

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. 12,268,265
Case No. PGR2025-00080

Petition for Post-Grant Review
Under 35 U.S.C. §322 and 37 C.F.R. §42.204

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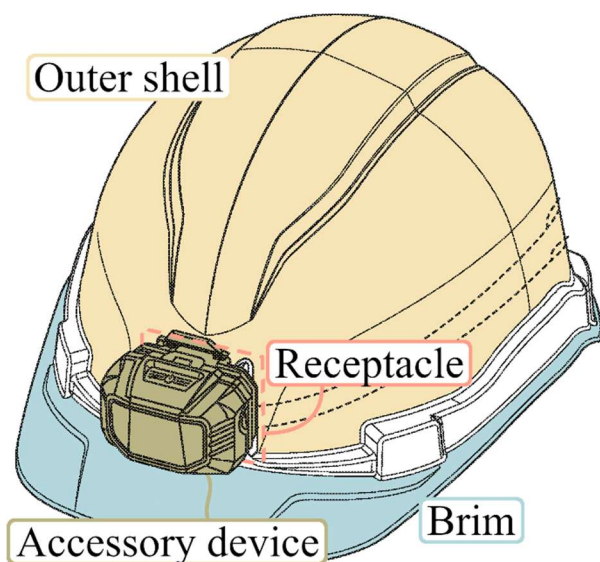
Exhibit	Description
Ex-1001	U.S. Patent No. 11,452,327 (“’327 Patent”)
Ex-1002	Declaration of Expert Dr. Per Reinhall
Ex-1003	<i>Curriculum Vitae</i> of Expert Dr. Per Reinhall
Ex-1004	Prosecution History of U.S. Patent Application 16/246,935 (“’935 Application”) that led to the ’327 Patent
Ex-1005	U.S. 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/osh3151.pdf (Personal Protective Equipment) OSHA 3151-12R 2004.
Ex-1018	Internet Archive Declaration with exhibit
Ex-1019	U.S. Patent No. 12,268,265 (“’265 Patent”)
Ex-1020	Prosecution History of U.S. Patent Application 17/856,628 (“’628 Application”) that led to the ’265 Patent
Ex-1021	’628 Application as filed July 1, 2022
Ex-1022	First Amended Complaint under Section 337 of the Tariff Act of 1930, as Amended, In the Matter of Certain Glow Fish Tape Systems, Safety Helmet Systems, and Components Thereof, Investigation No. 337-TA-1442, May 5, 2025
Ex-1023	Exhibit 64 (Patent Owner’s “Exemplary Domestic Industry Claim Chart for U.S. Patent No. 12,268,265”) to the First Amended complaint, In the Matter of Certain Glow Fish Tape Systems, Safety Helmet Systems, and Components Thereof, Investigation No. 337-TA-1442, May 5, 2025

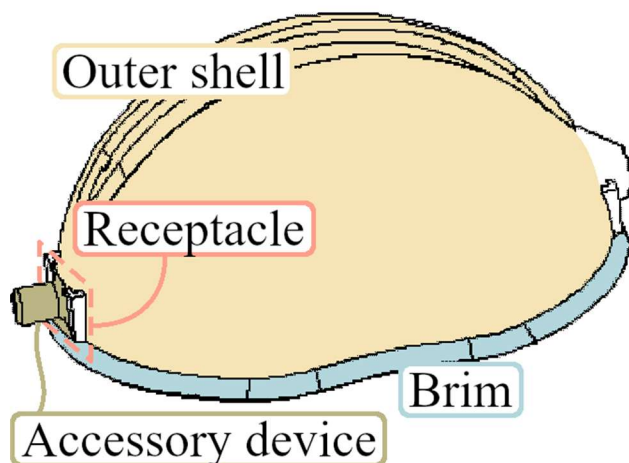
1. Introduction

Milwaukee Electric Tool Corporation (“Petitioner”) requests post-grant review (“PGR”) of claims 1-4 (“Challenged Claims”) of U.S. Patent No. 12,268,265 (“’265 Patent,” Ex-1019), which is allegedly owned by Klein Tools, Inc. (“Patent Owner”).

The ’265 Patent purports to improve on century-old safety helmets 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-1019, Fig. 1 (’265 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).

Petitioner submits in Ground 2 that the claims are invalid under 35 U.S.C. §112(a):

No.	Argument
1	Lacking written description and enablement for “a stop...wherein the stop is integrally molded,” and “the outer shell, the front receptacle [which includes the stop], and the rear receptacle [also includes the stop] are formed from a common material,” claims 1-4 fail under 35 U.S.C. § 112
2	Lacking support for pairs of external slots, claims 1-4 fail under 35 U.S.C. § 112(a)

While Petitioner believes that the Challenged Claims lack written description, to the extent that Patent Owner argues and the Board agrees that there

is support for the features related to pairs of external slots, the Challenged Claims are obvious and/or anticipated based on what Patent Owner has said pairs of external slots could look like in the parallel ITC proceeding. *See* Ex-1023 at 10 (Patent Owner's Exemplary Domestic Industry Claim Chart for the '265 Patent).

Thus, if the Challenged Claims do not fail §112(a), as discussed in §6 and summarized below, the Challenged Claims are obvious in view of Yan, with secondary references teaching the stop and clip features.

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

Additionally, if the Challenged Claims do not fail §112(a), given the introduction of new matter during prosecution of the parent application (§5.3), the Challenged Claims are not entitled to their claimed priority date, and, therefore, the claims are anticipated by Patent Owner's own news release describing its allegedly patent-practicing helmet. Thus, Ground 6 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
6	Claims 1-4 are anticipated by Klein News Release under 35 U.S.C. §102

2. Grounds for Standing

Petitioner certifies that the '265 Patent is available for PGR and that Petitioner is not barred or estopped from requesting PGR of the Challenged Claims on the asserted grounds.

3. Time for Filing

The '265 Patent issued on April 8, 2025. Ex-1020, 189. This petition is being timely filed no later than the date that is nine months after the date of the grant of the '265 Patent.

4. Mandatory Notices

4.1 Real Parties-in-Interest

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

4.2 Related Matters

Patent Owner is currently asserting the '265 Patent in the following cases:

- 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)²

Petitioner also notes that the '265 Patent is in the same family as U.S. Patent No. 11,452,327 (the "'327 Patent") and U.S. Patent App. No. 19/074,885. Petitioner challenged the '327 Patent in IPR2025-00724.

4.3 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), Joyce Guo (Reg. No. 81,826), Jason C. White (Reg. No. 42,223) and Scott Sherwin (provisionally recognized PTAB attorney) as back-up counsel.

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

4.4 Service Information

Petitioner consents to electronic service at 265Patent-Metco-Klein-PGR@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).

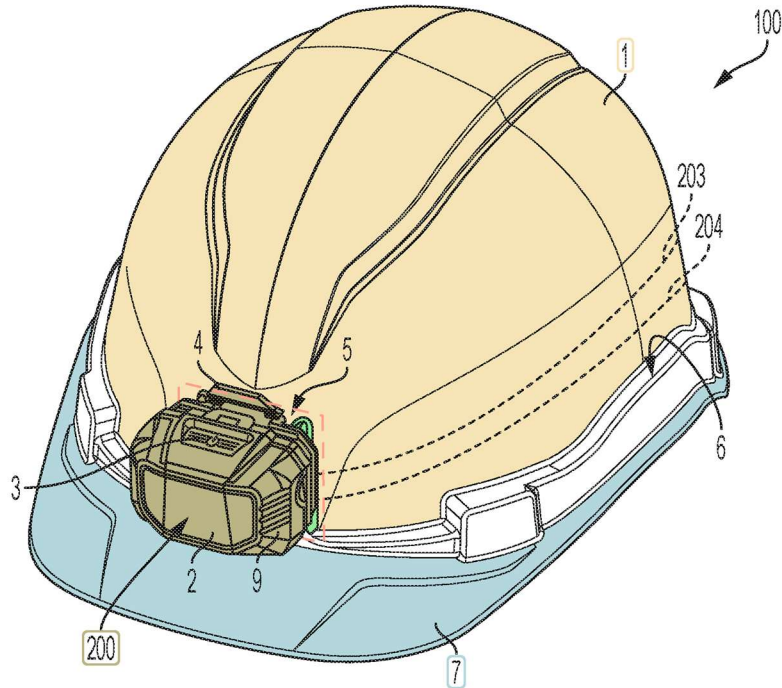
² The '265 Patent was added to the ITC case in an amended complaint dated May 5, 2025. *cf.* Ex-1016, Ex-1022.

5. The '265 Patent

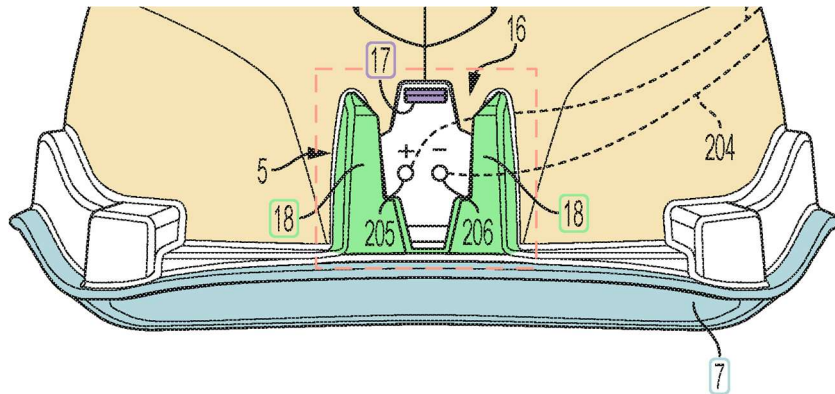
5.1 Summary

The '265 Patent issued from the '628 Application, filed on July 1, 2022, and it claims priority to the as '935 Application (the "Parent Application"), which was filed on January 14, 2019 (and issued as the '327 Patent), and to the '472 Provisional, filed on January 26, 2018, and to the '491 Provisional, filed on March 20, 2018 (the '935 Application, the '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-1019, claims 1-4. Despite providing support for only a **single** receiving slot with a protruding nub centrally disposed (Ex-1019, 6:3-6), the Challenged Claims go beyond this by reciting that each receptacle includes a **pair** of external slots (e.g., flanked by raised **walls**) and a **protruding member**. *See id.*, Fig. 3.



Ex-1019, Fig. 1



Ex-1019, Fig. 3 (Excerpt; single slot only)

5.2 Priority Date

Grounds 3-5 are presented using January 26, 2018, the filing date of the earliest provisional, as the alleged priority date. §§6.1-6.5.

Petitioner also separately challenges the priority date because the '265 Patent differs materially from Priority Applications due to new matter added on

October 21, 2021 and April 25, 2022 in the Parent Application. This new matter is present in each Challenged Claim. The priority date is, therefore, no earlier than October 21, 2021. Ground 6 relies on this priority date.³ §6.6.

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

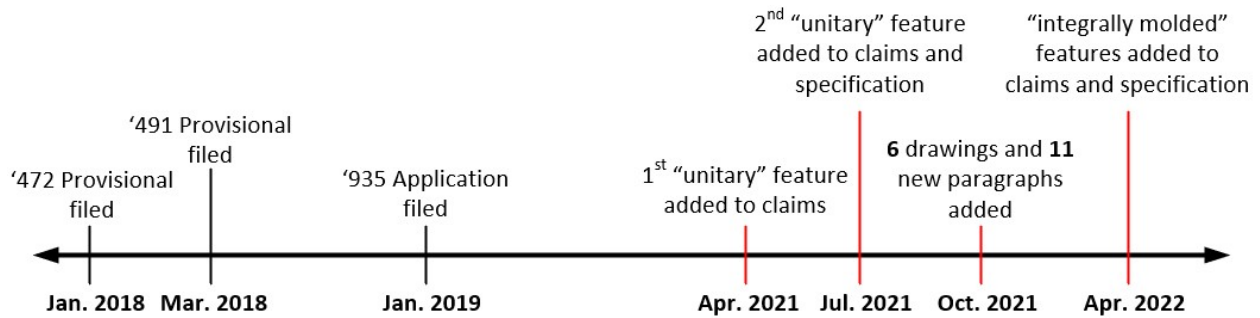
5.3 Prosecution History

5.3.1 Prosecution of Parent Application

The most notable prosecution aspect in the Parent Application was Patent Owner's repeated addition of new matter.

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

³ The references of Grounds 2-4 also qualify as prior art under this later priority date.



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 (6) new drawings and amendments to existing paragraphs as well as eleven (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. Notably, when adding the new drawings, Patent Owner edited one of the drawings without informing the Examiner, as discussed further in §6.6.1. On April 25, 2022, Patent Owner added even more language, this time 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 of the Parent Application. *See* Ex-1008 (redline showing differences between the ’935 Application as-filed and the ’327 Patent); *see also* Ex-1021 (as-filed application that led to the ’265 Patent, which includes all of the added subject matter from the Parent Application).

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 in Ground 6, the Hill Declaration is flawed, and thus Patent Owner is not entitled to its claimed priority date. §6.6.1.

5.3.2 Prosecution of '628 Application

After adding new matter in the Parent Application, Patent Owner subsequently forgot to file any drawings with the '628 Application. Ex-1021; Ex-1020, 41. It was only after a “Notice of Omitted Items in a Nonprovisional Application” was issued by the USPTO that Patent Owner, seven days later, submitted the Figures, noting that the “drawings were inadvertently omitted upon filing of this application.” Ex-1020, 41-43, 49-61, 64.

A rejection was issued on August 2, 2024 for pending claims 21-39 (*Id.*, 129), in which claims 36-39 were withdrawn, claims 21-35 were rejected on the ground of non-statutory double patenting as being unpatentable over claims 1-17 of the '327 Patent (*Id.*, 139-141), and claims 21-22 and 24-35 were rejected in view of various combinations of prior art (*Id.*, 129-139).

Patent Owner then filed a terminal disclaimer over the parent patent, the '327 Patent, to overcome the rejection based on the grounds of non-statutory double patenting (*Id.*, 159), and amended dependent claim 23 into independent form. Patent Owner canceled the other claims, and a Notice of Allowance was then issued on February 18, 2025. *Id.*, 150-153, 167.

5.4 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 '265 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.

5.5 Claim Construction

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

6. The Challenged Claims Are Unpatentable

6.1 Ground 1: Lacking written description and enablement for “a stop...wherein the stop is integrally molded,” and “the outer shell, the front receptacle [which includes the stop], and the rear receptacle [also includes the stop] are formed from a common material,” claims 1-4 fail under 35 U.S.C. § 112

In a PGR, the Board can also apply the reasoning from § 5.2-5.3, which analyzed Patent Owner’s improper introduction of new matter (i.e., the “integrally molded” stop) into the '327 Patent (to which the '265 Patent claims priority to and shares an identical specification with) that was not included in the Priority

Applications, and find claims 1-4 unpatentable under 35 U.S.C. § 112 for lack of written description and enablement. *See Adello Biologics, LLC v. Amgen Inc.*, PGR2019-00001, Paper 13 at 12, (P.T.A.B. April 19, 2019) (instituting on same written description grounds that underlay assessment of PGR eligibility without further analysis because the priority application and issued patent shared a common specification).

To the extent that Patent Owner argues, and the Board agrees, that the '265 Patent is entitled to the priority date of the Priority Applications, then as a continuation, the '265 Patent must be supported by the disclosure of the Priority Applications alone for 35 U.S.C. § 112 compliance. *See* 35 U.S.C. § 120 (“An application for patent for an invention disclosed in the manner provided by section 112(a)...in an application previously filed in the United States...shall have the same effect, as to such invention, as though filed on the date of the prior application.”)

As explained in §§ 5.2-5.3 and § 6.6.1, the Priority Applications as-filed are silent regarding integral molding or forming the protruding nub or the stop of a common or same material as the outer shell, despite the '265 Patent reciting limitations based on such non-existent disclosures in the Priority Applications such as “the stop is integrally molded with the exterior surface of the outer shell” in claim 1, element 1[b] and “the outer shell, the front receptacle [which includes the stop], and the rear receptacle [also includes the stop] are formed from a common material”

in claim 2. Thus, the specification of the Priority Applications alone (which we must consider because the '265 is a continuation of those Priority Applications), does not reasonably convey to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date nor that a POSA, in light of the knowledge of the time, could make or use the invention from the disclosures in the patent without undue experimentation. Ex-1002 at ¶¶ 73-76.

**6.2 Ground 2: Lacking Support for Pairs of External Slots,
Claims 1-4 Fail 35 U.S.C. § 112(a)**

For the following reasons, the terms “first pair of external slots” and “second pair of external slots” recited in each of claims 1-4 of the '265 Patent lack written description under 35 U.S.C. § 112(a).

