

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

US CONEC LTD.,
Petitioner

v.

SENKO ADVANCED COMPONENTS, INC.,
Patent Owner

Case IPR2024-00115
U.S. Patent No. 11,307,369

**PETITION [1 of 2] FOR *INTER PARTES* REVIEW OF U.S. PATENT NO.
11,307,369 [Claims 1-22]**

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PETITIONER'S EXHIBIT LIST

Exhibit No.	Description
1001	U.S. Patent No. 11,307,369 to Takano et al. (“’369 Patent”)
1002	Patent Prosecution History of U.S. Patent No. 11,307,369 to Takano et al.
1003	International Application No. WO 2015/027033 to Scherer et al. (“Scherer”)
1004	International Publication No. WO 2017/127208 to Lee (“Lee”)
1005	U.S. Patent Application Publication No. 2017/0227720 to Lin (“Lin”) (Relevant to Declaration 2)
1006	<i>Curriculum Vitae</i> of James F. Brennan III, Ph.D.
1007	Exhibit I of Complaint – Claim Chart U.S. Patent No. 11,307,369 and MMC, <i>Senko Advanced Components, Inc. v. US Conec, Ltd.</i> , No. 1:23-cv-00083 (D. Del. Jan. 24, 2023), ECF No. 1-1
1008	Childers, Darrell, <i>et al.</i> , “Multi-Fiber, MT Ferrule Endface Fiber Tip Displacement Model for Physical Contact Interconnects,” White Paper (2006)
1009	U.S. Patent Application Publication No. 2016/0238796 to Nguyen et al. (“Nguyen”) (Relevant to Declaration 2)
1010	U.S. Patent No. 8,465,317
1011	Declaration of James F. Brennan III, Ph.D.
1012	Declaration of James F. Brennan III, Ph.D. (IPR2024-00116)
1013	Wenke, I.G., “Report on Fiber Optic Cables,” <i>HSB Technical Report</i> (2015)
1014	Kant, K., “Data Center Evolution: A Tutorial on State of the Art, Issues, and Challenges,” <i>Computer Networks</i> , 53:2939-65 (2009)
1015	Curran, M. & Shirk, B., “Basics of Fiber Optics”, accessed at https://www.fibersystems.com/pdf/whitepapers/Basics-of-Fiber-Optics.pdf (May 2016)
1016	“19-Inch Rack,” <i>Lite-On</i> , accessed at https://liteon-cips.com/products/racks/19-inch-rack/

Exhibit No.	Description
1017	“Fiber Optic Rack Mount Enclosure, 3-Panel 1 RMS,” <i>Computer Cable Store</i> , accessed at https://www.computercablestore.com/fiber-optic-rack-mount-enclosure-3-panel-1-rms
1018	“Fiber Optic Connector Tutorial,” <i>Fibermart</i> , accessed at https://www.fiber-mart.com/news/fiber-optic-connector-tutorial-a-848.html
1019	U.S. Patent No. 5,615,293 to Sayegh (“Sayegh”)
1020	Complaint, Senko Advanced Components, Inc. v. US Conec Ltd., Case No. 1:23-cv-00083 (D. Del.)

I. INTRODUCTION

Petitioner US Conec Ltd. (“Petitioner”) requests inter partes review (“IPR”) and cancellation of claims 1–22 of U.S. Patent No. 11,307,369 (“the ’369 patent”) to Takano et al., which is assigned to Senko Advanced Components, Inc. (“PO”). The claims recite an optical fiber connector configured to hold two optical fiber ferrules spaced along a row parallel to a transverse axis and having a latch positioned above the connector housing along the transverse axis.

These claims do not recite a patentable invention. The claimed arrangement of the ferrules and latch was well known at the time the application for the ’369 patent was filed, and the additional claimed features are incidental details that can also be found in the prior art. EX1003; EX1004; EX1010.

Accordingly, there is at least a reasonable likelihood that at least one claim of the ’369 patent is unpatentable. Petitioner respectfully requests that the Board institute trial on the grounds herein and determine that claims 1-22 are unpatentable.

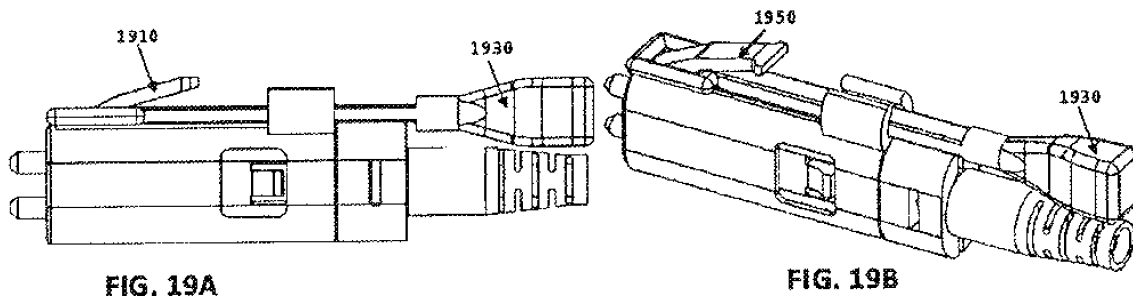
II. THE ’369 PATENT

A. Priority

The ’369 patent issued on April 19, 2022 from U.S. Patent Application No. 17/370,057 (“the ’057 application”), and alleges a priority date of July 14, 2017 through a chain of provisional and non-provisional prior applications.

B. Claimed Embodiment

The '369 patent discloses several distinct embodiments. EX1001, FIGs. 3-69. The claims of the '369 patent use several terms, such as “transverse axis,” “elongate arm,” “front end portion,” “rear end portion,” and “edge” that do not appear in the Specification. But the embodiments illustrated in Figures 19A-19D, of which Figures 19A and 19B are reproduced below, have some features that appear to be consistent with those of, for example, claim 1.



EX1001, FIGs. 19A, 19B.

The '369 patent describes the embodiment of Figures 19A and 19B as having a push-pull tab 1930 that is separable from a connector housing. *Id.*, 12:38-42. The push-pull tab 1930 actuates a latch 1910 “for inserting and extracting the connector from an adapter or transceiver.” *Id.*, 12:42-44.

C. Prosecution History

The '057 application was filed with prosecution claims 1-30, of which claims 1 and 18 were independent. EX1002, '369 Patent Prosecution History, 93-97.

PO submitted multiple Information Disclosure Statements citing hundreds of references in total before the first Office Action issued. *Id.*, 178-181, 184-290. In the first Office Action, the Examiner remarked “[t]he numerous references and materials listed on the submitted **47** sheets of the IDS’s make it difficult to determine whether or not any of the references... are material... the submission of voluminous documents in the instant information disclosure statements (here, in excess of **47 sheets of** documents) make it difficult, and likely impossible, for the Patent Office to fairly asses applicants’ application...” *Id.*, 237-238 (emphasis in original).

The first Office Action indicated that prosecution “[c]laims 2-4, 12, 13, 15, 19-21, 29 and 30... would be allowable if rewritten in independent form....” *Id.*, 236. In response, Applicant amended claims 2, 12, 13, 15, 19, 29, and 30 into independent form. *Id.*, 296-306. Prosecution claims 2, 12, 13, and 15 were renumbered to granted claims 1, 20, 21, and 22, respectively, which are challenged herein together with dependent claims 2-19. *Id.*, 321.

III. PERSON OF ORDINARY SKILL IN THE ART

A person of ordinary skill in the art (“POSITA”) in the field of endeavor of the ’369 patent at the time of its earliest claimed priority date would have been a person having: (1) at least a bachelor’s degree in mechanical engineering, electrical engineering, physics, or a related field and three years of experience in fiber optics

and fiber optic connectors; (2) a master's degree in mechanical engineering, electrical engineering, physics, or a related field and at least one year of experience in fiber optics and fiber optic connectors; or (3) industry experience (at least three years) designing fiber optic connectors in lieu of a formal degree. EX1011, ¶¶40-46.

IV. CLAIM CONSTRUCTION

This Petition affords all terms their ordinary and customary meaning.

V. OVERVIEW OF THE APPLIED ART

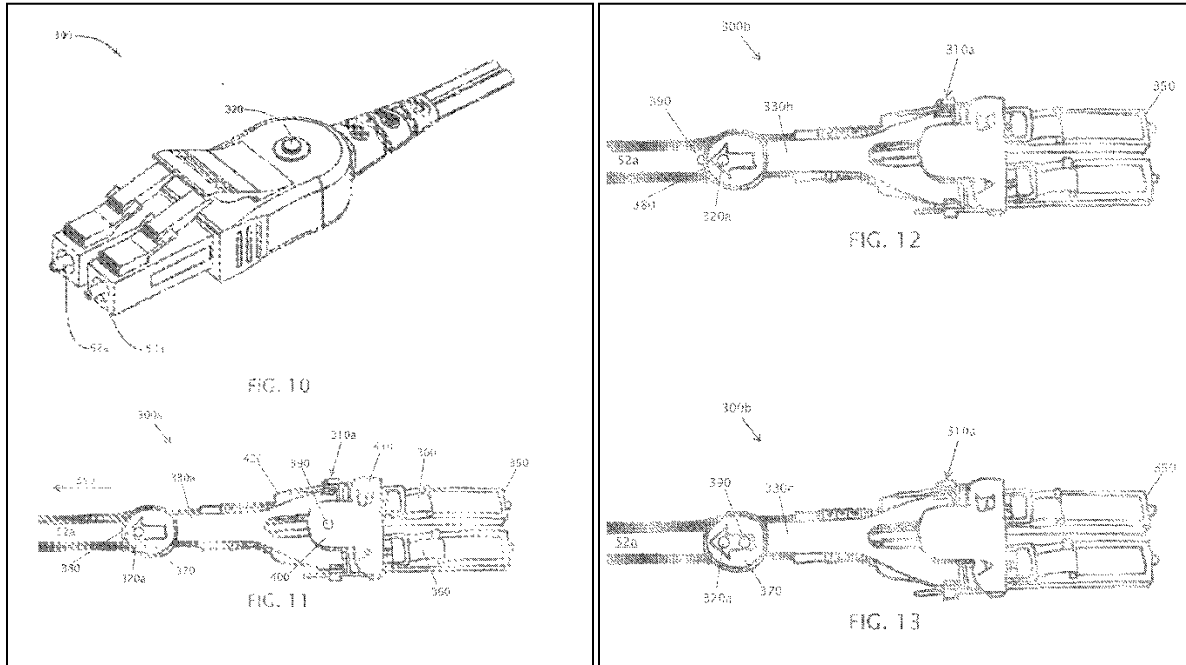
A. Scherer

International Application No. WO 2015/027033 A1 to Scherer *et. al.* (“Scherer”) published February 26, 2015, and is prior art under AIA 35 U.S.C. § 102(a)(1).

Scherer relates to devices and techniques for networking cables, including optical fiber cables. EX1003, ¶2. Scherer teaches that its techniques can be applied to fiber optic cables, and provides multiple “[e]xamples of connectors for optical-fiber cables” which “include single-fiber (e.g., LC) connectors, multi-fiber (e.g., MPO and/or MTP) connectors, and/or any other optical-fiber connectors (e.g., SC, ST, and the like).” *Id.*, ¶50.

Scherer explains “FIGS. 11-14 depict...cables 300a, 300b, 300c with fiber-optic cable connector hoods 310a, 310b, 310c.” *Id.*, ¶51. Scherer depicts distal, connecting ends of an optical fiber cable (referred to as “transmission line 52a”)

protruding from front ends of the connector hoods pictured in Figures 10-13. *Id.*, FIGs. 10-13, ¶51.

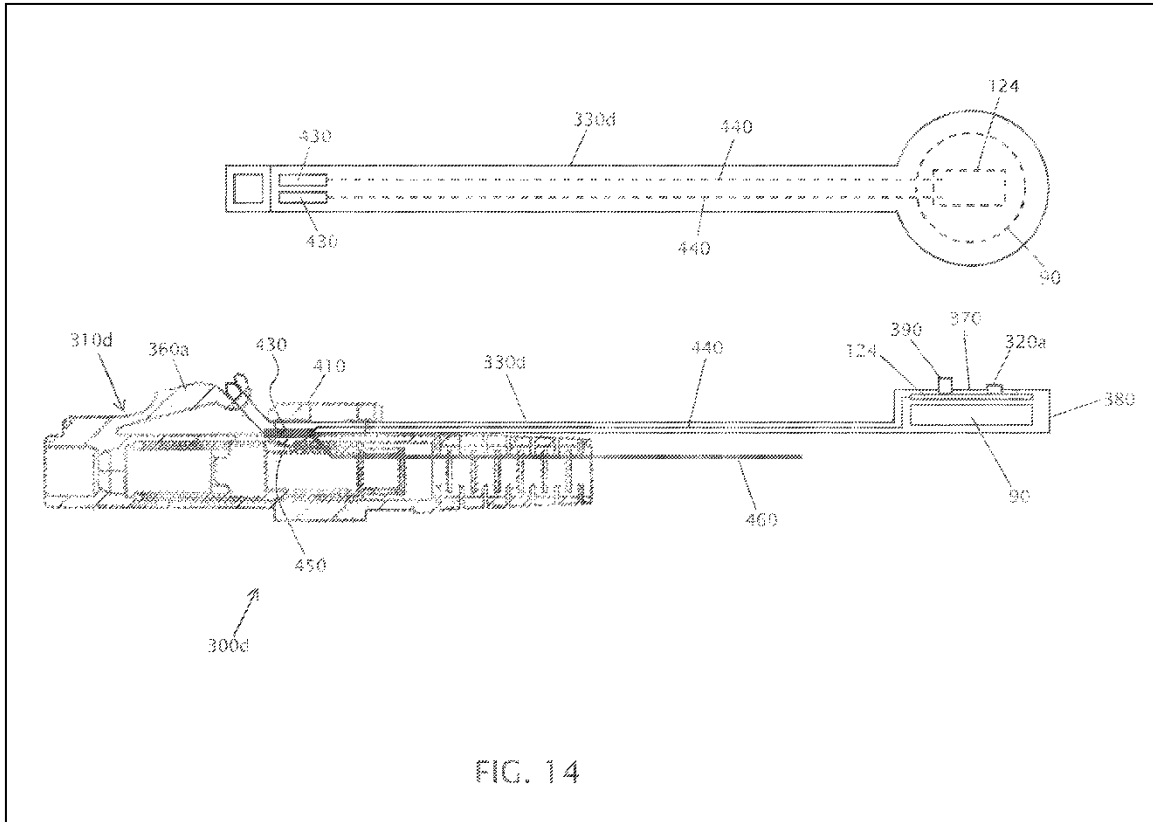


EX1003, FIGs. 10-13.

Hoods 310a, 310b, 310c “each include[] an extender or remote release tab (330a, 330b, 330c) which improves the ease of releasing the respective connector in high-density environments because the extender or remote release tab can simply be pulled by a user in a direction 340 away from a distal end 350 of the connector to laterally compress the lever(s) (360) of the connector toward the transmission line(s) 52a.” *Id.*, ¶51. Compressing the lever releases the connector because Scherer’s levers function to resist release of connector hoods from a mating connector or jack. *Id.*, ¶¶ 5, 10.

Scherer discloses “FIG. 14 depicts cutaway side view of a first end of a fourth embodiment 300d of the present fiber-optic cables. Cable 300d is similar to cable 300c with the primary exception that cable 300d includes only a single fiber optic cable (which is omitted for clarity).” *Id.*, ¶54. Thus, like the connector hoods 310a, 310b, 310c, Scherer’s “connector hood 310d includes extender 300d [*sic*’] that is configured to be removably coupled to connector body 400a such that extender 300d [*sic*] can slide relative to connector body 400a to depress or compress lever 360a.” *Id.*

¹ Scherer refers to a “cable 300d” three times and “extender 330d” in the same paragraph, so “extender 300d” is a clerical error and should be “330d”. EX1011, Section VII.A.



EX1003, FIG. 14.

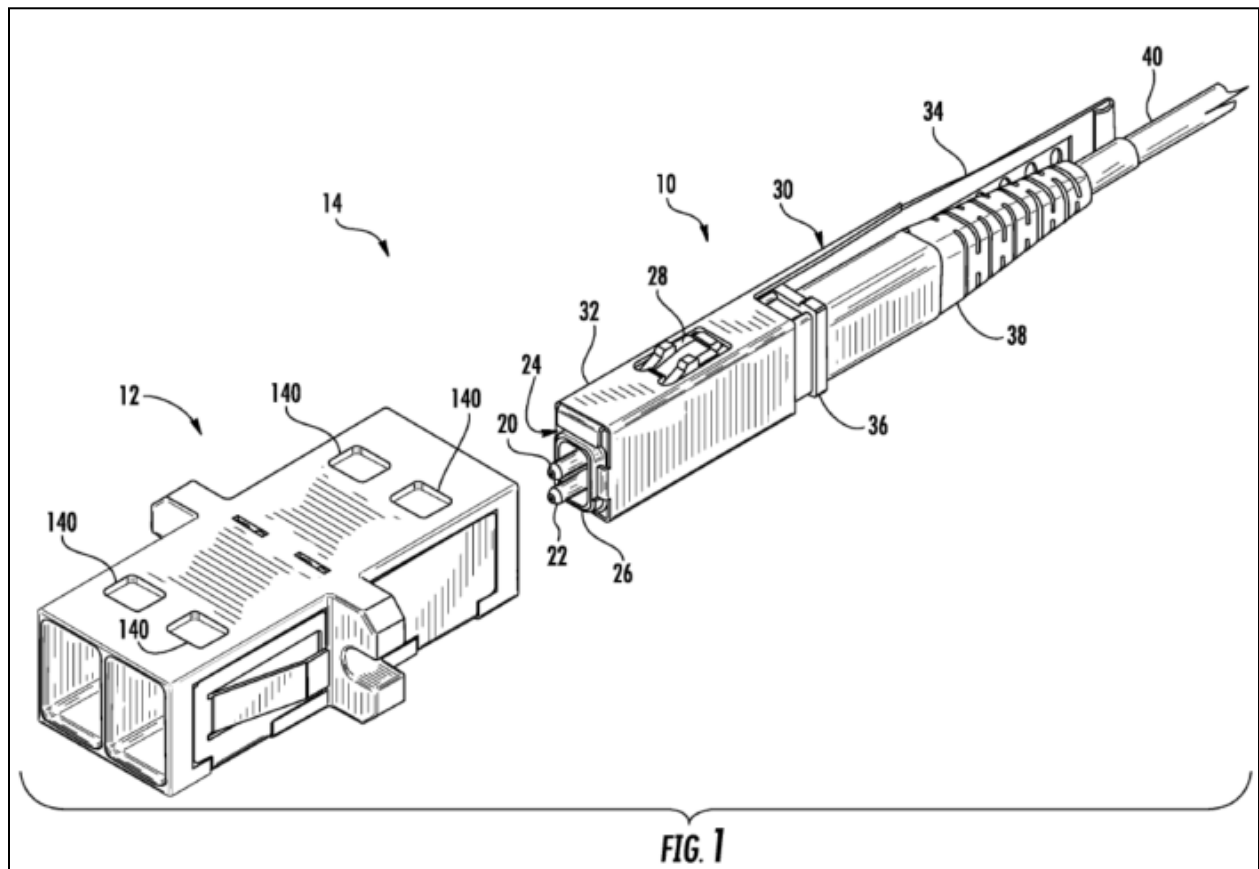
Grounds 1 and 2 are based on Scherer's Figure 14, with reference to Figures 11-13. Figure 14 is generally alike to those of Figures 11-13 "with the primary exception that cable 300d" depicted in Figure 14 "includes only a single fiber optic cable." EX1003, ¶54.

B. Lee

International Publication No. WO 2017/127208 A1 to Lee ("Lee") was filed on December 21, 2016 and published on July 27, 2017, and is prior art under AIA 35 U.S.C. § 102(a)(2).

Lee relates to optical fiber connectors releasably connectable to adapters.

EX1004, ¶¶2-4, 29. Lee discloses an illustrated example of a fiber optic connector for first and second fiber optic ferrules, with the fiber optic ferrules aligned in a row with a depressible latch for securing the connector to the adapter. *Id.*, ¶¶29, 30, 44.



EX1004, FIG. 1.

Fiber optic connector 10 “is designed to have a small profile and thereby enable high-density interconnects.” EX1004, ¶29. Figure 1 shows fiber optic connector 10 includes a first ferrule 20 and a second ferrule 22 exposed at a front

end 26 of fiber optic connector 10 for mating with adapter 12. *See id.*, ¶30.

Connector 10 includes a handle 30, which includes a housing portion 32 that houses inner connector body 24. *Id.* Lee explains “the handle 30 can move relative to the inner connector body 24 so that the housing portion 32 can cause the latch arm 28 to flex toward the inner connector body 24.” *Id.* Housing portion 32 includes an opening 54 through which latch arm 28 extends. *Id.*, ¶47. A pushing feature 142 includes a rounded surface 144 and provides a front edge of opening 54 such that the front edge of opening 154 slides longitudinally along a ramp 124 that provides an upper surface of latch arm 28 when handle 30 is pulled rearwardly to depress latch arm 28. *Id.*, ¶47, FIG. 3. Pulling the handle rearwardly can thereby depress latch arm 28 and enable withdrawal of the connector. *Id.*, ¶65; EX1011, ¶¶93-110.

C. Gniadek

U.S. Patent No. 8,465,317 to Gniadek (“Gniadek”) was granted on June 18, 2013, and is prior art under AIA 35 U.S.C. § 102(a)(1).

Gniadek’s disclosure “relates to interconnect technology. More specifically, the present disclosure relates to interconnect technology used in electrical and optical systems.” EX1010, 1:13-1:15; EX1011, ¶¶111-116.

Gniadek discloses a latching connector 816 for an optical fiber transmission medium 812. EX1010, 16:18-25; EX1011, ¶¶111-116.

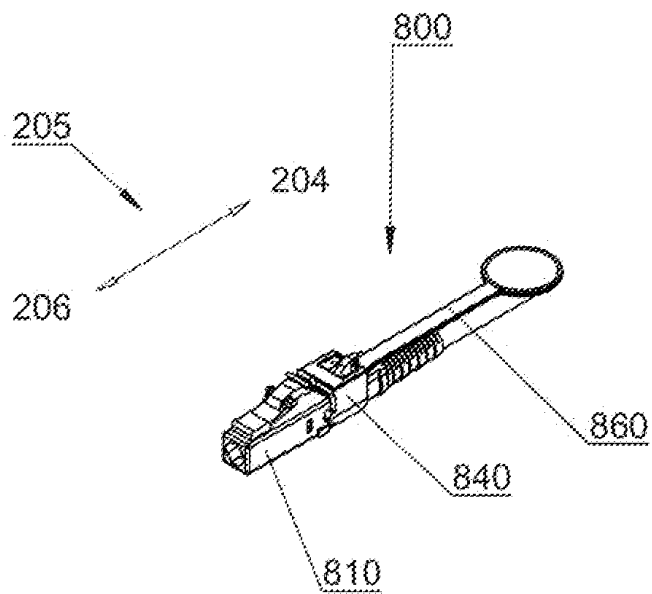


FIG. 21

EX1010, FIG. 21.

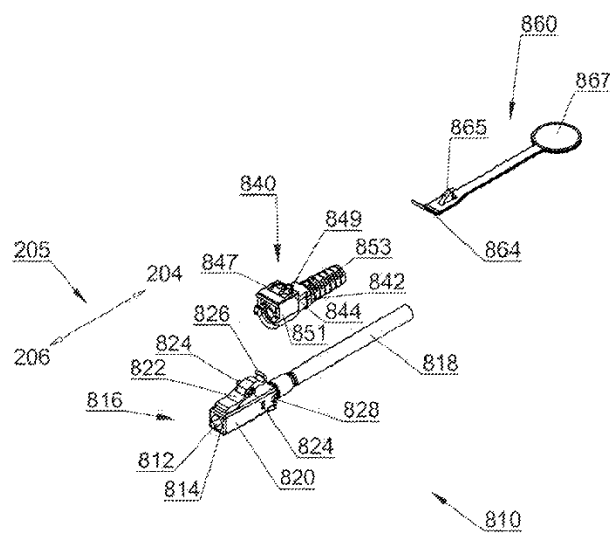


FIG. 22

EX1010, FIG. 22.

Connector 816 includes a lever 822 with latches 824. EX1010, 16:20-30. An extender 860 is connected to lever 822, such that pulling extender 860 depresses lever 822. EX1010, 17:20-29; EX1011, ¶¶111-116.

Connector 816 includes a trap 828, and a boot 840 includes a protruding member 851 configured to be received in trap 828 to couple boot 840 to connector 816. EX1010, 17:2-11; EX1011, ¶¶111-116.

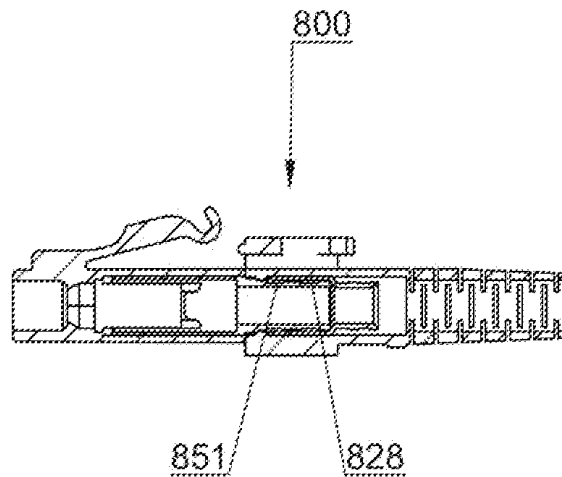


FIG. 23
SECTION VIEW OF 800

EX1010, FIG. 23.

VI. IDENTIFICATION OF THE CHALLENGE (37 C.F.R. §42.104(B))

Petitioner provides a Ranking Document demonstrating why two petitions are necessary to full challenge this patent. EX1011, ¶¶117-119.

This table summarizes the Grounds for claims 1-22 found in IPR2024-00115:

Ground	Basis	Reference(s)	Claims
1	§ 103	Scherer (EX1003) and Lee (EX1004)	1-17, 20 and 21
2	§ 103	Scherer, Lee, and Gniadek (EX1010)	18, 19, and 22
3	§ 102	Lee	1-17, 20, and 21
4	§ 103	Lee	18, 19, 21, and 22

This table summarizes the Grounds for claims 23-40 found in IPR2024-00116:

Ground	Basis	Reference(s)	Claims
1	§ 102	Nguyen (EX1009)	23-26 and 40
2	§ 103	Nguyen and Lin (EX1005)	27-39
3	§ 103	Scherer (EX1003) and Lin	23-39, 39, and 40
4	§ 103	Scherer, Lin, and Gniadek (EX1010)	37 and 38

VII. GROUND 1: SCHERER IN VIEW OF LEE RENDERS OBVIOUS CLAIMS 1-17, 20, AND 21.

A. Motivation to combine

1. Scherer

Scherer, like the '369 patent, discloses optical fiber connectors, including individual connectors configured connect multiple distinct lines. EX1011, ¶¶125-127; EX1003, ¶¶50-54. PO may contend that Scherer does not disclose the particular arrangement of optical fiber ferrules relative to features of an optical

fiber connector recited in claims 1-22. PO may further allege that Scherer does not expressly disclose wherein the edge slides longitudinally along the upper surface of lever 360a when the extender is pulled rearwardly. But these features were well known.

2. Lee

Lee discloses an optical fiber connector comprising first and second optical fiber ferrules spaced apart along a transverse axis, as well as a depressible latch above a top portion of the connector housing along the transverse axis. Section V.B. Lee further discloses an elongate arm having a front end portion defining an opening with an edge that defines a front end of the opening and slides longitudinally along the upper surface of the latch when the elongate arm is pulled rearwardly to depress the latch. *Id.* A POSITA would have found it obvious to modify Scherer's optical fiber connector of to arrange optical fiber ferrules in a row with the depressible latch as disclosed in Lee and to have an edge defining a front end of an opening in the extender, wherein the edge slides longitudinally along the upper surface of lever 360a when the extender is pulled rearwardly to depress lever 360a, and the product of such a modification would have fallen within the scope of claims 1-21. EX1011, ¶¶128-133.

3. How to Combine

A POSITA would have found it obvious to modify Scherer's connector to orient first and second optical fiber ferrules along the transverse axis of Scherer's connector. *Id.* A POSITA would also have found it obvious to modify Scherer's extender 330d and lever 360a such that the edge defining the front end of the opening slides longitudinally along the upper surface of the lever 360a when the extender 330d is pulled rearwardly to depress the lever 360a. EX1011, ¶134.

