shell using the molding teachings of Nesbitt, as was also explained above in §5.3.3.2; Ex-1002, ¶232.

Thus, the Yan-Nesbitt helmet teaches or suggests a safety helmet having a brim, front receptacle, and rear receptacle that are a unitary feature of the outer shell. Ex-1002, ¶233.

5.4 Ground 4: Klein News Release Anticipates Claims 1-17

5.4.1 Priority Date of Challenged Claims

The priority date of the Challenged Claims is at issue because new matter was added during prosecution (§4.3) and used as the basis for amendments to the independent claims, thereby violating the written description requirement. *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1571 (Fed. Cir. 1997) (“to gain the benefit of the filing date of an earlier application ... each application in the chain leading back to the earlier application must comply with the written description requirement.”).

Specifically, claims 1, 4, and 26 were amended to recite that “the protruding nub” is “**integrally molded** with the outer shell” from a “**common material**.”¹⁶ Ex-1004, 62-63 and 65. Similarly, pending claim 25 was amended to

¹⁶ Claims 1, 4, 25, and 26 of the '935 Application correspond, respectively, to claims 1, 8, 16, and 17 of the '327 Patent.

indicate that “the outer shell forms the protruding nub from **a same material** as the outer shell.” *Id.*, 64. The Priority Applications as-filed are silent regarding integral molding or forming the protruding nub of a common or same material as the outer shell.

Patent Owner’s assertions that these amendments were grounded in the as-filed Priority Applications are false. §4.3. The Hill Declaration was impermissible for both legal and factual reasons—as spelled out below.

The written description requirement requires that a patent’s specification “contain a written description of the invention . . . in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains . . . to make and use the same.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). The test for sufficiency is whether the disclosure “reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter **as of the filing date.**” *Id.*

5.4.1.1 The Hill Declaration was legally improper

Patent Owner relied on the Hill Declaration to validate the addition of new matter. Ex-1004, 73-74. This reliance was misplaced as such a declaration cannot establish facts that are not disclosed in the specification. *In re Buchner*, 929 F.2d 660 (Fed. Cir. 1991). *See also, In re Oppenauer*, 143 F.2d 974, 976 (C.C.P.A. 1944) (“It is well-settled law that testimony will not be received for the purpose of

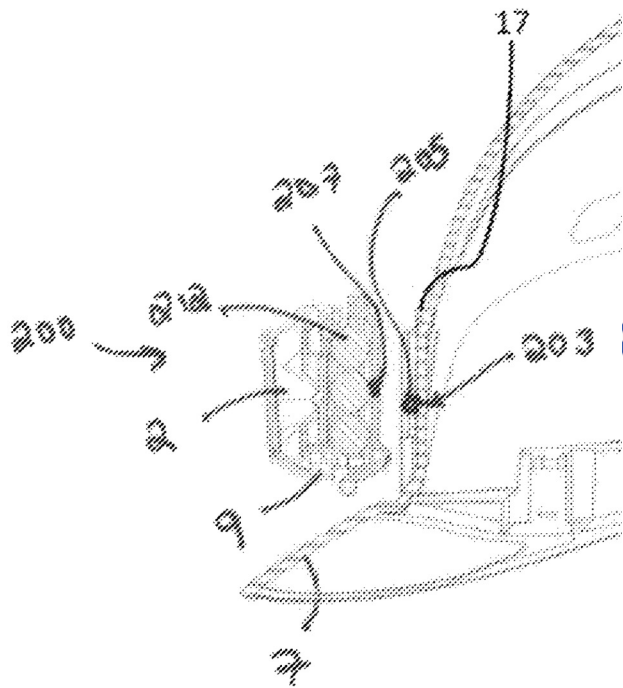
explaining the disclosure of a pending application except in very exceptional cases.”).