Independent claim 1 of the '265 Patent recites (emphasis added):

- “a front receptacle having a *first pair of external slots* and a stop, wherein each of the *first pair of external slots* extends upwardly along the front side of the outer shell and the stop is disposed between the *first pair of external slots*, and wherein the stop is integrally molded with the exterior surface of the outer shell;”
- “a rear receptacle disposed on the rear side on the exterior surface of the outer shell, the rear receptacle having a *second pair of external slots*,” and
- “wherein **each** of the *first pair of external slots* of the front receptacle is a receiver slot flanked by raised walls.”

Thus, the claims require a “pair of external slots” in each of the front and rear receptacles of the claimed helmet, where an integrally molded stop is disposed

between each pair of external slots and each external slot of each pair is a receiver slot flanked by raised walls. Ex-1002, ¶¶77-78.

However, the specification of the '265 Patent does not have support for each receptacle having more than one external slot. Ex-1002, ¶79. Instead, the written description recites “[a]s shown in FIG. 3, the protruding nub 17 is centrally disposed relative to the external slot.”⁴ Ex-1019, 6:3-5. There is no other reference, depiction, or disclosure of a pair of external slots on the front and back of the helmet.

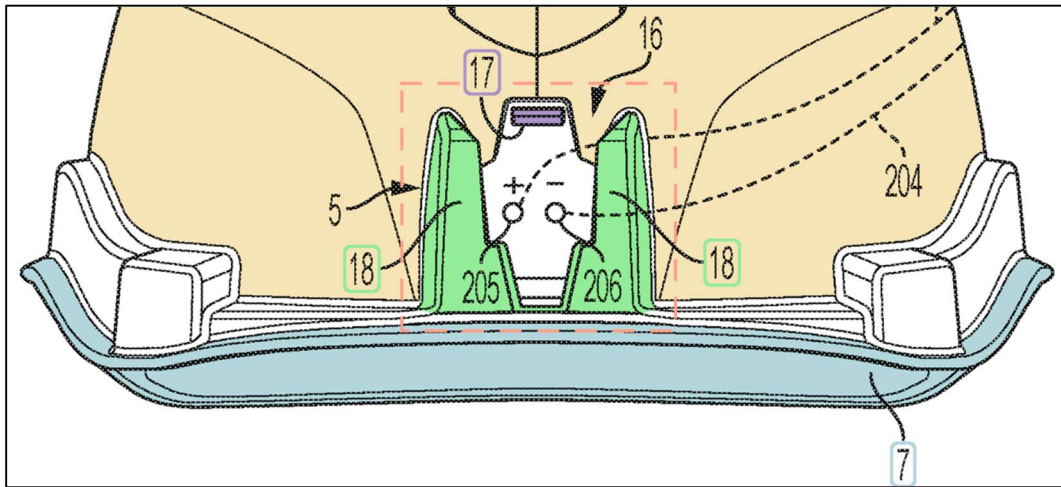
Moreover, the '265 Patent discloses that the protruding nub (stop/protruding member) is centrally disposed relative to **the** external slot. *Id.* (emphasis added). There is no disclosure of “the stop [being] disposed between the first pair of external slots,” as required by claim 1. Ex-1002, ¶79.

Further, the specification refers to “the front tapered receiver slot 5” and “the rear tapered receiver slot 11,” shown below in the Fig. 3 excerpt and Fig. 7.⁵ Nowhere does the specification disclose more than one slot in the front or in the

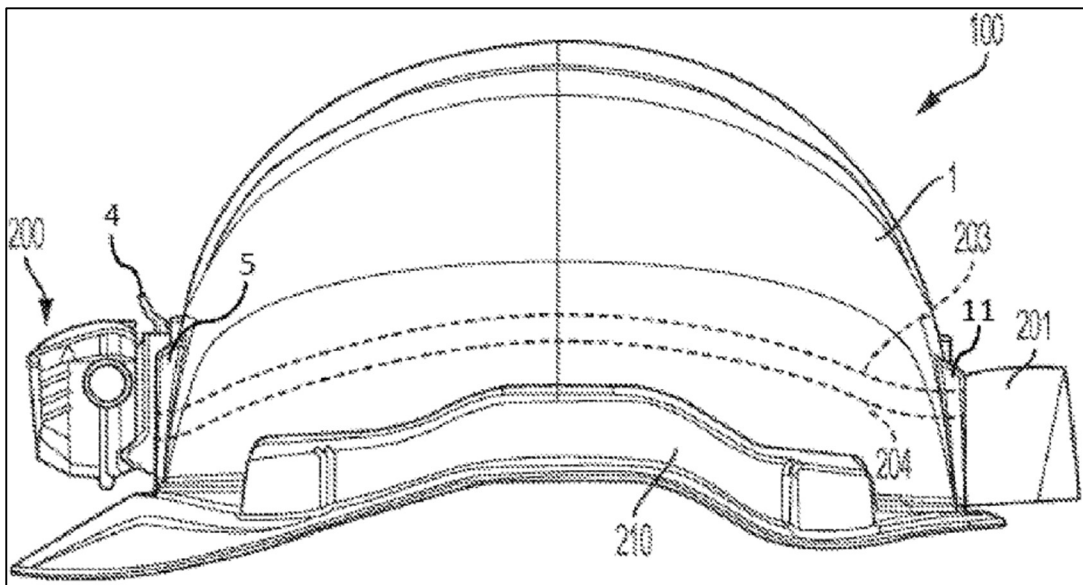
⁴ This language was belatedly added to the specification of the Parent Application on April 25, 2022 (Ex-1004, 58).

⁵ The “rear tapered receiver slot 11” language was added to the specification of the Parent Application, and reference numeral 11 was added to Fig. 7 of the Parent Application, on October 21, 2021 (Ex-1004, 149-155, 158).

back. Ex-1002, ¶80. Nor do any of the figures show more than one slot in the front or the back of the helmet. *Id.*



Ex-1019, Fig. 3 (excerpt)



Ex-1019, Fig. 7

Contrast the disclosure of the singular external slot (front and back) with the disclosure of a plurality accessory slots 6 (sides) in the '265 Patent. The specification

describes the “accessory slots 6” in the plural (Ex-1019, 3:48), teaching that the accessory slots “may be present to accept various accessories.” Ex-1019, 3:48-49. This shows that Patent Owner knew how to properly disclose multiples of claim elements (e.g., more than one accessory slot 6), yet intentionally chose not to do so when disclosing only a singular external slot in the specification. Ex-1002, ¶81.

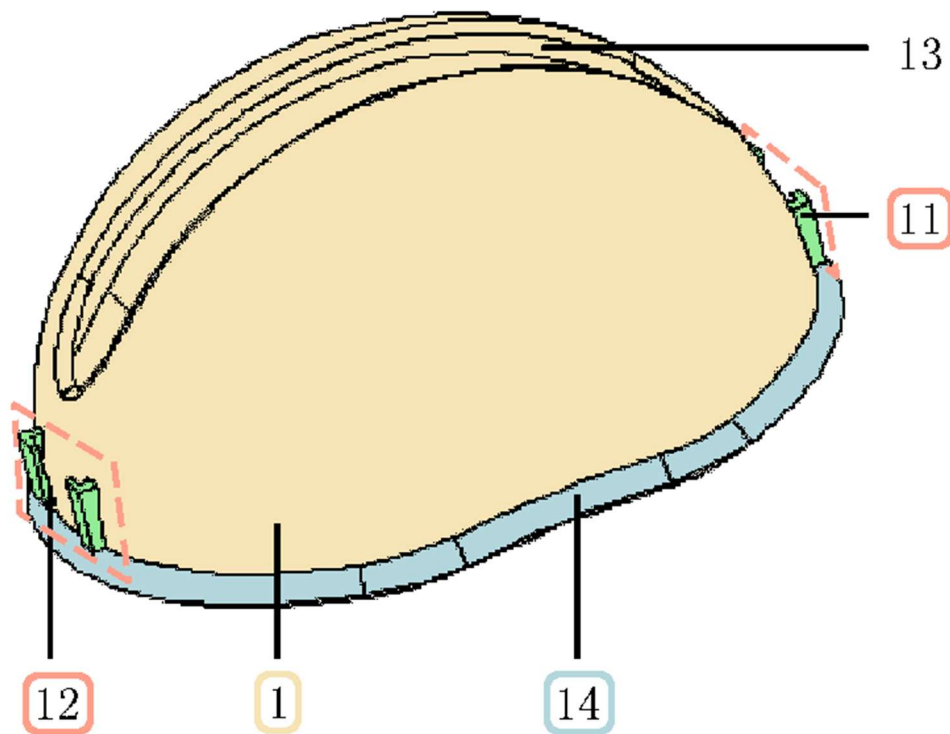
Patent Owner’s own position during litigation is inconsistent as they argue the same aspects of the disclosure disclose both a singular external slot (for the ’327 Patent) and a pair of external slots (for the ’265 Patent). *See* Ex-1022. A POSA reviewing the ’265 Patent would not have understood it to disclose the “first pair of external slots” or the “second pair of external slots” required by the Challenged Claims. Ex-1002, ¶82. Therefore, the terms “first pair of external slots” and “second pair of external slots” do not include sufficient written description, and claims 1-4 of the ’265 Patent are invalid under 35 U.S.C. § 112(a).

As noted above, Grounds 3-6 are raised as an alternative to Ground 2, i.e., if Patent Owner argues and the Board agrees that the Challenged Claims do not fail 112(a) (which would be incorrect), then the Challenged Claims are invalid based on prior art showing obviousness (Grounds 2-4) and/or anticipation (Ground 6).

6.3 Ground 3: Claims 1-4 Are Rendered Obvious by Yan and Daley

6.3.1 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 symmetrically arranged **L-shaped slots**. Ex-1011, ¶¶5, 9.

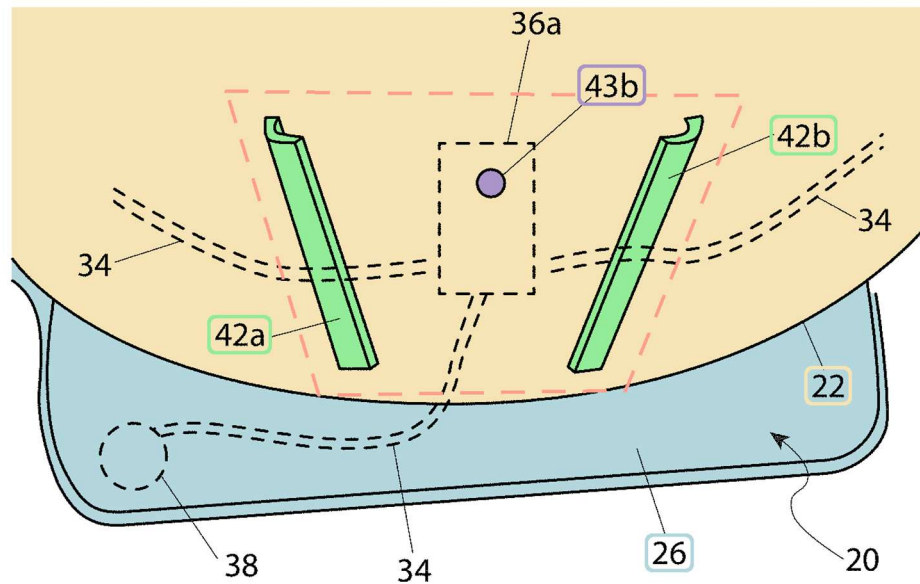


Ex-1011, Fig. 2

6.3.2 Overview of Daley

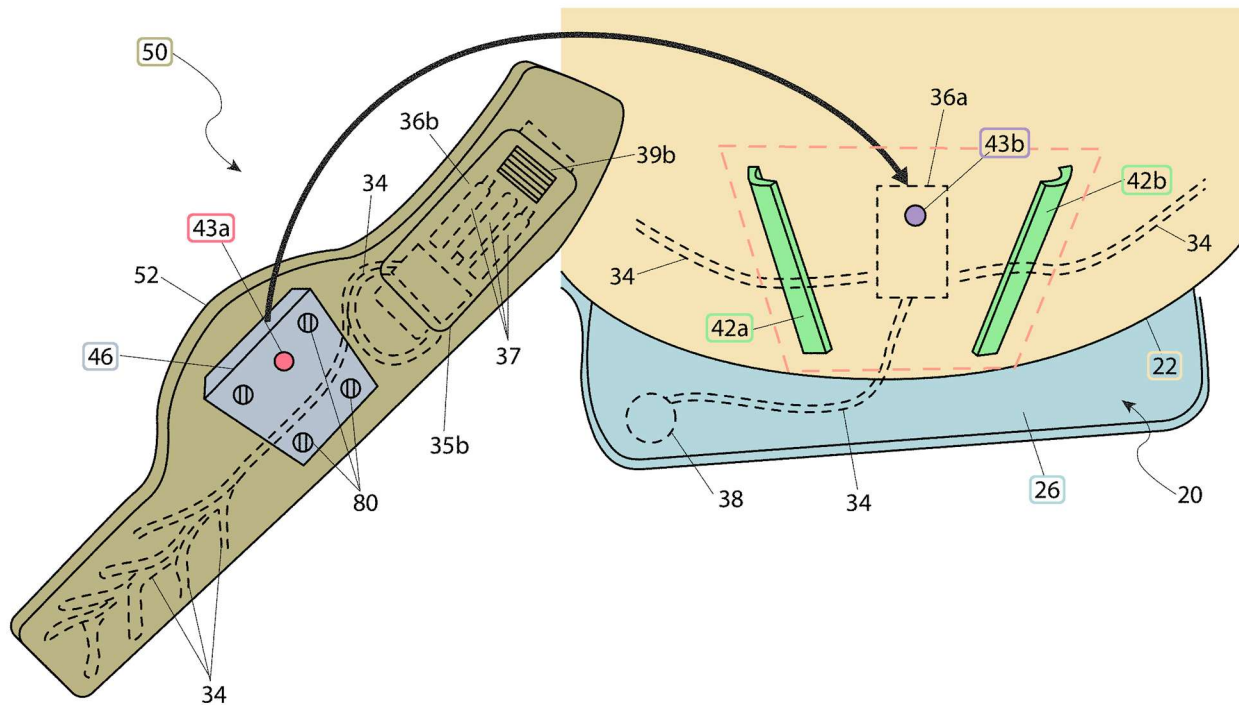
Daley issued on June 12, 2018, and has a filing date of March 24, 2015, and therefore qualifies as prior art under §102(a)(2). Daley discloses a safety helmet

with a **shell 22**, a **brim 26**, and a **receptacle** including **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

6.3.3 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 '265 Patent, *i.e.*, safety helmets. Ex-1019 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-1019, 1:27-38; Ex-1011, ¶5; Ex-1012, 5:32-43; Ex-1002, ¶84. 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, ¶85. 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 would have been motivated to adopt the teachings of Daley to integrally mold the receptacle (e.g., the space between 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, ¶86. A POSA would have been motivated to also adopt Daley's positional teaching for the protrusion to position (e.g., centrally positioned) the protrusion between the L-shaped slots in Yan. Ex-1012, 1:60-66; Ex-1002, ¶86. 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, ¶86.

When modifying Yan's snap-fit slot structures to include Daley's protrusion, a POSA would have been motivated to 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, ¶87. 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 have created 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, ¶88. 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, ¶88.