4. Why to Combine

A POSITA would have recognized that Scherer and Lee both provide interrelated teachings and are in the same field of endeavor as the '369 patent. EX1011, ¶¶135-144. This orientation is readily apparent in Lee. Section V.B. A POSITA would have found this modification obvious because it would merely amount to finding constructional details in Lee to implement a variation on the multiple-ended connections Scherer discloses. *Id.*

There are only a finite number of orientations in which to arrange an array of fibers. *Id.* More specifically, for applications in which a row or column of fibers is desired—which is a well-known configuration because often optical systems arrange multiple fiber connections side-by-side on a circuit board or other substrate—it would have been obvious to select an axis perpendicular to the longitudinal axis of the fiber in which to arrange such fibers; and, the choice of

whether to select, for example, the vertical or horizontal axis is arbitrary and amounts to merely choosing one of the few and finite available options. *Id.*

5. Expectation of Success

Scherer explicitly suggests the use of different fiber optic connector configurations (EX1003, ¶50), which a POSITA would have understood includes different connector orientations. EX1011, ¶¶135-144. Scherer explains that its “cable tracer technologies and techniques can also be included in fiber optic cables,” and relevant “[e]xamples of connectors for optical-fiber cables include single-fiber (e.g., LC) connectors, multi-fiber (e.g., MPO and/or MTP) connectors, and/or any other optical-fiber connectors (e.g., SC, ST, and the like).” EX1003, ¶50. Scherer depicts transmission line 52a extending through connector hoods 310a, 310b, 310c to protrude from distal ends thereof, while the line 52a is omitted from Figure 14 for clarity. *Id.*, ¶¶50, 51, 54, FIGs. 10-14. In each of cables 300, 300a, 300b, 300c, the transmission line 52a has two distal ends. *Id.*, ¶¶50-53. A POSITA would have understood Scherer’s statement that “[c]able 300d is similar to cable 300c with the primary exception that cable 300d includes only a single fiber optic cable” (*id.*, ¶54) to mean that the structures depicted in Figure 14 and described with respect thereto could be altered to make multiple connections from a single optical fiber transmission line 52a, as shown in Figures 10-13. EX1011, ¶¶135-144.

A POSITA would have found Lee to be an obvious source for alternative solutions (as suggested by Scherer) to making multiple connections from a single optical fiber cable. In addition to disclosing multiple ferrules 20, 22, Lee solves some of the same problems as Scherer in a similar way, i.e., facilitating multiple connections from a single optical fiber cable in a high density environment with a connector that has a latch and a handle configured so that pulling the handle depresses the latch and releases the connector. EX1011, ¶¶135-144; EX1004, ¶¶4, 29, 65.

The modification to Scherer only involves basic dimensional and structural changes to incorporate a well-known (a multi-fiber ferrule) into Scherer's connector. EX1011, ¶¶135-144. These changes would have been well within the skill of a POSITA. *Id.*

Furthermore, Lee discusses “[t]he demand for high bandwidth tends to drive a need for high-density interconnects... By increasing the number of optical connections, more data can be transmitted in the given space,” but that in high density applications “[t]he fiber optic connectors often become more difficult to handle and less robust as components are made smaller.” EX1004, ¶4. Lee discloses that its specific connector design “is designed to have a small profile and thereby enable high-density interconnects. Connector 10 is particularly suitable for data centers and other environments where many connections are desired in small

spaces.” *Id.*, ¶29. Connector density is a well-known driver of fiber optic design and is increasingly one of the main design factors when creating a new connector. EX1011, ¶¶135-144. A POSITA would have been motivated to align a connector like Scherer’s with a higher density connector design, like Lee’s. *Id.*

This modification would have been obvious at least because there are two realistic orientations given space constraints: the orientation shown in Scherer in which the ferrules are aligned in the plane oriented perpendicularly to the defined transverse and longitudinal axes, and the orientation shown in Lee, in which the ferrules are aligned along the defined transverse axis. *Id.* There are no technical difficulties implementing either known orientation, and thus a POSITA would have found this modification to be obvious to try, especially when pursuing benefits accompanying improved connector density. *Id.* Accordingly, a POSITA would have been motivated to modify Scherer’s connector hood to include multiple ferrules positioned relative to the lever as disclosed in Lee. *Id.*

Finally, the modification of extender 330d to have an edge that slides along lever 360a would have only required elongating the portion of the front portion of extender 330d in which the opening that receives the lever 360a is defined so that the edge at the front end of the opening would rest against the ramped upper surface of the lever 360a instead of being seated inside of the hook-shaped recess at the back end of the lever 360a. *Id.*

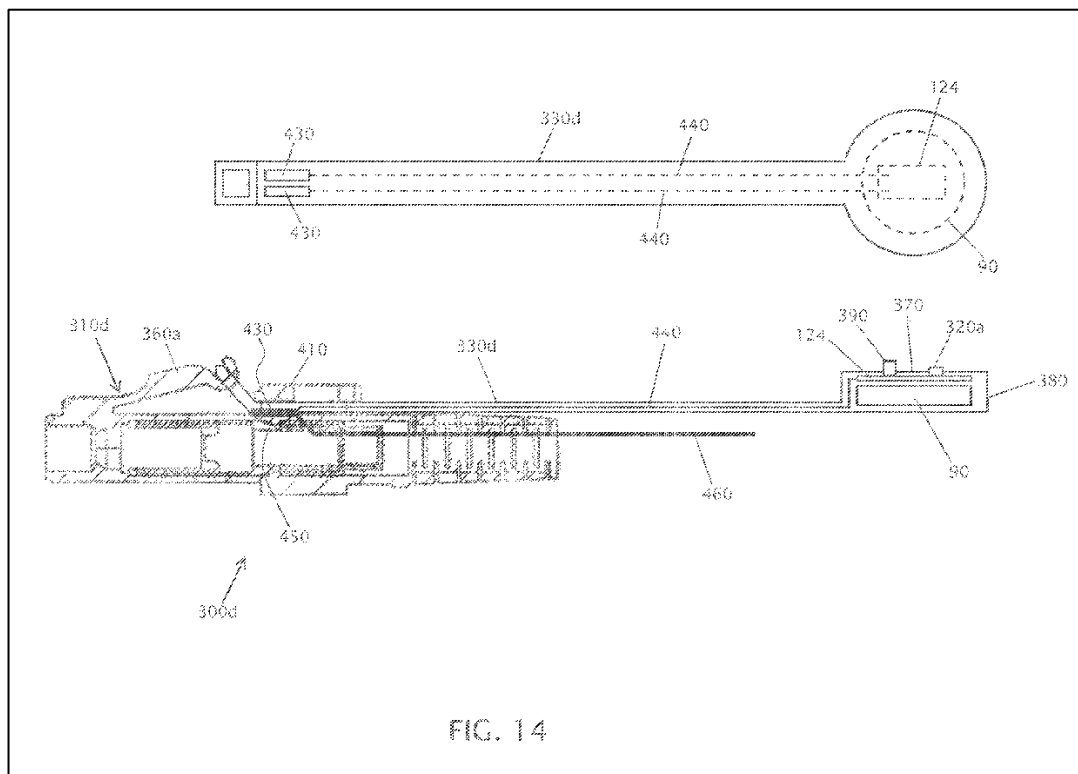
B. Claim 1

1. Preamble

Scherer discloses the elements of the preamble. EX1011, ¶¶145-150.

Scherer discloses optical fiber connectors in Figures 10-14. EX1003, ¶¶51-55, FIGs. 10-14; EX1011, ¶¶145-150. One example is shown below in Scherer's

Figure 14:



EX1003, FIG. 14.

A POSITA would have readily understood that Figure 14 shows an optical fiber connector. EX1003, ¶¶51-52, 55; EX1011, ¶¶145-150. Scherer discloses the limitations of the preamble.

Scherer explains that “FIGS. 11-14 depict various embodiments of cables 300a, 300b, 300c with fiber-optic cable connector hoods 310a, 310b, 310c” designed in a way that “improves the ease of releasing the respective connector in high-density environments,” and that connector hood 310d shown in Figure 14 is similar to at least cable 300c. EX1003, ¶¶51, 54.

Hood 310d and associated transmission line are thus an assembly forming an optical fiber connector for high-density environments of a type similar to the claimed optical fiber connectors. EX1001, Abstract, 1:34-2:57 (explaining the need for high-density interconnects in data centers and disclosing an optical connector), FIGs. 18A-19D (illustrating example embodiments of an optical fiber connector); EX1011, ¶¶145-150.

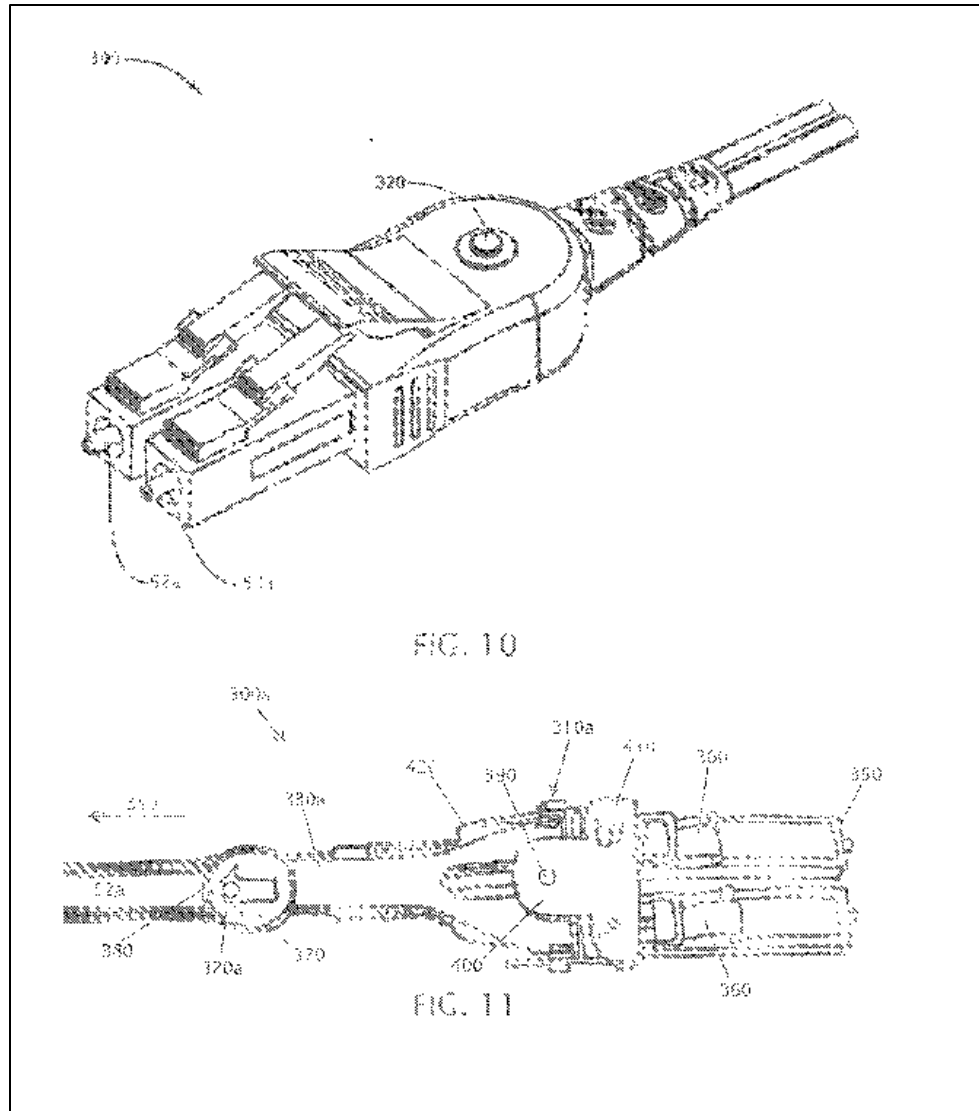
Accordingly, Scherer discloses the preamble. EX1011, ¶¶145-150.

2. [1.1]

Scherer-Lee teaches [1.1]. EX1011, ¶¶151-159.

a. Scherer

Scherer’s Figures 10-13 show two fiber optic lines that terminate at the forward portion of the connector. EX1003, ¶¶50, 51, 53, FIGs. 10-13; EX1011, ¶¶145-159.



EX1003, FIGs. 10-11.

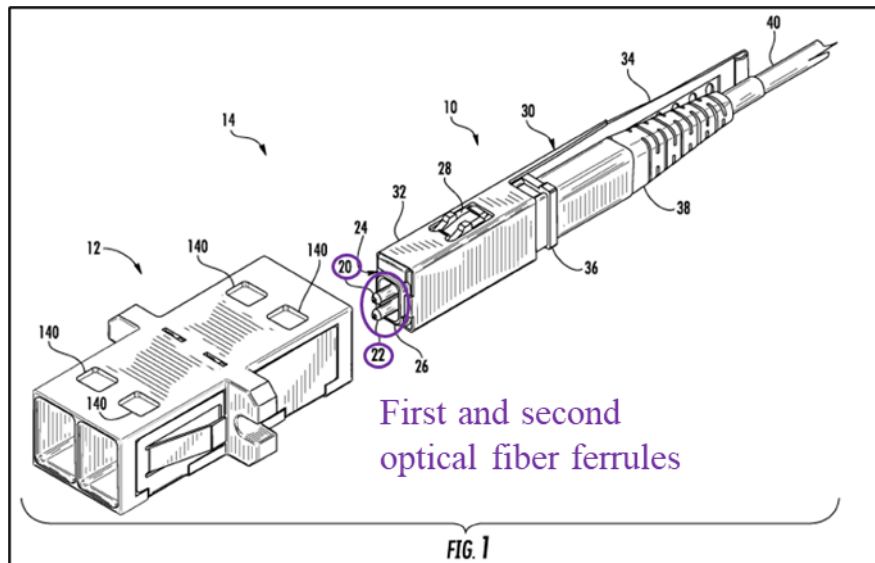
Scherer Figure 14 shows “[c]able 300d is similar to cable 300c with the primary exception that cable 300d includes only a single fiber optic cable.”

EX1003, ¶54. A POSITA would have understood that the features of the connector shown in Figure 14 would also be suitable for making double ended connections like those related to Figures 11-13. EX1011, ¶¶145-159. And a POSITA would

have been motivated to modify Scherer to include [1.1] in view of Lee. EX1011, ¶¶145-159.

b. Lee

Lee also discloses first and second optical fiber ferrules. EX1004, ¶6; EX1011, ¶¶151-159. Lee Figure 1 shows “the connector 10 includes first and second ferrules 20, 22, an inner connector body 24 having a front end 26 from which the first and second ferrules extend...” *Id.*, ¶30. Ferrules 20, 22 can also be seen in annotated Figure 1. Lee’s Figures 10 and 12-14 also illustrate fiber optic connectors with first and second optical fiber ferrules. EX1011, ¶¶151-159.



EX1004, FIG. 1 (annotated).

c. Motivation to Combine

A POSITA would have been motivated to modify Scherer's Figure 14 optical fiber connector to include Lee's first and second optical fiber ferrules

because doing so would have had entirely predictable results and would have enabled the advantages of Scherer's optical fiber connectors to be implemented with the increased connector density that Lee teaches is a result of using multiple optical fiber ferrules. EX1011, ¶¶145-159.

Accordingly, [1.1] would have been obvious over Scherer-Lee. EX1011, ¶¶151-159.

3. [1.2]

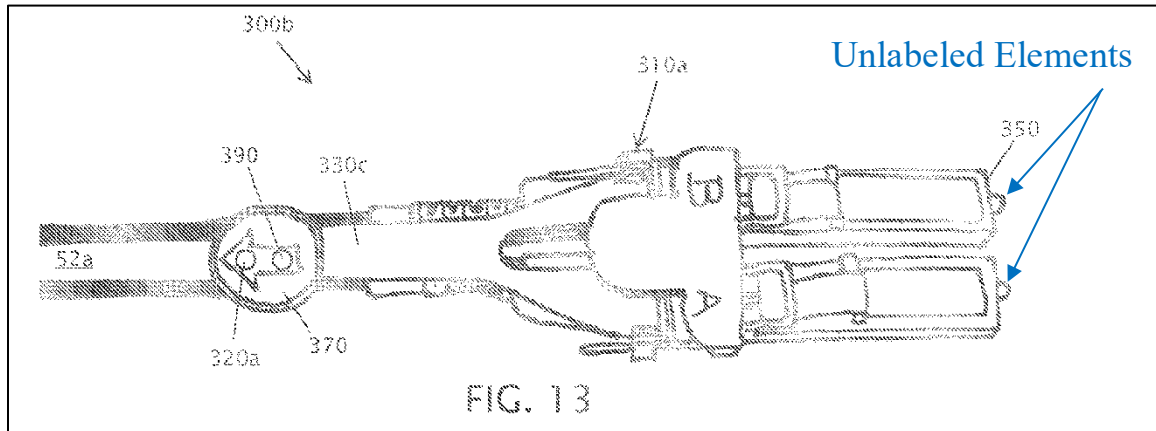
Scherer discloses [1.2]. EX1011, ¶¶160-171.

Scherer discloses a connector housing having a front end, rear end, top portion, and bottom portion along the axes recited in this claim. EX1003, ¶¶50, 51, 53, FIG. 14. A POSITA would have understood that the portion of Scherer's "connector hood 310d" that surrounds the empty space through which the transmission line 52a would extend defines the claimed "connector housing". EX1003, ¶¶50, 51, 53, FIG. 14; EX1011, ¶¶160-171.

Scherer states "FIG. 14 depicts cutaway side view of a first end of a fourth embodiment 300d of the present fiber-optic cables. Cable 300d is similar to cable 300c with the primary exception that cable 300d includes only a single fiber optic cable (which is omitted for clarity)." EX1003, ¶54.

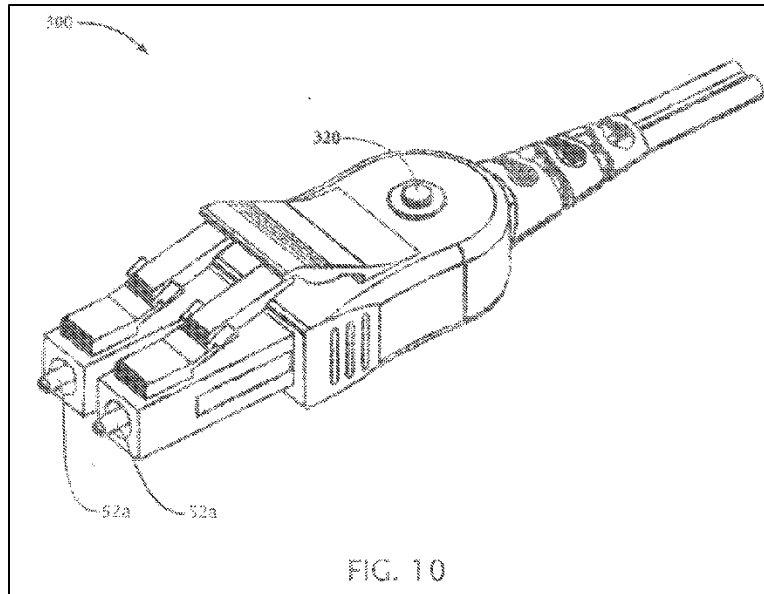
Figure 13 depicts cable 300c with unlabeled elements exposed through the front end portion, or distal end 350, of connector hood 310. EX1003, ¶53, FIG. 13

(the appearance of numeral 300b in FIG. 13 appears to be an error because Scherer states that “FIG. 13 depicts a first end of a third embodiment 300c of the present fiber optic cables.”); EX1011, ¶¶160-171.



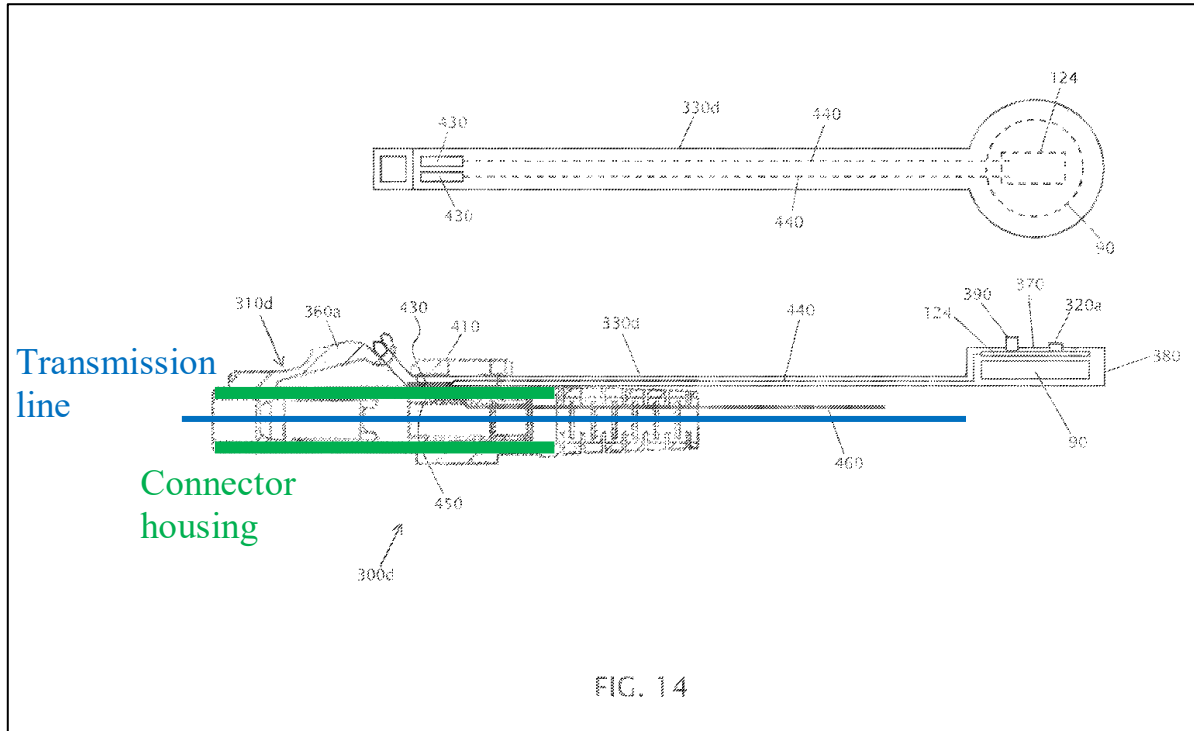
EX1003, FIG. 13 (annotated).

Scherer states that cables 300a, 300b, 300c include a “transmission line 52a,” also referred to as a “cable 52a.” EX1003, ¶51. Features resembling the “unlabeled elements” indicated in Figure 13 above are labeled with numeral 52a in Figure 10. EX1003, FIG. 10; EX1011, ¶¶160-171.



EX1003, FIG. 10.

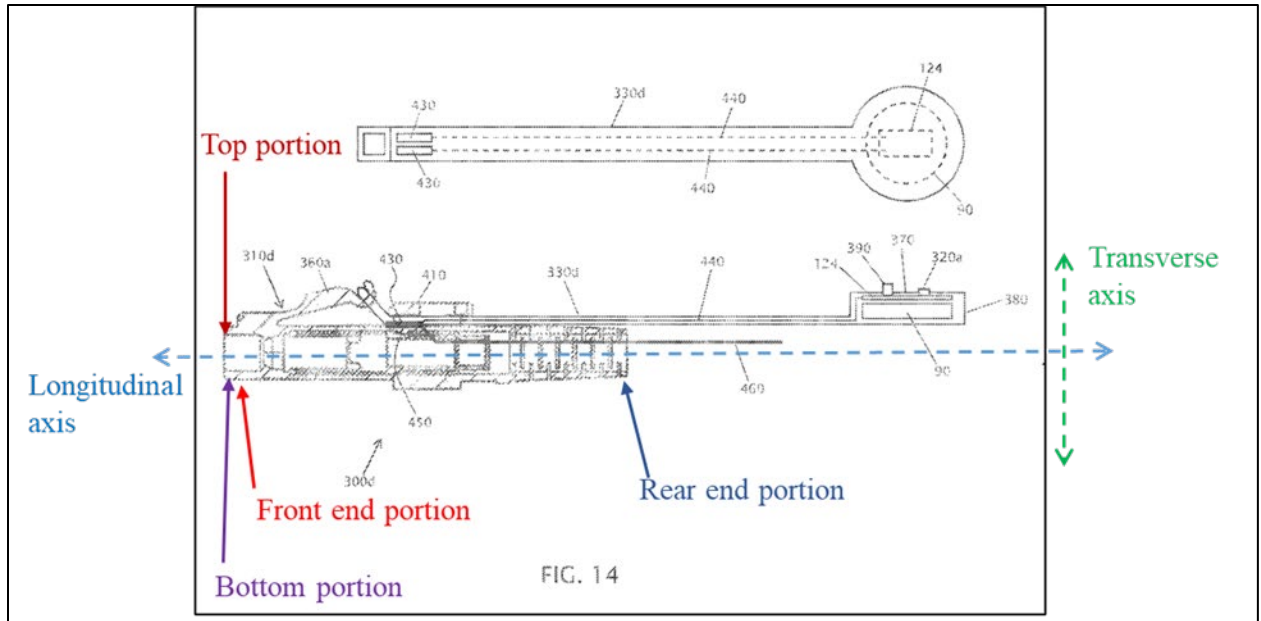
A POSITA would therefore understand from context that Figure 13's annotated "unlabeled elements" are each extensions of "transmission line 52a" or "cable 52a" that Scherer describes as being present in Figure 13. EX1011, ¶¶160-171. Because Scherer states that Figures 13 and 14 are similar, and that the cable is omitted from Figure 14 for clarity, a POSITA would understand from comparing Figures 13 and 14 that transmission line 52a is located at the position shown in annotated Figure 14, extending through hood 310d to be exposed through the front end portion thereof. *Id.*



EX1003, FIG. 14 (annotated).

A POSITA would therefore recognize the portion of hood 310d highlighted in green above that surrounds the space through which the transmission line would extend is a “connector housing” as claimed. EX1011, ¶¶160-171. The highlighted portion of connector hood 310d is a part of an optical fiber connector that defines a structural housing for transmission line 52a, and thereby teaches a “connector housing.” EX1011, ¶¶160-171.

The connector housing provided by hood 310d has a front end portion and a rear end portion spaced apart along a longitudinal axis, the connector housing comprising a top portion and a bottom portion spaced apart along a transverse axis perpendicular to the longitudinal axis as claimed. EX1003, FIG. 14.



EX1003, FIG. 14 (annotated).

Accordingly, Scherer discloses [1.2]. EX1011, ¶¶160-171.

4. [1.3]

Scherer-Lee teaches [1.3]. EX1011, ¶¶172-186.

To any extent the PO may allege that Scherer does not expressly disclose [1.3], Lee does. EX1011, ¶¶172-186.

Scherer discloses hood 310d that defines a connector housing configured to hold line 52a, such that the distal end of line 52a is exposed through the front end portion of the housing. Section VII.B.3; EX1003, FIG. 14, ¶¶51-54; EX1011, ¶¶172-186. Scherer's Figures 10–13 show two ferrules connected to line 52a and exposed through the front end of a connector. EX1003, ¶¶51-53, FIGs. 10–13. Scherer states Figure 14's connector is similar to Figure 13, "with the primary

exception that cable 300d includes only a single fiber optic cable (which is omitted for clarity)” (*id.*, ¶54), so a POSITA would have understood that the connecting features of Figure 14 are configured for making a connection with a ferrule exposed through the front end. *Id.*, ¶54; EX1011, ¶¶172-186.

PO may allege that Scherer does not expressly disclose a connector housing holding the first and second optical fiber ferrules such that the first and second ferrules are spaced apart from one another along the transverse axis as claimed. However, Lee discloses [1.3]. Section VIII.A.4; EX1004, FIGs. 1-3, 5, ¶¶3, 30, 35, 36. To any extent PO may allege that Scherer does not expressly disclose [1.3], it would have been obvious in view of Lee to modify Scherer’s Figure 14 by adding a second ferrule aligned with the first ferrule and the latch on a transverse axis. Section VII.A; EX1011, ¶¶125-144, ¶¶172-186.