5.4.1.2 The Hill Declaration is factually flawed

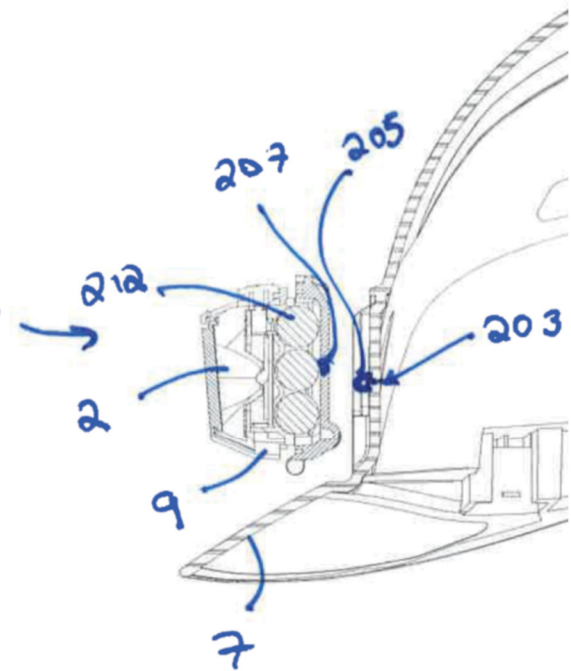
Mr. Hill opined that the added subject matter was disclosed in the drawings of the '935 Application, particularly Fig. 3 and in Fig. 8. Ex-1004, 43-44. This opinion is flawed in several regards.

First, Mr. Hill's reliance on Fig. 8 of the '935 Application is misplaced. Fig. 8 was added on October 21, 2021, and is similar to Fig. 5 of the '491 Provisional with one notable difference—the reference numeral 17 was added to Fig. 8. Ex-1004, 45, 159; Ex-1006, 11. Patent Owner did not notify the Examiner of this addition, stating simply that the “newly presented figures are part of the provisional applications.” Ex-1004, 169.

Fig. 8 relied on by Mr. Hill is reproduced below with Fig. 5 of the '491 Provisional. As seen below, the original Fig. 5 did not include the lead line or reference numeral 17. Thus, Mr. Hill's opinion relied on new subject matter added in 2021.



'935 Application, Fig. 8

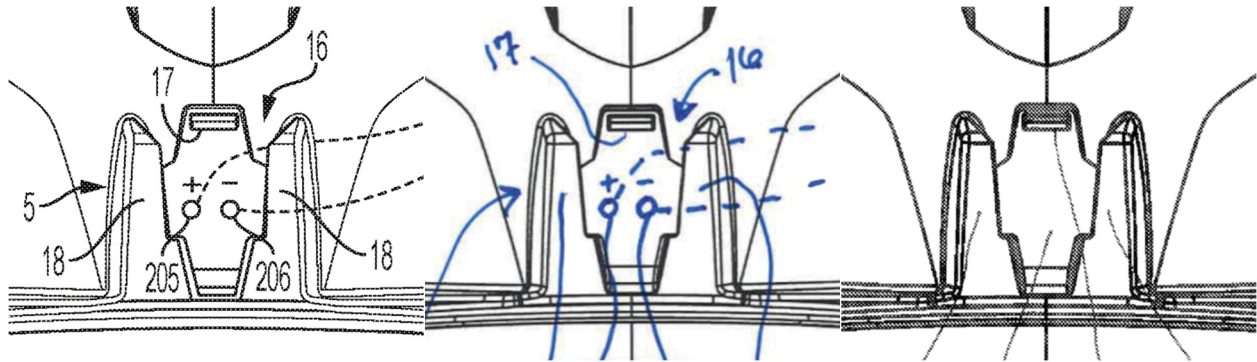


'491 Provisional, Fig. 5

The characteristics of the feature indicated by the new numeral 17 are unclear. However, it is apparent that the feature would not engage with a clip of (or otherwise interact with) the headlamp device 200 while the headlamp device is mounted. Therefore, this feature cannot serve as the claimed protruding nub. Ex-1002, ¶242.

Additionally, it is unclear whether the uniform cross-hatching for the helmet shell extends to the newly indicated feature, and therefore it does not teach a POSA that the feature is integrally molded of a common material. *Id.*, ¶243.