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, ¶89. Adding Daley's

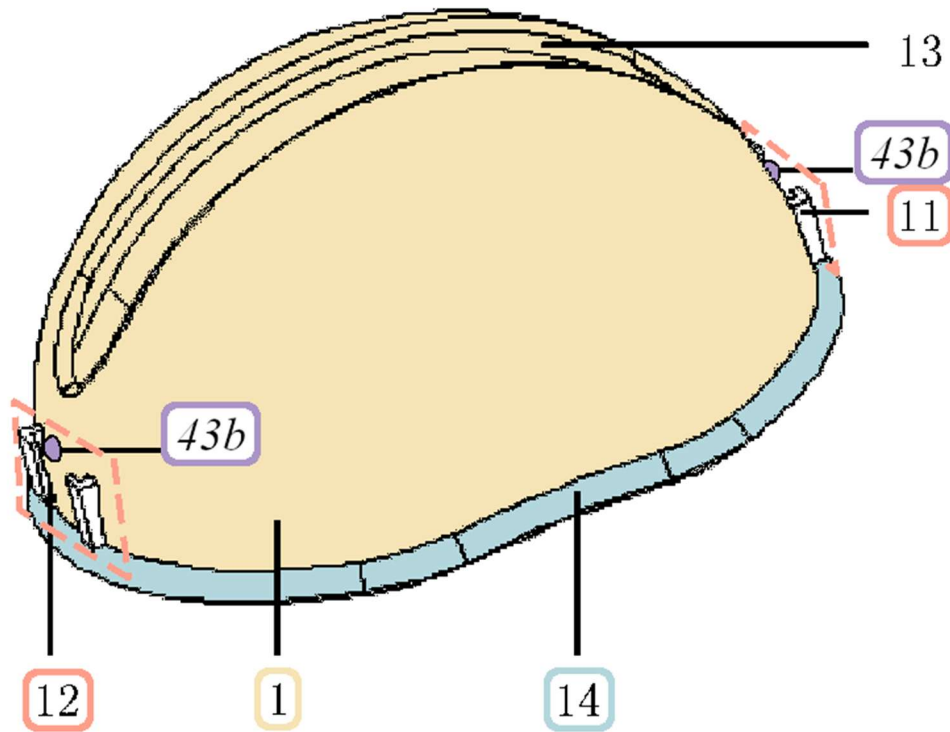
protrusion feature to Yan's snap-fit slot structures and the bracket with detent in the accessories would have been routine for a POSA exercising only ordinary skill, so the modification would have been achieved with a reasonable expectation of success.

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 a protruding nub to more securely fasten Yan's lamp accessories). Ex-1002, ¶90. 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, ¶¶ 84-90. An example depiction of the Yan-Daley helmet is below:



Ex-1011, Fig. 2 (Modified)⁶

6.3.4 Claim 1⁷

The Yan-Daley helmet renders obvious claim 1. Ex-1002, ¶¶ 92-128.

6.3.4.1 Element 1[pre]

1[pre] recites a “safety helmet system.”

⁶ Example of the Yan-Daley combination.

⁷ A claim listing is at the end of this document.

Outside of the claims, the '265 Patent does not mention a “safety helmet system.” The '265 Patent does identify safety helmets as “commonly also being referred to as ‘hard hats’” and being “for use to protect the wearer from falling objects.” Ex-1019, 1:15-17. The '265 Patent acknowledges such helmets are commonly used in several industries (*Id.*, 1:17-18) such as underground mines (*Id.*, 1:50-52). Given the lack of further details in the specification, the system of 1[pre] refers to a safety helmet along with an accessory device, which the prior art teaches.

In particular, Yan teaches “a safety helmet” (Ex-1011, ¶1) and several accessories (mining lamp 3 and LED lamp 2, Ex-1011, ¶15). Yan’s safety helmet is modified to include Daley’s protrusion 43b and, thus, if limiting, the Yan-Daley helmet teaches a safety helmet system that includes a safety helmet with an accessory device (explained in further detail below).

6.3.4.2 Element 1[a]

1[a] recites “a safety helmet.”

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 the Yan-Daley helmet teaches a safety helmet. Ex-1002, ¶97.

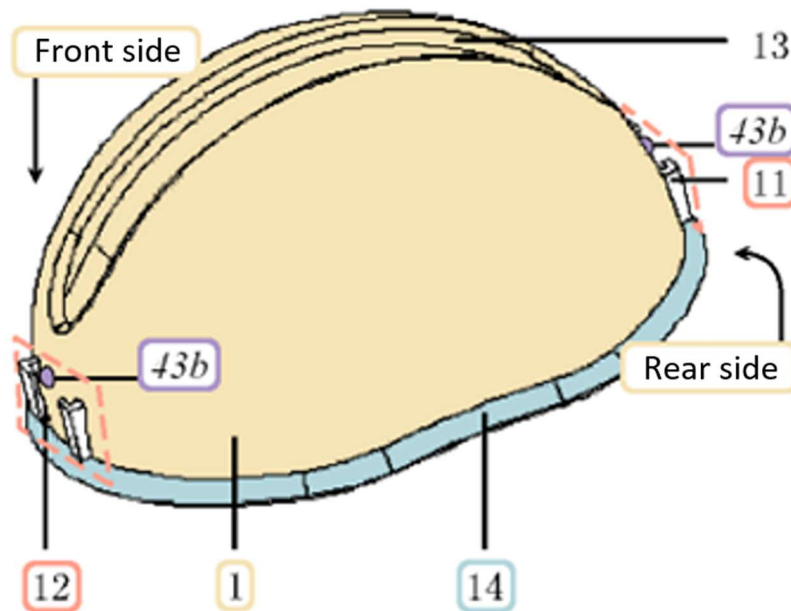
6.3.4.3 Element 1[b]

1[b] recites “a molded outer shell adapted to be worn by a user, the outer shell having an exterior surface defining a front side, a rear side, and a brim extending forward from the front side.”

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, ¶100. Therefore, the Yan-Daley helmet teaches such an outer shell (helmet body 1) adapted to be worn by a user. Ex-1002, ¶100.

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, for example, 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. Yan’s brim encircling the bottom edge of the helmet body extends forward from the front side, for example, as illustrated in modified Figure 2 below. Ex-1002, ¶101. In Figure 2, Yan illustrates a helmet **body 1** with a **brim 14** extending forward from the front side. Ex-1002, ¶101. Yan also discloses that “bottom of the helmet body is also equipped with a brim, and both the first snap-

fit slot and second snap-fit slot are located above the brim.” Ex-1011, ¶9. Yan further discloses 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. Therefore, the Yan-Daley helmet teaches such an outer shell having an exterior surface defining a front side, a rear side, and a brim extending from the front side. Ex-1002, ¶101.

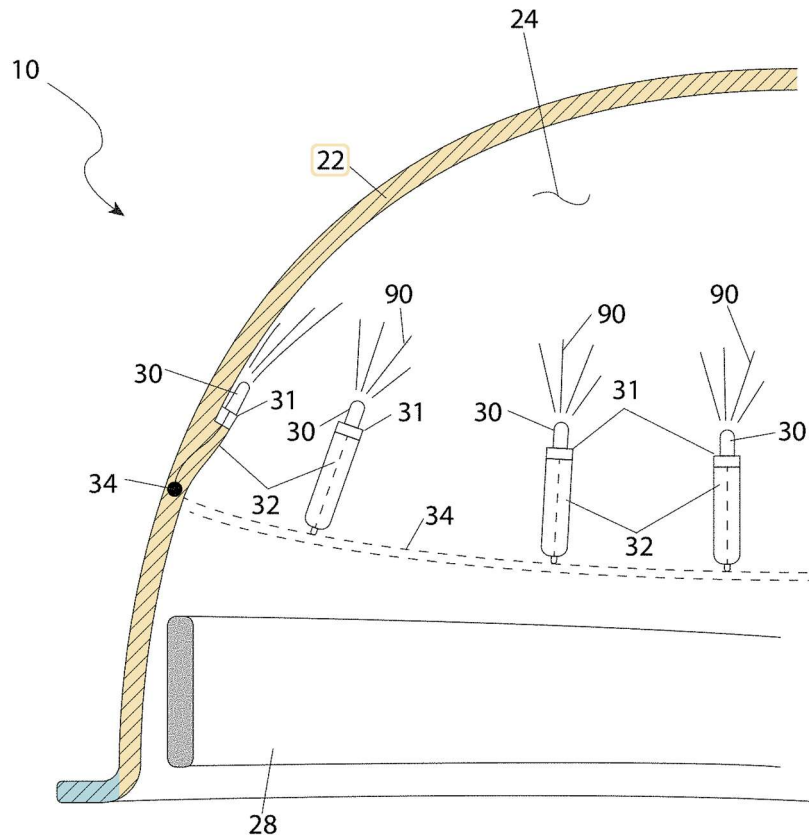


Ex-1011, Fig. 2 (Modified)⁸

The Yan-Daley helmet teaches or suggests the outer shell being molded. If Patent Owner is legally correct that line drawings alone can teach molded features (as it argued during prosecution, §6.6.1), Daley teaches this as well. Daley Figure 4 illustrates a cross-sectional view of shell 22 showing consistent lines and cross-

⁸ Example of the Yan-Daley combination.

hatching pattern throughout the shell and brim of the helmet. Ex-1002, ¶102. 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

Therefore, the Yan-Daley helmet teaches a molded outer shell (helmet body 1) adapted to be worn by a user, the outer shell having an exterior surface defining a front side, a rear side, and a brim (brim 14) extending forward from the front side.

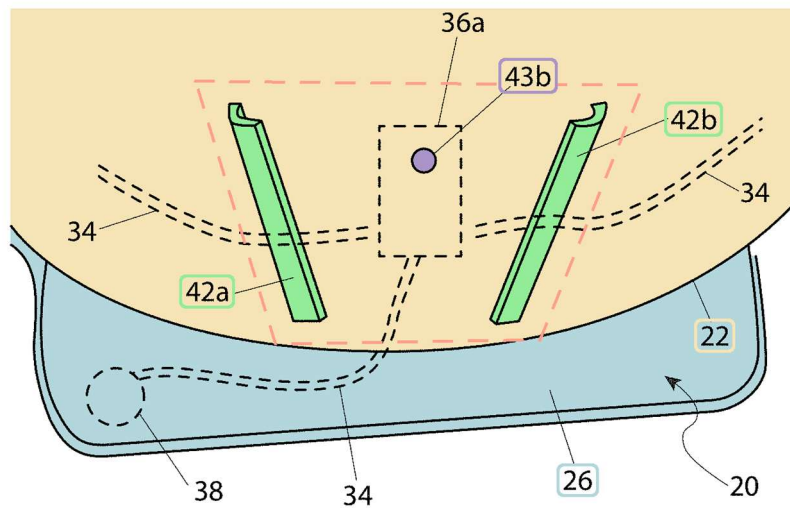
6.3.4.4 Element 1[c]

1[c] recites “a front receptacle having a first pair of external slots and a stop, wherein each of the first pair of external slots extends upwardly along the front side of the outer shell and the stop is disposed between the first pair of external slots, and wherein the stop is integrally molded with the exterior surface of the outer shell.”

First, Yan teaches a snap-fit slot 11 (a front receptacle) having L-shaped slots (a first pair of external slots) that extend upwardly along the front side of the outer shell. Ex-1011, Fig. 2 and ¶19. The two L-shaped slots of the snap-fit slot 11 form a pair of external slots extending upwardly along the front side of the outer shell. Ex-1002, ¶106.⁹

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 between the locking ears 42a and 42b (the first pair of external slots). Ex-1002, ¶107.

⁹ Unlike the '265 Patent, Yan expressly describes plural L-shaped slots.



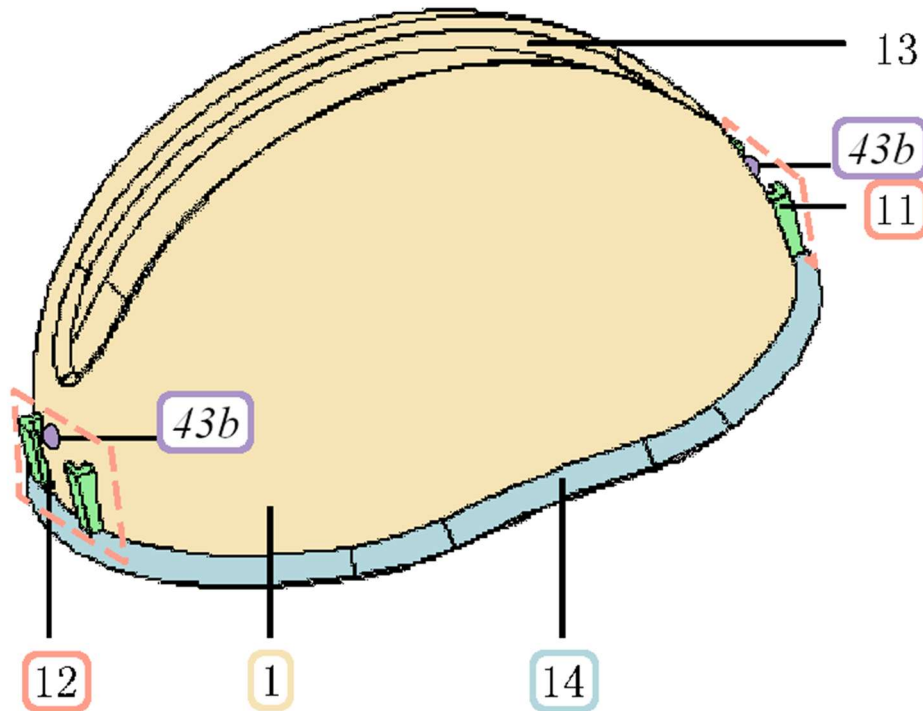
Ex-1012, Fig. 3 (Excerpt)

Thus, the protrusion 43b is a stop that is integrally molded with the exterior surface of the outer shell and is disposed between the first pair of external slots.¹⁰ Ex-1002, ¶108.

Therefore, as illustrated in the Figure below, the Yan-Daley helmet teaches a front receptacle (**snap-fit slot 11**) having a first pair of external slots (Yan's **L-shaped slots**) and a stop (**protrusion 43b**), wherein each of the first pair of external slots extends upwardly along the front side of the outer shell (**helmet body 1**) and

¹⁰ 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.

the stop is disposed between the first pair of external slots, and wherein the stop is integrally molded with the exterior surface of the outer shell.



Ex-1011, Fig. 2 (Modified)¹¹

6.3.4.5 Element 1[d]

1[d] recites “a rear receptacle disposed on the rear side on the exterior surface of the outer shell, the rear receptacle having a second pair of external slots.”

First, 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

¹¹ Example of the Yan-Daley combination.

mere duplication of parts has no patentable significance unless a new and unexpected 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, ¶112.

However, even if 1[d] 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. Ex-1002, ¶113. Therefore, the Yan-Daley helmet teaches a rear receptacle (snap-fit slot 12) disposed on the rear side on the exterior surface of the outer shell, the rear receptacle (snap-fit slot 12) having a second pair of external slots (Yan’s L-shaped slots).

6.3.4.6 Element 1[e]

1[e] recites “an accessory device having a mating receptacle formed thereon, at least a portion of the mating receptacle being selectively engageable with the front receptacle or the rear receptacle such that the accessory device is releasably mountable onto each of the front receptacle and the rear receptacle.”

Yan teaches the “mining lamp 3 and the LED lamp 2 are both detachably mounted on the helmet body 1.” Ex-1011, claim 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, ¶116.

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 have been obvious to a POSA to modify each of lamp 2 and lamp 3 to include Daley’s bracket 46. §6.3.3; Ex-1002, ¶117.

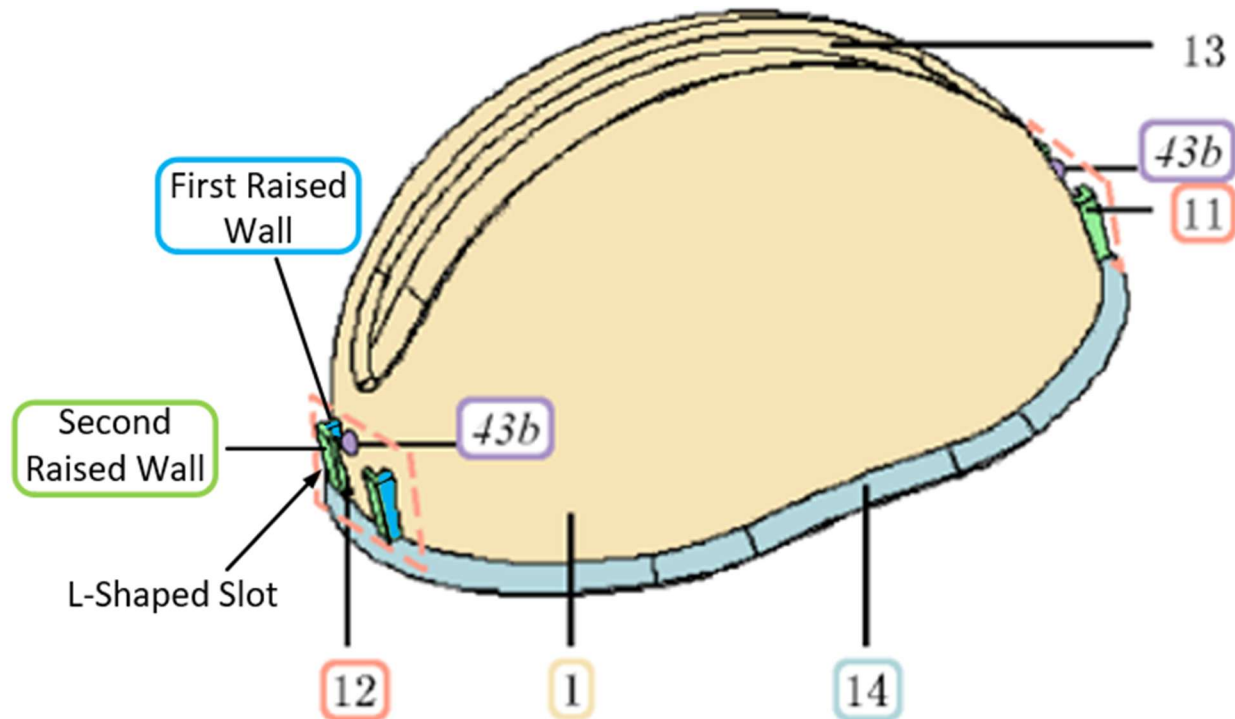
Therefore, Yan-Daley helmet teaches an accessory device (lamp 2) having a mating receptacle (bracket 46) formed thereon, at least a portion of the mating receptacle being selectively engageable with the front receptacle (snap-fit slot 11) or the rear receptacle (snap-fit slot 12) such that the accessory device is releasably mountable onto each of the front receptacle and the rear receptacle. Ex-1002, ¶118.