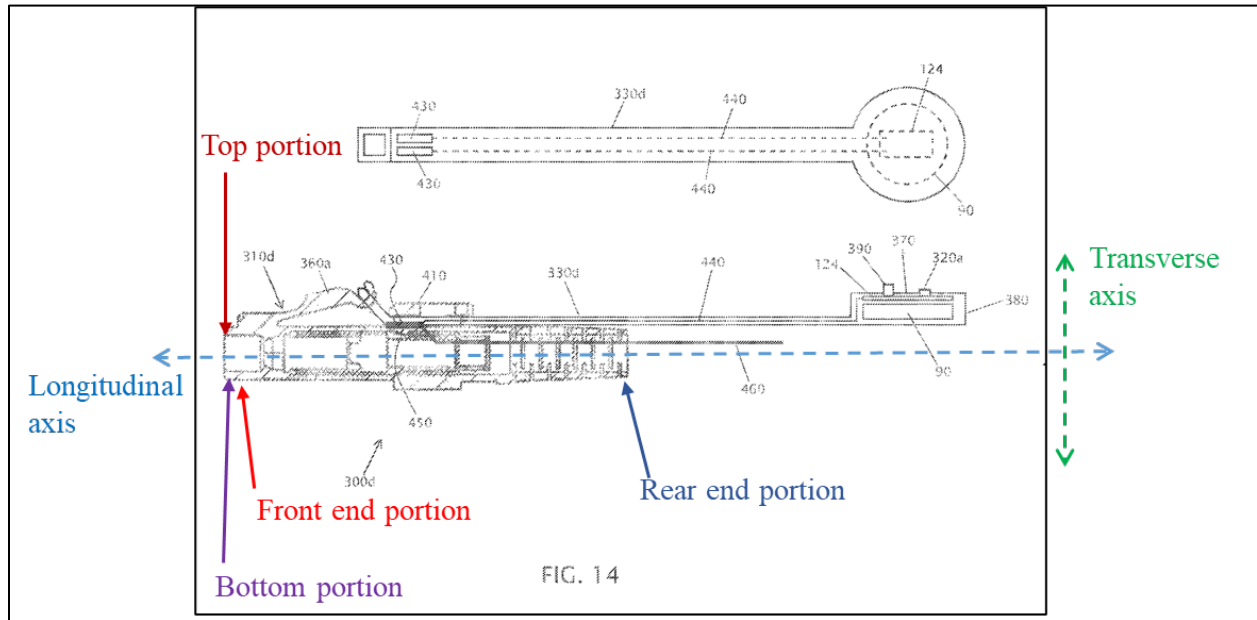
Accordingly, Scherer-Lee teach [1.3]. EX1011, ¶¶172-186.

5. [1.4]

Scherer discloses [1.4.]. EX1011, ¶¶187-193.

Because [1.2] recites a “connector housing comprising a top portion and a bottom portion spaced apart along a transverse axis,” the vertical position of elements, such as “top,” “bottom,” and “above,” indicate placement of those elements with respect to the transverse axis. EX1011, ¶¶187-193.

Scherer discloses a connector housing comprising a top portion and a bottom portion spaced apart along a transverse axis. Section VII.B.3; EX1003, ¶¶50, 51, 53, 54, FIG. 14.



EX1003, FIG. 14 (annotated).

Scherer shows a lever 360a positioned on an opposite side of the top portion of hood 310d from the bottom portion along the transverse axis, making lever 360a above the top portion. EX1003, ¶53, FIG. 14; EX1011, ¶¶187-193.

Based on Scherer's explanation of the role of levers, a POSITA would have recognized the lever 360a as being a depressible latch as claimed. EX1011, Section ¶¶187-193; EX1003, ¶¶5, 10. Scherer states the role of a lever is "to engage the mating connector or jack to resist removal of the distal end" of a connector. EX1003, ¶¶5, 10. Scherer's Figures 11-13 show remote release tabs 330a, 330b,

330c “improve[] the ease of releasing the respective connector in high-density environments because the extender or remote release tab can simply be pulled by a user... to laterally compress the lever(s) (360),” which is consistent with the role of the lever 360a being to act as a latch that resists removal of the connector from a mating connector or jack. EX1003, ¶51; EX1011, ¶¶187-193. Scherer’s lever 360a is therefore a depressible latch above the top portion of the connector housing as claimed. EX1011, ¶¶187-193.

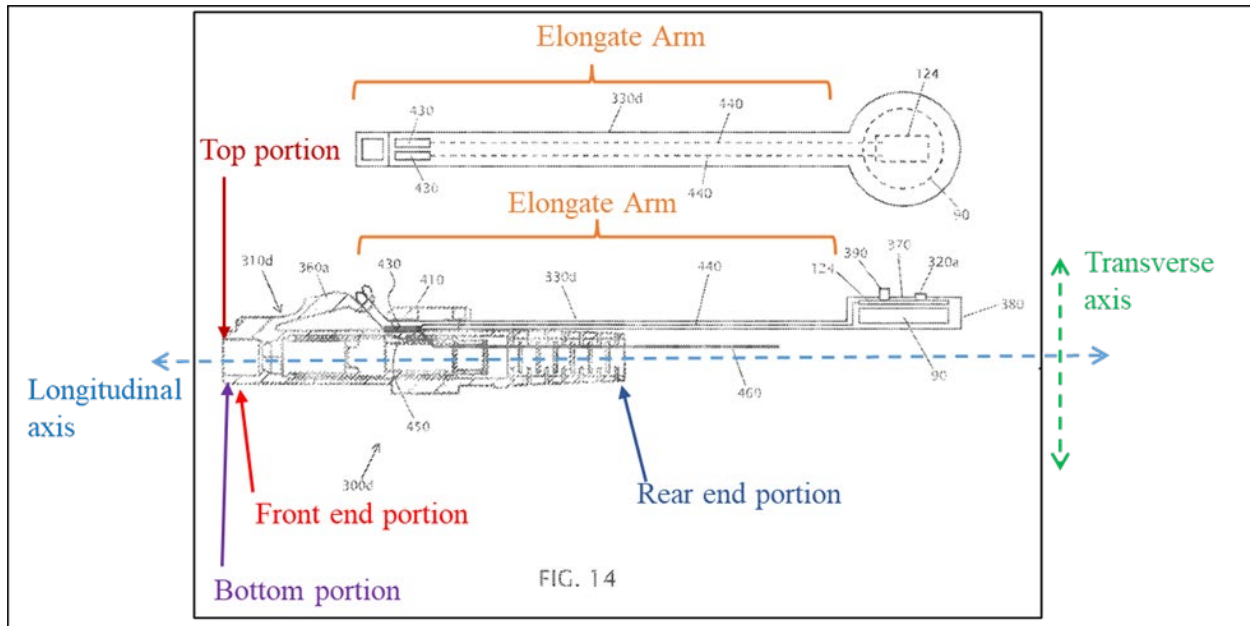
Accordingly, Scherer discloses [1.4]. EX1011, ¶¶187-193.

6. [1.5]

Scherer discloses [1.5]. EX1011, ¶¶194-209.

A POSITA would have interpreted Scherer’s extender 330d as providing an elongate arm connected to the connector housing above the top portion and configured to be pulled to actuate the depressible latch. EX1011, ¶¶194-209; EX1003, ¶54, FIG. 14. FIG. 14’s extender 330d is pulled to actuate a depressible latch in the form of lever 360a because, as Scherer explains, the “connector hood 310d includes extender 300d [*sic*] that is configured to be removably coupled to connector body 400a such that extender 300d [*sic*] can slide relative to connector body 400a to depress or compress lever 360a.” EX1003, ¶54; EX1011, ¶¶194-209.

Extender 330d not only performs claimed functions, but is above the top portion of the connector housing. EX1003, FIG. 14. EX1011, ¶¶204-207.



EX1003, FIG. 14 (annotated).

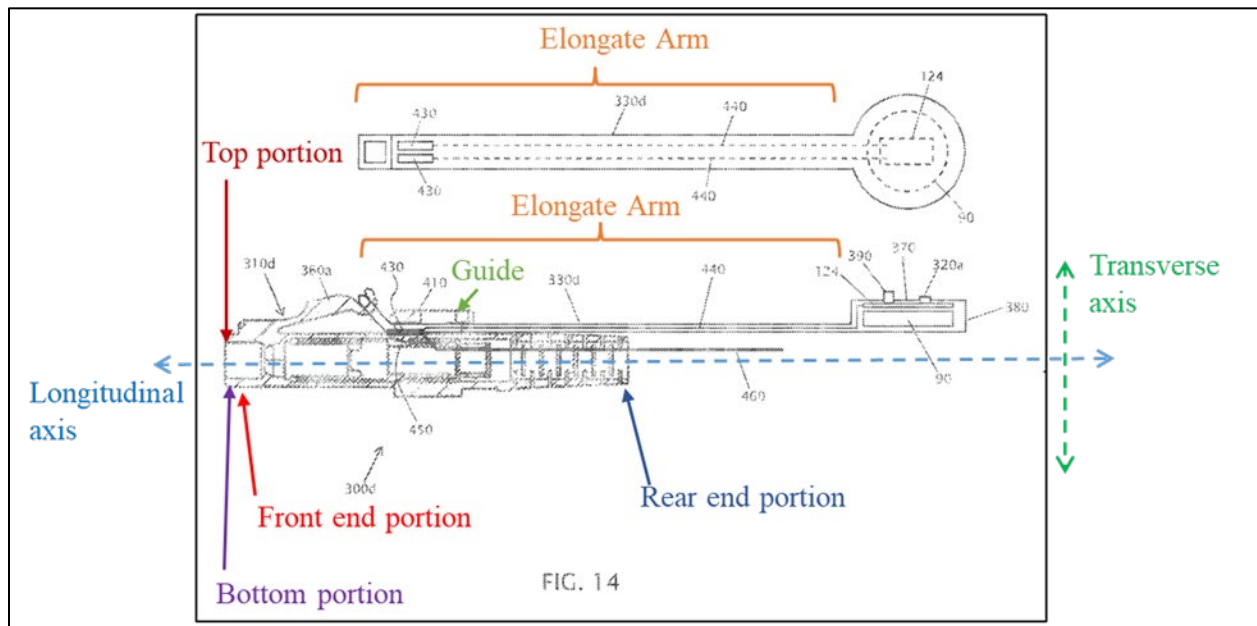
Extender 330d is confined between the connector body 400/410 and the top portion of the connector housing. EX1004, FIG. 14. And extender 330d “is configured to be removably coupled to connector body 400a,” *id.*, ¶54, where Figure 14 shows extender 330d is connected to the connector housing above the top portion. Extender 330d provides an elongate arm connected to the connector housing above the top portion and configured to be pulled to actuate a depressible latch as claimed. EX1011, ¶¶204-208.

Accordingly, Scherer discloses [1.5]. EX1011, ¶¶194-209.

7. [1.6]

Scherer discloses [1.6]. EX1011, ¶¶210-215.

Scherer Figure 14 depicts a guide that connects extender 330d, which defines an elongate arm as claimed, Section VII.B.6, to the connector housing provided by connector hood 310d. *Id.*, FIG. 14.



EX1003, FIG. 14 (annotated).

Connector body 400a/410 couples extender 330d to the housing while allowing extender 330d to slide. EX1003, ¶54.

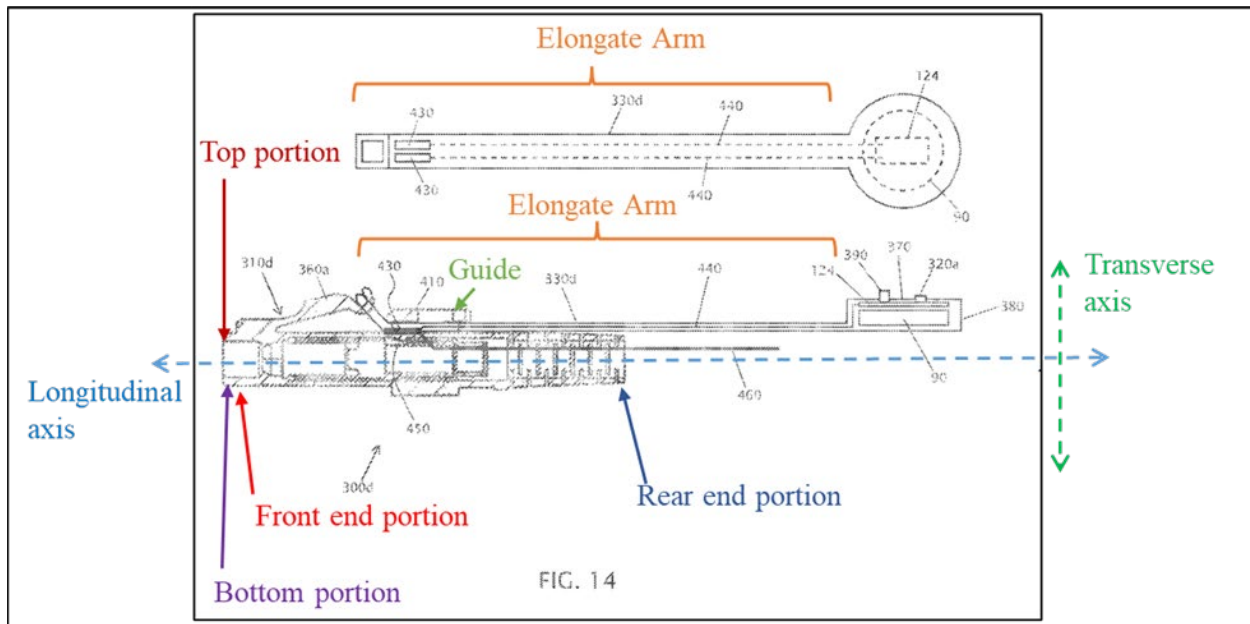
Scherer states its connector bodies can define slots in which the respective extenders can be slidably disposed, which map to the space between body 410 and the top portion of the connector housing. *Id.*, ¶8 (“In some embodiments, the connector body defines a slot, and the extender is configured to be slidably

disposed in the slot.”). Thus, the space or slot guides extender 330d to move “slidably” and is a guide that connects extender 330d to the housing portion of hood 310d. EX1011, ¶¶210-215.

Accordingly, Scherer discloses [1.6]. EX1011, ¶¶210-215.

C. Claim 2

Scherer’s extender 330d defines an “elongate arm” and is further connected to hood 310d that defines a “connector housing” by being received between the connector housing and a part of a body 410. Sections VII.B.6, VII.B.7; EX1003, ¶¶51, 54, FIG. 14; EX1011, ¶¶217-221.



EX1003, FIG. 14 (annotated).

Scherer describes the space identified herein as a “guide” as a “slot.” EX1003, ¶8 (“In some embodiments, the connector body defines a slot, and the

extender is configured to be slidably disposed in the slot.”). A slot is within the plain and ordinary meaning of the word “groove,” so the guide defined by Fig. 14’s optical fiber connector includes a guide defining a groove. EX1011, Section ¶220. Further, it is apparent that the groove extends along the longitudinal axis. EX1003, FIG. 14, ¶54; EX1011, ¶¶216-221. Scherer’s connector housing comprises a guide that in turn defines a groove extending along the longitudinal axis. EX1011, ¶¶216-221; EX1003, ¶¶8, 54.

Accordingly, Scherer discloses claim 2. EX1011, ¶¶217-221.

D. Claim 3

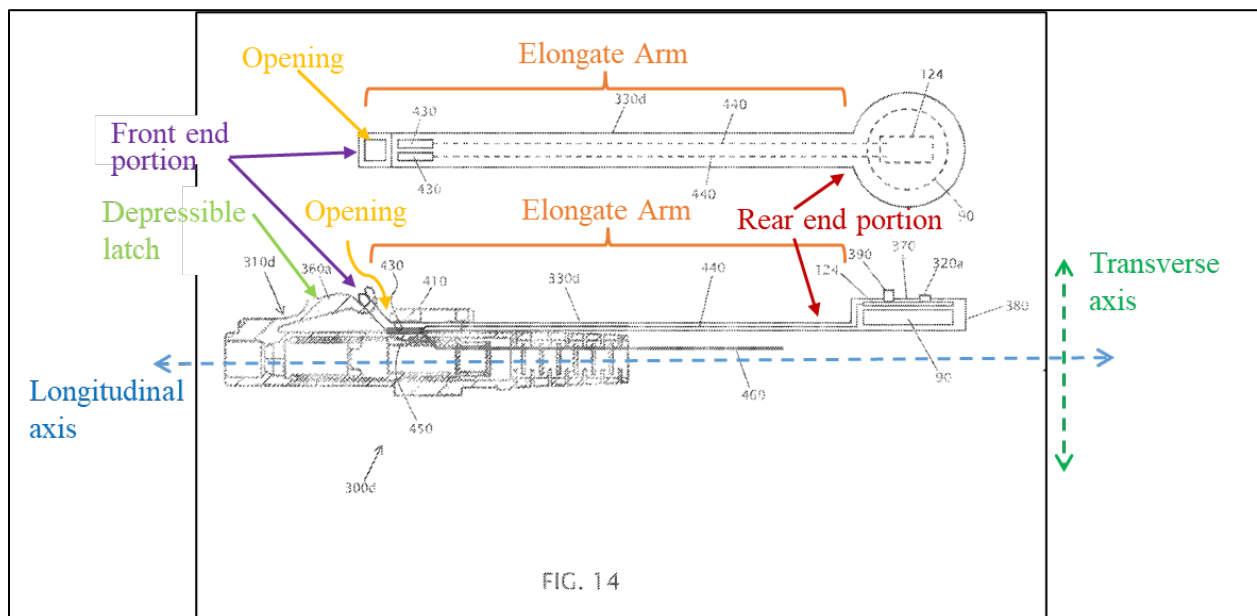
Scherer discloses a connector provided by hood 310d including body 410 and a slot defined by body 410 that defines a guide for the elongate arm, i.e., extender 330d, and connects extender 330d to the housing portion of hood 310d. Section VII.C. The slot defines the claimed groove. *Id.*

Scherer discloses “the extender is configured to be slidably disposed in the slot.” EX1003, ¶8. “Disposed” is within the plain and ordinary meaning of the word “received” in this context. EX1011, ¶¶222-230. Scherer discloses the elongate arm provided by extender 330d is received in the groove provided by Scherer’s slot. *Id.*

Accordingly, Scherer discloses claim 3. EX1011, ¶¶223-230.

E. Claim 4

A POSITA would have understood that the elongate arm (extender 330d) includes a front end portion and a rear end portion spaced apart along the longitudinal axis. EX1011, ¶¶232-238. Scherer Figure 14 illustrates the front end portion and the rear end portion of the elongate arm (extender 330d). EX1003, FIG. 14.



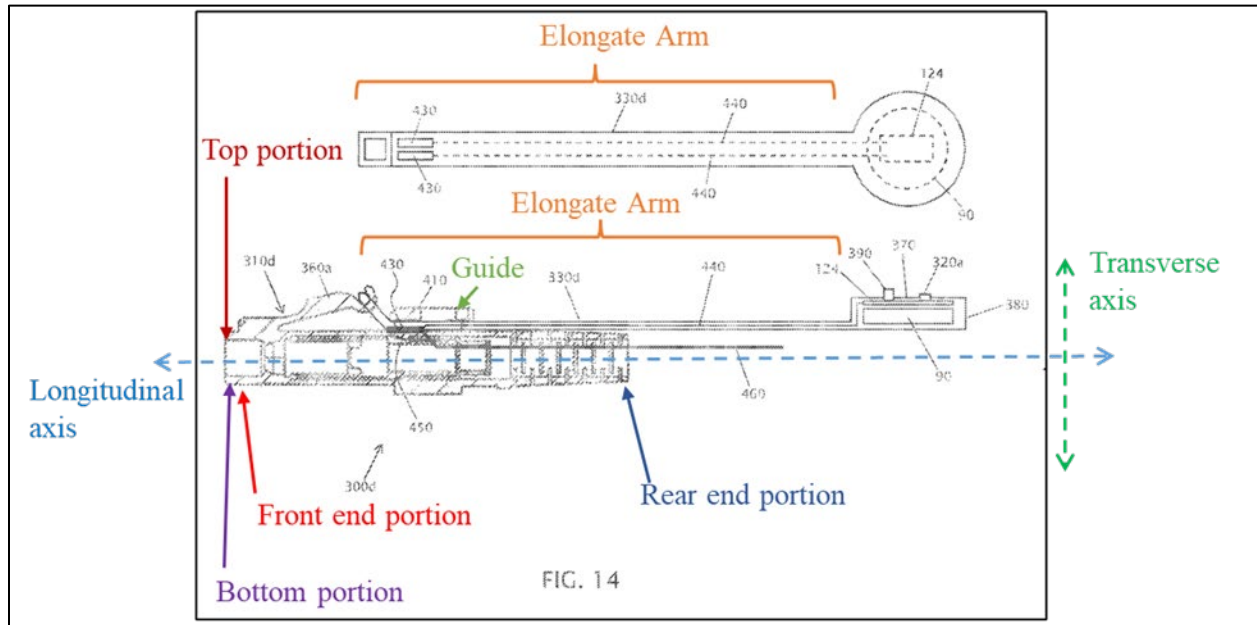
EX1003, FIG. 14 (annotated).

Figure 14 shows front end portion of extender 330d that provides an elongate arm is spaced apart from rear end portion. EX1003, FIG. 14; EX1011, ¶¶232-238.

Accordingly, Scherer discloses claim 4. *Id.*

F. Claim 5

A POSITA would have understood that the front end portion of extender 330d (Section VII.E) defines an opening. EX1011, ¶¶240-243.



EX1003, FIG. 14 (annotated).

Figure 14 shows front end of extender 330d defines an opening for receiving a hook defined at a rearward end of lever 360a. EX1011, ¶¶240-243.

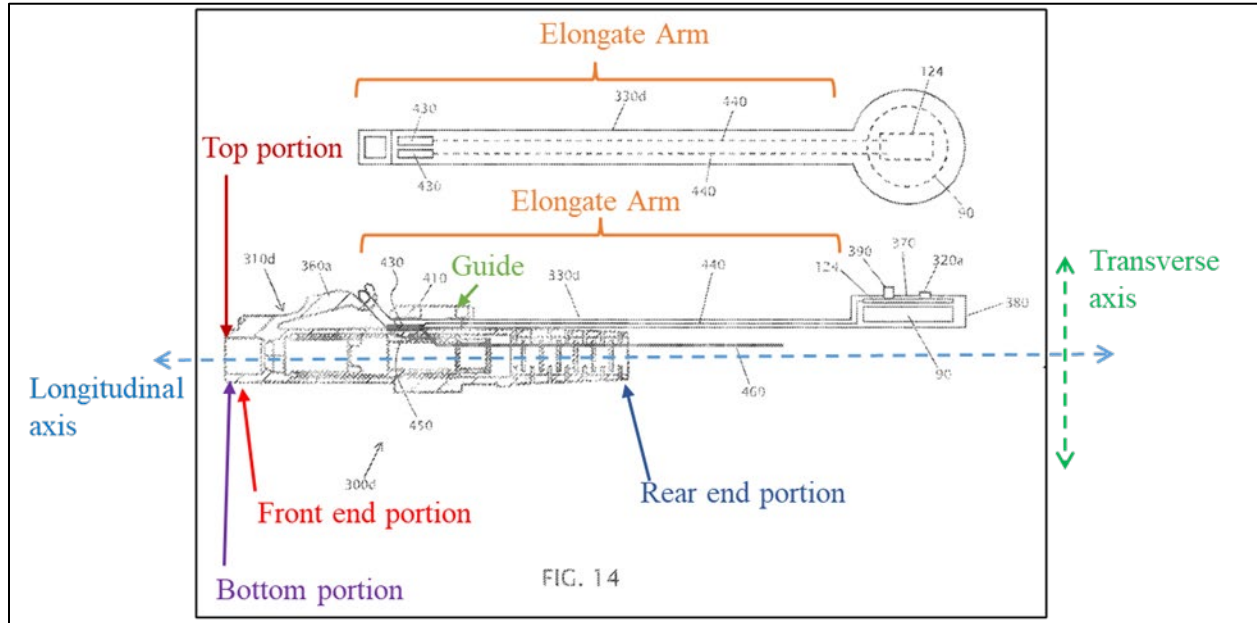
Accordingly, Scherer discloses claim 5. *Id.*

G. Claim 6

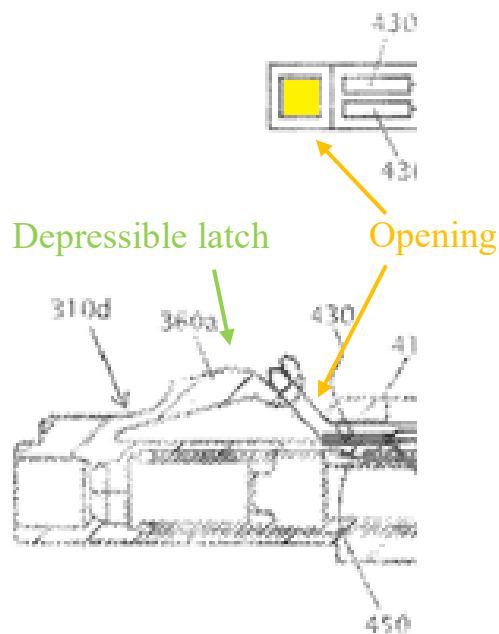
A POSITA would have understood that Scherer's elongate arm (extender 330d) includes a front end portion and a rear end portion spaced apart along the longitudinal axis, and that the front end portion defines an opening. Section VII.F; EX1011, ¶¶231-243. A POSITA would recognize that the depressible latch (lever

360d) is received in the opening. EX1011, ¶¶245-248; EX1003, FIG. 14. Scherer

Figure 14 shows receipt of lever 360d in the opening.



EX1003, FIG. 14 (annotated).



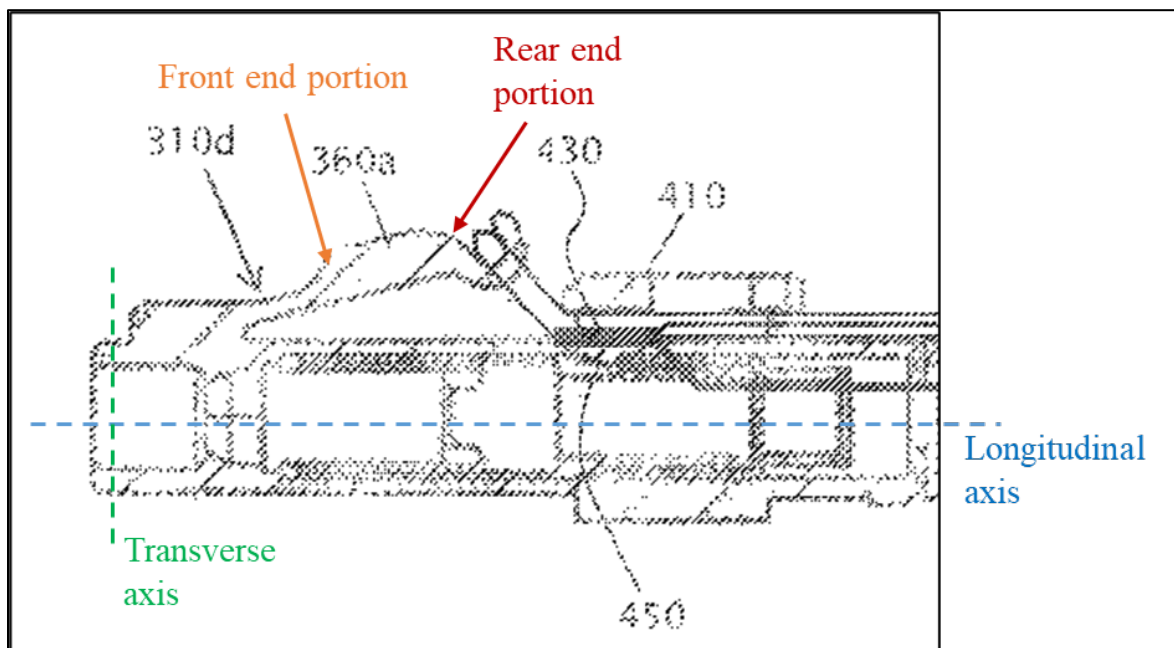
EX1003, FIG. 14 (annotated, cropped).

Figure 14 shows the free end of lever 360a includes a hook shaped portion that extends through that opening, so lever 360a is received in the opening.

EX1003, FIG. 14. EX1011, ¶¶245-248. Accordingly, Scherer discloses claim 6. *Id.*

H. Claim 7

A POSITA would have understood that Scherer's Figure 14 shows a latch arm (lever 360a) meeting claim 7. EX1011, ¶¶250-254; EX1003, FIG. 14, ¶54.