In fact, protruding nub 17 is only shown and labeled in one drawing of the '935 Application as-filed, Fig. 3. Ex-1007, 16. Fig. 3 corresponds to Fig. 3 of the '491 Provisional (Ex-1006, 10) and to Fig. 5 of the '472 Provisional (Ex-1007, 14). Each of these figures is reproduced in relevant part below:



'935 App., Fig. 3

'491 Prov., Fig. 3

'472 Prov., Fig. 5

Contrary to Mr. Hill's opinion, the line drawing of protruding nub 17 is insufficient to teach a POSA that it is inherent that the protruding nub is integrally molded with (or formed from) the outer shell or that it is of a same material as the outer shell.¹⁷ Ex-1002, ¶247.

Finally, Mr. Hill also states that his conclusion regarding the front and rear receivers is "based on an observation of the photos illustrated in Figures 12 and 13 of the '935 Application," asserting that his opinion is partially based on the **material color**. Ex-1004, 45-46. However, Figures 12 and 13 do not show the protruding

¹⁷ The Hill Declaration did not identify a POSA or opine as to what a POSA would have understood.

nub (as well as other portions of the receivers), and are **black and white photographs** that do not show the material color. *See* Ex-1005, 15-16 (showing the photographs that were added into the '935 Application).

A description in an earlier filing that renders the invention obvious is not sufficient. *Lockwood v. Am Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). “**The question is not whether a claimed invention is an obvious variant** of that which is disclosed in the specification.” *Id.*

The specification itself must demonstrate possession. *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1352 (Fed. Cir. 2010) (en banc). *See also Scaltech Inc. v. Retec/Tetra L.L.C.*, 178 F.3d 1378, 1384 (Fed. Cir. 1999) (“Inherency may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient to establish inherency.”).

For these reasons, the Hill Declaration does not cure Priority Applications’ failure to particularly point out and distinct claim the subject matter as required by 35 U.S.C. §112(b). Ex-1002, ¶¶234-252. *See Indivior UK Ltd. v. Dr. Reddy’s Laboratories S.A.*, 18 F.4th 1323, 1329 (Fed. Cir. 2021), citing *Brenner v. Manson*, 383 U.S. 519, 536 (1966) (“A written description sufficient to satisfy the requirement of the law requires a statement of an invention, **not an invitation to go**

on a hunting expedition to patch together after the fact a synthetic definition of an invention.”).

5.4.1.3 Priority date is the date new matter was added

As established above, new material regarding the protruding nub was added in 2021 and 2022, years after the '935 Application was filed. Each Challenged Claim includes this material. Ex-1001, 16-17. Therefore, the priority date for the Challenged Claims is no earlier than October 21, 2021.

5.4.2 Overview of Klein News Release

The Klein News Release (“KNR”) published on July 23, 2019 (Ex-1016, ¶27), and none of the exceptions under §102(b) apply as it published more than one year before the October 21, 2021 priority date. KNR therefore qualifies as prior art under §102(a)(1).

KNR describes Klein Tools’ “Safety Helmet System,” which Patent Owner has asserted practices the '327 Patent. Ex-1016, ¶113, 114. *See also, id.*, ¶27 (“On July 23, 2019, Klein Tools published a press release about its new generation of hard hat systems ... **These new hard hat systems incorporated the receptacle features** discussed above and other innovative features ... Klein Tools’ press release identified the product as then ‘**patent-pending.**’”).

As acknowledged by Patent Owner, KNR references the '327 Patent by mentioning “Patent-pending accessory mounts on front and back” of the safety helmets shown in KNR. Ex-1010, 1. Therefore, if the priority date is October 21, 2021, then Patent Owner’s own admissions show that KNR is invalidating anticipatory art. A brief analysis on an element-by-element basis is also provided below.

5.4.3 Claim 1

KNR anticipates claim 1. Ex-1002, ¶¶254-263.

5.4.3.1 Element 1[pre]

If limiting, KNR discloses this. KNR shows and describes ten different hard hat models, with “hard hat” being interchangeable with the '327 Patent’s safety helmet. Ex-1001, 1:14-17 (“The present disclosure relates to ... safety helmets ...[,] also referred to as hard hats.”). Thus, KNR discloses a safety helmet. Ex-1002, ¶254.