6.3.4.7 Element 1[f]

1[f] recites “wherein each of the first pair of external slots of the front receptacle is a receiver slot flanked by raised walls, and the stop comprises a protruding member.”

Yan teaches that each of snap-fit slot 11 and snap-fit slot 12 has “two symmetrically arranged L-shaped slots.” Ex-1011, ¶17. As seen in Fig. 2 of Yan (reproduced and annotated below), each L-shaped slot has two perpendicular raised walls.

Second, Patent Owner uses the terms “protruding nub” and “protruding member,” interchangeably with the term “stop.” Ex-1001, claims 1-2, 8; Ex-1019, claims 1, 2; Ex-1021, ¶18. Outside of the claims, the '265 Patent does not mention a “protruding member” and mentions a “stop” only once. Ex-1021, ¶18 (reciting “a stop shown in the preferred embodiment as a protruding nub”). Therefore, Daley’s protrusion 43b teaches the protruding member and the stop. Ex-1002, ¶121-122. 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 or suggests such a receiver slot flanked by raised walls (first and second raised walls of each **L-shaped slot**) with a stop comprising a protruding member (**protrusion 43b**).



Ex-1012, Fig. 2 (Modified)¹²

To the extent Patent Owner argues a receiver slot requires tapering, this would be obvious as a known technique 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 or suggests this aspect too.

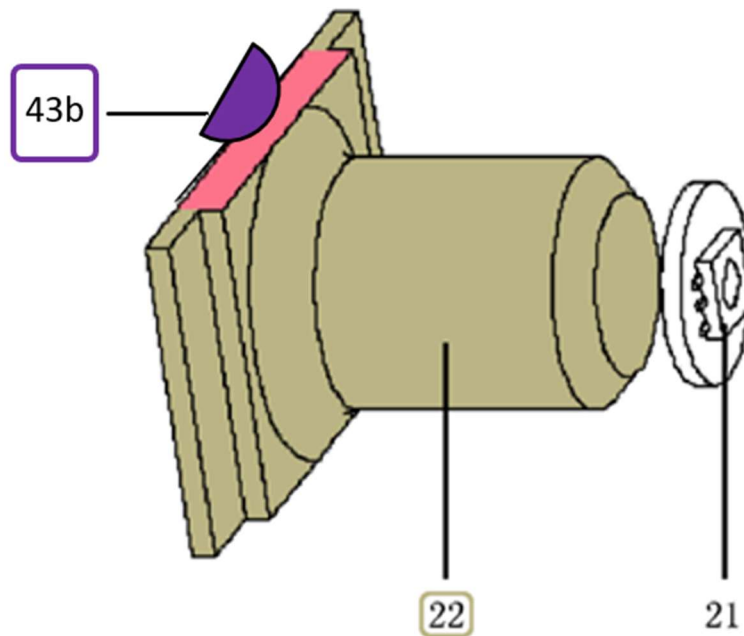
¹² Example of the Yan-Daley combination.

6.3.4.8 Element 1[g]

1[g] recites “wherein the accessory device includes a clip.” The ’265 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). Ex-1002, ¶124.

The Yan-Daley helmet has Yan’s lamps 2 and 3 modified to include the bracket 46. Daley teaches that the 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. Thus, the Yan-Daley helmet teaches or suggests that the accessory device (lamp 2 or 3) includes a clip (detent 43a).

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, ¶125. Yan teaches that “the LED lamp 2 comprises ... an LED lamp body 22.” Ex-1011, ¶21. The lamp body includes a top portion (a clip) that would engage with the nub 32. Ex-1002, ¶125.



Ex-1011, Fig. 3 (Modified excerpt)

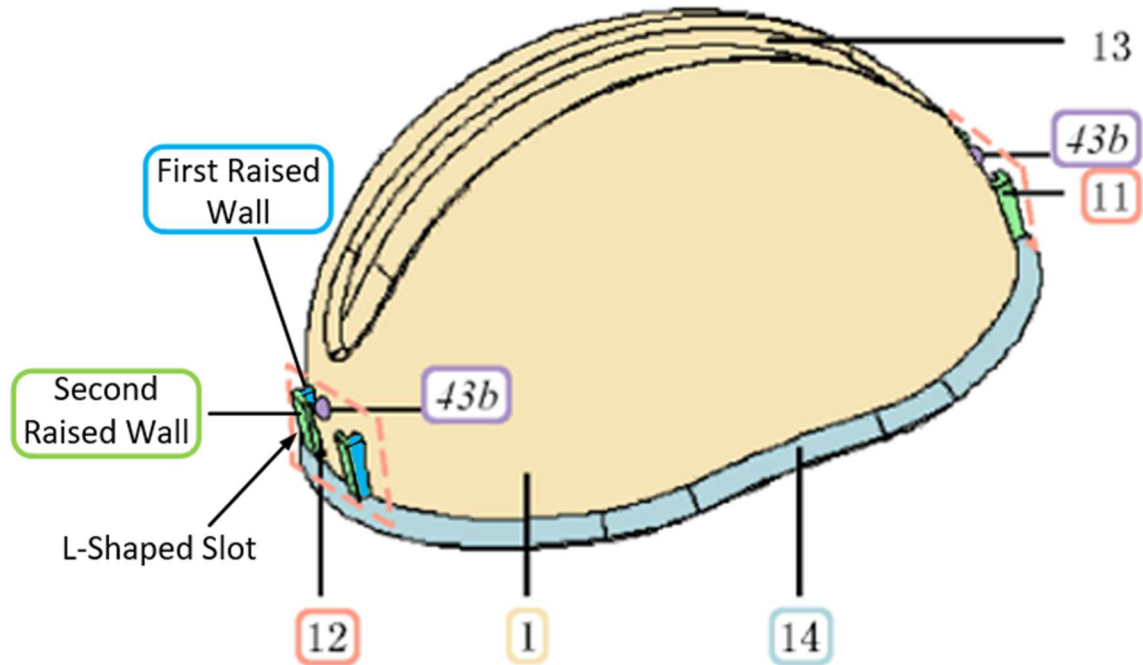
Therefore, the Yan-Daley helmet teaches this element.

6.3.4.9 Element 1[h]

1[h] recites “wherein the receiver slot aligns the accessory device therein, the raised walls retain the accessory device therebetween, and the protruding member engages the clip to releasably mount the accessory device in the front receptacle.”

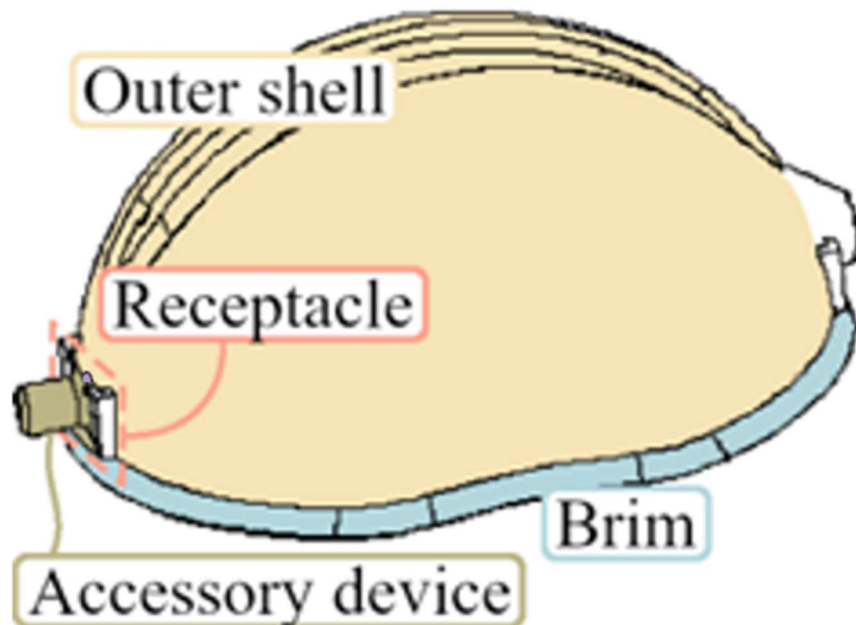
The Yan-Daley helmet teaches that the receiver slot (formed by the L-shaped slots) aligns the accessory device (lamp 2 or 3) therein. Yan Figure 1 shows lamp 2 aligned within snap-fit slot 12 and lamp 3 aligned within snap-fit slot 11. The Yan-Daley helmet also teaches that the raised walls (first and second raised walls of each the L-shaped slots, annotated below) retain the accessory device (lamp 2 or 3)

therebetween (as shown in Yan's Figure 1), and the protruding member (protrusion 43b) engages the clip (bracket 46) to releasably mount the accessory device in the front receptacle (snap-fit slot 11).



Ex-1012, Fig. 2 (Modified)¹³

¹³ Example of the Yan-Daley combination.



Ex-1012, Fig. 1 (Modified)¹⁴

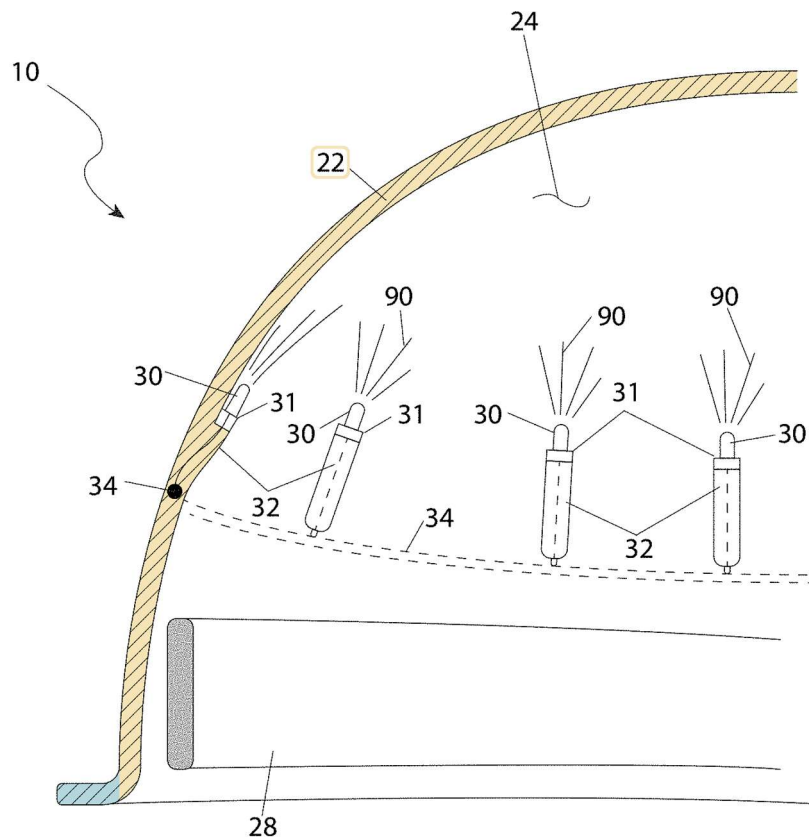
6.3.5 Claim 2

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

§6.3.4. Claim 2 adds “wherein the outer shell, the front receptacle, and the rear receptacle are formed from a common material.”

The Yan-Daley helmet teaches or suggests being formed from a common material. Daley 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.

¹⁴ Example of the Yan-Daley combination.



Ex-1012, Fig. 4

Thus, a POSA would have found it obvious to form Yan's shell using a common material throughout (as Daley teaches). §6.3.3; Ex-1002, ¶131. Therefore, the Yan-Daley helmet teaches or suggests that the outer shell (helmet body 1), the front receptacle (snap-fit slot 11), and the rear receptacle (snap-fit slot 12) are formed from a common material.

6.3.6 Claim 3

Claim 3 depends from claim 2, which is rendered obvious by Yan-Daley.

§6.3.5. 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 ’265 Patent. Ex-1002, ¶133.

In addition to plastic being a known material suitable for safety helmets, Daley teaches integrally molding features into the helmet shell (§6.3.4.4) and using plastic injection molding. Ex-1012, 4:50-66. The Yan-Daley helmet integrates Daley’s integral molding technique and, in doing so, would have used the plastic injection molding as Daley teaches. §6.3.3. Therefore, it would have been obvious to a POSA to mold the Yan-Daley helmet using plastic as a common material. Ex-1002, ¶134.

6.3.7 Claim 4

Claim 4 depends from claim 1, which is rendered obvious by Yan-Daley. §6.3.4. Claim 4 adds “further including 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.”

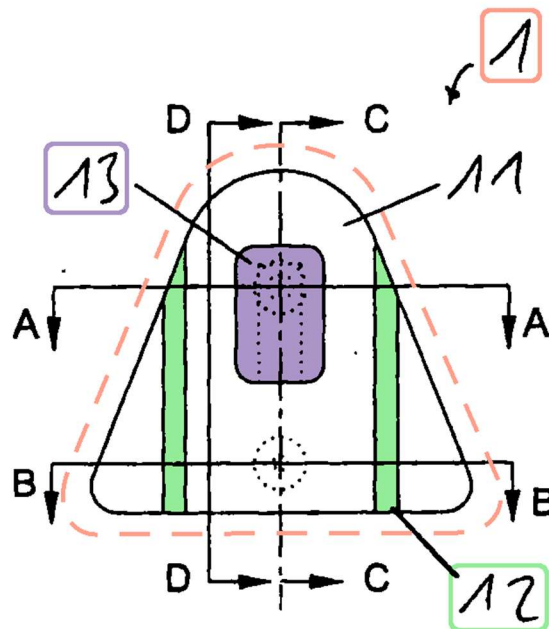
The second accessory device is mere duplication of parts. As pointed out previously, such duplication has no patentable significance unless a new and unexpected result is produced. *Application of Harza*, 274 F.2d 669, 671 (C.C.P.A. 1960). Here, no new or unexpected result is produced. The results (e.g., two mountable accessory devices) are instead predictable and expected. Ex-1002, ¶136.

If claim 4 is limiting, the Yan-Daley helmet teaches a second accessory device (“mining lamp 3 and the LED lamp 2 are both detachably mounted on the helmet body 1.” Ex-1011, ¶15) having a second mating receptacle (bracket 46). §6.3.4.6. 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. §6.3.3; Ex-1002, ¶137. The Yan-Daley helmet also teaches or suggests at least a portion (bracket 46) of the second 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.*

**6.4 Ground 4: Claims 1-4 Are Rendered Obvious by Yan,
Daley, and Kiessler**

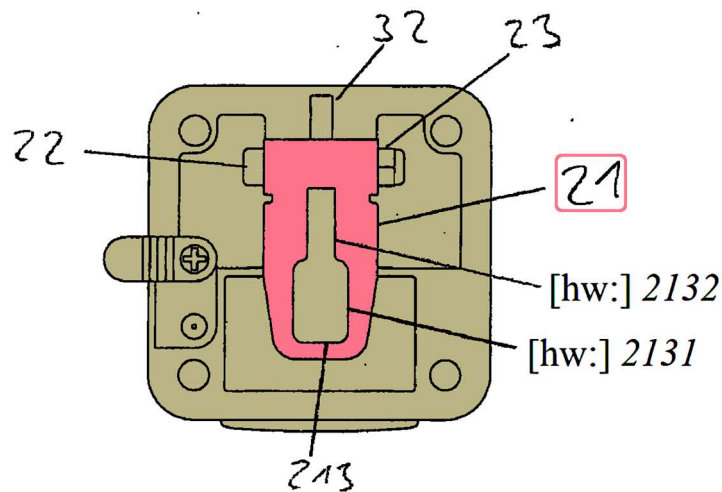
6.4.1 Overview of Kiessler

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

6.4.2 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 '265 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-1019, 1:27-38; Ex-1011, ¶5; Ex-1012, 5:32-43; Ex-1015, ¶4; Ex-1002, ¶138. Ample motivation-to-combine Kiessler's teachings to modify the Yan-Daley helmet also existed. Ex-1002, ¶138-142.