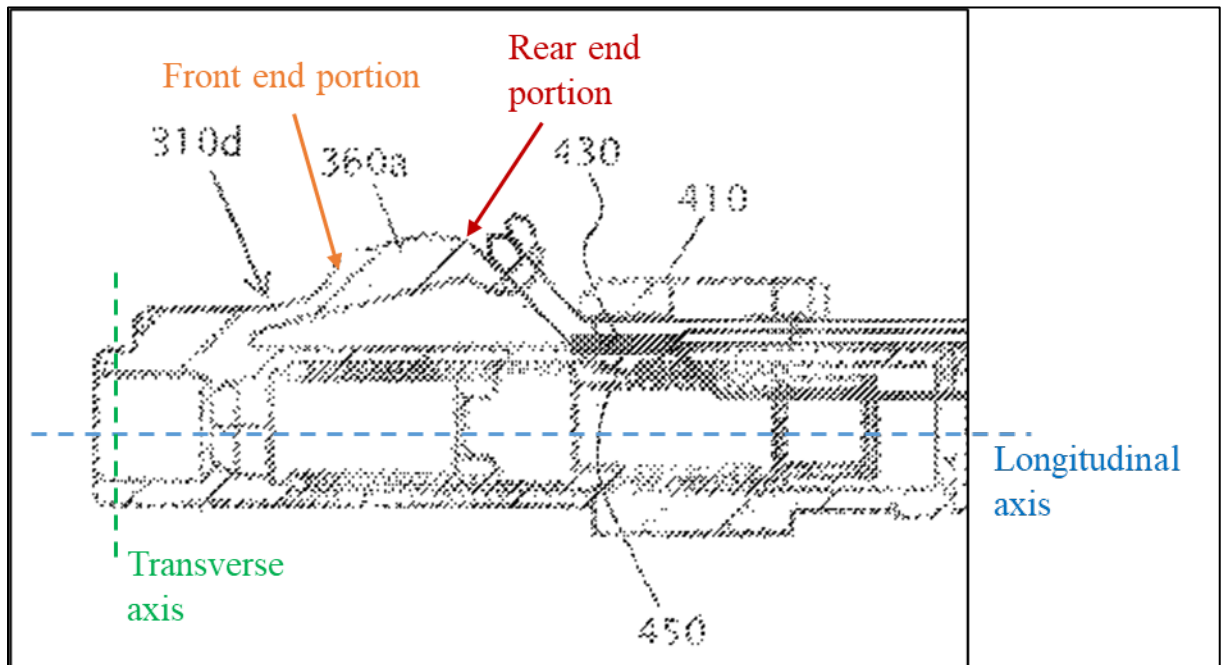
EX1003, FIG. 14 (annotated, cropped).

Scherer's Figure 14 depicts lever 360a extending upward along the transverse axis from a front end portion to a rear end portion, with the front and rear end portions being spaced apart along the longitudinal axis. EX1003, FIG. 14. EX1011, ¶¶250-254.

Accordingly, Scherer discloses claim 7. *Id.*

I. Claim 8

A POSITA would have understood that Scherer's Figure 14 depicts the rear end portion of the latch (lever 360a) being positioned as claimed. EX1011, ¶¶256-258; EX1003, FIG. 14.



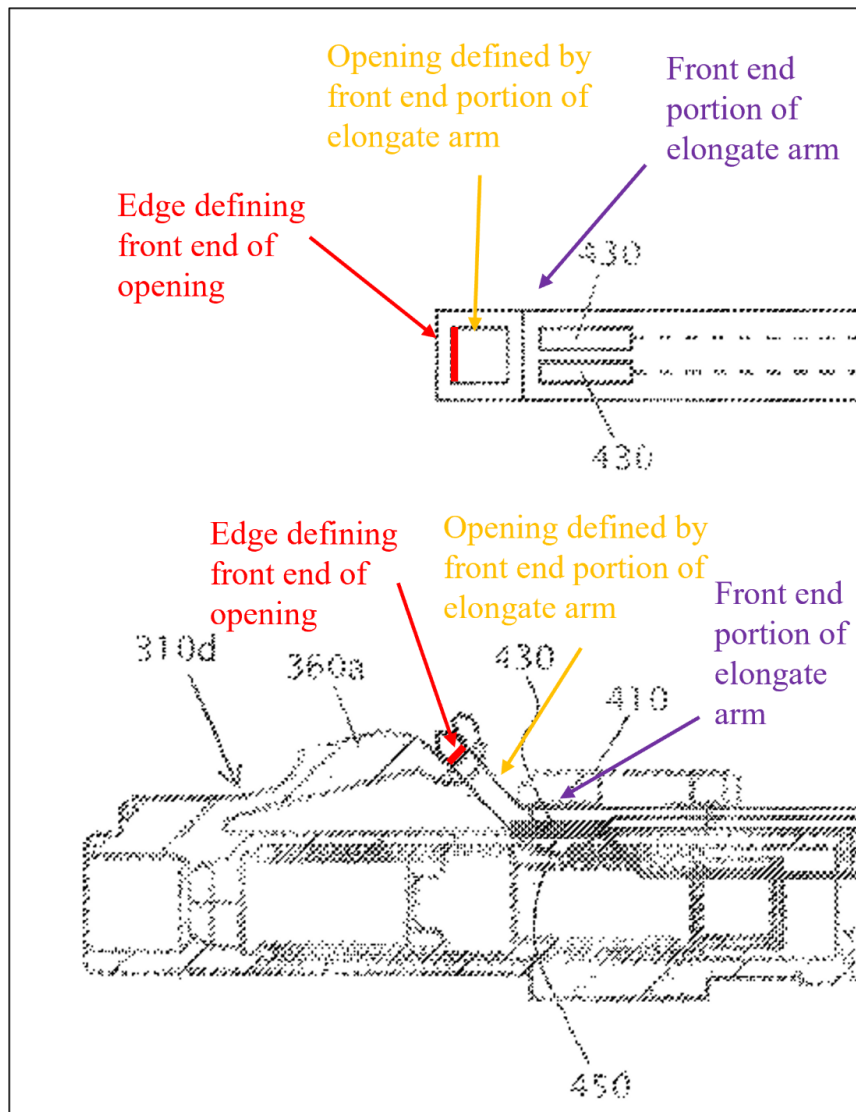
EX1003, FIG. 14 (annotated, cropped).

Rear end portion of Scherer's depressible latch (free end of lever 360a) is spaced apart from the connector housing portion of connector hood 310d along the transverse axis, such that it is above the top portion of the connector housing. EX1003, FIG. 14. EX1011, ¶¶256-258.

Accordingly, Scherer discloses claim 8. *Id.*

J. Claim 9

A POSITA would have understood that Scherer's Figure 14 depicts that a front end portion of the elongate arm (extender 330d) includes an opening as well as an edge that defines a front end of the opening. EX1011, ¶¶260-261; EX1003, FIG. 14.

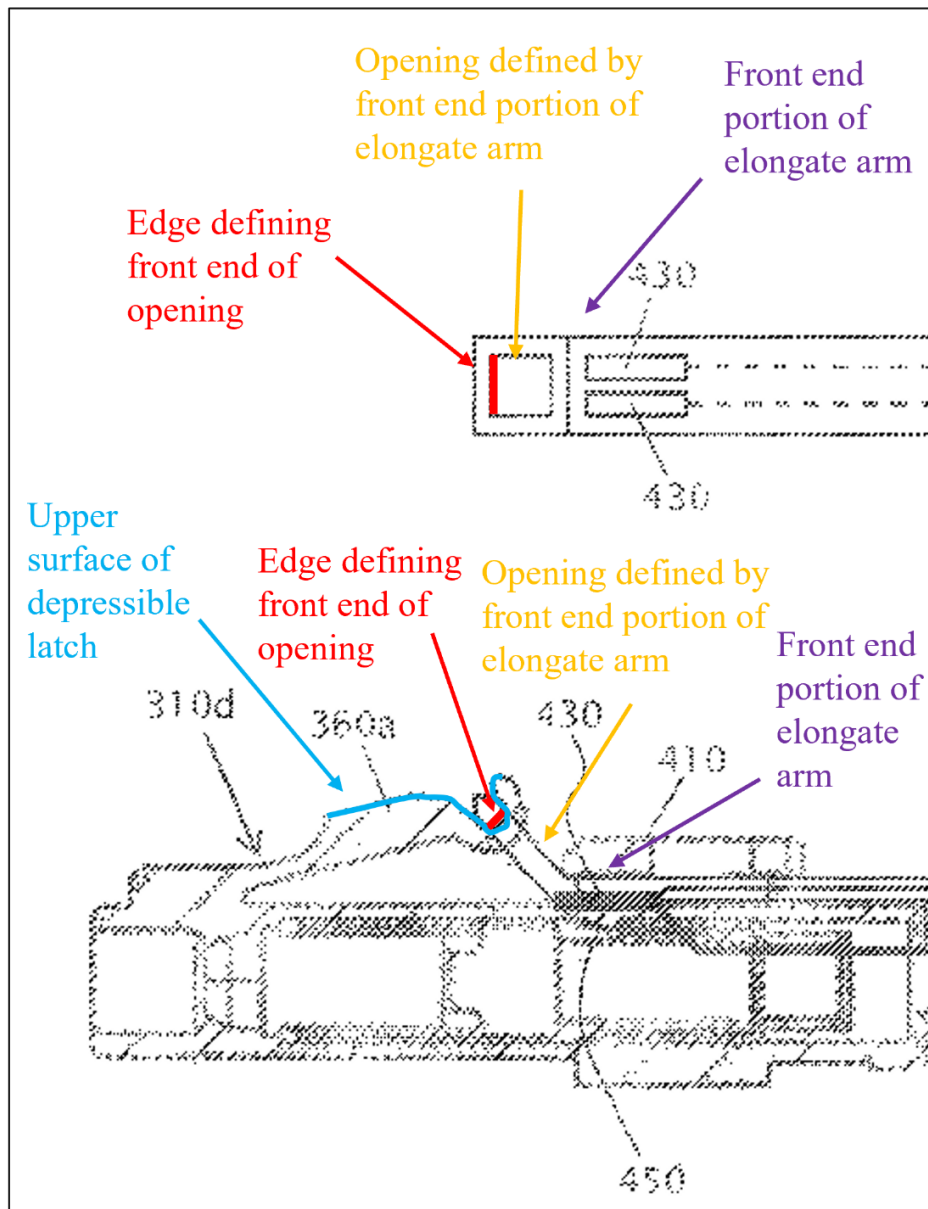


EX1003, FIG. 14 (annotated, cropped).

Accordingly, Scherer discloses claim 9. EX1011, ¶¶260-261.

K. Claim 10

A POSITA would have understood that Scherer discloses that the latch (lever 360a) has an upper surface, and the edge included by the front end portion of the elongate arm provided by extender 330d opposes the upper surface. EX1011, ¶¶259-261; EX1003, ¶54, FIG. 14.



EX1003, FIG. 14 (annotated, cropped).

Scherer details how lever 360a is actuated by pulling extender 330d rearward. EX1003, ¶54 (“extender 300d [*sic*] can slide relative to connector body 400a to depress or compress lever 360a.”). Extender 330d depressing the lever 360a is consistent with the leading edge of the opening defined at the front end portion of extender 330d opposing the upper surface of lever 360a, as this arrangement would cause extender 330d to depress lever 360a when slid longitudinally rearward. EX1011, ¶¶263-267.

Accordingly, Scherer discloses claim 10. *Id.*

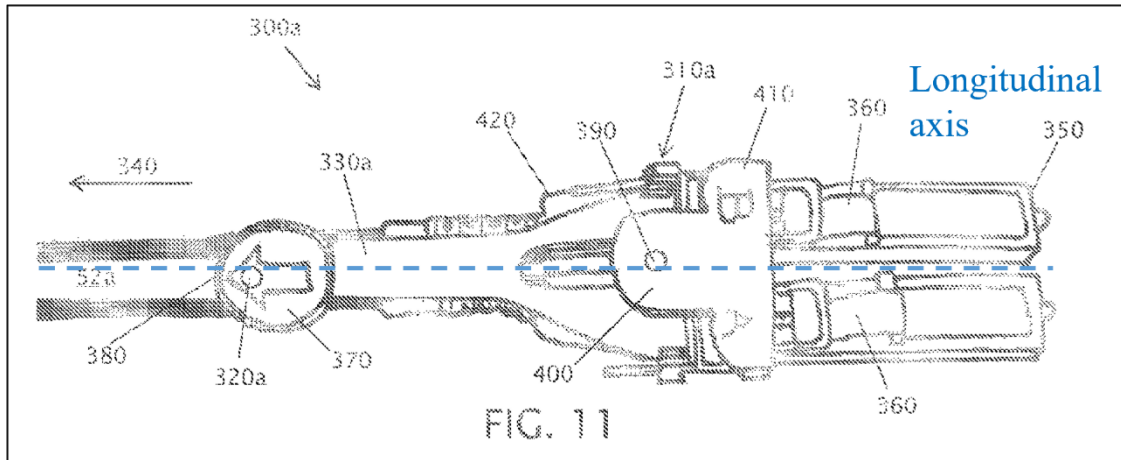
L. Claim 14

Claim 14 is addressed out of order because it depends from claims 4-10, while claims 11-13 do not depend from any of claims 4-10.

Lee discloses claim 14, and it would have been obvious to modify Scherer in view of Lee to include those features. EX1011, ¶¶271-288.

Scherer discloses that “cables 300a, 300b, 300c” have “fiber-optic cable connector hoods 310a, 310b, 310c,” and the hoods “each include[] an extender or remote release tab (330a, 330b, 330c)” that “can simply be pulled by a user in a direction 340 away from a distal end 350 of the connector to laterally compress the lever(s) (360) of the connector toward the transmission line(s) 52a.” EX1003, ¶51. Scherer’s Figure 11 shows that “direction 340” is proximal, *i.e.*, rearward along a

longitudinal axis that includes the distal and proximal directions relative to which proximal end 380 and distal end 350 are defined. EX1003, FIG. 11; EX1011, ¶271.



EX1003, FIG. 11 (annotated).

Scherer states “[c]able 300d is similar to cable 300c with the primary exception that cable 300d includes only a single fiber optic cable.” EX1003, ¶54. A POSITA would understand that extender 330d is also pulled proximally, *i.e.*, rearward, along the longitudinal axis relative to the connector housing to depress lever 360a. EX1011, ¶¶272-274; EX1003, ¶54.

PO may allege that Scherer does not expressly disclose that the edge travels along the upper surface. But Lee does. Section VIII.K; EX1011, ¶¶276-282; EX1004, ¶¶30, 32, 43, 47-48, FIGs. 1-5.

A POSITA would have found it obvious to implement Scherer in view of Lee such that Scherer’s edge would slide longitudinally along the upper surface of Scherer’s latch (lever 360a) to depress the latch when Scherer’s elongate arm

(extender 330d) is pulled rearward. EX1011, ¶¶283-288. That implementation would have been obvious because it would have amounted to substituting an incidental feature of Scherer's disclosure with an equivalent feature having the same purpose and result from Lee's disclosure, would have had predictable results, and would have resulted in a connector operating in the same manner Scherer already describes. *Id.*

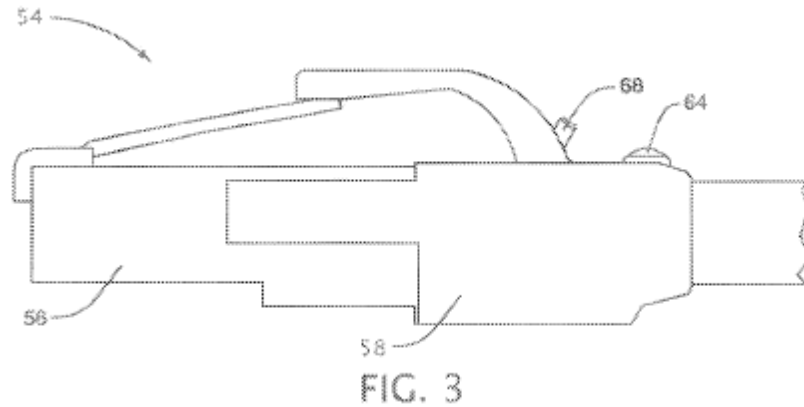
Scherer-Lee teach Claim 14. EX1011, ¶¶268-288.

M. Claim 11

A POSITA would have understood that the connector housing provided by Scherer's connector hood 310d includes a front body and a back body. EX1011, ¶¶290-296.

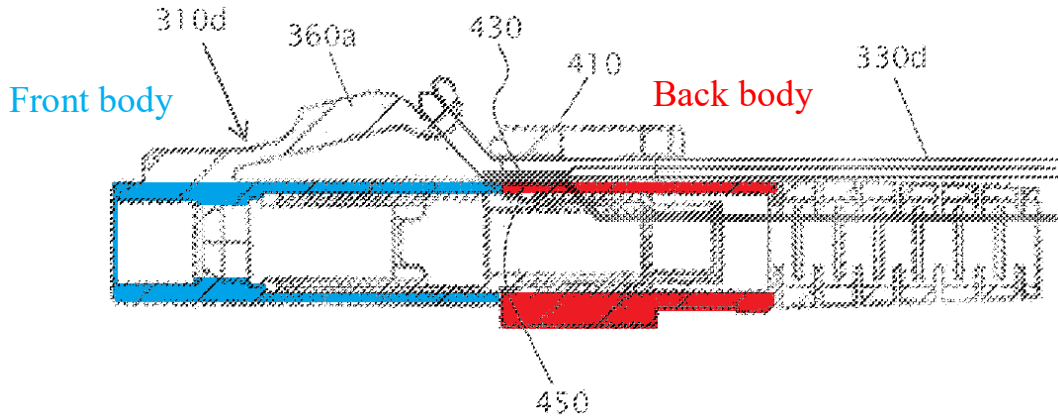
Scherer's connector hood 310d provides a connector housing. Section VII.B.2. Scherer explains the meaning of "connector hood" for the purposes of the disclosure refers to a combination of a connector and a boot. EX1003, ¶35 ("a connector assembly or hood 54 comprises a connector 56 coupled to a boot 58, and the connector hood is coupled to an end of cable 52. . . . The overall connector (connector plus boot) will be referred to as the connector hood in this description and in the appended claims."). A POSITA would have understood Scherer Figure 14's "connector hood 310d" to also be an assembly of a "connector" and a "boot."

EX1011, ¶293. Scherer Figure 3 illustrates how a connector 56 and boot 58 may be assembled. EX1003, ¶¶35, 37, FIG. 3.



EX1003, FIG. 3.

Connector 56 and boot 58 are arranged as a front body and a back body, respectively. EX1003, FIG. 3. Scherer states cable 300d comprises a “connector body 400” and “boot 420” but does not use either numeral in Figure 14. EX1003, ¶54, FIG. 14. A POSITA would understand in view of Figure 3 that the elements indicated in the portion of Figure 14 would be the connector and boot, respectively, of hood 310d and cable 300d. EX1011, ¶¶294-295; EX1003, ¶54, FIG. 14.



EX1003, FIG. 14 (annotated, cropped).

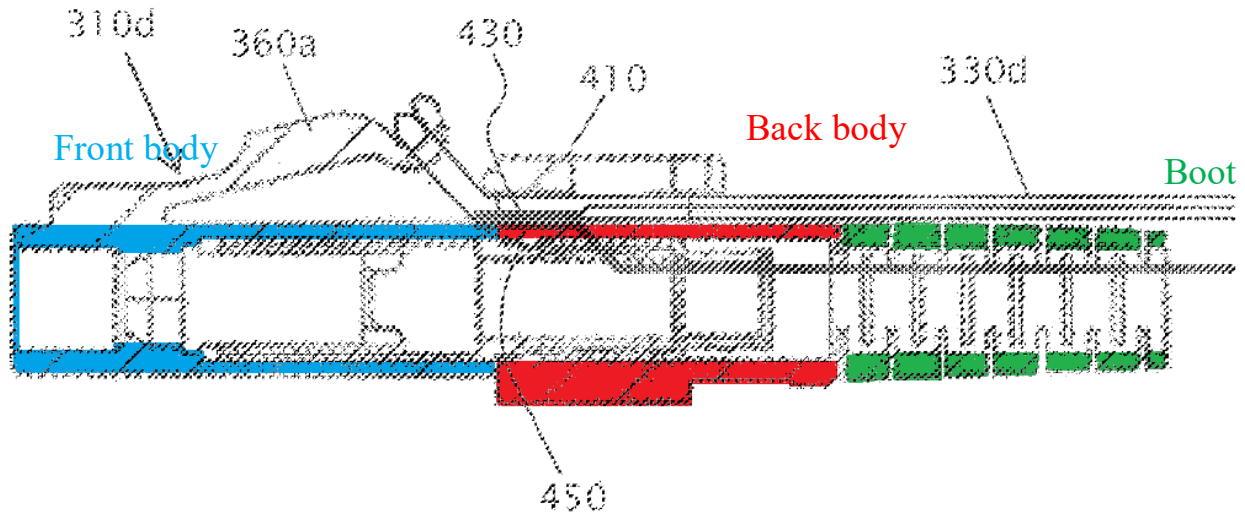
Scherer's hood 310d connector and boot provide a front body and back body, respectively. EX1003, FIG. 14. Each makes up a portion of the part of hood 310d that defines the connector housing, meaning Scherer discloses a connector housing that includes a front body and back body as claimed. EX1011, ¶295.

Accordingly, Scherer discloses claim 11. EX1011, ¶¶290-296.

N. Claim 12

A POSITA would have understood that Scherer discloses a single cable boot extending rearward from the back body of the connector housing provided by Scherer's connector hood 310d. EX1011, ¶¶298-306.

The plain and ordinary meaning of the word "boot" within the field of optical fiber connectors includes a strain relieving cover. EX1011, ¶¶300. Scherer illustrates a feature that a POSITA would recognize as a "boot" within that plain and ordinary meaning extending from the above identified back body of the connector housing in Figure 14. EX1011, ¶¶304; EX1003, FIG. 14.



EX1003, FIG. 14 (annotated, cropped).

Accordingly, Scherer discloses claim 12. EX1011, ¶¶298-306.

O. Claim 13

Scherer discloses a boot extending rearward from the back body of the connector housing provided by hood 310d. Section VII.N. Because Scherer's back body is part of a connector housing, Scherer also discloses the boot extending rearward from the connector housing. EX1001, ¶¶308-316.

Accordingly, Scherer discloses claim 13. *Id.*

P. Claim 15

Except for depending from claim 14 instead of directly from claim 1, claim 15 is identical to claim 2. Scherer therefore discloses claim 15 similar to reasons for claim 2. Section VII.C. Accordingly, Scherer discloses claim 15. EX1011, ¶318.

Q. Claim 16

Except for depending from claim 15 instead of claim 2, claim 16 is identical to claim 3. Scherer therefore discloses claim 16 for similar reasons as claim 3.

Section VII.D. Accordingly, Scherer discloses claim 16. EX1011, ¶320.

R. Claim 17

Except for depending from claim 15 instead of directly from claim 1, claim 17 is identical to claim 11. Scherer therefore discloses claim 16 for similar reason as claim 3. Section VII.M. Accordingly, Scherer discloses claim 17. EX1011, ¶322.

S. Claim 20

1. Preamble – [20.5]

The preamble of claim 20 is identical to the preamble of claim 1, and [20.1]-[20.5] are identical to [1.1]-[1.5]. Accordingly, the preamble and [20.1]-[20.5] are either disclosed in Scherer or rendered obvious by Scherer-Lee similar to reasons for the preamble of claim 1 and [1.1]-[1.5]. Sections VII.B.1-6; EX1011, ¶¶323-329.

2. [20.6]–[20.13]

[20.6]-[20.12] are identical to claims 4-10 and [20.13] is identical to claim 14. Accordingly, [20.6]-[20.13] are either disclosed in Scherer or rendered obvious by Scherer-Lee. Sections VII.E-L; EX1011, ¶¶330-337.

Because every of claim 20 either is disclosed in Scherer or would have been obvious over Scherer-Lee, claim 20 is obvious over Scherer-Lee. EX1011, ¶338.

T. Claim 21

1. Preamble – [21.5]

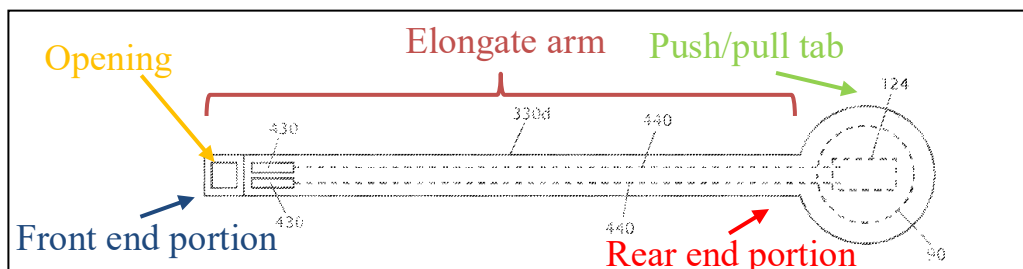
The preamble of claim 21 is identical to the preamble of claim 1, and [21.1]-[21.5] are identical to [1.1]-[1.5]. Accordingly, the preamble of claim 21 and [21.1]-[21.5] are either disclosed in Scherer or rendered obvious by Scherer-Lee. Sections VII.B.1-6; EX1011, ¶¶340-345.

2. [21.6]

[21.6] is identical to claim 4. Accordingly, Scherer discloses [21.6]. Section VII.E; EX1011, ¶346.

3. [21.7]

A POSITA would have understood that Scherer further discloses a push/pull tab extending from the rear end portion of the elongate arm (extender 330D). EX1011, ¶¶347-358; EX1003, FIG. 14.



EX1003, FIG. 14 (annotated, cropped).

Scherer's extender 330d defines an elongate arm having a front end portion and a rear end portion, with the front end portion defining an opening. Section VII.F; EX1003, FIG. 14. The end of the elongate arm defined by extender 330d opposite from the opening therefore defines the rear end portion. Figure 14 shows a push/pull tab extending from the rear end portion of the elongate arm (extender 330d). EX1003, FIG. 14. EX1011, 354.

Accordingly, Scherer discloses [21.7]. EX1011, ¶358.

Because every of claim 21 either is disclosed in Scherer or would have been obvious over Scherer-Lee, claim 21 would have been obvious over Scherer-Lee.

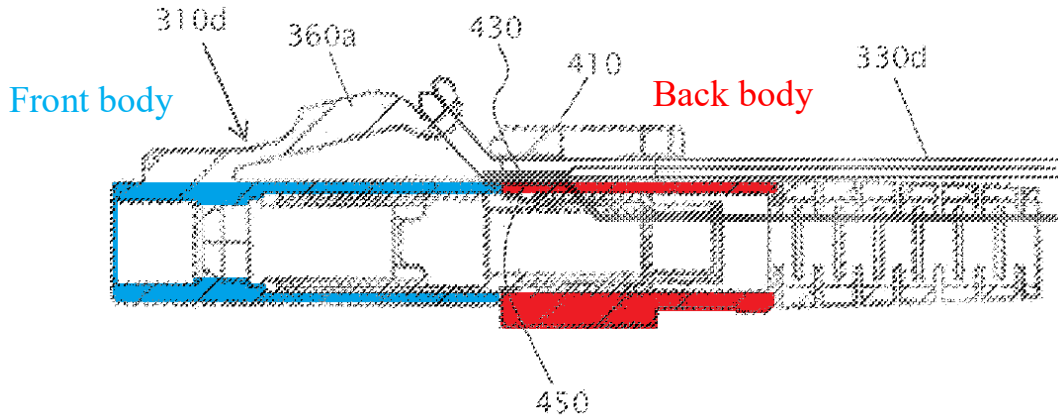
Id.

VIII. GROUND 2: SCHERER-LEE IN VIEW OF GNIADEK RENDERS OBVIOUS CLAIMS 18, 19, AND 22.

A. Motivation to Combine

1. Scherer-Lee

Scherer-Lee renders obvious claim 17, from which claims 18 and 19 depend. Section VII.R. Scherer discloses a connector body 400 and a boot 420 providing a front body and a back body, respectively, of a connector housing. Section VII.R; EX1011, ¶359; EX1003, ¶54, FIG. 14.



EX1003, FIG. 14 (annotated, cropped).

PO may allege that Scherer-Lee do not expressly disclose wherein a front body of a connector housing includes a recess and a back body of the connector housing comprises a protrusion received in the recess to connect the back body to the front body, but this was well known from Gniadek that was incorporated by reference into Scherer. EX1011, ¶360.

2. Gniadek

Gniadek discloses an optical fiber connector assembly including a connector 816 and a boot 840. Section V.C; EX1010, 16:20-30, 17:2-11. Connector 816 includes a trap 828, and boot 840 includes a protruding member 851 configured to be received in trap 828 to connect boot 840 to connector 816. EX1010, 17:2-11; EX1011, ¶361.