Ex-1010, Image 1¹⁸

5.4.3.2 Elements 1[a][i]-1[a][iii]

KNR discloses hard hats with various brims, including “Cap Style” and “Full Brim” hats, and indicates the hard hats are designed for electricians, line workers, and other professionals. Ex-1010, 2. It also indicates that the hard hats include shells, which can be white or orange in color. *Id.* Additionally, KNR discloses that each hat has been “[t]ested ... to safely wear frontwards or backwards.” *Id.*, 1.

¹⁸ KNR color images original, reference lines and colored textboxes added in following images

Based on KNR, a POSA would appreciate that each of the hard hat shells are molded from a common material, most likely plastic. Ex-1002, ¶257. A POSA would further appreciate the outer shells have exterior surfaces with front and back ends, with a brim extending at least from the front side of said surfaces. *Id.* Additionally, a POSA would appreciate the illustrated brims are configured for shielding a wearer's eyes from sunlight and falling debris and further configured to be above the wearer's face at least during standard wear (*i.e.*, with the front side of the shell above the wearer's face). *Id.*



Ex-1010, Image 3 (Excerpt)

Thus, KNR discloses an outer shell (e.g., a white shell) adapted to be worn by a user (e.g., an electrician), the outer shell being molded from a common material (e.g., plastic) and having an exterior surface defining a front side, a rear side, and a

brim extending forward from the front side and configured to shield the user's eyes from sunlight or falling debris (e.g., as illustrated in image 3), wherein the outer shell is reversible such that one of the front side or the rear side is oriented above a face of the user when the outer shell is worn by the user (e.g., as illustrated in image 3), and wherein the brim is configured to be disposed above the face of the user when the outer shell is worn by the user with the front side being oriented above the face of the user (e.g., as illustrated in image 3). Ex-1002, ¶258.

5.4.3.3 Element 1[b]

According to KNR, these mounts implement patent-pending technology for holding headlamps without straps or zip-ties. §5.4.2; Ex-1010, 1.



Ex-1010, Image 1 (Excerpt)

Thus, as would be apparent to a POSA reviewing KNR's images, KNR discloses the claimed front receptacle. Ex-1002, ¶260.

5.4.3.4 Element 1[c]



Ex-1010, Image 2 (Excerpt)

As would be apparent to a POSA reviewing KNR's images, KNR discloses a rear receptacle having an additional external slot disposed on the rear side on the exterior surface of the outer shell, wherein the front receptacle and the rear receptacle are of identical construction. Ex-1002, ¶261.

5.4.3.5 Element 1[d]

KNR discloses such accessory devices. Ex-1010, Image 1. KNR further discloses "[p]atent-pending accessory mounts on front and back securely hold [headlamps] without using straps or zip ties." Ex-1010, 1.



Ex-1010, Image 1

Thus, as would be apparent to a POSA reviewing KNR's images, KNR discloses the claimed accessory device (Hardhat Headlamp (Cat. No. KHH56220)). Ex-1002, ¶263.

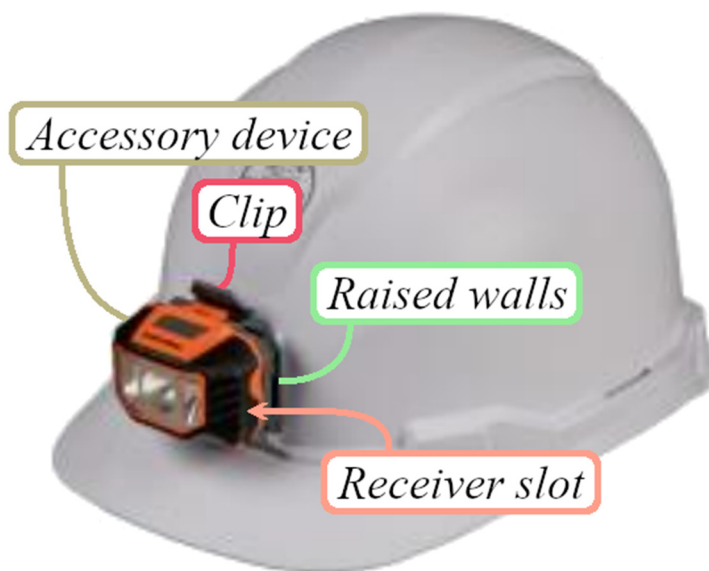
5.4.4 Claim 2

Claim 2 depends from claim 1, which is anticipated by KNR. §5.4.3. KNR discloses hard hats with such front receptacles. Ex-1010, 1; Ex-1002, ¶264.