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, ¶139.

Upon reviewing the analogous Kiessler reference, a POSA would have seen its teachings related to using a lamp 3 (accessory device) with a fixture (mating receptacle) that includes 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, ¶140. 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.”).

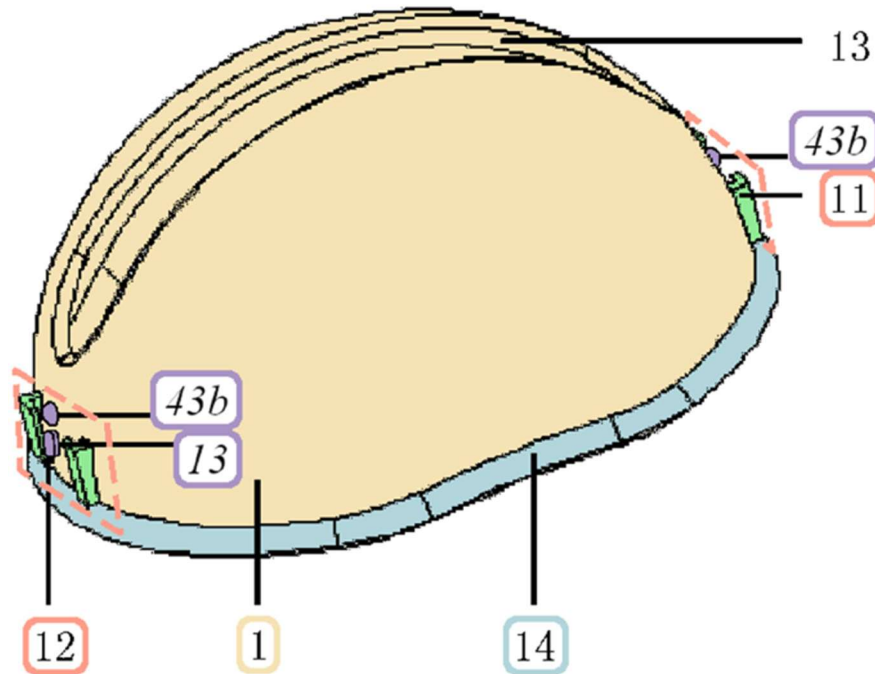
Adding Kiessler’s fixture 2 and groove head 13 to the Yan-Daley helmet would have been routine for a POSA exercising only ordinary skill, so the modification would have been achieved with a reasonable expectation of success. Ex-1002, ¶141.¹⁵

Additionally, modifying the Yan-Daley helmet to include Kiessler’s fixture 2 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, ¶142. 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). Ex-1002, ¶142.

Accordingly, a POSA would have been motivated to incorporate Kiessler’s molded groove head and corresponding accessory with fixture and clamping lever

¹⁵ Unlike Ground 3, this ground does not rely on Daley’s teaching of male bracket 46.

with the Yan-Daley helmet. Ex-1002, ¶¶138-142. An example depiction of the Yan-Daley-Kiessler helmet is shown below:



Ex-1012, Fig. 2 (Modified)¹⁶

6.4.3 Claim 1

The Yan-Daley-Kiessler helmet renders obvious claim 1. Ex-1002, ¶¶143-177.

6.4.3.1 Element 1[pre]

1[pre] recites a “safety helmet system.”

¹⁶ Example of the Yan-Daley-Kiessler combination.

Outside of the claims, the '265 Patent does not mention a “safety helmet system.” Given the lack of further details in the specification, the system of 1[pre] refers to a safety helmet along with an accessory device, which the prior art teaches. §6.3.4.1; Ex-1002, ¶145.

In particular, Yan teaches “a safety helmet” (Ex-1011, ¶1) and several accessories (mining lamp 3 and LED lamp 2, Ex-1011, ¶15). Yan’s safety helmet is modified to include Daley’s protrusion 43b and Kiessler’s groove head 13 and, thus, if limiting, the Yan-Daley-Kiessler combination teaches or suggests a safety helmet system that includes a safety helmet with an accessory device (explained in further detail below).

6.4.3.2 Element 1[a]

1[a] recites “a safety helmet.”

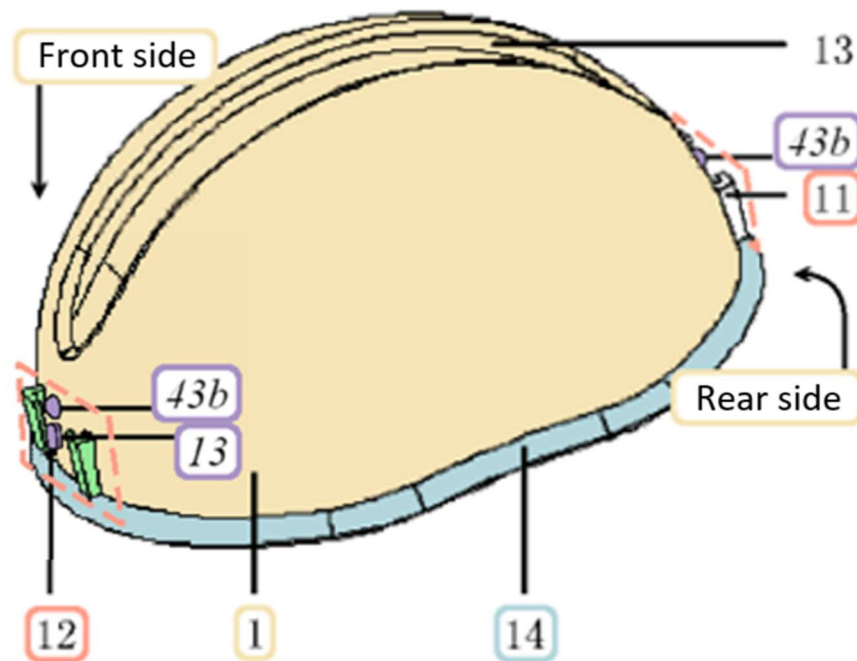
Yan teaches “a safety helmet, and more specifically, ... a mining safety helmet with an emergency lighting function.” Ex-1011, ¶1. Yan’s safety helmet is modified to include Daley’s protrusion 43b and Kiessler’s groove head 13 and, thus the Yan-Daley-Kiessler helmet teaches or suggests a safety helmet. Ex-1002, ¶148.

6.4.3.3 Element 1[b]

1[b] recites “a molded outer shell adapted to be worn by a user, the outer shell having an exterior surface defining a front side, a rear side, and a brim extending forward from the front side.”

First, Yan's helmet body 1 is an outer shell adapted to be worn by a user. Ex-1002, ¶151; §6.3.4.3. Therefore, the Yan-Daley-Kiessler helmet teaches or suggests such an outer shell (helmet body 1) adapted to be worn by a user. *Id.*

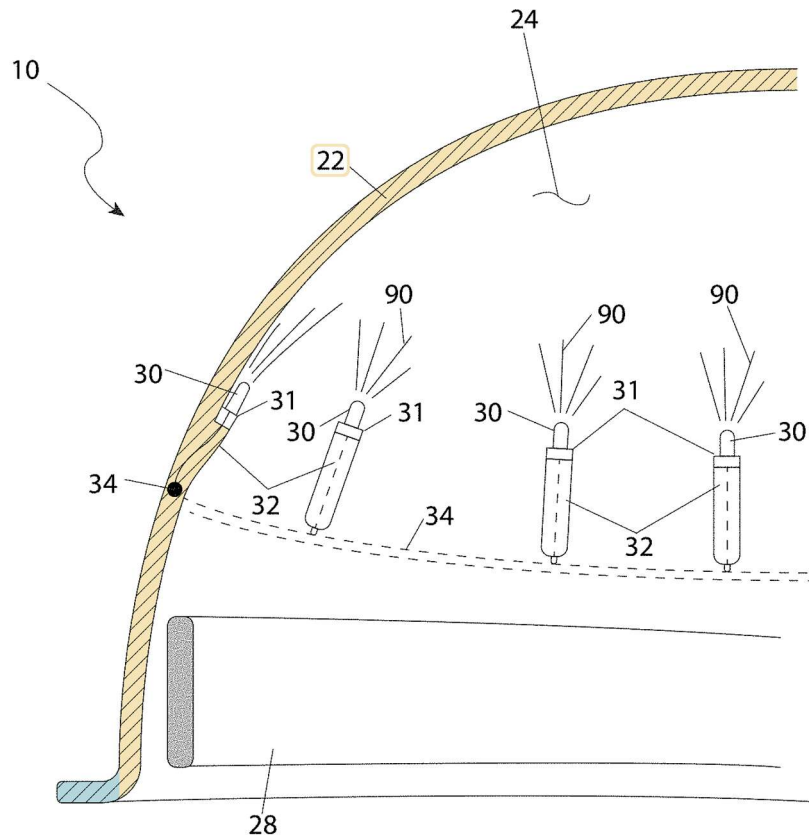
The Yan-Daley-Kiessler helmet teaches or suggests the outer shell having an exterior surface defining a front side, a rear side, and a brim extending forward from the front side, as illustrated in modified Figure 2 below. Yan teaches "brim 14 is located at the bottom of the helmet body 1 and encircles the bottom edge of the helmet body 1." Ex-1011, ¶19. Yan's brim encircling the bottom edge of the helmet body extends forward from the front side, as illustrated in modified Figure 2 below. Ex-1002, ¶152. In Figure 2, Yan illustrates a helmet **body 1** with a **brim 14** extending forward from the front side. Ex-1002, ¶152. Therefore, the Yan-Daley-Kiessler helmet teaches or suggests such an outer shell having an exterior surface defining a front side, a rear side, and a brim extending from the front side. Ex-1002, ¶152.



Ex-1011, Fig. 2 (Modified)¹⁷

The Yan-Daley-Kiessler helmet teaches or suggests the outer shell being molded. If Patent Owner is legally correct that line drawings alone can teach molded features (as it argued during prosecution, §6.6.1), 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, ¶153. 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.

¹⁷ Example of the Yan-Daley-Kiessler combination.



Ex-1012, Fig. 4

Therefore, the Yan-Daley-Kiessler helmet teaches or suggests a molded outer shell (helmet body 1) adapted to be worn by a user, the outer shell having an exterior surface defining a front side, a rear side, and a brim (brim 14) extending forward from the front side.

6.4.3.4 Element 1[c]

1[c] recites “a front receptacle having a first pair of external slots and a stop, wherein each of the first pair of external slots extends upwardly along the front side of the outer shell and the stop is disposed between the first pair of external slots, and wherein the stop is integrally molded with the exterior surface of the outer shell.”

First, Yan teaches a snap-fit slot 11 (a front receptacle) having L-shaped slots (a first pair of external slots) that extend upwardly along the front side of the outer shell. Ex-1011, Fig. 2 and ¶19. The two L-shaped slots of the snap-fit slot 11 form a pair of external slots extending upwardly along the front side of the outer shell above the brim. Ex-1002, ¶157.

Additionally, Kiessler teaches a helmet receiver 1 that includes a groove head 13 “arranged centrally between the stop edges 12.” Ex-1015, ¶¶35-36. Kiessler further teaches that “the receiver 1 is designed as a plastic injection molding.” Ex-1015, ¶46. Kiessler teaches 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. The clamping lever 21 includes a recess 213 and the width of the recess 213 “corresponds essentially to the width of the web 132 of the groove head 13.” Ex-1015, ¶39.

Additionally, Daley teaches a safety helmet with a shell 22 including “integrally-molded portions including ... protrusion 43b.” Ex-1012, 5:37-40. The protrusion 43b is disposed between the locking ears 42a and 42b (the first pair of external slots). Ex-1002, ¶159. Thus, the protrusion 43b is a stop that is integrally molded with the exterior surface of the outer shell and is disposed between the first pair of external slots. Ex-1002, ¶159.

Therefore, the Yan-Daley-Kiessler helmet combining the aspects noted above teaches or suggests a front receptacle (**snap-fit slot 11**) having a first pair of external slots (Yan's **L-shaped slots**) and a stop (**groove head 13**), wherein each of the first pair of external slots extends upwardly along the front side of the outer shell (**helmet body 1**) and the stop is disposed between the first pair of external slots, and wherein the stop is integrally molded with the exterior surface of the outer shell.

6.4.3.5 Element 1[d]

1[d] recites “a rear receptacle disposed on the rear side on the exterior surface of the outer shell, the rear receptacle having a second pair of external slots.”

First, the rear receptacle is mere duplication of parts. §6.3.4.5; Ex-1002, ¶162. Moreover, if 1[d] is limiting, Yan-Daley-Kiessler 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 Kiessler's groove head 13 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. Ex-1002, ¶163.

Therefore, the Yan-Daley-Kiessler helmet teaches or suggests a rear receptacle (snap-fit slot 12) disposed on the rear side on the exterior surface of the outer shell, the rear receptacle (snap-fit slot 12) having a second pair of external slots (Yan's L-shaped slots).

6.4.3.6 Element 1[e]

1[e] recites “an accessory device having a mating receptacle formed thereon, at least a portion of the mating receptacle being selectively engageable with the front receptacle or the rear receptacle such that the accessory device is releasably mountable onto each of the front receptacle and the rear receptacle.”

Yan teaches the “mining lamp 3 and the LED lamp 2 are both detachably mounted on the helmet body 1.” Ex-1011, claim 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, ¶166.

Kiessler teaches 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. The clamping lever 21 includes a recess 213 and the width of the recess 213 “corresponds essentially to the width of the web 132 of the groove head 13.” Ex-1015, ¶39. It would be obvious to a POSA to modify each of lamp 2 and lamp 3 to include Kiessler’s fixture 2. Ex-1002, ¶167. In the Yan-Daley-Kiessler helmet, the fixture 2 would engage with the groove head 13 via the recess 213 as explained in Kiessler and abut the protrusion 43b to further secure the accessory within the snap-fit slot. Ex-1002, ¶167.

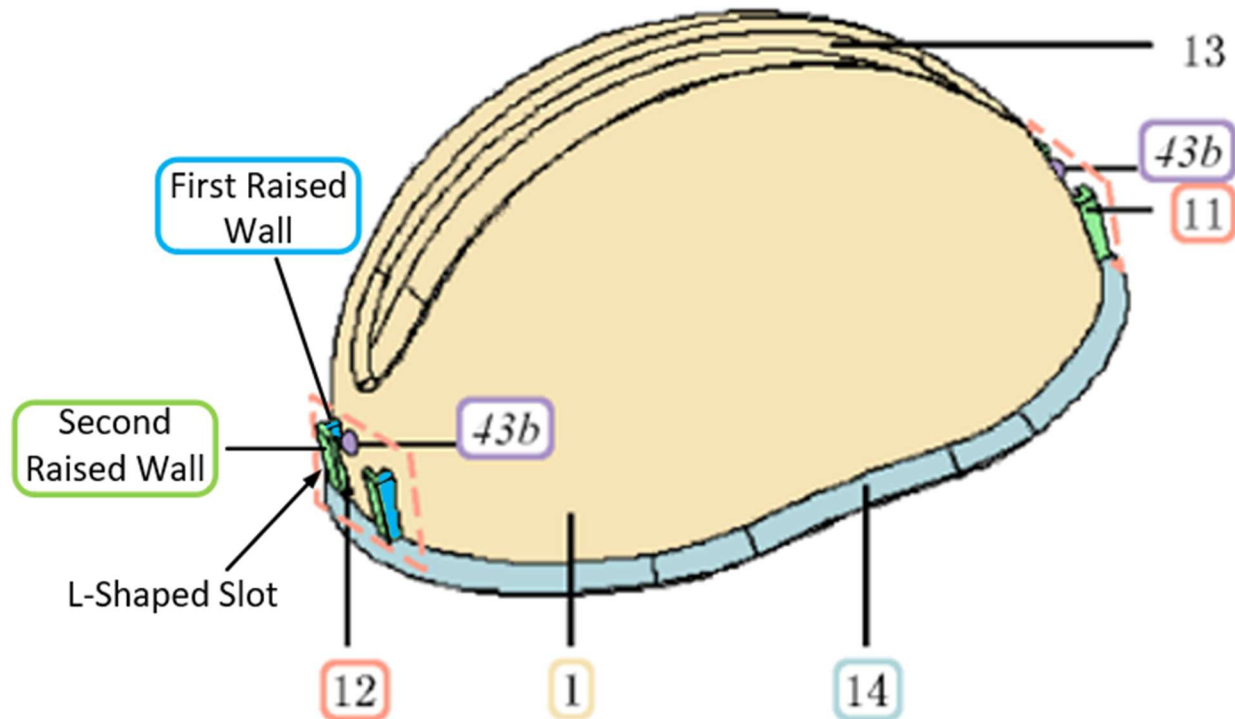
Therefore, Yan-Daley-Kiessler helmet teaches or suggests an accessory device (lamp 2) having a mating receptacle (fixture 2) formed thereon, at least a portion of the mating receptacle being selectively engageable with the front receptacle (snap-fit slot 11) or the rear receptacle (snap-fit slot 12) such that the

accessory device is releasably mountable onto each of the front receptacle and the rear receptacle. Ex-1002, ¶168.