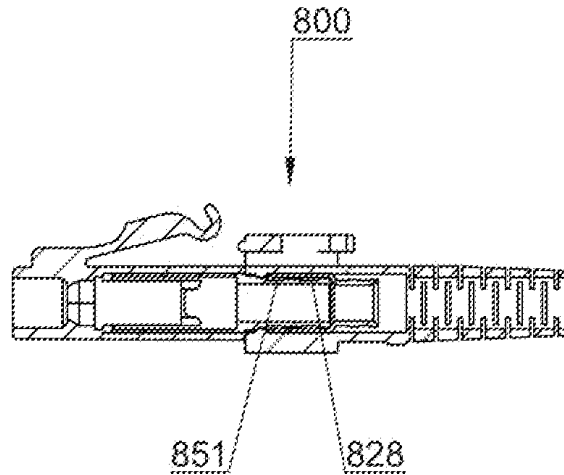


FIG. 23
SECTION VIEW OF 800

EX1010, FIG. 23.

3. How to Combine

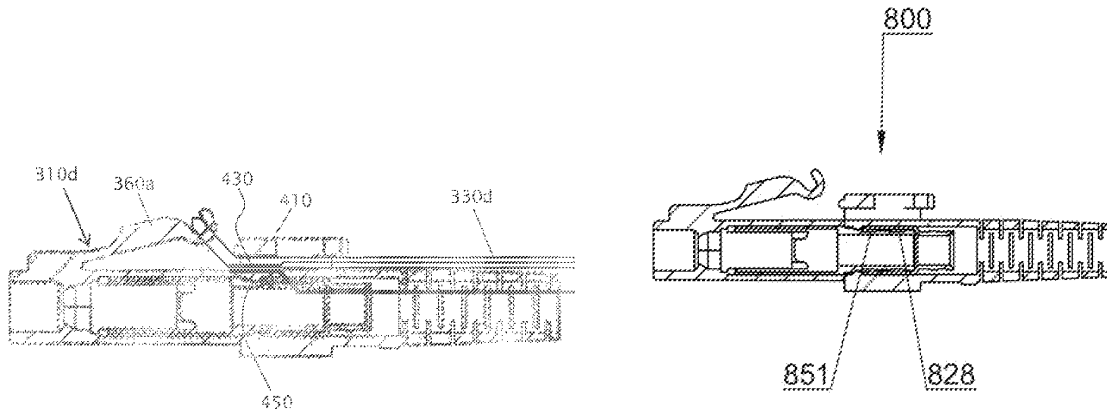
A POSITA would have found it obvious to modify the front body and back body of the connector housing disclosed in Scherer-Lee to include a trap and protruding member, respectively, alike to Gniadek's trap 828 and protruding member 851, to couple the front body and back body together. EX1011, ¶361.

4. Why to Combine

A POSITA would have found this modification obvious because Scherer-Lee incorporates Gniadek by reference and then compares its optical fiber connector hoods 310a, 310b, 310c, 310d to those disclosed in Gniadek, “which is incorporated by reference to the extent it provides details of various versions of remote-release connectors.” EX1003, ¶¶51, 54; EX1011, ¶¶362-364. Specifically, Scherer explains “[e]ach of connector hoods 310a, 310b, 310c are similar in some respects to the remote-release connectors disclosed in U.S. Patent No. 8,465,317.” EX1003, ¶51. Scherer specifically compares Figure 14 to Gniadek. EX1003, ¶54.

5. Expectation of Success

A POSITA would have had a reasonable expectation of success in making this modification because Scherer explicitly states that its connectors are similar to Gniadek’s. EX1003, ¶¶51, 54; EX1011, ¶364. Additionally, the POSITA would understand that Scherer-Lee’s connector of Scherer’s Figure 14 and Gniadek’s connector of Figures 21-23 are connectors of very similar styles from the visible similarities between them, and that features could therefore be carried from Gniadek’s connector to Scherer-Lee’s connector and continue to serve the same purpose. EX1011, ¶364.

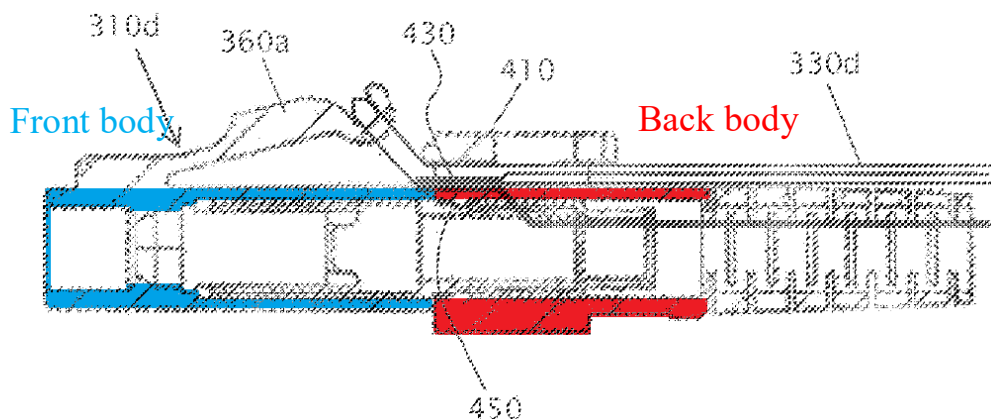


EX1003, FIG. 14 (left, cropped); EX1010, FIG. 23 (right, cropped).

B. Claim 18

It would have been obvious to modify Scherer-Lee to meet claim 17, from which claim 18 depends. Section VII.R. Gniadek discloses claim 18, and it would have been obvious to further modify Scherer-Lee with Gniadek to meet claim 18.

Scherer discloses a connector housing including a front body and a back body. Section VII.R; EX1011, ¶¶366-370; EX1003, FIG. 14, ¶¶51, 54.



EX1003, FIG. 14 (annotated, cropped).

PO may allege Scherer-Lee does not expressly disclose wherein the front body includes a recess and the back body includes a protrusion received in the recess to connect the back body to the front body, but Gniadek does.

Gniadek discloses an optical fiber connector assembly including a connector 816 and a boot 840. Section V.C; EX1011, ¶370; EX1010, 16:20-30, 17:2-11. Connector 816 includes a trap 828, and boot 840 includes a protruding member 851 configured to be received in trap 828 to connect boot 840 to connector 816. EX1010, 17:2-11; EX1011, ¶370.

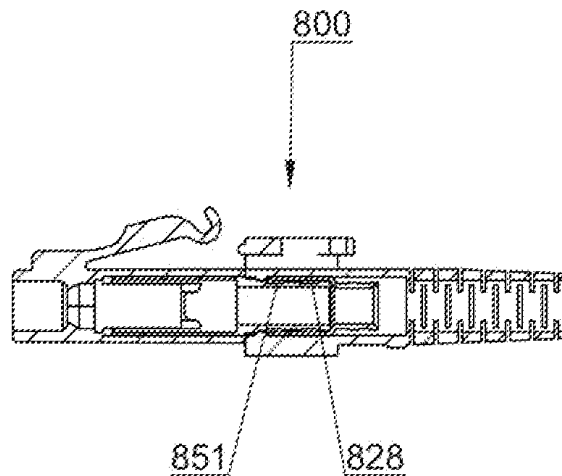


FIG. 23
SECTION VIEW OF 800

EX1010, FIG. 23.

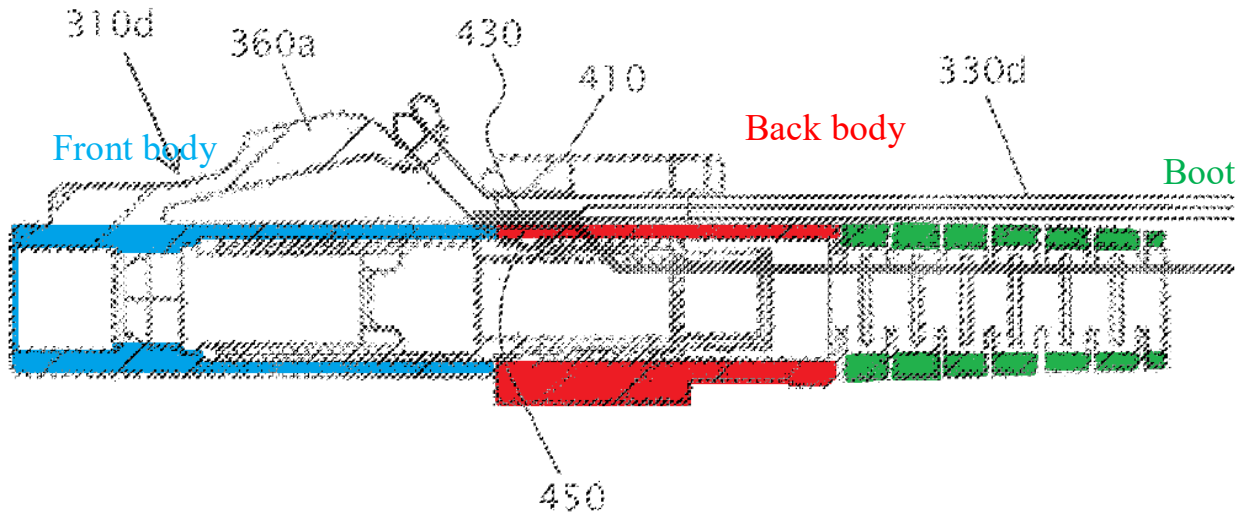
Gniadek's connector 816, boot 840, trap 828, and protruding member 851 are a front body, back body, recess, and protrusion as claimed. EX1011, ¶¶368-370.

A POSITA would have found it obvious to modify the front body and back body of the connector housing disclosed in Scherer-Lee to include a trap and protruding member, respectively, alike to Gniadek's trap 828 and protruding member 851, to couple the front body and back body together. Section VIII.A; EX1011, ¶371.

The result of this modification would have had every feature of claim 18. EX1011, ¶¶371-372. Accordingly, claim 18 would have been obvious over Scherer-Lee and Gniadek. Section VIII.A; EX1011, ¶¶366-372.

C. Claim 19

Scherer illustrates a feature that a POSITA would recognize as the claimed "boot" extending from the above identified back body of the connector housing in Figure 14 because it also provides strain relief. EX1003, FIG. 14; EX1011, ¶¶374, 308-316.



EX1003, FIG. 14 (annotated, cropped).

D. Claim 22

The preamble of claim 22 is identical to the preamble of claim 1, and [22.1]-[22.5] are identical to [1.1]-[1.5]. Additionally, [22.6] only presents features already addressed in claim 11. Accordingly, the preamble of claim 22 and [20.1]-[20.6] are either disclosed in Scherer or rendered obvious by Scherer-Lee as explained above with regard to the preamble of claim 1, [1.1]-[1.5], and claim 11. Sections VII.B.1-6, VII.M; EX1011, ¶¶375-382.

[22.7] only presents features already addressed in claim 18. Accordingly, [22.7] would have been an obvious further modification in view of Gniadek as explained above with regard to claim 18. Section VIII.B; EX1011, ¶383.

Claim 22 as a whole therefore would have been obvious over Scherer, Lee and Gniadek. EX1011, ¶384.

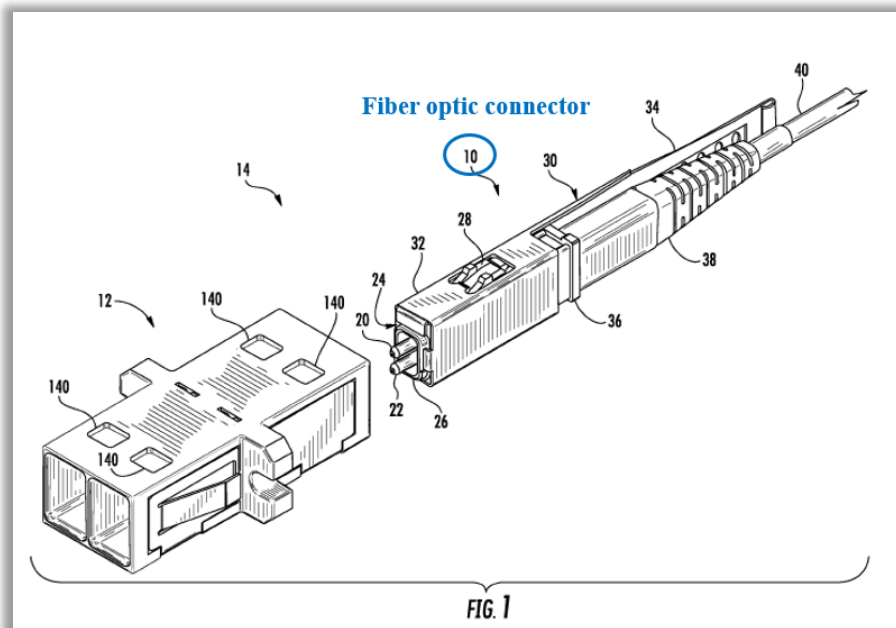
IX. GROUND 3: LEE ANTICIPATES CLAIMS 1-17, 20, AND 21.

Lee anticipates claims 1-22. EX1011, ¶¶576-577.

A. Claim 1

1. Preamble

Lee discloses an optical fiber connector. EX1004, ¶2 (“This disclosure relates generally to fiber optic connectors, and more particularly fiber optic connectors suitable for use in data centers or the like.”), FIG. 1.



EX1004, FIG. 1 (annotated).

Lee explains that “Fig. 1 illustrates one example of a fiber optic connector 10 (also referred to as ‘optical connector 10’, or simply ‘connector 10’) and an adapter 12.” *Id.*, ¶29. This is the same type of optical fiber connector as disclosed in the ’369 patent. EX1001, Abstract, 1:34-2:57 (explaining the need for high-

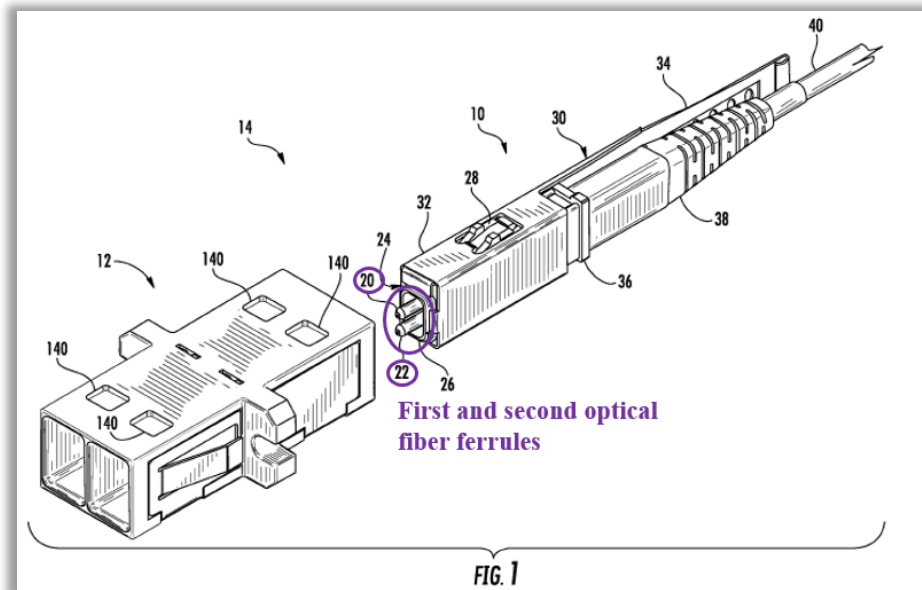
density interconnects in data centers and disclosing an optical connector), FIGs.

18A-19D (illustrating example embodiments of an optical fiber connector);

EX1011, ¶¶387-390.

2. [1.1]

Lee's Figures 1-10 and 12-14 all illustrate fiber optic connectors with first and second optical fiber ferrules. EX1004, FIGs. 1-10 and 12-14; EX1011, ¶¶582-585.



EX1004, FIG. 1 (annotated).

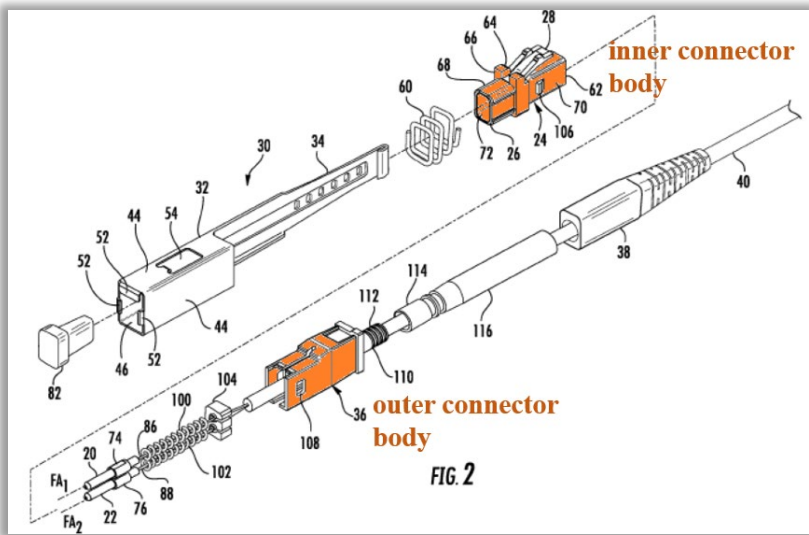
Lee states “the connector 10 includes first and second ferrules 20, 22, an inner connector body 24 having a front end 26 from which the first and second ferrules extend...” EX1004, ¶30.

3. [1.2]

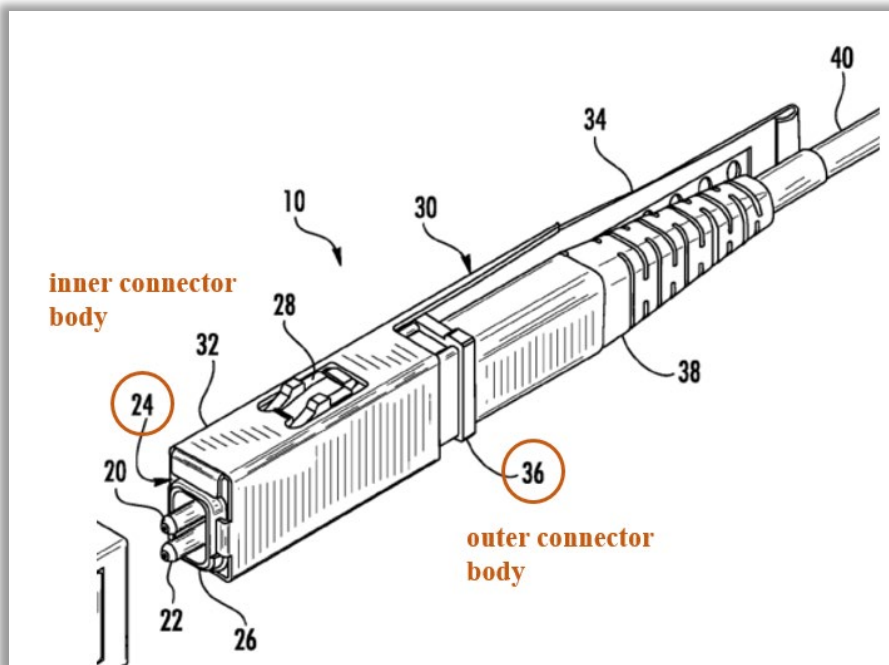
Lee discloses a connector housing having a front end, rear end, top, and bottom portion along the axes recited in this claim. *Id.*, ¶29, FIGs. 1-5. Lee's "outer connector body 36 coupled to the inner connector body 24" collectively defines a "connector housing" as used in this claim. EX1011, ¶395; EX1004, ¶30.

Lee describes that body 24 and body 36 are coupled together to collectively form a connector housing. EX1004, ¶30 ("The connector 10 also includes an outer connector body 36 coupled to the inner connector body 24 within the housing portion 32 of the handle 30."); EX1011, ¶397. First and second optical fibers 86, 88 pass through this collective housing and include ferrules 20, 22 at the forward end of the connector housing. *See* EX1004, FIGs. 1-3, ¶38; EX1011, ¶397.

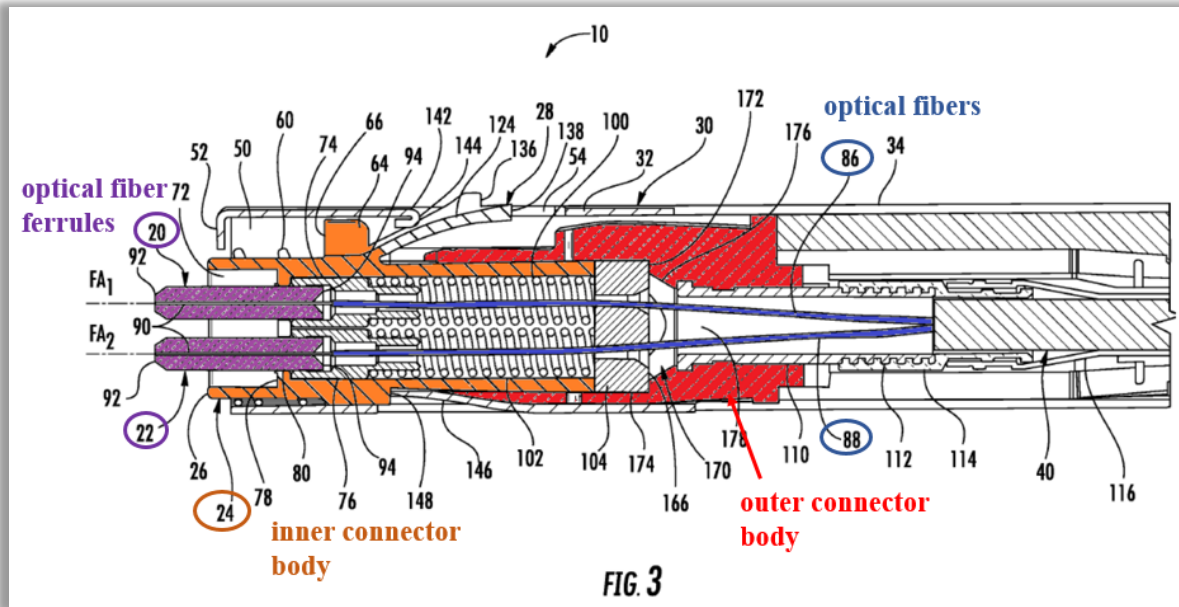
Lee's Figures 1, 2, and 3 show body 24 and body 36 collectively define a connector housing for first and second fibers 86, 88 and first and second ferrules 20, 22. EX1004, FIG. 3; EX1011, ¶¶398-400.



EX1004, FIG. 2 (annotated).



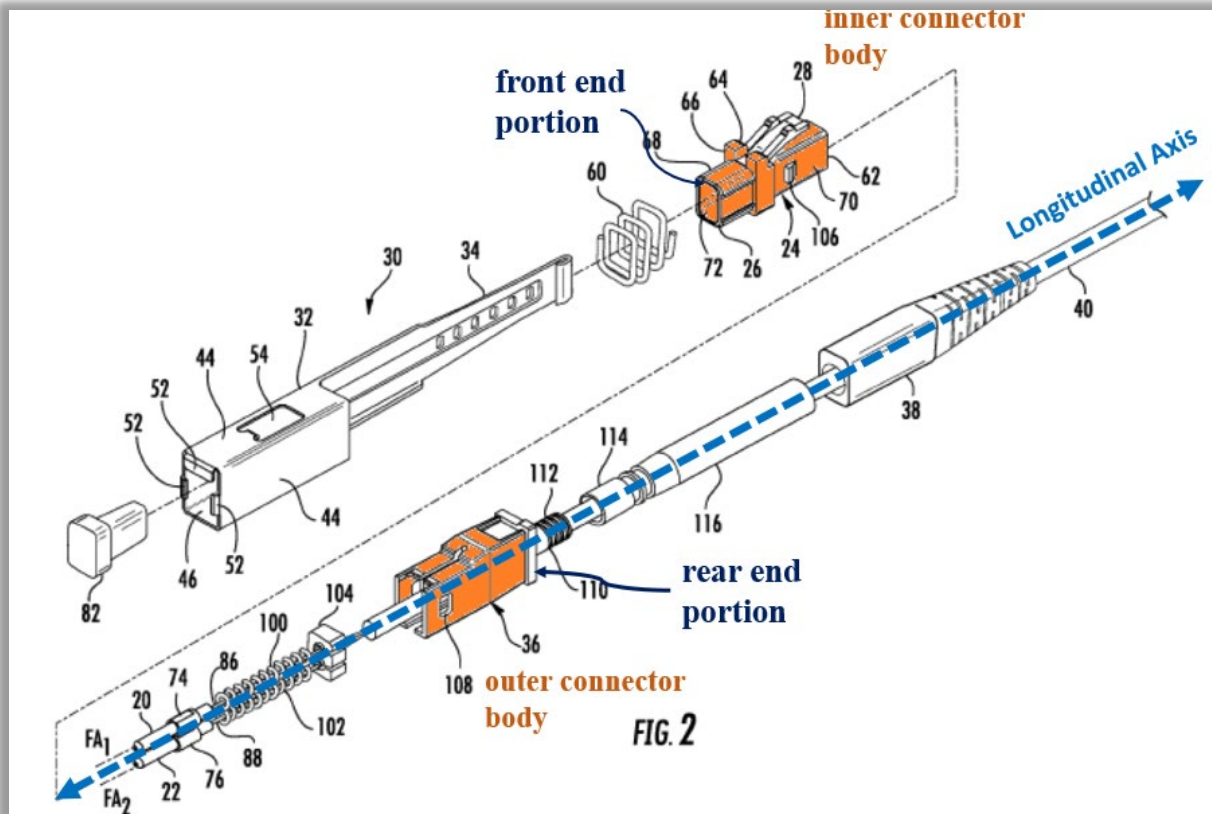
EX1004, FIG. 1 (annotated, cropped).



EX1004, FIG. 3 (annotated).

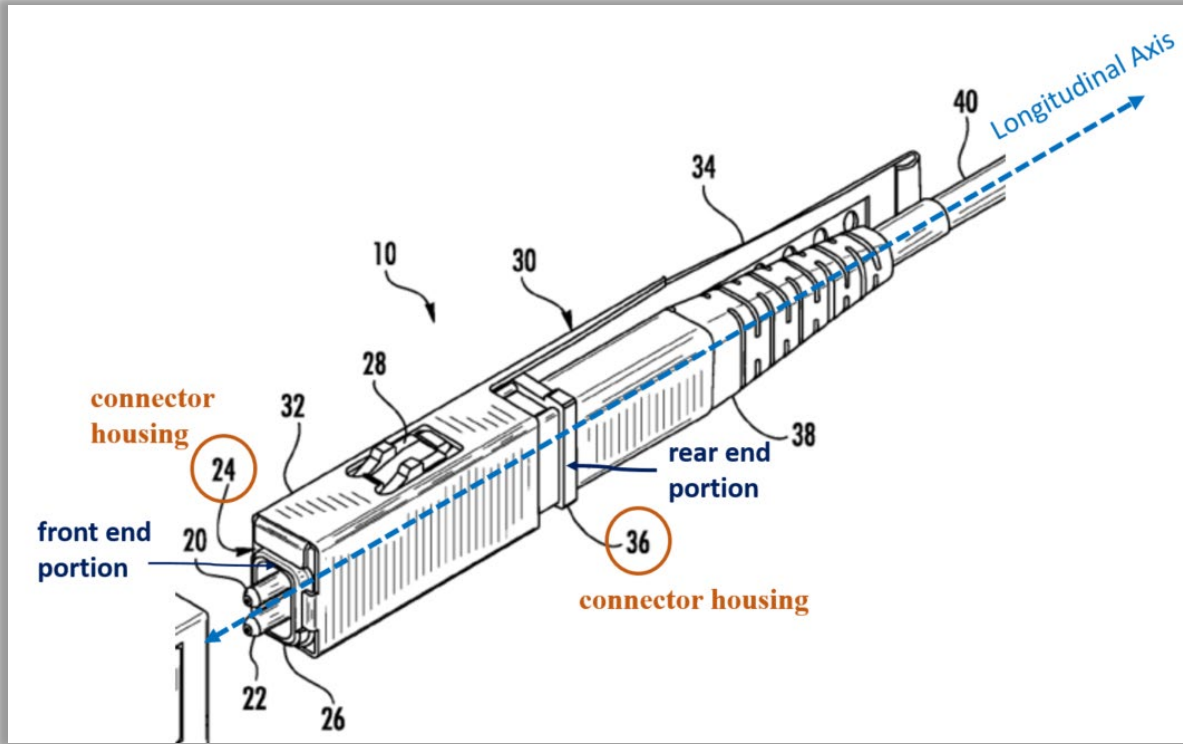
The connector housing defined by Lee's housing 24 and housing 36 includes a front end portion and a rear end portion spaced apart along a longitudinal axis.