Ex-1010, Image 1 (Excerpt)

As would be apparent to a POSA, KNR discloses that the claimed external slot of the front receptacle is a **receiver slot** flanked by **raised walls**. *Id.*



Ex-1010, Image 3 (Excerpt)

As would further be apparent to a POSA, KNR discloses the claimed accessory device that includes a clip. Ex-1002, ¶266.

5.4.5 Claim 3

Claim 3 depends from claim 1, which is anticipated by KNR. §5.4.3. The selection of plastic for the common material is *prima facie* obvious. §5.1.6. Moreover, a POSA would understand from the images that the material is plastic. Ex-1002, ¶267. Thus, KNR discloses the common material being plastic. *Id.*

5.4.6 Claim 4

Claim 4 depends from claim 1, which is anticipated by KNR. §5.4.3. Claim 4 includes similar limitations as claim 2 and KNR anticipates claim 4 for the reasons discussed above for claim 2. §5.4.4; Ex-1002, ¶268.

5.4.7 Claim 5

Claim 5 depends from claim 1, which is anticipated by KNR. §5.4.3. As would be apparent to a POSA reviewing KNR's images, KNR discloses headlamp accessories being received by the front receptacle of the hard hats as discussed above for claim 2. §5.4.4; Ex-1002, ¶269.

5.4.8 Claim 6

Claim 6 depends from claim 1, which is anticipated by KNR. §5.4.3. As would be apparent to a POSA reviewing KNR's images, KNR discloses that the front receptacle includes a first sidewall, the accessory device includes a bracket,

and the bracket is retained by the first sidewall to mount the accessory device to the front receptacle. Ex-1002, ¶270.

5.4.9 Claim 7

Claim 7 depends from claim 6, which is anticipated by KNR. §5.4.1. As would be apparent to a POSA reviewing KNR's images, KNR discloses that the front receptacle includes a second sidewall, and that the bracket is retained by the first sidewall and the second sidewall. Ex-1002, ¶271.

5.4.10 Claim 8

KNR anticipates claim 8. Ex-1002, ¶¶273-276.

5.4.10.1 Elements 8[pre]-8[c]

8[pre]-8[c] recite a safety helmet having features found in 1[pre]-1[c], so most of 8[pre]-8[c] is disclosed by KNR for analogous reasons. §5.4.3.

As compared to 1[b], 8[b] adds “the front receptacle [is] integrally molded with the outer shell.” This would be apparent to a POSA reviewing KNR's images. Ex-1002, ¶274.

5.4.10.2 Elements 8[d]-8[e]

KNR discloses “[p]atent-pending accessory mounts on front and back securely hold Hardhat Headlamp (Cat. No. KHH56220) or Rechargeable Auto-Off Headlamp (Cat. No. 56034) without using straps or zip ties.” Ex-1010, 1. Thus, as would be apparent to a POSA reading this description and reviewing KNR's images,

KNR discloses a first accessory device (e.g., Hardhat Headlamp (Cat. No. KHH56220)) having a first mating receptacle formed thereon, at least a portion of the first accessory device being releasably mountable onto each of the front receptacle or the rear receptacle on the exterior of the outer shell. Ex-1002, ¶275.

Additionally, as would be apparent to a POSA reviewing KNR, it discloses a second accessory device (Rechargeable Auto-Off Headlamp (Cat. No. 56034)) having a second mating receptacle formed thereon, at least a portion of the second accessory device being releasably mountable onto each of the front receptacle or the rear receptacle on the exterior of the outer shell. Ex-1002, ¶276.