6.4.3.7 Element 1[f]

1[f] recites “wherein each of the first pair of external slots of the front receptacle is a receiver slot flanked by raised walls, and the stop comprises a protruding member.”

Yan teaches that each of snap-fit slot 11 and snap-fit slot 12 has “two symmetrically arranged L-shaped slots.” Ex-1011, ¶17. As seen in Fig. 2 of Yan, each L-shaped slot has two perpendicular raised walls.



Ex-1012, Fig. 2 (Modified)¹⁸

Second, Daley's protrusion 43b teaches the protruding nub, protruding member, and stop. §6.3.4.7; Ex-1002, ¶172. 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 or suggests such a receiver slot flanked by raised walls (first and second raised walls of each **L-shaped slot**) with a stop comprising a protruding member (**protrusion 43b**). Ex-1002, ¶¶ 170, 173.

¹⁸ Example of the Yan-Daley combination.

Moreover, Kiessler teaches using a receiver 1 with a groove head 13 arranged between stop edges 12, with the receiver 1 being plastic injection molded. Ex-1015, ¶¶34-36, 46. Adding Kiessler's groove head 13 teaches or suggests such a receiver slot flanked by raised walls (first and second raised walls of each **L-shaped slot**) with a stop comprising a protruding member (**groove head 13**). Ex-1002, ¶172.

Therefore, the Yan-Daley-Kiessler helmet teaches or suggests this element.

6.4.3.8 Element 1[g]

1[g] recites “wherein the accessory device includes a clip.”

It would have been obvious to modify the Yan-Daley helmet to incorporate Kiessler's groove head 13 and corresponding accessory fixture 2 with clamping lever 21 with the Yan-Daley helmet. §6.4.2; Ex-1002, ¶175. Thus, the Yan-Daley-Kiessler helmet teaches or suggests an accessory device (lamp 2 or 3) that includes a clip (clamping lever 21).

6.4.3.9 Element 1[h]

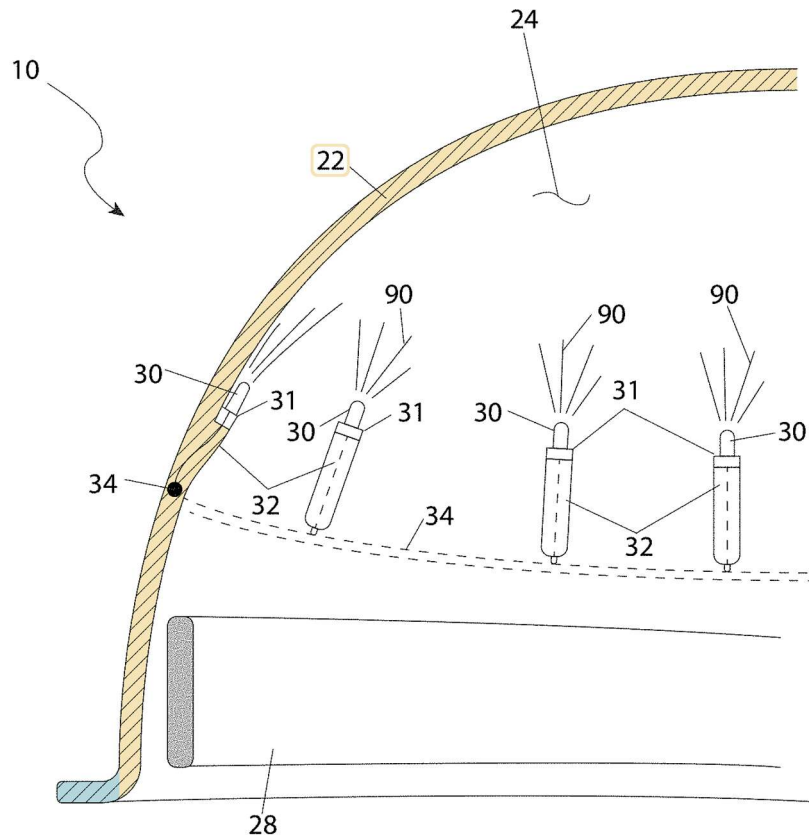
1[h] recites “wherein the receiver slot aligns the accessory device therein, the raised walls retain the accessory device therebetween, and the protruding member engages the clip to releasably mount the accessory device in the front receptacle.”

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 and protrusion 43b engage with the clamping lever 21. Ex-1002, ¶177. Thus, the Yan-Daley-Kiessler helmet teaches or suggests that the receiver slot (defined by L-shaped slots) aligns the accessory device (lamp 2 or 3) therein, the raised walls (L-shaped slots) retain the accessory device therebetween, and the protruding member (groove head 13) engages the clip (clamping lever 21) to releasably mount the accessory device in the front receptacle (snap-fit slot 11).

6.4.4 Claim 2

Claim 2 depends from claim 1, which is rendered obvious by the Yan-Daley-Kiessler Helmet. §6.4.3. Claim 2 adds “wherein the outer shell, the front receptacle, and the rear receptacle are formed from a common material.”

The Yan-Daley-Kiessler helmet teaches or suggests being formed from a common material. Daley 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 form Yan's shell using a common material throughout (as Daley teaches). Ex-1002, ¶180. Therefore, the Yan-Daley-Kiessler helmet teaches or suggests that the outer shell (helmet body 1), the front receptacle (snap-fit slot 11), and the rear receptacle (snap-fit slot 12) are formed from a common material.

6.4.5 Claim 3

Claim 3 depends from claim 2, which is rendered obvious by Yan-Daley-Kiessler. §6.4.4. Claim 3 adds "wherein the common material is plastic."

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

§6.3.6; Ex-1002, ¶182.

In addition to plastic being a known material suitable for safety helmets, Daley teaches integrally molding features into the helmet shell (§6.3.4.4) and using plastic injection molding. Ex-1012, 4:50-66. Moreover, Kiessler teaches using plastic injection molding for the receiver. Ex-1015, ¶46.

The Yan-Daley helmet integrates Daley's integral molding technique and, in doing so, would have used the plastic injection molding as Daley teaches. §6.3.3; §6.4.2. Therefore, it would have been obvious to a POSA to mold the Yan-Daley-Kiessler helmet using plastic as a common material. Ex-1002, ¶181-183.

6.4.6 Claim 4

Claim 4 depends from claim 1, which is rendered obvious by Yan-Daley-Kiessler. §6.4.3. Claim 4 adds “further including 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.”

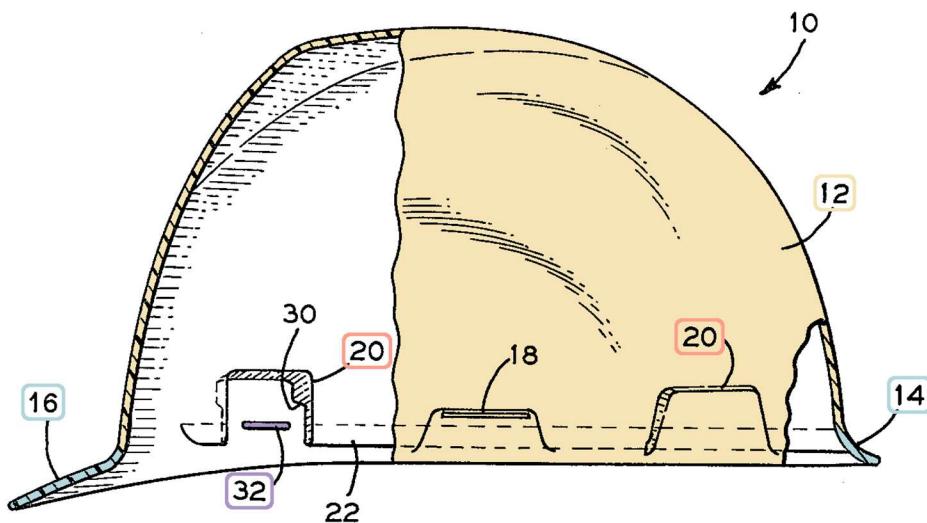
The second accessory device is mere duplication of parts. §6.3.7; Ex-173, ¶168. If claim 4 is limiting, the Yan-Daley-Kiessler helmet teaches or suggests a second accessory device (“mining lamp 3 and the LED lamp 2 are both detachably mounted on the helmet body 1.” Ex-1011, ¶15) having a second mating receptacle

(fixture 2). §6.3.4.6. A POSA would have found it obvious to use the fixture 2 on the lamp body (lamp body 22) of each of Yan's lamp 2 and 3. §6.4.2; Ex-1002, ¶186. The Yan-Daley-Kiessler helmet also teaches or suggests at least a portion (bracket 46) of the second 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.*

6.5 Ground 5: Claims 1-4 Are Rendered Obvious by Yan and Nesbitt

6.5.1 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

6.5.2 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 '265 Patent, *i.e.*, safety helmets. Ex-1019, 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-1019, 1:27-38; Ex-1011, ¶5; Ex-1013, 2:22-33; Ex-1002, ¶187. 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 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, ¶188. 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 a protruding member such as the nub. Ex-1002, ¶189. 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 would have been motivated to take the straightforward path of adopting the teachings of Nesbitt to integrally mold the receptacle (Yan's L-shaped slots) with a protruding member (Nesbitt's nubs) 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, ¶190. Following these straightforward choices, a POSA would also have been motivated to adopt Nesbitt's positional teaching for each nub to position the protruding member between the L-shaped slots in Yan. Ex-1013, Fig. 8; Ex-1002, ¶190. 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, ¶190.

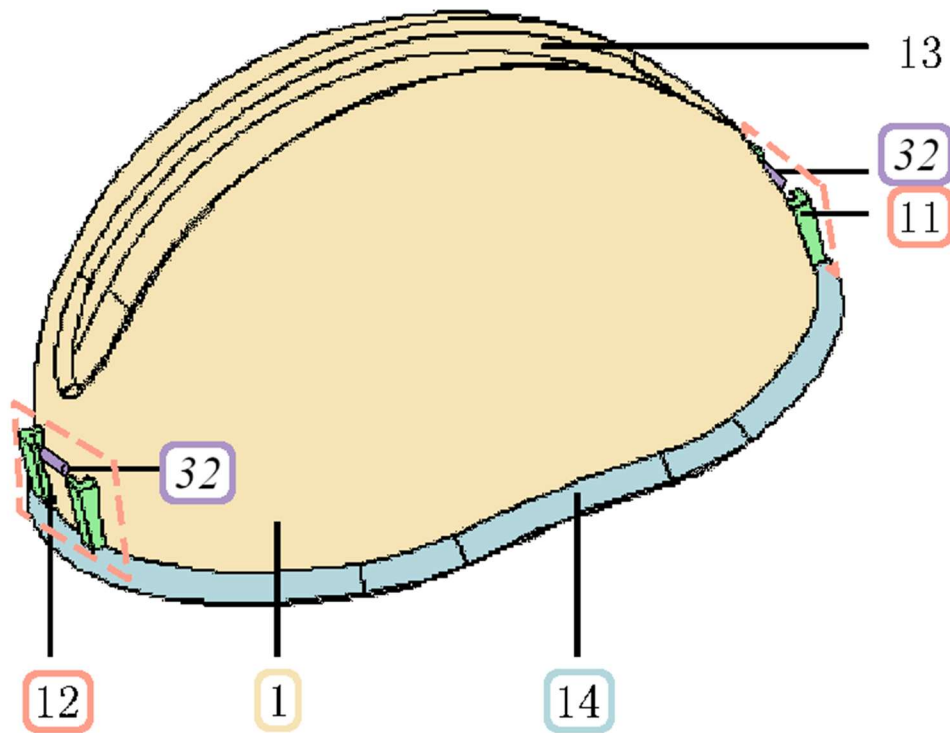
Including the protruding member feature with the snap-fit slot structures would create a more robust securing of the accessories in the snap-fit slot structures and thus would have been a desirable structural modification. Ex-1002, ¶191. In having a more robust securing, this would have made the Yan-Nesbitt helmet more attractive to potential purchasers, thereby further motivating the combination as a matter of commercial desirability. Ex-1002, ¶191.

A POSA would have been motivated to incorporate Nesbitt's centrally located and integrally molded nubs into each of Yan's snap-fit slot structures to securely mount detachable accessory devices while keeping the snap-fit slots identical. Ex-1002, ¶192. Adding Nesbitt's nubs 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 snap-fit slot receptacle having L-shaped slots and a protruding 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, ¶193. 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 **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, ¶¶187-194. An example depiction of the combination Yan-Nesbitt helmet is below:



Ex-1011, Fig. 2 (Modified)¹⁹

6.5.3 Claim 1

Yan-Nesbitt renders obvious claim 1. Ex-1002, ¶¶195-221.

6.5.3.1 Element 1[pre]

As mentioned previously, outside of the claims, the '265 Patent does not mention a “safety helmet system.” Given the lack of further details in the specification, the system of 1[pre] refers to a safety helmet along with an accessory device, which the prior art teaches. §6.3.4.1; Ex-1002, ¶197.

¹⁹ Example of the Yan-Nesbitt combination.

In particular, Yan teaches “a safety helmet” (Ex-1011, ¶1) and several accessories (mining lamp 3 and LED lamp 2, Ex-1011, ¶15). Yan’s safety helmet is modified to include Nesbitt’s nub 32 and, thus, the Yan-Nesbitt helmet teaches or suggests a safety helmet system that includes a safety helmet with an accessory device (explained in further detail below).

6.5.3.2 Element 1[a]

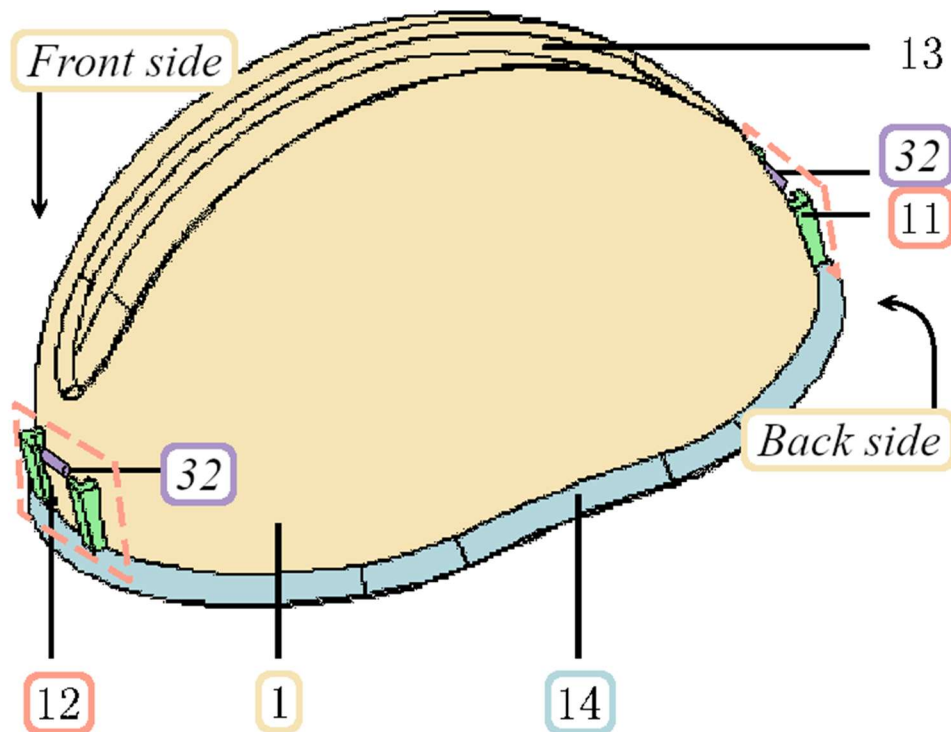
Yan teaches “a safety helmet, and more specifically, ... a mining safety helmet with an emergency lighting function.” Ex-1011, ¶1. Yan’s safety helmet is modified to include Nesbitt’s nub 32 and, thus the Yan-Nesbitt helmet teaches or suggests a safety helmet. Ex-1002, ¶200.