EX1004, FIG. 2; EX1011, ¶401.



EX1004, FIG. 2 (annotated).

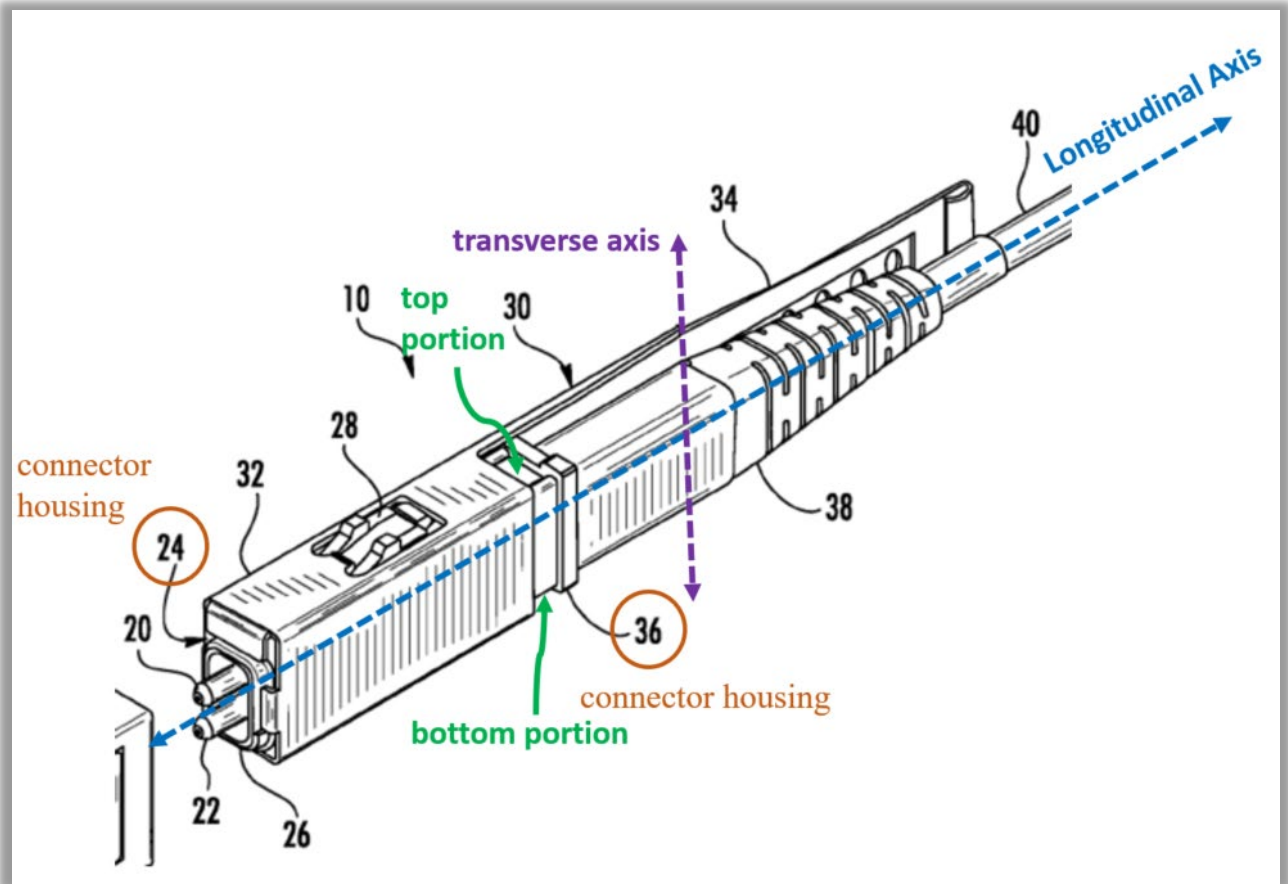
Figure 1 illustrates front and back bodies 24, 36 connected together and having the front end portion and rear end portions in their assembled configuration, wherein the front and rear end portions are spaced apart along the longitudinal axis. EX1004, FIG. 1; EX1011, ¶401.



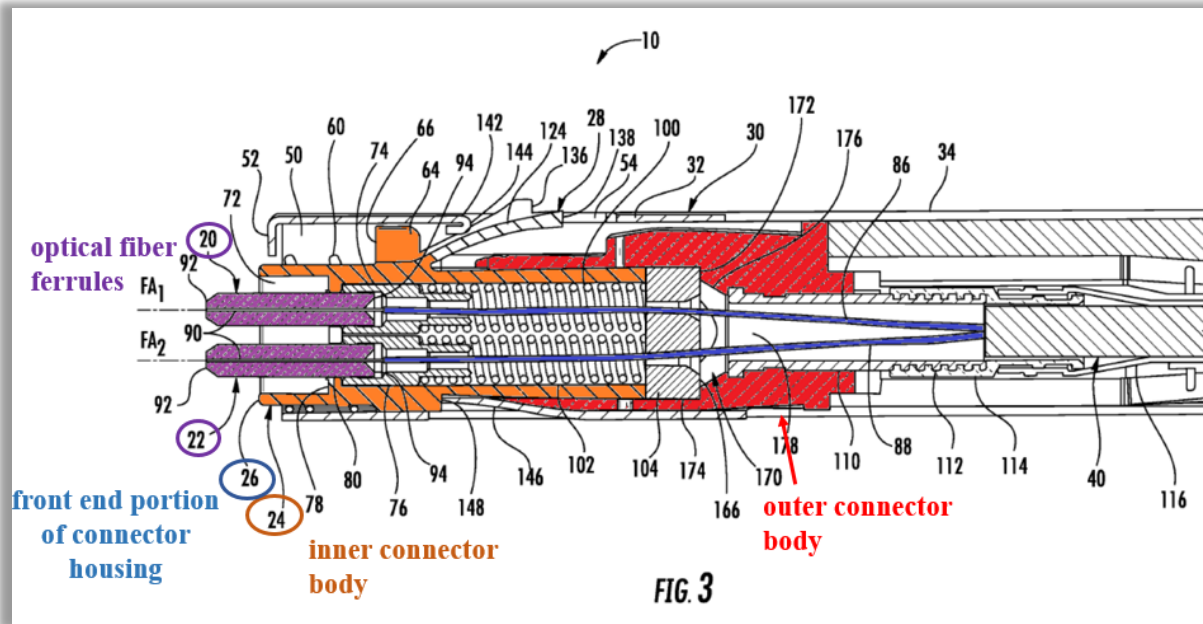
EX1004, FIG. 1 (annotated, cropped).

Lee's connector housing also comprises a top portion and a bottom portion spaced apart along a transverse axis perpendicular to the longitudinal axis.

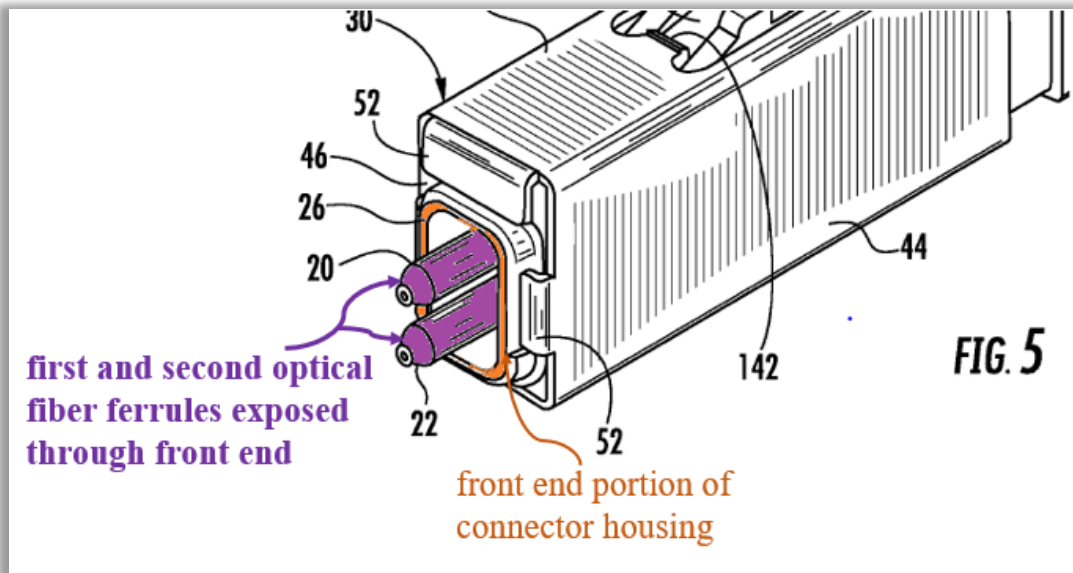
EX1004, FIGs. 1, 2; EX1011, ¶¶402-403.



EX1004, FIG. 1 (annotated, cropped).



EX1004, FIG. 3 (annotated) (showing the optical fiber ferrules 20, 22).

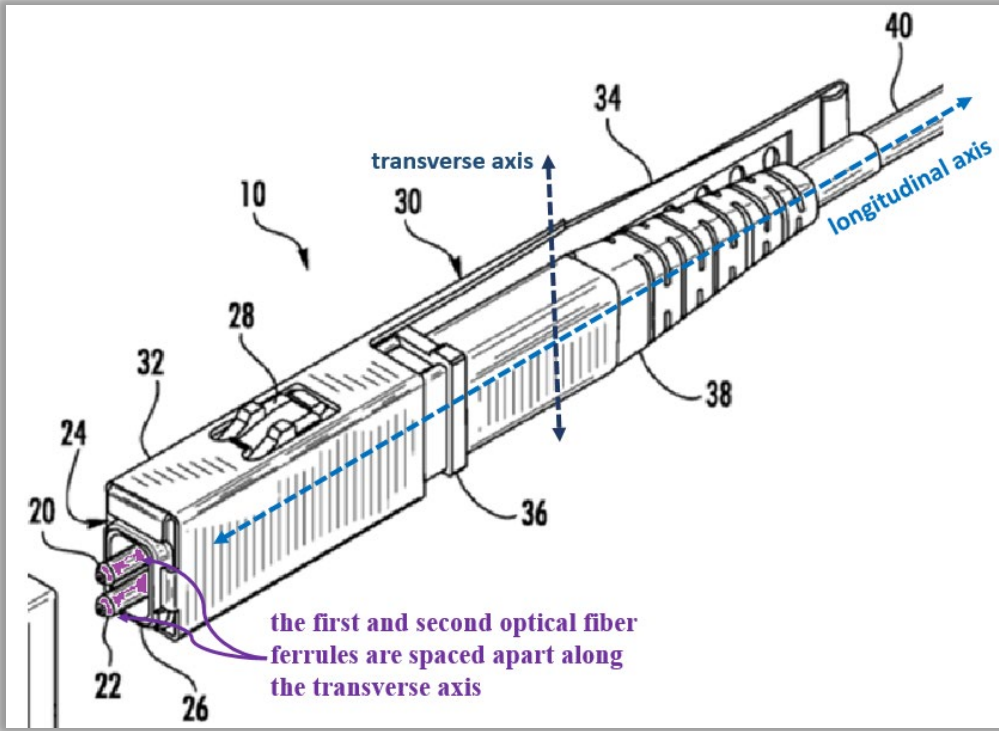


EX1004, FIG. 5 (annotated, cropped).

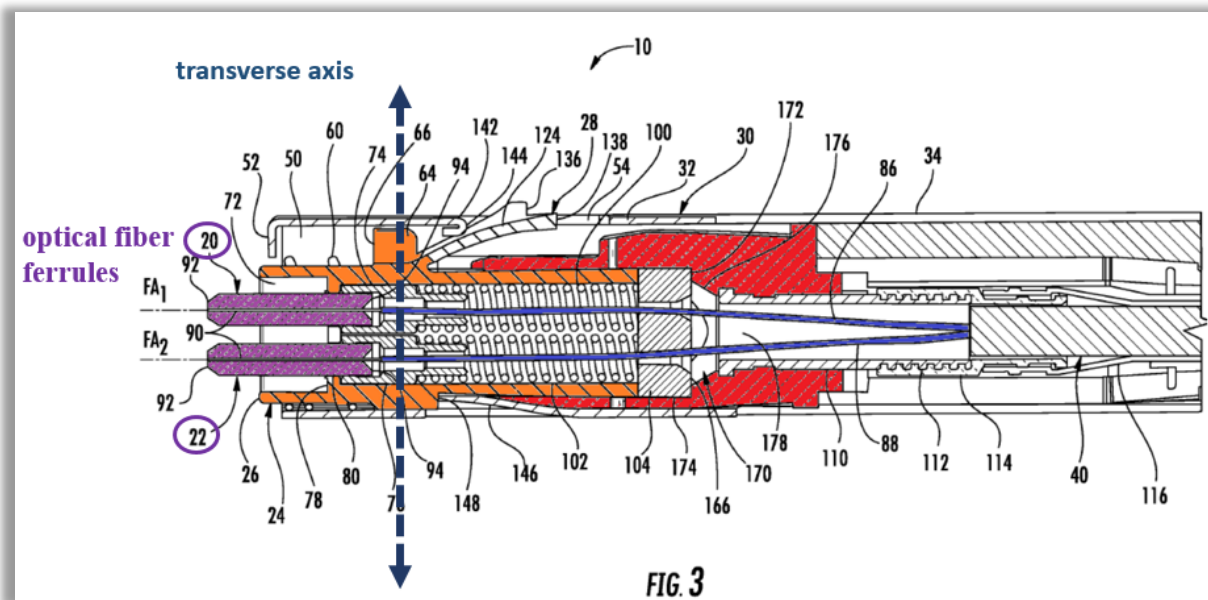
Lee shows ferrules are housed in the connector housing and are exposed through portion 26. EX1004, ¶30. Lee explains that in this arrangement “[t]he first

and second ferrules 20, 22 extend beyond the front end 62 of the inner connector body 24.” *Id.*, ¶35. Lee further explains that the “[c]onnectors are typically provided on the ends of the cables to conveniently provide these connections,” referring to data transmission. *Id.*, ¶3. Lee goes on to explain “[t]he connectors are designed to be received in ports that align the optical fiber(s) carried by connectors with the optical fiber(s) of other connectors or with equipment (e.g., transceivers) so that data can be transmitted between the components.” *Id.* (emphasis added). The purpose of exposing first and second ferrules 20, 22 beyond the front end of connector 10 is “for making an optical connection” as recited in this claim element. EX1011, ¶¶408-412.

Lee Figures 1 and 2 show first and second ferrules 20, 22 are spaced apart from one another along a transverse axis perpendicular to the longitudinal axis. EX1011, ¶¶413-415.



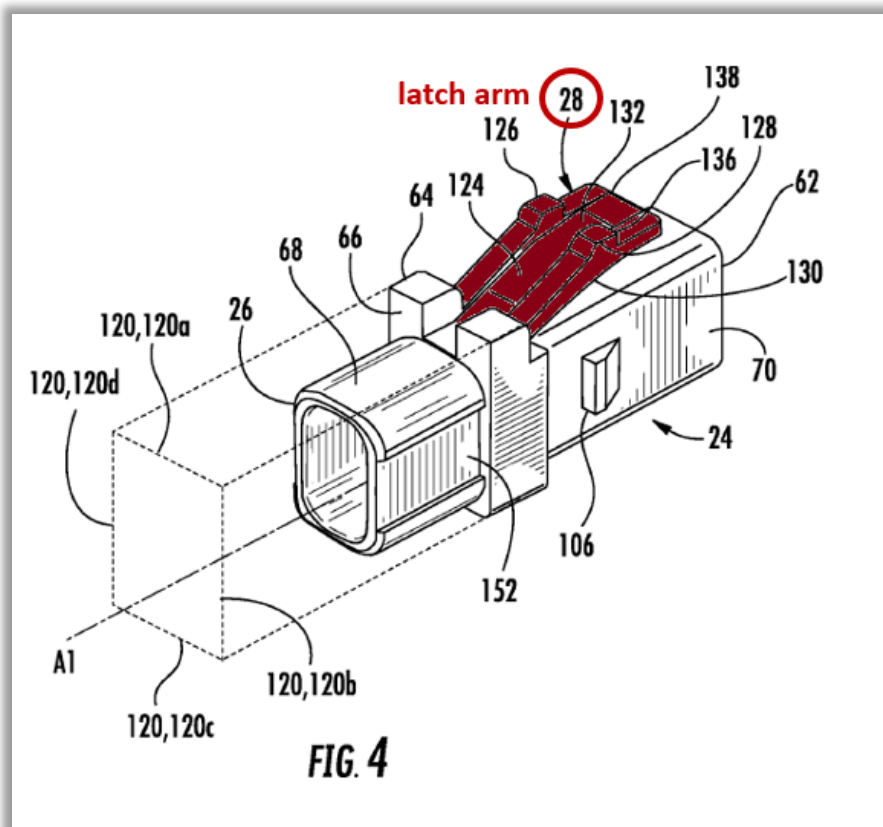
EX1004, FIG. 1 (annotated, cropped).



EX1004, FIG. 3 (annotated).

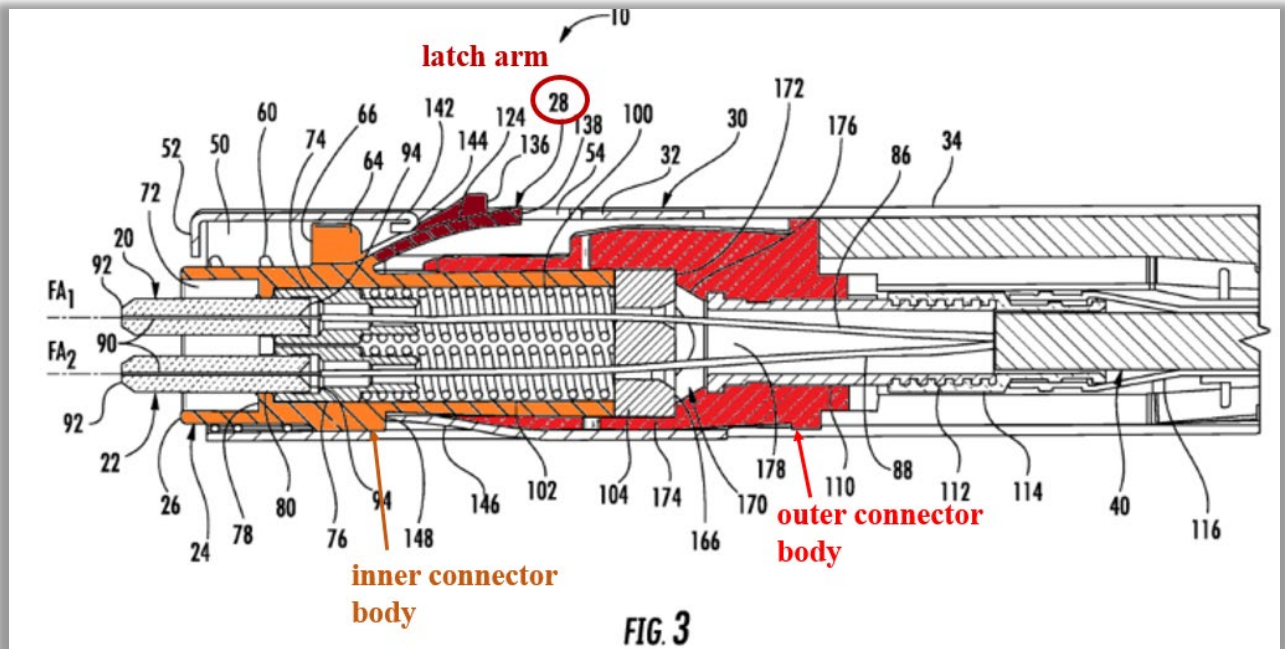
5. [1.4]

Lee discloses a latch arm 28 that includes first and second latching features 126, 128. EX1004, ¶¶30, 43. Latch arm 28 interacts with housing portion 32 of the handle 30 “to flex toward the inner connector body 24.” *Id.*, ¶30. Lee explains “[w]hen the handle 30 is moved rearwardly relative to the inner connector body 24... [it causes] the latch arm 28 to flex toward the inner connector body 24.” *Id.*, ¶47. Latch arm 28 is a “depressible latch” as recited in this claim. EX1011, ¶¶417-419.



EX1004, FIG. 4 (annotated).

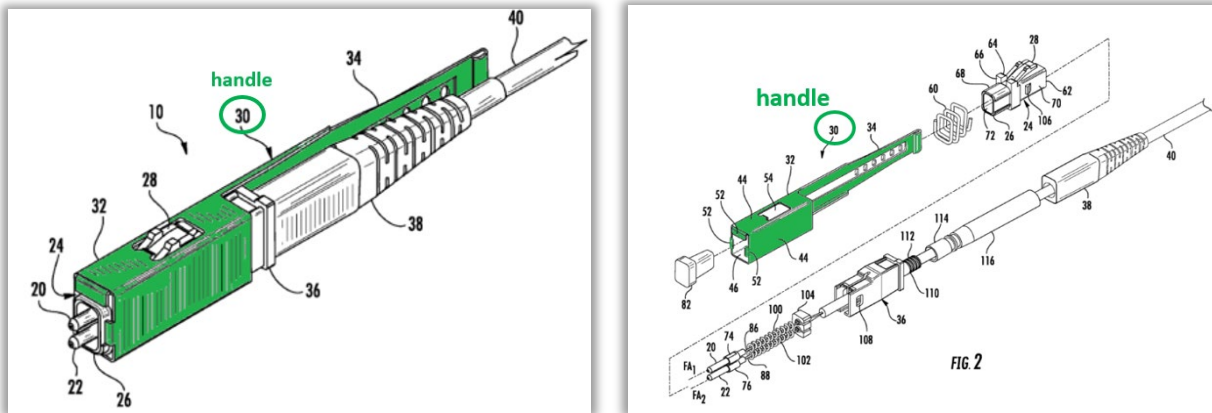
Lee discloses latch arm 28 is “above the top portion of the connector housing”. EX1011, ¶¶420-422. For example, latching features 124, 126 of latch arm 28 are readily seen as extending above the top portion of the connector housing (body 24/ body 36).Section VIII.A.3; EX1004, FIGs. 3, 5.



EX1004, FIG. 3 (annotated).

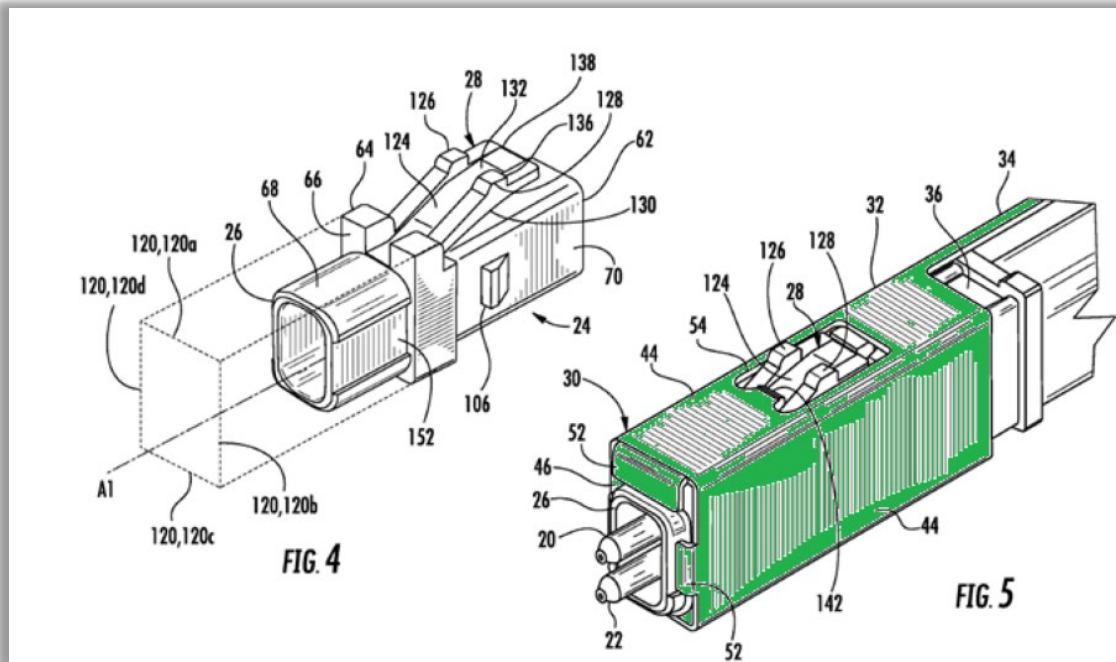
6. [1.5]

Lee Figures 1 and 2 disclose a handle 30 that provides an “elongate arm” as claimed. EX1004, FIGs. 1, 2, ¶¶30, 32, 43, 47.



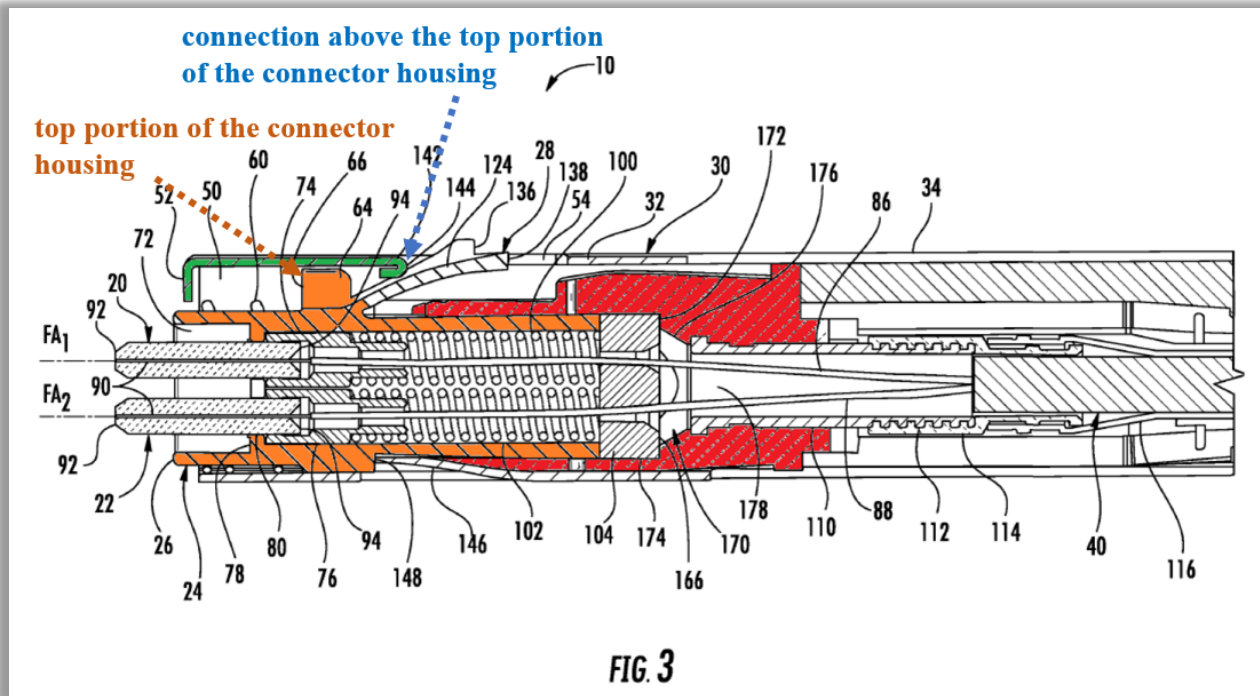
EX1004, FIGs. 1-2 (annotated, cropped).

Lee’s handle is configured to be retracted rearwardly to actuate latch arm 28. *Id.*, ¶¶30, 32, 43, 47. Lee explains “handle 30 can move relative to the inner connector body 24 so that the housing portion 32 can cause the latch arm 28 to flex toward the inner connector body 24.” *Id.*, ¶30. Lee’s grip portion 34 would be pulled to actuate latch arm 28 as understood based on, *e.g.*, Figure 5. EX1011, ¶¶424-428.