5.4.11 Claims 9 and 12

Claims 9 and 12 depend from claim 8, which KNR anticipates. §5.4.10. Claims 9 and 12 include features found in claim 2 with differences that are all anticipated by KNR for the prior reasons. §§5.4.4; Ex-1002, ¶278.

5.4.12 Claim 10

Claims 9 and 12 depend from claim 8, which KNR anticipates. §5.4.10. Claim 10 states that the common material is “a molded plastic material” rather than just “plastic” as claim 3 recites. KNR anticipates both recitations. §5.4.5; Ex-1002, ¶279.

5.4.13 Claim 11

Claim 11 depends from claim 8, which KNR anticipates. §5.4.10. The limitations of claim 11 are found in 1[c] and anticipated by KNR for the reasons stated earlier. §5.4.3.4; Ex-1002, ¶280.

5.4.14 Claims 13-15

Claims 13-15 depend from claim 8, which KNR anticipates. §5.4.10. Claims 13-15 include features found in claims 5-7, respectively, and are therefore anticipated for the prior reasons. §§5.4.7-5.4.9; Ex-1002, ¶281.

5.4.15 Claim 16

KNR anticipates claim 16. Ex-1002, ¶¶282-284.

5.4.15.1 Elements 16[pre]-16[a] and 16[c]-16[d]

16[pre]-16[a] and 16[c]-16[d] recite a safety helmet having features found in 1[pre]-1[a] and 1[c]-1[d], respectively. KNR anticipates these elements for reasons stated earlier. §5.4.3.

5.4.15.2 Element 16[b]

16[b] is similar to 1[b], distinguished by reciting “the outer shell forms the protruding nub from a same material as the outer shell.” This feature would have been apparent to a POSA reviewing KNR. Ex-1002, ¶284.

5.4.16 Claim 17

KNR anticipates claim 17. Ex-1002, ¶¶285-288.

5.4.16.1 Elements 17[pre]-17[d]

17[pre]-17[d] recite a safety helmet having features found in both 16[pre]-16[d] and 1[pre]-1[d]. 17[c] recites components of the rear receptacle that are the same as the components of the front receptacle, while 1[c] recites that the receptacles are of identical construction. KNR anticipates both recitations. §§5.4.15, 5.4.3.

5.4.16.2 Element 17[e]

17[e] recites a second accessory device that is substantially identical to 8[e]. Even if this duplication of parts imparts patentable significance (it does not), KNR discloses these features. §5.4.10.1.

5.4.16.3 Element 17[f]

Additionally, as would be apparent to a POSA, KNR discloses hard hats with a brim, front receptacle, and rear receptacle that are a unitary feature of the outer shell. Ex-1002, ¶288.

6. No Secondary Considerations

Any purported secondary considerations would be addressed after institution. *Zurn Industries v. Sioux Chief*, IPR2018-00975, Paper 9 at 39.

**7. Reservation of Rights Based on Bifurcated Discretionary-Denial
Considerations**

Relying on the *Interim Processes for PTAB Workload Management* Memorandum dated March 26, 2025, Petitioner now understands that discretionary denial will be addressed in separate briefing, if the issue is raised by Patent Owner.

8. Payment of Fees

The U.S. Patent and Trademark Office is hereby authorized to charge any fees due during the IPR proceeding to Deposit Account No. 50-0310 (Order No. 010768-8005).

9. Conclusion

As demonstrated above, the Challenged Claims are old, anticipated, and obvious and, therefore, need to be canceled.