6.5.3.3 Element 1[b]

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, ¶202. Therefore, the Yan-Nesbitt helmet teaches or suggests 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. 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, ¶203.

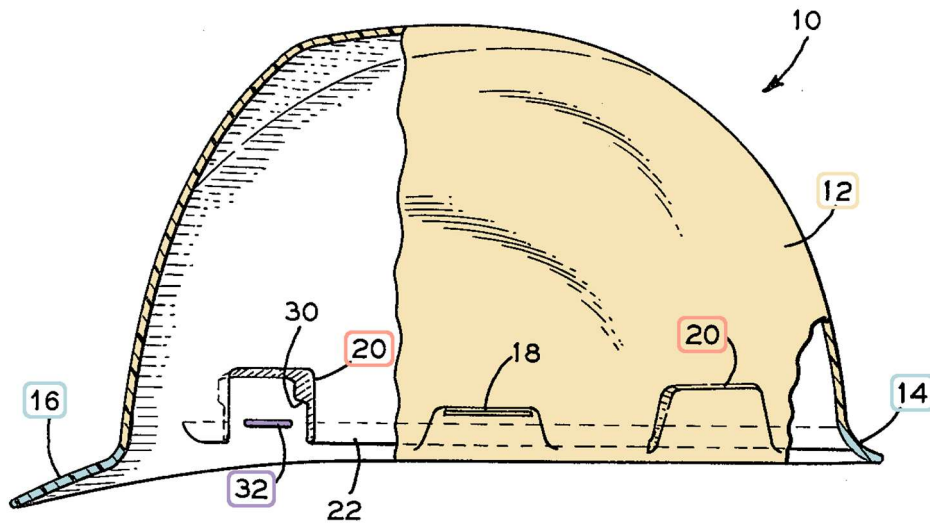


Ex-1011, Fig. 2 (Modified)²⁰

Therefore, the Yan-Nesbitt helmet teaches or suggests such an outer shell (**helmet body 1**) having an exterior surface defining a front side, a rear side, and a brim (**brim 14**) extending forward from the front side. Ex-1002, ¶203.

²⁰ Example of the Yan-Nesbitt combination.

Third, the Yan-Nesbitt helmet teaches or suggests the outer shell being molded. If Patent Owner is legally correct that line drawings alone can teach molded features (as it argued during prosecution, §5.3.1), Nesbitt includes a line drawing (Figure 8) illustrating a cross-sectional view of the shell 12 showing unbroken lines and a cross-hatching pattern throughout the shell and brim of the safety helmet. Ex-1002, ¶205. Nesbitt further teaches molding a plurality of sockets into the shell. Ex-1013, 2:65-67.



Ex-1013, Fig. 8

Therefore, the Yan-Nesbitt helmet teaches or suggests a molded outer shell (helmet body 1) adapted to be worn by a user, the outer shell having an exterior surface defining a front side, a rear side, and a brim (brim 14) extending forward from the front side. Ex-1002, ¶206.

6.5.3.4 Element 1[c]

Yan teaches a snap-fit slot 11 (a front receptacle) having a first pair of external slots wherein each of the first pair of external slots extends upwardly along the front side of the outer shell. Ex-1011, ¶19. The two L-shaped slots of the snap-fit slot 11 form a pair of external slots extending upwardly along the front side of the outer shell above the brim. Ex-1002, ¶209.

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). Thus, the nub 32 is a stop that is integrally molded with the exterior surface of the outer shell and is disposed between the pair of external slots. Ex-1002, ¶210.

Therefore, the Yan-Nesbitt helmet teaches or suggests a front receptacle (snap-fit slot 11) having a first pair of external slots (formed by Yan’s L-shaped slots) and a stop (nub 32), wherein each of the first pair of external slots extends upwardly along the front side of the outer shell (helmet body 1) and the stop is disposed between the first pair of external slots, and wherein the stop is integrally molded with the exterior surface of the outer shell.

6.5.3.5 Element 1[d]

First, the rear receptacle is mere duplication of parts without a new and unexpected result. §6.3.4.5. Moreover, if 1[d] is limiting, Yan-Nesbitt teaches or

suggests 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 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. §6.5.2; Ex-1002, ¶213-214.

Therefore, the Yan-Nesbitt helmet teaches or suggests a rear receptacle (snap-fit slot 12) disposed on the rear side on the exterior surface of the outer shell, the rear receptacle (snap-fit slot 12) having a second pair of external slots (pair of L-shaped slots). Ex-1002, ¶215.

6.5.3.6 Element 1[e]

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

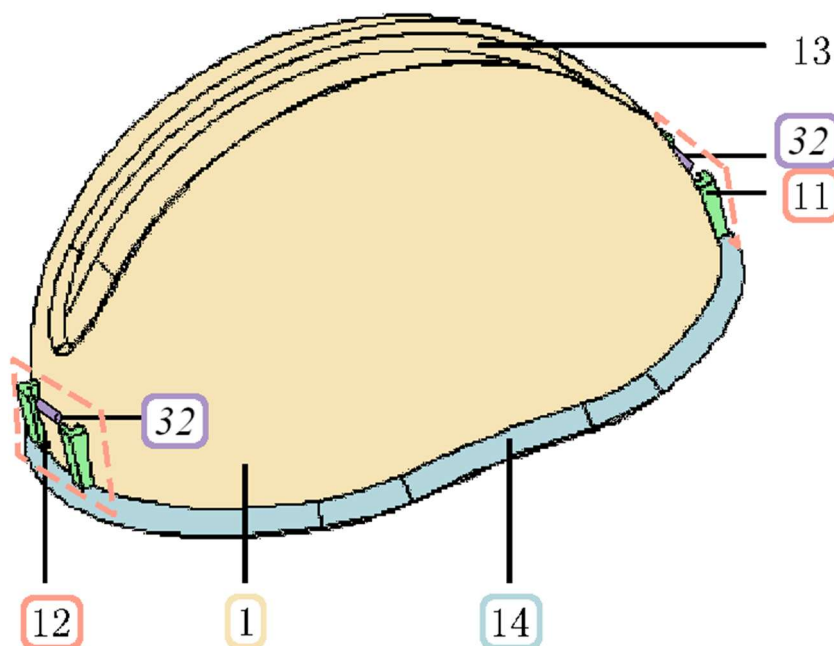
11.” Ex-1011, ¶20. Yan also teaches that the “base of the LED lamp body 22 has the same structure as the base of the mining lamp 3. The two sides of the base of the LED lamp body 22 can be inserted into the two L-shaped slots of the second snap-fit slot 12.” Ex-1011, ¶24. Yan further teaches that “the 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, ¶217.

Therefore, Yan-Nesbitt helmet teaches or suggests 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 with the front receptacle (snap-fit slot 11) or 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. Ex-1002, ¶218.

6.5.3.7 Element 1[f]

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). Adding Nesbitt’s nub to Yan’s helmet teaches or suggests such a receiver slot flanked by raised walls (**L-shaped slots**) with a stop comprising a protruding member (**nub 32**). §6.5.2.

Ex-1011, Fig. 2 (Modified)²¹

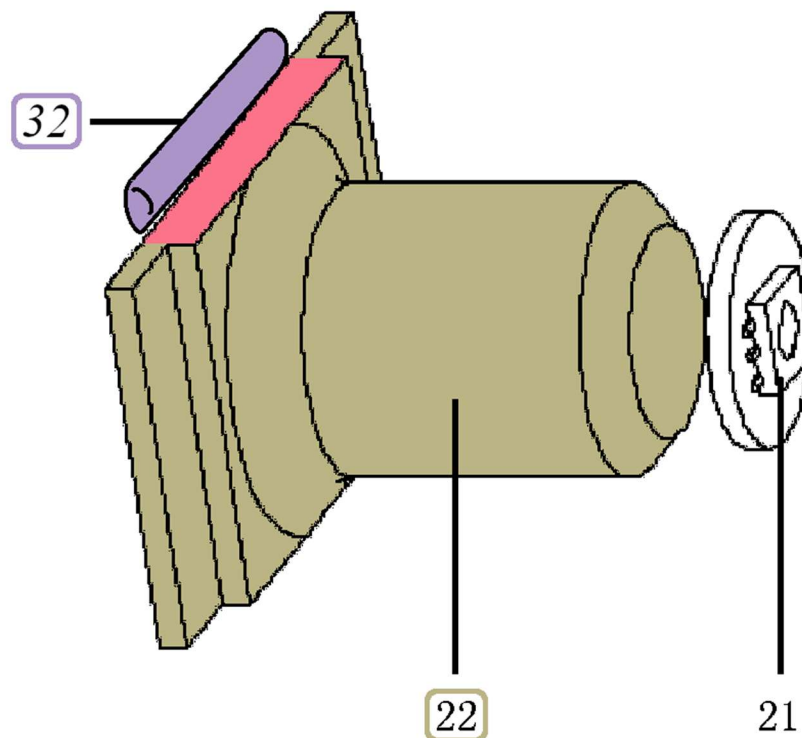
6.5.3.8 Element 1[g]

1[g] adds recites “wherein the accessory device includes a clip.” As discussed previously, the ’265 Patent does not redefine the term “clip” and thus a

²¹ Example of the Yan-Nesbitt combination.

POSA would have understood the term to have its ordinary meaning (e.g., any of various devices that grip, clasp, or hook).

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, ¶220.



Ex-1011, Fig. 3 (Modified excerpt)²²

²² Example of the Yan-Nesbitt combination.

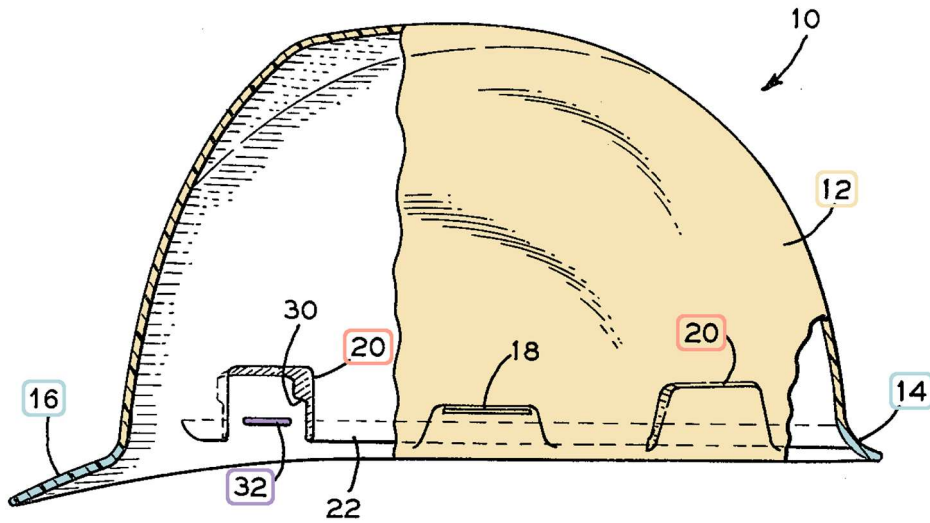
6.5.3.9 Element 1[h]

The L-shaped slots of Yan form a receiver slot that aligns the lamp accessories and retains the lamp accessories therebetween. Ex-1002, ¶221. Therefore, the Yan-Nesbitt helmet teaches or suggests 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 protruding member (nub 32) engages the clip (lamp body 22) to releasably mount the accessory device in the front receptacle (snap-fit slot 11). *Id.*

6.5.4 Claim 2

Claim 2 depends from claim 1, which is rendered obvious by Yan-Nesbitt. §6.5.3. Claim 2 adds “wherein the outer shell, the front receptacle, and the rear receptacle are formed from a common material.”

The Yan-Nesbitt helmet teaches or suggests being formed from a common material. If Patent Owner is legally correct that line drawings alone can teach molded features (as it argued during prosecution, §6.6.1), Nesbitt includes a line drawing (Figure 8) illustrating a cross-sectional view of the shell 12 showing unbroken lines and a cross-hatching pattern throughout the shell and brim of the safety helmet. Ex-1002, ¶223.



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. Ex-1002, ¶224.

Thus, a POSA would have found it obvious to form Yan's shell using a common material throughout (as Nesbitt teaches). Ex-1002, ¶225. Therefore, the Yan-Nesbitt helmet teaches that the outer shell (helmet body 1), the front receptacle (snap-fit slot 11), and the rear receptacle (snap-fit slot 12) are formed from a common material.

6.5.5 Claim 3

Claim 3 depends from claim 2, which is rendered obvious by Yan-Nesbitt.

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

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

§6.3.6; Ex-1002, ¶227.

In addition to plastic being a known material suitable for safety helmets, Yan-Nesbitt teaches or suggests this element. 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, ¶228. The Yan-Nesbitt helmet integrates Nesbitt’s integral forming techniques and, in doing so, would have used the plastic as Nesbitt teaches. §6.5.2.

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, ¶¶226-229.

6.5.6 Claim 4

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

§6.5.3. Claim 4 adds “further including 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. §6.3.7; Ex-1002, ¶231. Moreover, if claim 4 is limiting, the Yan-Nesbitt helmet teaches or suggests a second accessory device (“mining lamp 3 and the LED lamp 2 are both detachably mounted on the helmet body 1.” Ex-1011, ¶15) having a second mating receptacle (lamp body 22). §6.5.3.6. The Yan-Nesbitt helmet also teaches or suggests at least a portion (lamp body 22) of the second 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.*

6.6 Ground 6: Klein News Release Anticipates Claims 1-4

6.6.1 Priority Date of Challenged Claims

The priority date of the Challenged Claims is at issue because new matter was added during prosecution of the parent patent to which the ’265 claims priority to (§5.3) and used as the basis for limitations in the Challenged 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 of the parent (the '327 Patent) were amended to recite that “the protruding nub” is “**integrally molded** with the outer shell” from a “**common material**.”²³ Ex-1004, 62-63 and 65. Similarly, pending claim 25 was amended to indicate that “the outer shell forms the protruding nub from **a same material** as the outer shell.” *Id.*, 64.

The '265 Patent, the child of the '327 Patent, similarly recites that “the stop is integrally molded with the exterior surface of the outer shell” in claim 1, element 1[b] and that “the outer shell, the front receptacle [which includes the stop], and the rear receptacle [also includes the stop] are formed from a common material” in claim 2. The Priority Applications as-filed are silent regarding integral molding or forming the protruding nub or the stop of a common or same material as the outer shell.

These amendments were not grounded in the as-filed Priority Applications (as described in §5.3) and 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

²³ Claims 1, 4, 25, and 26 of the '935 Application correspond, respectively, to claims 1, 8, 16, and 17 of the '327 Patent.

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.*

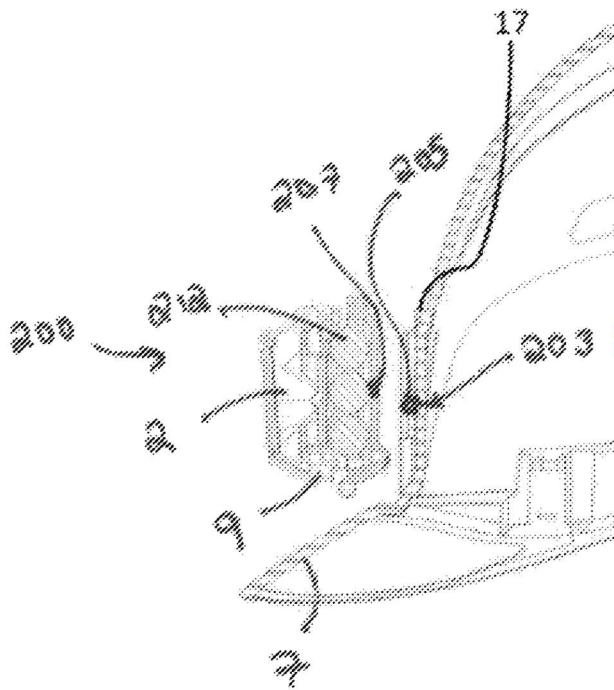
6.6.1.1 The Hill Declaration was legally improper

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.”).