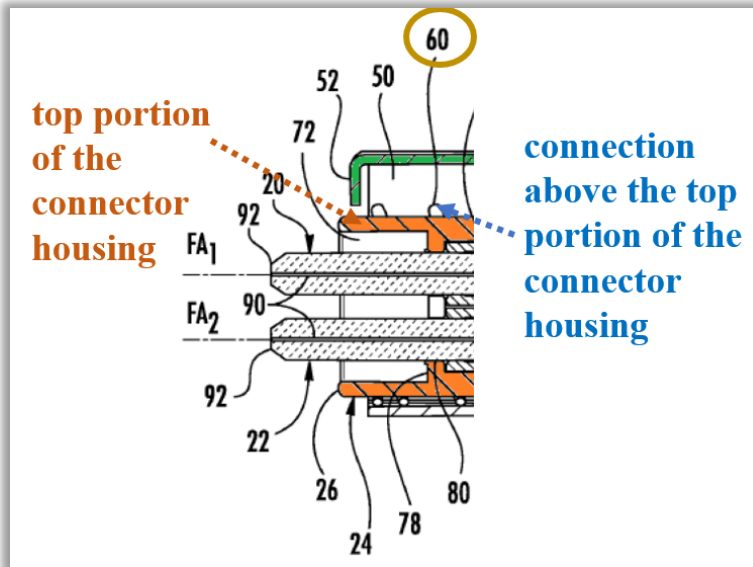
EX1004, FIGs. 4-5 (annotated).

Additionally, Lee's handle 30 includes a tab 52 and a pushing feature 142 that connect handle 30 to the connector housing above bodies 24, 36. In particular, Lee describes that that pushing feature 142 "is in the form of a finger extending into the opening 54" and includes a "rounded surface 144 [which] contacts and slides along the ramp 124 to cause the latch arm 28 to flex toward the inner connector body 24." *Id.*, ¶47. Pushing feature 142 moves between the first and second latching features 126, 128, *e.g.*, Figure 5, and thus pushing feature 142 is connected between latching features 126, 128. This connection is above the top portion of the connector housing. *Id.*, FIG. 3.

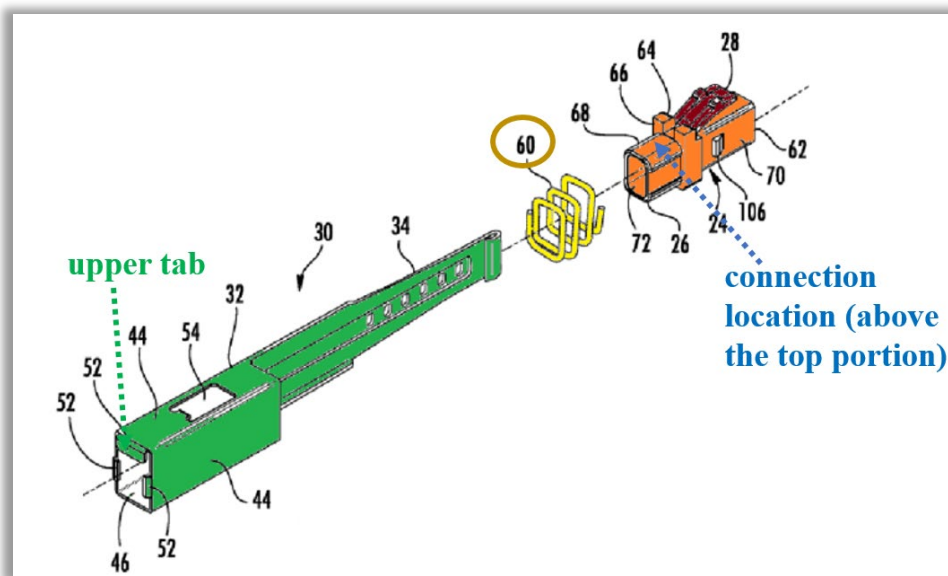


EX1004, FIG. 3 (annotated).

Lee further explains that an outer spring 60 is compressed between front tabs 52 of handle 30 and flange 64 of body 24 to limit the amount of movement of handle 30 in the rearward direction. *See* EX1004, ¶48. This connection is above the top portion of body 24 at this location of the connector housing. EX1004, FIGs. 2, 3; EX1011, ¶434.



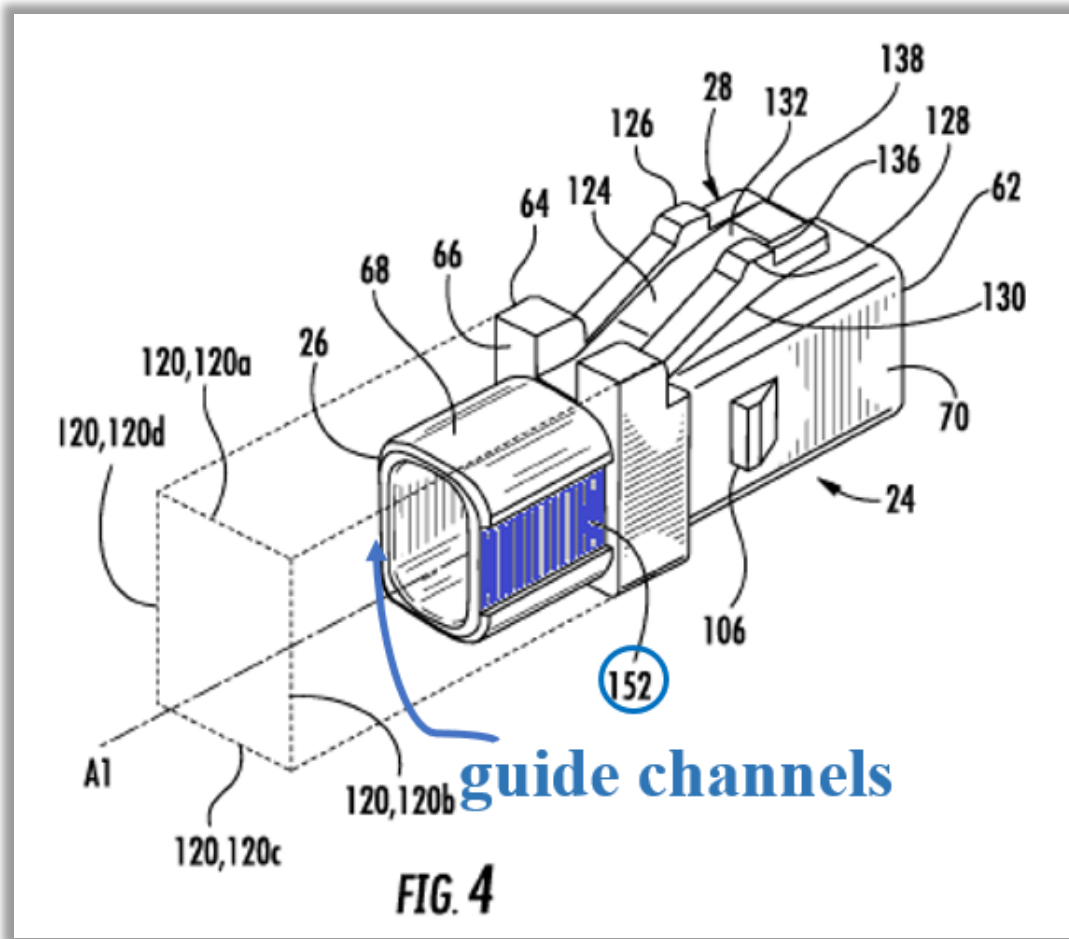
EX1004, FIG. 2 (annotated, cropped).



EX1004, FIG. 2 (annotated, cropped).

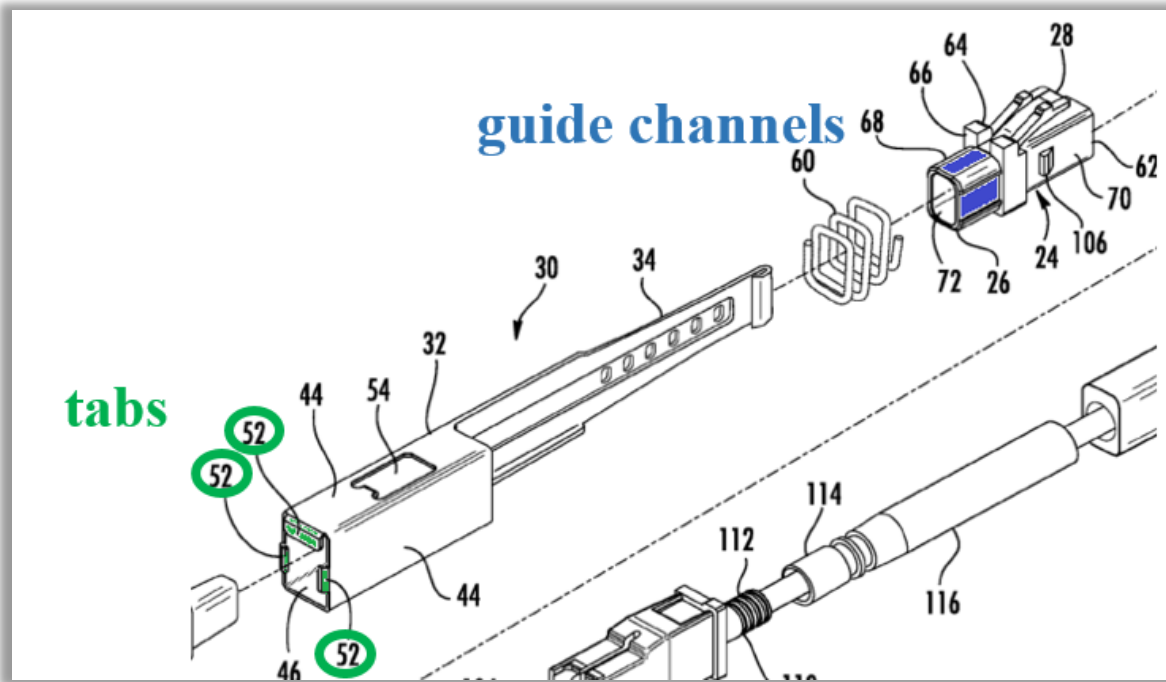
7. [1.6]

Lee's Figure 4 shows a guide of the connector housing. EX1004, FIG. 4;
EX1011, ¶446.



EX1004, FIG. 4 (annotated).

Lee explains how guide channels 152 on body 24 restricts movement: “two of the sides 120 (120b, 120d) of the inner connector body 24 each include a guide channel 152... When the connector 10 is assembled... two of the tabs 52 on the housing portion 32 are received in the guide channels 152. The tabs 52 travel along the guide channels 152 when the handle 30 moves relative to the inner connector body 24.” *Id.*, ¶50 (emphasis added).



EX1004, FIG. 2 (annotated, cropped).

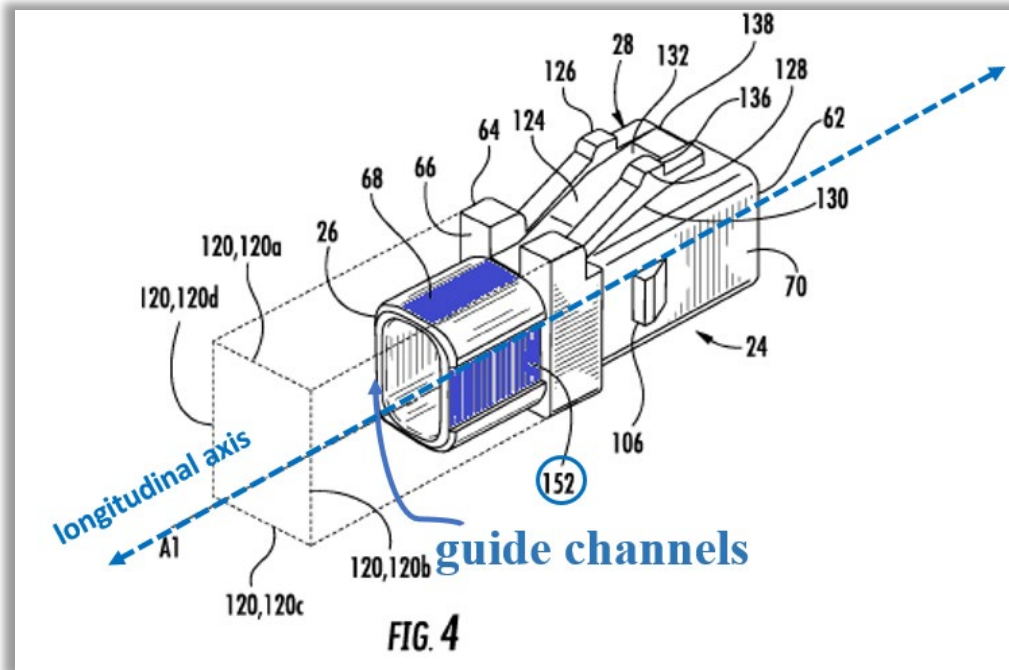
Lee's guide channels 152 connect handle 30 to the connector housing based on tabs 52 at the front end of handle 30 that move within guide channels 152.

EX1011, ¶¶447-450; EX1004, ¶51.

B. Claim 2

Lee explains guide channels 152 extend along the longitudinal axis and receive tabs 52. EX1004, ¶50. Lee FIGs. 1-5, specifically annotated Figure 4, collectively illustrate that guide channels 152 are grooves oriented in this way.

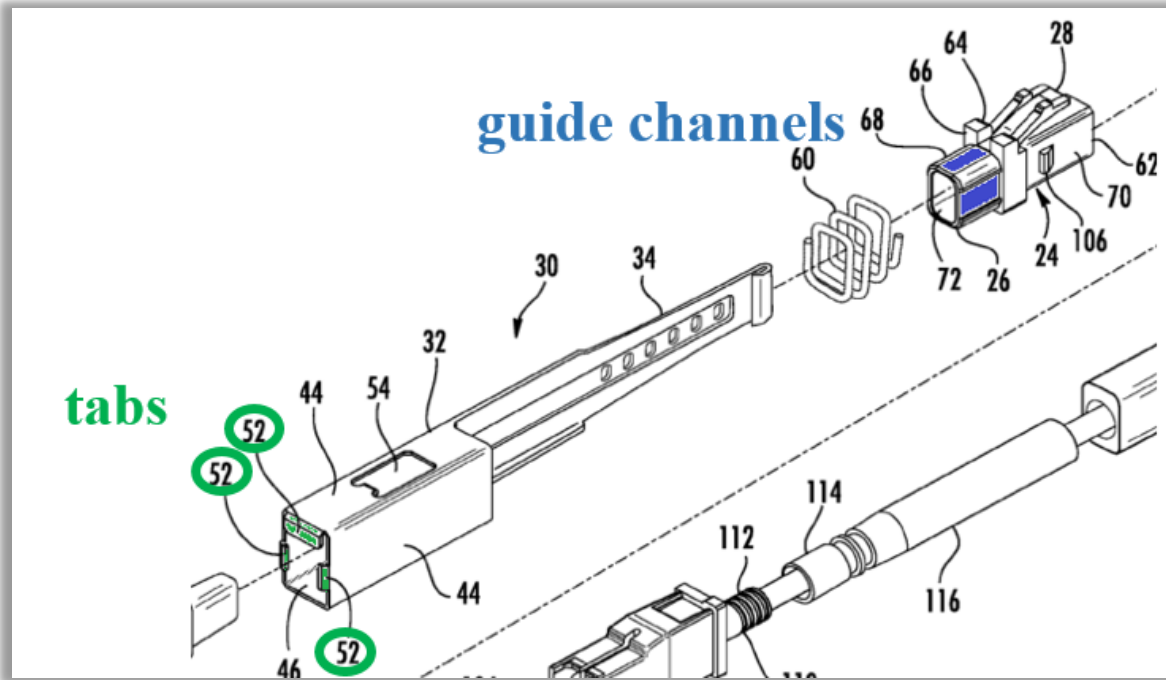
EX1011, ¶¶453-456.



EX1004, FIG. 4 (annotated).

C. Claim 3

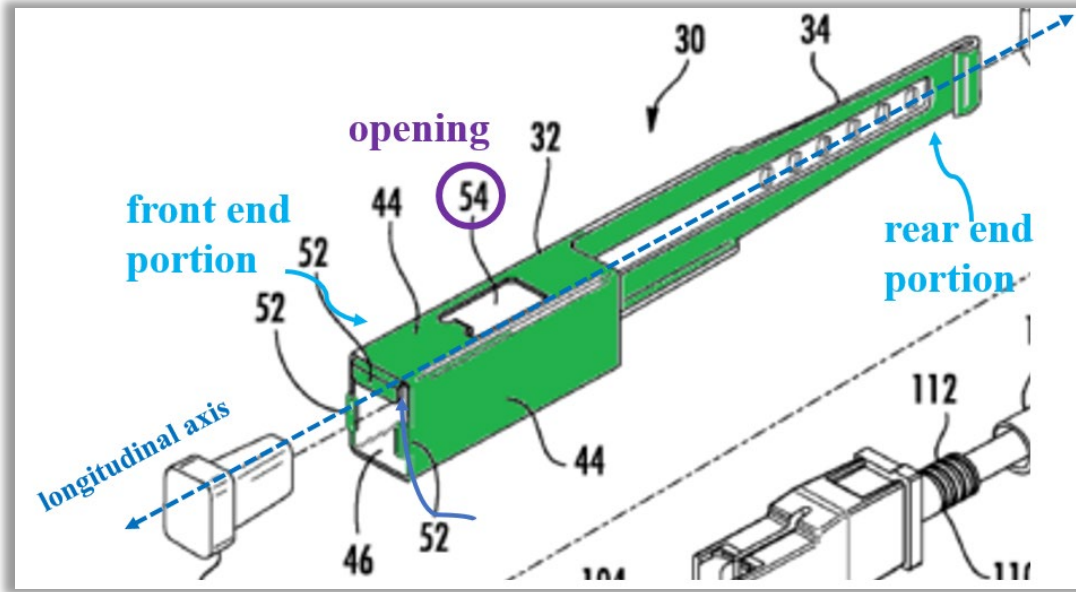
Lee shows tabs 52 are slidably received in guide channels 152. EX1004, ¶¶33, 50-51, FIGs. 2-5; EX1011, ¶¶459-463.



EX1004, FIG. 2 (annotated, cropped).

D. Claim 4

Lee's elongate arm (handle 30) includes a front end portion and a rear end portion spaced apart along the longitudinal axis. EX1011, ¶¶466-467; EX1004, FIG. 2.

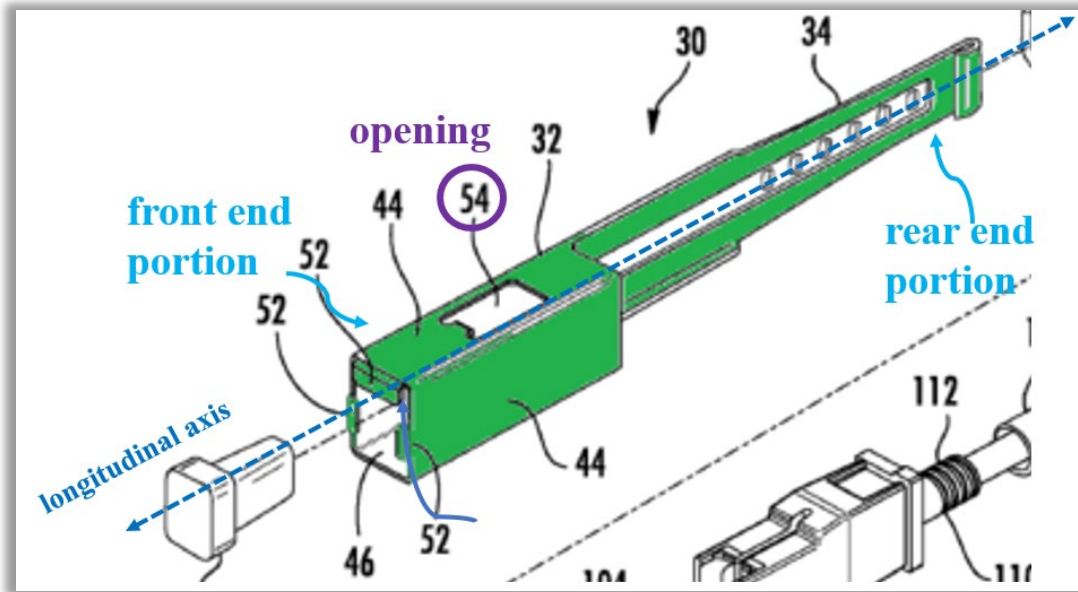


EX1004, FIG. 2 (annotated, cropped).

For example, Lee grip portion 34 defines a rear end portion and Lee housing portion 32 is a front end portion. EX1004, ¶¶30-32; EX1011, ¶¶468-469.

E. Claim 5

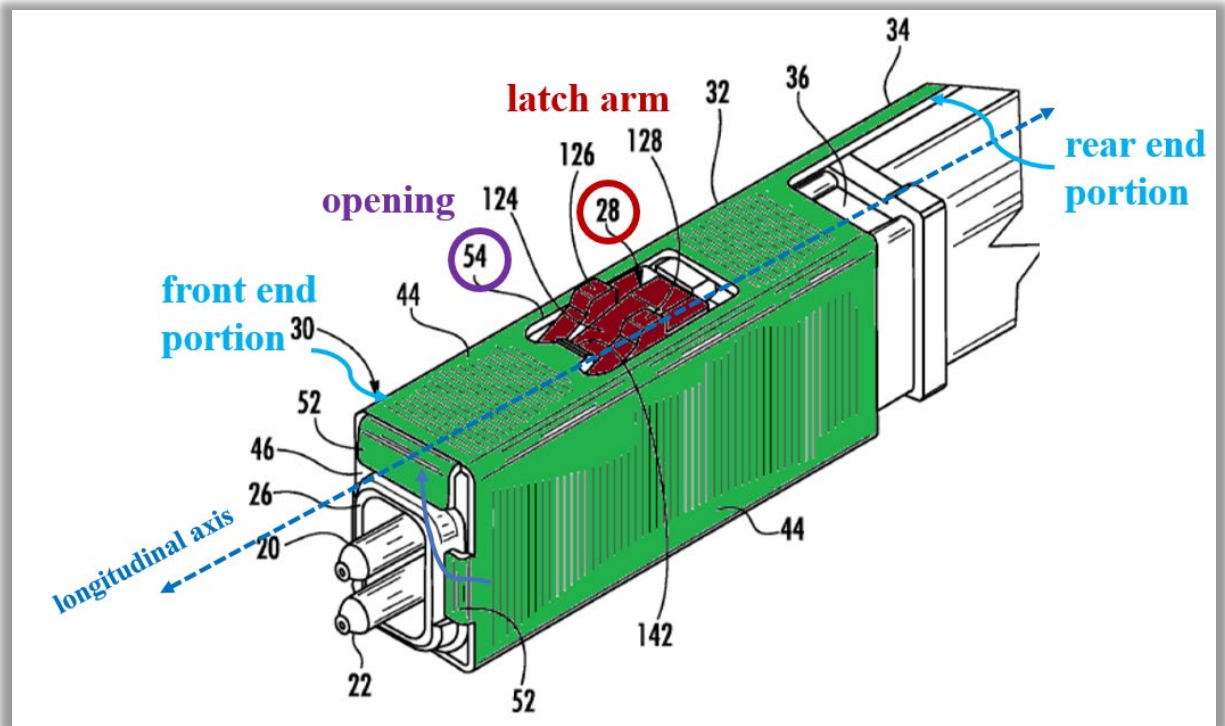
Lee describes an opening 54 defined in housing portion 32, which is the front end portion of the elongate arm provided by handle 30. EX1004, ¶¶30-32, 47 (“housing portion 32 of the handle 30 includes an opening 54” (emphasis added)); EX1011, ¶¶473-474.



EX1004, FIG. 2 (annotated, cropped).

F. Claim 6

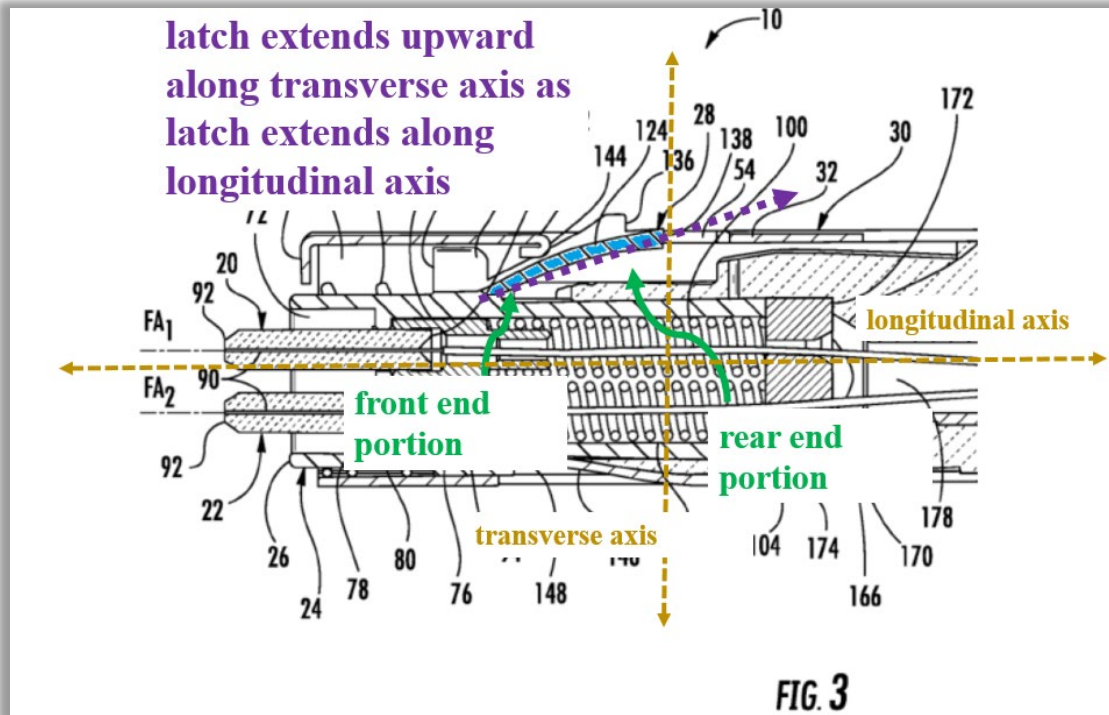
Lee discloses latch arm 28 is received in opening 54 of housing portion 32 of handle 30. EX1004, ¶47 (“housing portion 32 of the handle 30 includes an opening 54 for through which the latch arm 28 extends when the connector 10 is assembled.” (emphasis added)), FIGs. 1, 5; EX1011, ¶¶477-482.



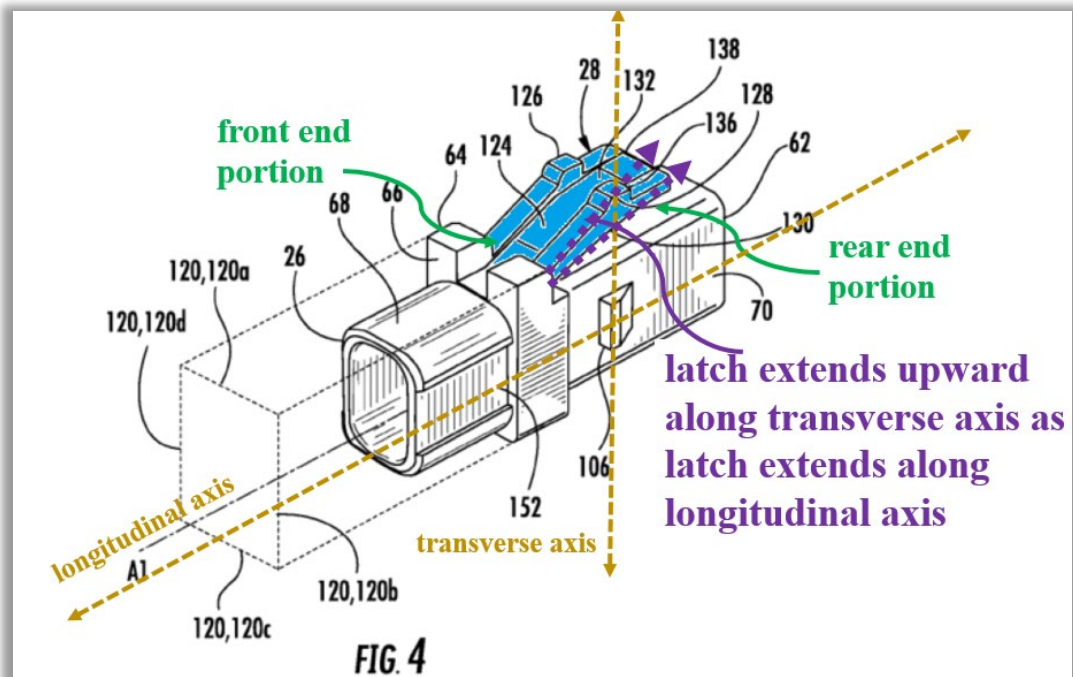
EX1004, FIG. 5 (annotated).

G. Claim 7

Lee's latch arm 28 teaches claim 7. EX1011, ¶¶485-488; EX1004, ¶¶43-46, FIGs. 3-4.