Dated: April 18, 2025

Respectfully Submitted,

/ Alexander B. Stein /
Alexander B. Stein, Reg. No. 71,397

U.S. PATENT NO. 11,452,327 – LISTING OF CHALLENGED CLAIMS

Claim No.	Claim Element(s)
1[pre]	A safety helmet, comprising:
1[a][i]	an outer shell adapted to be worn by a user, the outer shell being molded from a common material and having an exterior surface defining a front side, a rear side, and a brim extending forward from the front side and configured to shield the user's eyes from sunlight or falling debris,
1[a][ii]	wherein the outer shell is reversible such that one of the front side or the rear side is oriented above a face of the user when the outer shell is worn by the user, and
1[a][iii]	wherein the brim is configured to be disposed above the face of the user when the outer shell is worn by the user with the front side being oriented above the face of the user;
1[b]	a front receptacle having an external slot extending upwardly along the front side on the exterior surface of the outer shell above the brim and a protruding nub, wherein the protruding nub is integrally molded with the outer shell from the common material and is disposed centrally relative to the external slot and directly onto the exterior surface of the outer shell at an upward location away from the brim;
1[c]	a rear receptacle having an additional external slot disposed on the rear side on the exterior surface of the outer shell, wherein the front receptacle and the rear receptacle are of identical construction; and
1[d]	an accessory device having a mating receptacle formed thereon, at least a portion of the mating receptacle being selectively engageable within each of the external slot of the front receptacle or the additional external slot of the rear receptacle such that the accessory device is releasably mountable onto each of the front

	receptacle and the rear receptacle on the exterior surface of the outer shell.
2[a]	The safety helmet of claim 1, wherein the external slot of the front receptacle is a receiver slot flanked by raised walls and the protruding nub comprises a stop,
2[b]	wherein the accessory device includes a clip, and
2[c]	wherein the receiver slot aligns the accessory device therein, the raised walls retain the accessory device therebetween, and the stop engages the clip to releasably mount the accessory device in the front receptacle.
3	The safety helmet of claim 1, wherein the common material is plastic.
4	The safety helmet of claim 1, wherein the accessory device includes a clip, the external slot aligns the accessory device therein, and the protruding nub engages the clip to releasably mount the accessory device in the front receptacle.
5	The safety helmet of claim 1, wherein the external slot of the front receptacle is configured to receive a portion of the accessory device to mount the accessory device to the front receptacle.
6[pre]	The safety helmet of claim 1, wherein:
6[a]	the front receptacle includes a first sidewall;
6[b]	the accessory device includes a bracket; and
6[c]	the bracket is retained by the first sidewall to mount the accessory device to the front receptacle.
7[pre]	The safety helmet of claim 6, wherein:
7[a]	the front receptacle includes a second sidewall; and

7[b]	the bracket is retained by the first sidewall and the second sidewall.
8[pre]	A safety helmet, comprising:
8[a]	an outer shell adapted to be worn by a user, the outer shell being molded from a common material and having an exterior surface defining a front side, a rear side, and a brim extending forward from the front side and configured to shield the user's eyes from sunlight or falling debris, wherein the outer shell is reversible such that one of the front side or the rear side is oriented above a face of the user when the outer shell is worn by the user, and wherein the brim is configured to be disposed above the face of the user when the outer shell is worn by the user with the front side being oriented above the face of the user;
8[b]	a front receptacle being integrally molded with the outer shell and having an external slot extending upwardly along the front side on the exterior surface of the outer shell above the brim and a protruding nub, wherein the protruding nub is integrally molded with the outer shell from the common material and is disposed centrally relative to the external slot and directly onto the exterior surface of the outer shell;
8[c]	a rear receptacle having an additional external slot disposed on the rear side on the exterior of the outer shell;
8[d]	a first accessory device having a first mating receptacle formed thereon, at least a portion of the first accessory device being releasably mountable onto each of the front receptacle or the rear receptacle on the exterior of the outer shell; and
8[e]	a second accessory device having a second mating receptacle formed thereon, at least a portion of the second accessory device being releasably mountable onto each of the front receptacle or the rear receptacle on the exterior of the outer shell.
9	The safety helmet of claim 8, wherein the external slot of the front receptacle includes a receiver slot flanked by raised walls