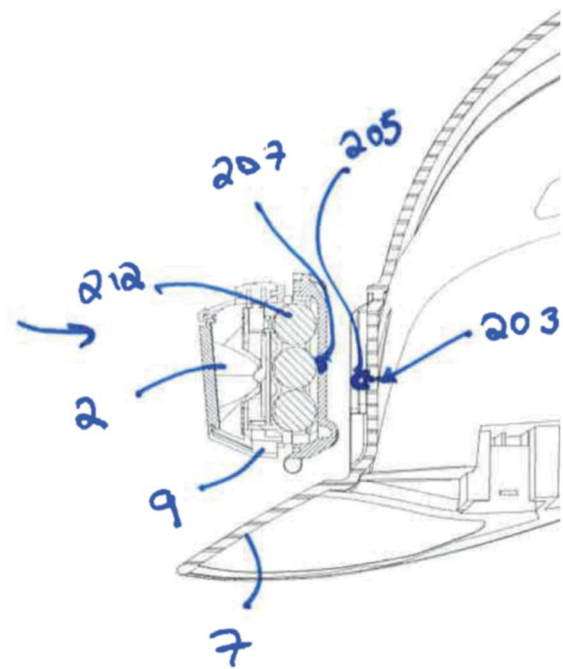
6.6.1.2 The Hill Declaration is factually flawed

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.

As described in §5.3, Fig. 8 of the '327 Patent was added on October 21, 2021. This figure 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.



'935 Application, Fig. 8



'491 Provisional, Fig. 5

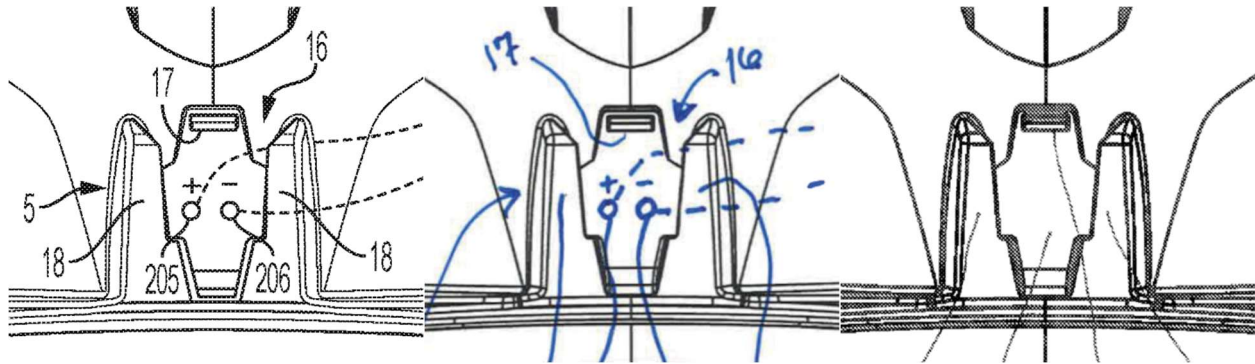
The location of the new lead line is in opposition to the only figure that originally included the protruding nub 17 label (Fig. 3), and the Priority Applications lacked any support for this addition. Moreover, Patent Owner did not even notify the Examiner of this new addition, instead simply stating that the “newly presented figures are part of the provisional applications,” which was not an accurate statement since the figures had been modified to add this reference numeral 17. Ex-1004, 169. There is no mention of the addition in the *Amendments to the Drawings* portion of the response, nor in the accompanying remarks concerning the *Amendments to the Specification and Drawings*. Rather, the remarks simply state that the figure was “pulled from [the provisional application].” Ex.1004, 170. Patent Owner

unpersuasively clings to a later remark in the *Amendments to the Claims* section that merely states that an “enlarged detail view” of Figure 8 presented therein has an added reference numeral. *Id.*, 171.

The characteristics of the feature indicated by the new numeral 17 in Fig. 8 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.*, ¶229.

The protruding nub 17 is only shown and labeled in Fig. 3 of the '935 Application as-filed. 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

After covertly adding the figure label to Fig. 8, Patent Owner then used it as evidence that the protruding nub 17 was integrally molded with (or formed from) the outer shell and that it was of a same material as the outer shell. Ex-1002, ¶246. Specifically, Patent Owner wrote new descriptive text that it added to the specification: “The safety helmet 100 of Fig. 8 shows that the protruding nub 17 and the brim 7 are unitary features of the hard outer shell 1. Stated in other words, the outer shell forms or defines the protruding nub 17 and the brim.” Ex-1004, 151.

On April 25, 2022, Patent Owner doubled down on the reliance to the covertly-added subject matter of Fig. 8 by relying on it in the Hill Declaration. When Mr. Hill opined that the added subject matter was disclosed in the drawings of the '935 Application, particularly Fig. 3 and **Fig. 8** (Ex-1004, 43-44), Mr. Hill relied on new subject matter added in 2021.

Moreover, 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.²⁴ 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 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

²⁴ The Hill Declaration did not identify a POSA or opine as to what a POSA would have understood.

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, ¶¶233-252. *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.**”).

6.6.1.3 Priority date is the date new matter was added

As established above, new material regarding the protruding nub was added in 2021 and 2022 to the parent ’327 Patent, years after the ’935 Application was filed. Each Challenged Claim in the ’265 Patent includes this new material. Ex-1019, claims 1-4. Therefore, the priority date for the Challenged Claims is no earlier than October 21, 2021.

6.6.2 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 ’265 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 the prior-art KNR publication is invalidating anticipatory art. A brief analysis on an element-by-element basis is also provided below.

6.6.3 Claim 1

KNR anticipates claim 1. Ex-1002, ¶¶253-270.

6.6.3.1 Element 1[pre]

As mentioned previously, outside of the claims, the ’265 Patent does not mention a “safety helmet system.” Given the lack of further details in the

specification, the system of 1[pre] refers to a safety helmet along with an accessory device, which the prior art discloses. §6.3.4.1; Ex-1002, ¶254.

KNR shows and describes ten different hard hat models (Ex-1010, 1), with “hard hat” being interchangeable with the ’265 Patent’s safety helmet. Ex-1019, 1:14-17 (“The present disclosure relates to ... safety helmets ...[,] also referred to as hard hats.”). KNR also shows and describes “Convenient accessories and replacement parts offer customization for added versatility.” Ex-1010, 1. Thus, KNR discloses a safety helmet system that includes a safety helmet with an accessory device (explained in further detail below). Ex-1002, ¶¶255-256.



Ex-1010, Image 1²⁵

6.6.3.2 Element 1[a]

As mentioned above, Klein News Release shows and describes different models of hard hats. Ex-1010, Image 1. Thus, Klein News Release discloses a safety helmet. Ex-1002, ¶258.

6.6.3.3 Elements 1[b]

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

²⁵ KNR color images original, reference lines and colored textboxes added in following images

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.

If Patent Owner is legally correct that such pictures can disclose molded features (as it argued during prosecution), KNR discloses this as well. Ex-1002, ¶¶ 259-260; Ex-1004, 45 (“That the front and rear receivers (11) shown in the drawings are molded from the same material and in the same mold during the same molding operation as the outer shell of the helmet illustrated, is also evident to me from the pictures presented as Figures 12 and 13 of the Instant Application. This conclusion is based on an observation of the photos illustrated in these figures”).

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.*



Ex-1010, Image 3 (Excerpt)

Thus, KNR discloses a molded outer shell (e.g., a white shell) adapted to be worn by a user (e.g., an electrician), the **outer shell** having an exterior surface defining a front side, a rear side, and a **brim** extending forward from the front side. Ex-1002, ¶261.

6.6.3.4 Element 1[c]

KNR discloses this element. Unlike the '265 Patent, KNR includes perspectives view of the front receiver slot that indicate respective external slots that may be formed by the raised sidewalls 18. Ex-1002, ¶¶ 82, 262-263. According to KNR, these mounts implement patent-pending technology for holding headlamps without straps or zip-ties. 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** having a first pair of external slots and a stop, wherein each of the first pair of external slots extends upwardly along the front side of the outer shell and is disposed between the first pair of external slots, and wherein the stop is integrally molded with the exterior surface of the outer shell. Ex-1002, ¶263.

6.6.3.1 Element 1[d]

KNR discloses this element. First, the rear receptacle is mere duplication of parts without a new and unexpected result. §6.3.4.5. Moreover, if 1[d] is limiting, KNR discloses this.



Ex-1010, Image 2 (Excerpt)

As would be apparent to a POSA reviewing KNR's images, KNR discloses a **rear receptacle** disposed on the rear side on the exterior surface of the outer shell, the rear receptacle having a second pair of external slots. Ex-1002, ¶264.

6.6.3.2 Element 1[e]

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

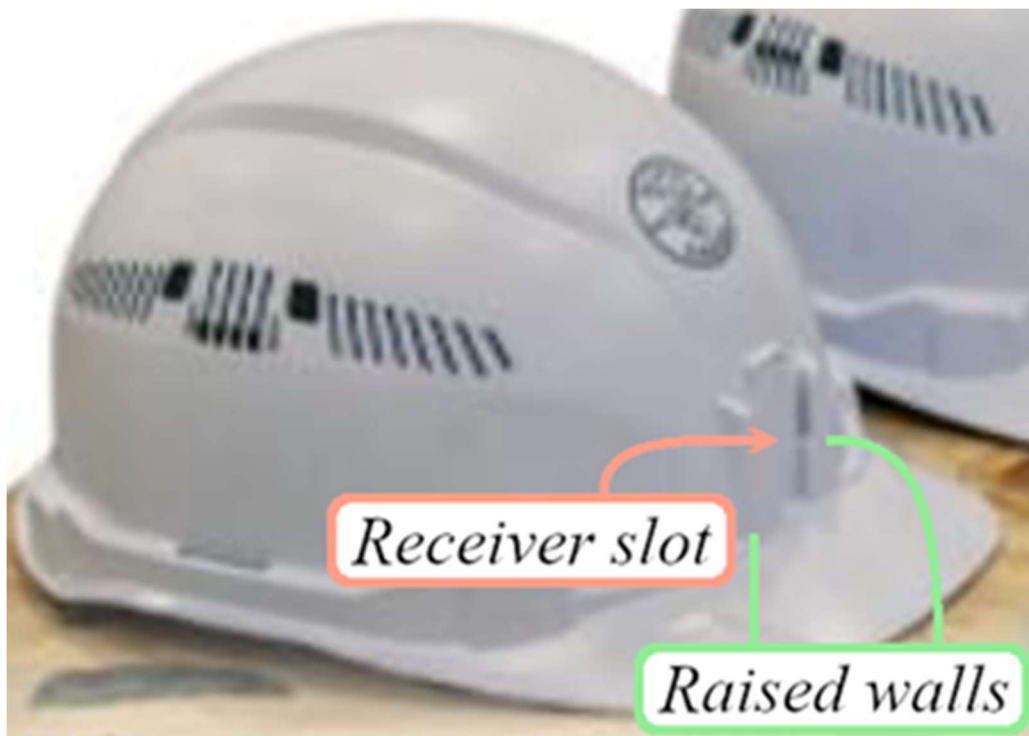


Ex-1010, Image 3 (excerpt)

Thus, as would be apparent to a POSA reviewing KNR's images, KNR discloses the claimed **accessory device** (Hardhat Headlamp (Cat. No. KHH56220)), which is an accessory device have a **mating receptacle** formed thereon, at least a portion of the mating receptacle being selectively engageable with the front receptacle or the rear receptacle such that the accessory device is releasably mountable onto each of the front receptacle and the rear receptacle. Ex-1002, ¶266.

6.6.3.3 Element 1[f]

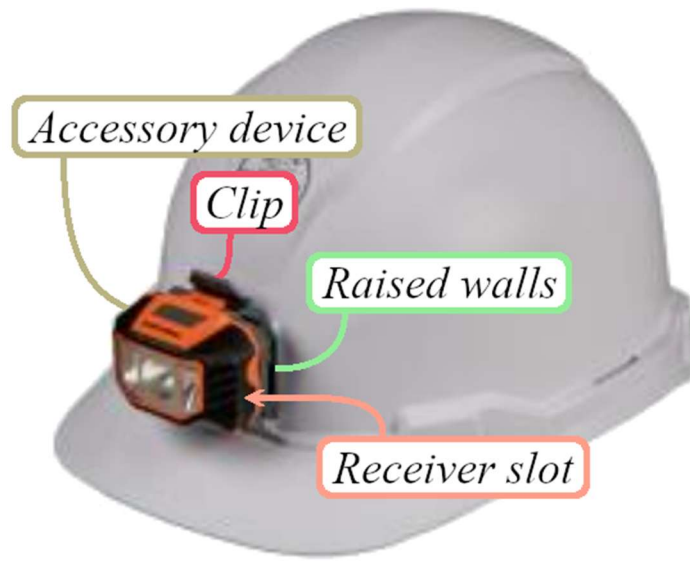
KNR discloses this element. KNR discloses hard hats with such front receptacles. Ex-1010, 1; Ex-1002, ¶267-268.



Ex-1010, Image 1 (Excerpt)

As would be apparent to a POSA, KNR discloses that each of the first pair of external slots of the front receptacle is a **receiver slot** flanked by **raised walls** with a stop comprising a protruding member. *Id.*

6.6.3.4 Element 1[g]



Ex-1010, Image 3 (Excerpt)

As would be apparent to a POSA, KNR discloses the claimed accessory device that includes a **clip**. Ex-1002, ¶269.

6.6.3.5 Element 1[h]



Ex-1010, Image 1 (Excerpt)

As would be apparent to a POSA, KNR discloses that the claimed **receiver slot** aligns the accessory device therein, the **raised walls** retain the accessory device therebetween, and the protruding member engages the clip to releasably mount the accessory device in the front receptacle. Ex-1002, ¶270.

6.6.4 Claim 2

Claim 2 depends from claim 1, which is anticipated by KNR. §6.6.3. 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, ¶271. Thus, KNR discloses that the outer shell, the front receptacle, and the rear receptacle are formed from a common material.

6.6.5 Claim 3

Claim 3 depends from claim 2, which is anticipated by KNR. §6.6.3. The selection of plastic for the common material is *prima facie* obvious. §6.3.6. Moreover, a POSA would understand from the images that the material is plastic. Ex-1002, ¶272. Thus, KNR discloses the common material being plastic. *Id.*

6.6.6 Claim 4

Claim 4 depends from claim 1, which is anticipated by KNR. §6.6.3.

The second accessory device is mere duplication of parts. §6.3.7; Ex-1002, ¶273. Moreover, if claim 4 is limiting, 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 second accessory device (e.g., Hardhat Headlamp (Cat. No. KHH56220) or 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, ¶¶273-275.

7. No Secondary Considerations

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

8. Reservation of Rights Based on Bifurcated Discretionary-Denial Considerations

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

9. Payment of Fees

The U.S. Patent and Trademark Office is hereby authorized to charge any fees due during the PGR proceeding to Deposit Account No. 50-0310 (Order No. 010768-8008).

10. Conclusion

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

Dated: September 30, 2025

Respectfully Submitted,

/ Alexander B. Stein /

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

U.S. PATENT NO. 12,268,265 – LISTING OF CHALLENGED CLAIMS

Claim No.	Claim Element(s)
1[pre]	A safety helmet system, comprising:
1[a]	a safety helmet comprising:
1[b]	a molded outer shell adapted to be worn by a user, the outer shell having an exterior surface defining a front side, a rear side, and a brim extending forward from the front side;
1[c]	a front receptacle having a first pair of external slots and a stop, wherein each of the first pair of external slots extends upwardly along the front side of the outer shell and the stop is disposed between the first pair of external slots, and wherein the stop is integrally molded with the exterior surface of the outer shell; and
1[d]	a rear receptacle disposed on the rear side on the exterior surface of the outer shell, the rear receptacle having a second pair of external slots; and
1[e]	an accessory device having a mating receptacle formed thereon, at least a portion of the mating receptacle being selectively engageable with the front receptacle or the rear receptacle such that the accessory device is releasably mountable onto each of the front receptacle and the rear receptacle;
1[f]	wherein each of the first pair of external slots of the front receptacle is a receiver slot flanked by raised walls, and the stop comprises a protruding member,
1[g]	wherein the accessory device includes a clip, and
1[h]	wherein the receiver slot aligns the accessory device therein, the raised walls retain the accessory device therebetween, and the protruding member engages the clip to releasably mount the accessory device in the front receptacle.

2	The safety helmet system of claim 1, wherein the outer shell, the front receptacle, and the rear receptacle are formed from a common material.
3	The safety helmet system of claim 2, wherein the common material is plastic.
4	The safety helmet system of claim 1, further including 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.

CERTIFICATION OF COMPLIANCE WITH TYPE-VOLUME LIMITS

As counted by Microsoft Word, this Petition includes 16,597 words and is therefore in compliance with the 18,700-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 PGR petition.

Dated: September 30, 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 September 30, 2025, copies of this Petition and all supporting exhibits were sent via Priority Mail Express to the correspondence address of record for the '265 Patent:

JOHN WHELAN
450 BOND STREET
LINCOLNSHIRE, IL 60069

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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Respectfully Submitted,

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