	and including a stop, wherein the first accessory device includes a clip, and wherein the receiver slot aligns the first accessory device therein, the raised walls retain the first accessory device therebetween, and the stop engages the clip to releasably mount the first accessory device in the front receptacle.
10	The safety helmet of claim 8, wherein the common material is a molded plastic material.
11	The safety helmet of claim 8, where in the front receptacle and the rear receptacle are of identical construction.
12	The safety helmet of claim 8, wherein the external slot of the front receptacle includes a receiver slot flanked by raised walls and including a protruding nub, wherein the first accessory device includes a clip, and wherein the receiver slot aligns the first accessory device therein, the raised walls retain the first accessory device therebetween, and the protruding nub engages the clip to releasably mount the first accessory device in the front receptacle.
13	The safety helmet of claim 8, wherein the external slot of the front receptacle is configured to receive a portion of the first accessory device to mount the first accessory device to the front receptacle.
14[pre]	The safety helmet of claim 8, wherein:
14[a]	the front receptacle includes a first sidewall;
14[b]	the first accessory device includes a bracket; and
14[c]	the bracket is retained by the first sidewall to mount the first accessory device to the front receptacle.
15[pre]	The safety helmet of claim 14, wherein:
15[a]	the front receptacle includes a second sidewall; and

15[b]	the bracket is retained by the first sidewall and the second sidewall.
16[pre]	A safety helmet, comprising:
16[a]	an outer shell adapted to be worn by a user, an exterior of the outer shell having a front side, a rear side, and a brim extending outwardly from the front side and configured to shield the user's eyes from sunlight or falling debris;
16[b]	a front receptacle having an external slot extending upwardly on the front side along the exterior of the outer shell above the brim and a protruding nub, wherein the outer shell forms the protruding nub from a same material as the outer shell;
16[c]	a rear receptacle having an additional external slot disposed on the rear side on the exterior of the outer shell, wherein the front receptacle and the rear receptacle are of identical construction; and
16[d]	an accessory device having a mating receptacle formed thereon, at least a portion of the mating receptacle being selectively engageable within each of the external slot of the front receptacle or the additional external slot of the rear receptacle such that the accessory device is releasably mountable onto each of the front receptacle and the rear receptacle on the exterior of the outer shell.
17[pre]	A safety helmet, comprising:
17[a]	an outer shell adapted to be worn by a user, an exterior of the outer shell having a front side, a rear side, and a brim extending outwardly from the front side and configured to shield the user's eyes from sunlight or falling debris;
17[b]	a front receptacle having an external slot extending upwardly on the front side and a protruding nub disposed centrally relative to

	the external slot, the protruding nub being integrally molded with the outer shell on the exterior from a common material;
17[c]	a rear receptacle having an additional external slot disposed on the rear side on the exterior of the outer shell, the rear receptacle having an additional protruding nub disposed centrally relative to the additional external slot, the additional protruding nub being integrally molded with the outer shell on the exterior from the common material;
17[d]	a first accessory device having a first mating receptacle formed thereon, at least a portion of the first accessory device being releasably mountable onto each of the front receptacle or the rear receptacle on the exterior of the outer shell; and
17[e]	a second accessory device having a second mating receptacle formed thereon, at least a portion of the second accessory device being releasably mountable onto each of the front receptacle or the rear receptacle on the exterior of the outer shell;
17[f]	wherein the brim, the front receptacle, and the rear receptacle are a unitary feature of the outer shell.

CERTIFICATION OF COMPLIANCE WITH TYPE-VOLUME LIMITS

As counted by Microsoft Word, this Petition includes 14,000 words and is therefore in compliance with the 14,000-word limit established by 37 C.F.R. §42.24(a)(1)(i). Accordingly, pursuant to 37 C.F.R. §42.24(d), Petitioners' lead counsel hereby certifies that this Petition complies with the type-volume limits established for an IPR petition.

Dated: April 18, 2025

Respectfully Submitted,

/ Alexander B. Stein /

Alexander B. Stein, Reg. No. 71,397

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §42.6(e)(4) and 42.105, lead counsel for Petitioner hereby certifies that on April 18, 2025, copies of this Petition and all supporting exhibits were sent via Priority Mail Express to the correspondence address of record for the '327 Patent:

Leydig, Voit & Mayer, Ltd.
180 North Stetson Ave., Suite 4900
Chicago, Il 60601-6731

Courtesy copies have also been delivered electronically to opposing counsel of record in the district court litigation and International Trade Commission (ITC) litigation involving this patent.

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