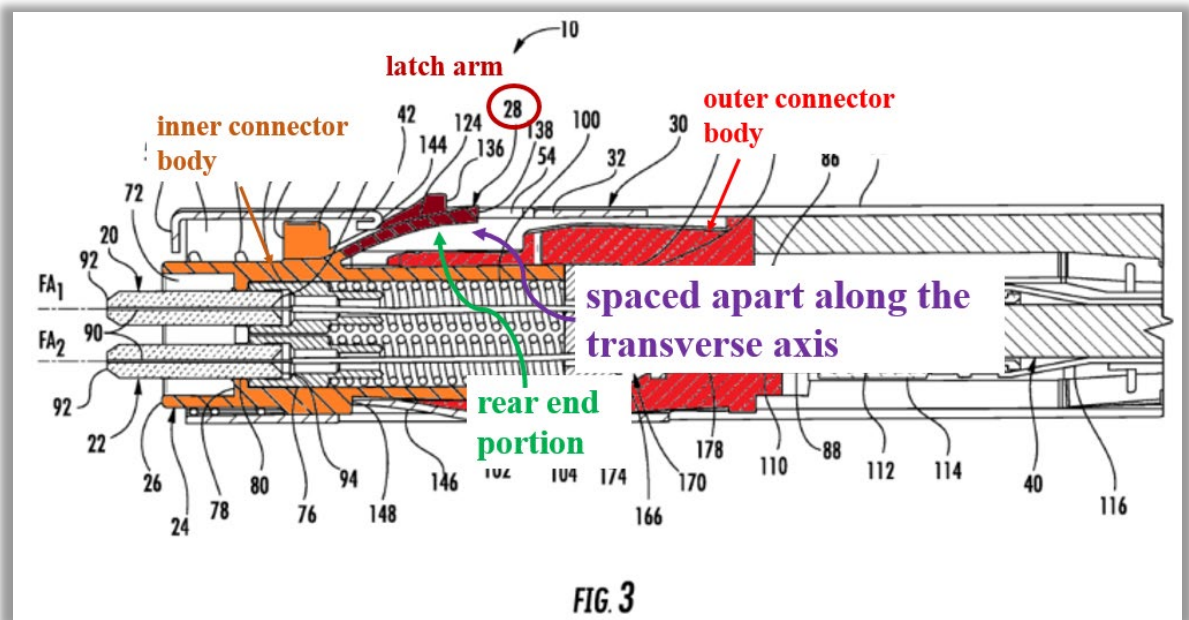
EX1004, FIG. 3 (annotated, cropped).



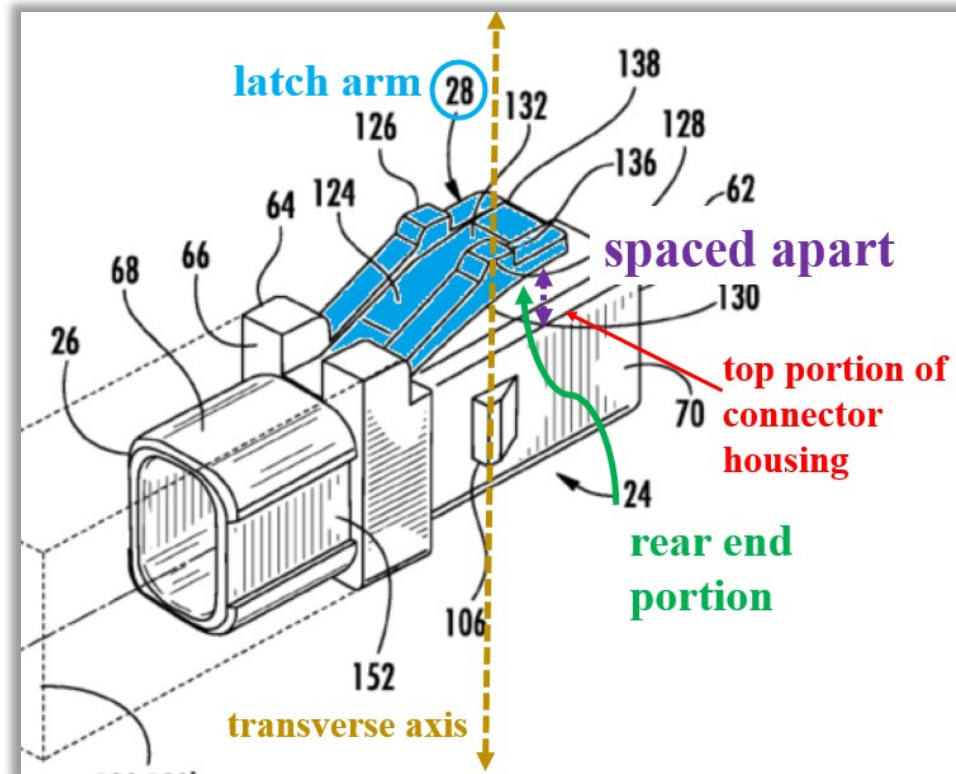
EX1004, FIG. 4 (annotated).

H. Claim 8

Lee explains “latch arm 28 includes a lower side 130 facing the inner connector body 24,” EX1004, ¶43, and illustrates the lower side 130 of the rear portion of the latch arm 28 is spaced apart from the top portion of the inner and outer connector bodies 24, 36. EX1004, ¶43, FIGs. 3, 4; EX1011, ¶¶491-493.



EX1004, FIG. 3 (annotated).

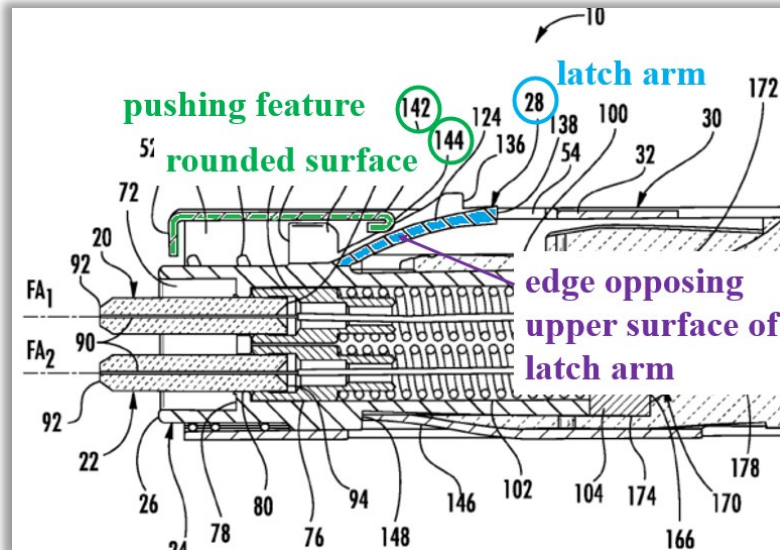


EX1004, FIG. 4 (annotated, cropped).

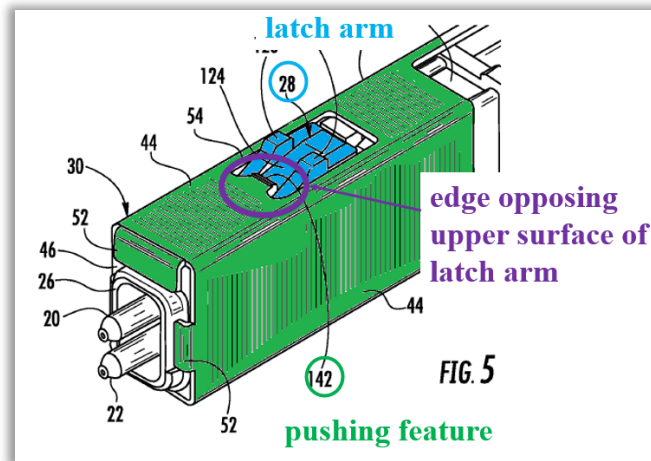
I. Claim 9

Lee shows the elongate arm (handle 30) includes an edge provided at least in part by rounded surface 144 of pushing feature 142 at the front end of opening 54.

See EX1004, ¶¶47-48; EX1011, ¶¶495-497.



EX1004, FIG. 3 (annotated, cropped).



EX1004, FIG. 5 (annotated).

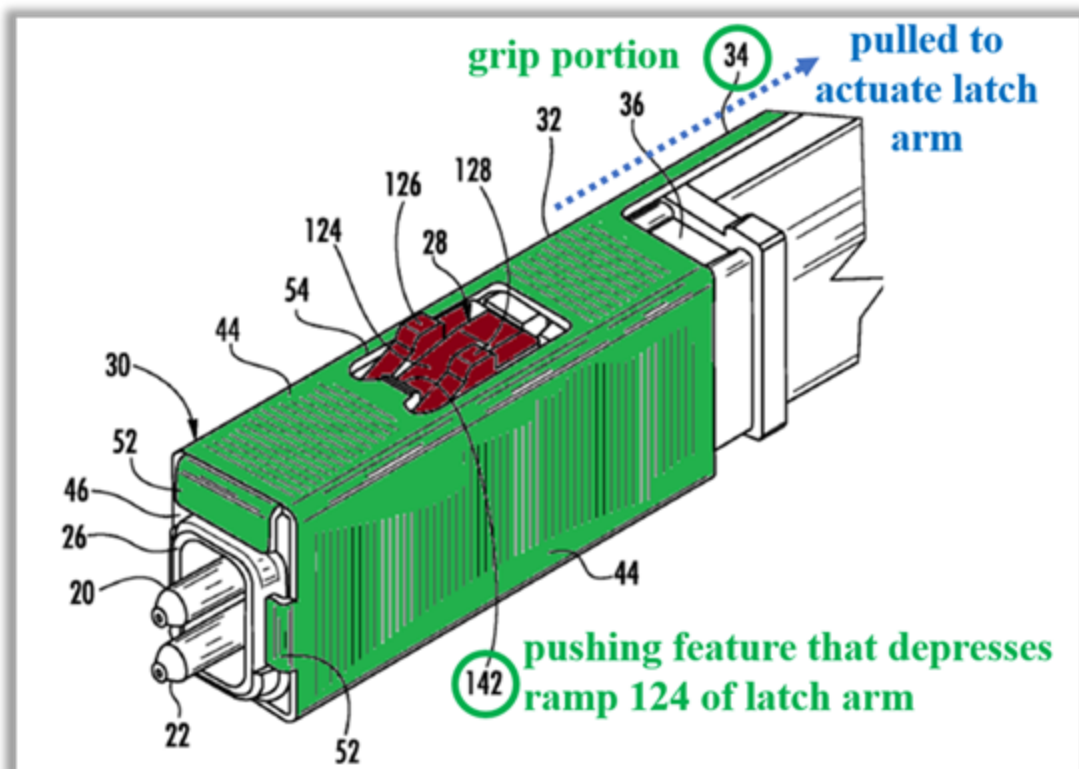
J. Claim 10

Pushing feature 142 including rounded surface 144 that defines at least part of the edge is provided opposite upper surface of ramp 124 of latch arm 28 because pushing feature 142 contacts upper surface of ramp 124 of latch arm 28 to actuate latch arm 28 when the handle is pulled rearwardly. *See, e.g.,* EX1004, ¶47

K. Claim 14

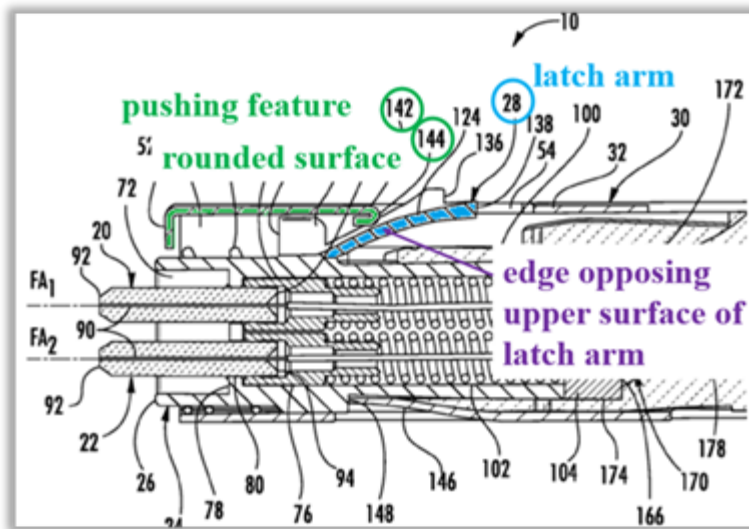
Claim 14 is addressed out of order because it depends from claims 4-10, while claims 11-13 do not depend from any of claims 4-10.

Lee's handle 30 is configured to be pulled rearward to actuate latch arm 28. EX1004, ¶¶30, 32, 43, 47. Lee explains "handle 30 can move relative to the inner connector body 24 so that the housing portion 32 can cause the latch arm 28 to flex toward the inner connector body 24." EX1004, ¶30. Lee further explains that "[w]hen the handle 30 is moved rearwardly relative to the inner connector body 24, the rounded surface 144 contacts and slides along the ramp 124 to cause the latch arm 28 to flex toward the inner connector body 24." EX1004, ¶47 (emphasis added); EX1011, ¶¶506-508.

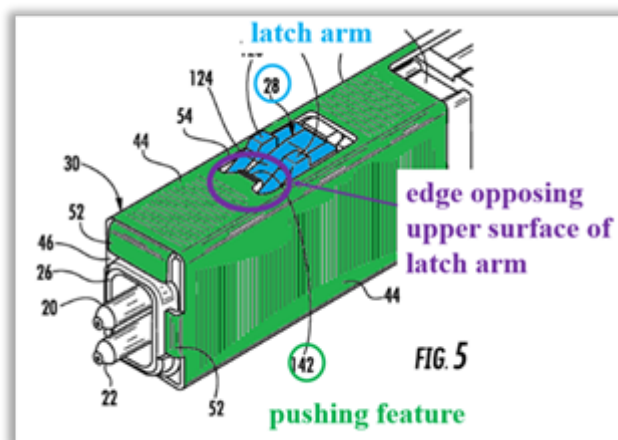


EX1004, FIG. 5 (annotated, cropped).

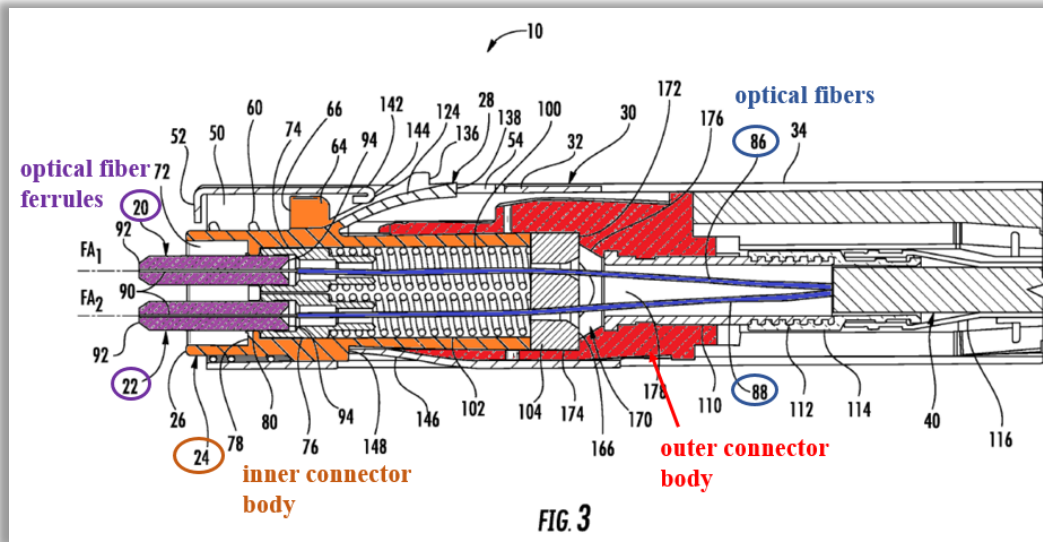
The edge provided at least partially by surface 144 is provided opposite upper surface of ramp 124 and “rounded surface 144 contacts and slides along the ramp 124 to cause the latch arm 28 to flex toward the inner connector body 24” when the handle 30 is pulled rearward. EX1004, ¶47, FIG. 3; EX1011, ¶509.



EX1004, FIG. 3 (annotated, cropped).



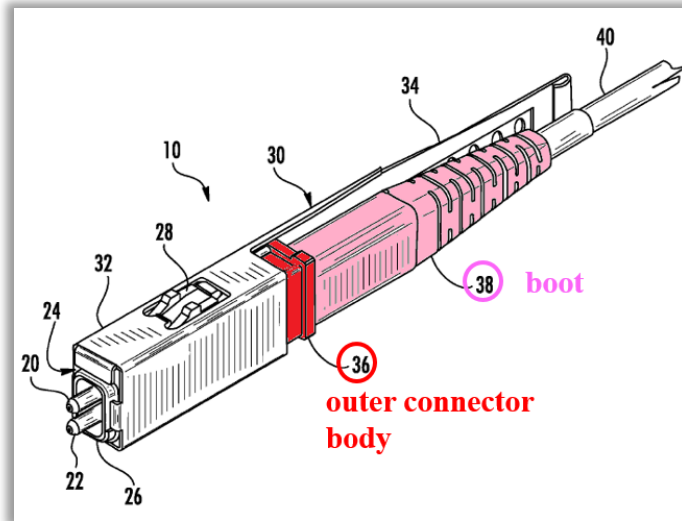
EX1004, FIG. 5 (annotated, cropped).



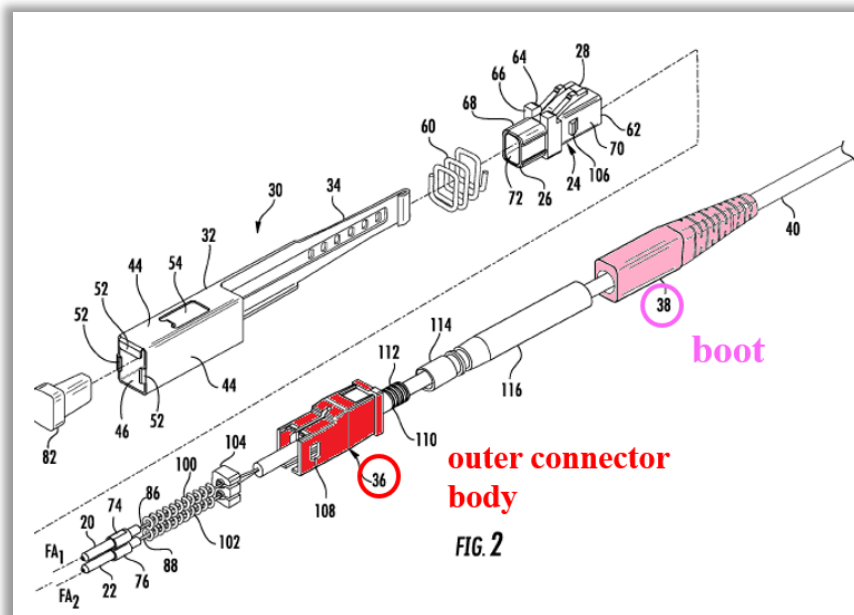
EX1004, FIG. 3 (annotated).

M. Claim 12

Lee's connector housing includes body 24 and body 36 (Sections VIII.A.3, VIII.A.4). Lee's boot also extends "rearward from the connector housing" as recited in claim 12. EX1004, FIGs. 1-3. Lee states "boot 38 is coupled to the outer connector body 36 outside of the housing portion 32." EX1004, ¶30. Lee Figures 1-3 show boot 38 as a single cable boot extending rearward from body 36, which is part of the connector housing. EX1004, FIGs. 1-3, ¶¶40, 55, 58; EX1011, ¶¶517-519.



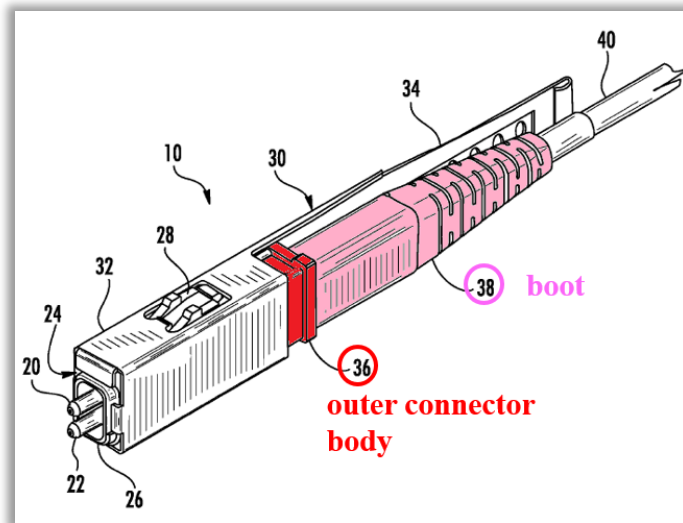
EX1004, FIG. 1 (annotated, cropped).



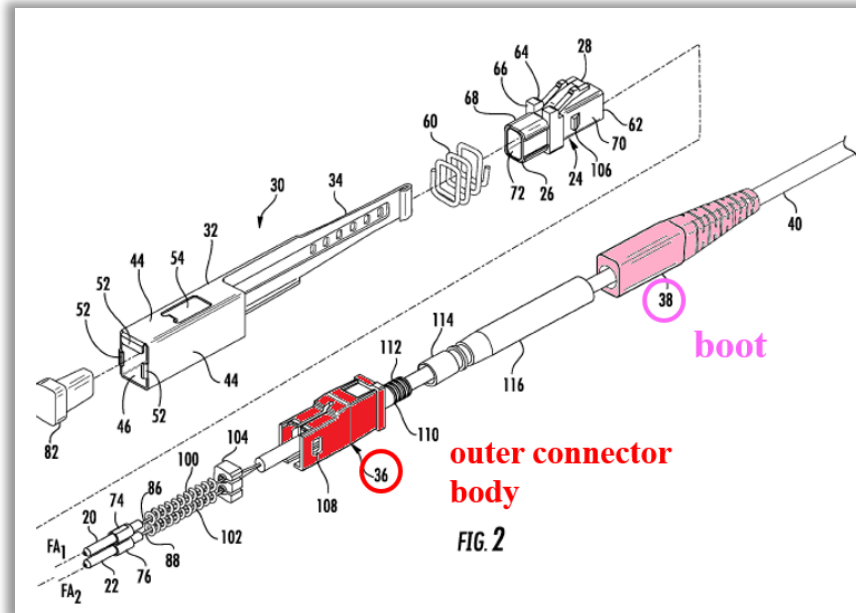
EX1004, FIG. 2 (annotated).

N. Claim 13

Lee's connector housing includes body 24 and body 36. Sections VIII.A.3, VIII.A.4. Lee's boot extends "rearward from the connector housing" as recited in claim 13. EX1004, FIGs. 1-3. Lee states "boot 38 is coupled to the outer connector body 36 outside of the housing portion 32." EX1004, ¶30. Lee's Figures 1-3 show boot 38 is a single cable boot extending rearward from body 36, which is part of the connector housing. EX1004, FIGs. 1-3; EX1011, ¶¶522-526.



EX1004, FIG. 1 (annotated, cropped).



EX1004, FIG. 2 (annotated); EX1004, FIG. 3, ¶¶40, 55, 58 (cable 40 and connection of boot 38 to body 36 of the connector housing).

O. Claim 15

Except for depending from claim 14 instead of directly from claim 1, claim 15 is identical to claim 2. Thus, Lee therefore discloses and anticipates claim 15. Section VIII.B; EX1011, ¶528.

P. Claim 16

Except for depending from claim 15 instead of claim 2, claim 16 is identical to claim 3. Thus, Lee discloses and anticipates claim 16. Section VIII.C; EX1011, ¶530.

Q. Claim 17

Except for depending from claim 15 instead of directly from claim 1, claim 17 is identical to claim 11. Thus, Lee discloses and anticipates claim 17. EX1011, ¶532.

R. Claim 20

1. Preamble – [20.5]

The preamble of claim 20 is identical to the preamble of claim 1, and [20.1]-[20.5] are identical to [1.1]-[1.5]. Accordingly, Lee discloses the preamble and elements [1.1]-[1.5] for similar reasons as claim 1. Sections VIII.A.1-6; EX1011, ¶533.

2. Elements [20.6]–[20.13]

[20.6]-[20.12] are identical to claims 4-10 and element [20.13] is identical to claim 14. Accordingly, Lee discloses [20.6]-[20.13] for similar reasons as claims 4-10 and 14. Sections VIII.D-K; EX1011, ¶533.

S. Claim 21

1. Preamble – [21.5]

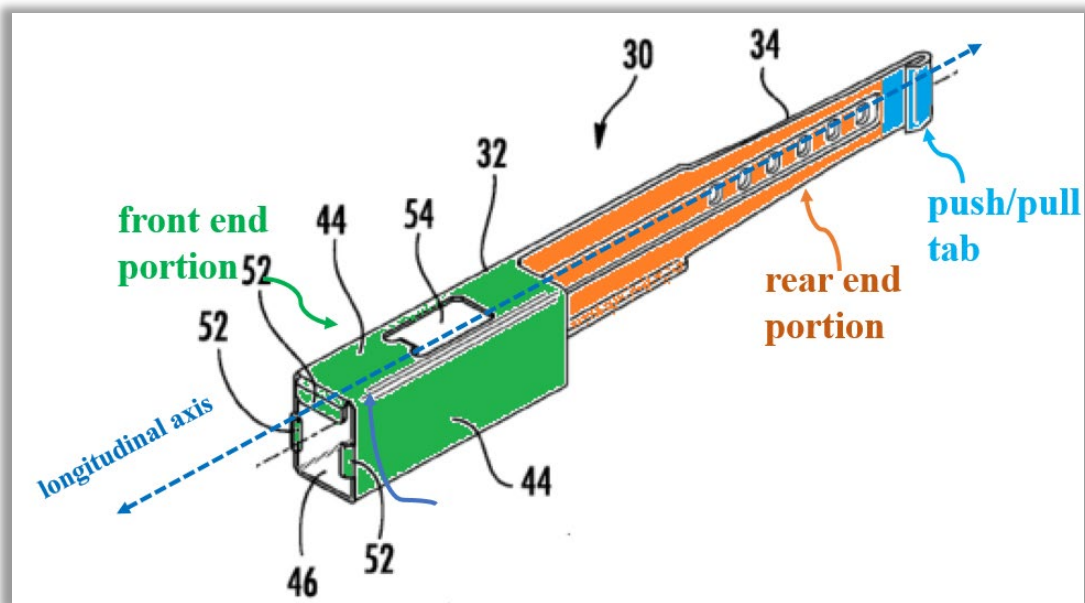
The preamble of claim 21 is identical to the preamble of claim 1, and [21.1]-[21.5] are identical to [1.1]-[1.5]. Accordingly, Lee discloses the preamble and [21.1]-[21.5] for similar reasons as claim 1. Sections VIII.A.1-6; EX1011, ¶534.

2. [21.6]

[21.6] is identical to claim 4. Accordingly, Lee discloses [20.6]. Section VIII.D; EX1011, ¶¶535-536.

3. [21.7]

Lee's handle 30 defines an elongate arm comprising a rear end portion and a push/pull tab extending from the rear end portion. EX1004, FIG. 2; EX1011, ¶¶537-544.



EX1004, FIG. 2 (annotated, cropped).

The portion of overlapping material at the proximal end of the grip portion 34 is a push-pull tab as claimed. EX1011, ¶543.

Accordingly, Lee discloses [21.7] with regard to both the connector 10 and the connector 510.

EX1004, FIG. 2 (annotated).

PO may allege that Lee does not expressly disclose “the front body includes a recess and the back body includes a protrusion received in the recess to connect the back body to the front body” because, in Figure 2, body 24 (compared above to the front body, Section VIII.A.3) has shoulder 106 and body 36 (compared above to the back body, Section VIII.A.3) has the shoulder.

However, Lee discloses “body 36 may be coupled to the inner connector body 24 in any suitable manner” before proceeding to describe the connection “[i]n the embodiment shown [in FIG. 2].” EX1004, ¶39 (emphasis added). In view of Lee’s suggestion that the connector bodies “may be coupled... in any suitable manner,” (*id.*) a POSITA would have found it obvious to trade the positions of shoulder 106 and opening 108 such that shoulder 106 is on body 36 and opening 108 is on body 24 as recited in claim 18. EX1011, ¶¶547-550. Doing so would have had equivalent, predictable results. *Id.*

Accordingly, claim 18 would have been obvious over Lee.

B. Claim 19

Except for depending from claim 19 instead of directly from claim 1, claim 19 is identical to claim 13. Lee therefore discloses and renders obvious claim 19. Section VIII.N; EX1011, ¶¶552-553.

C. Claim 21

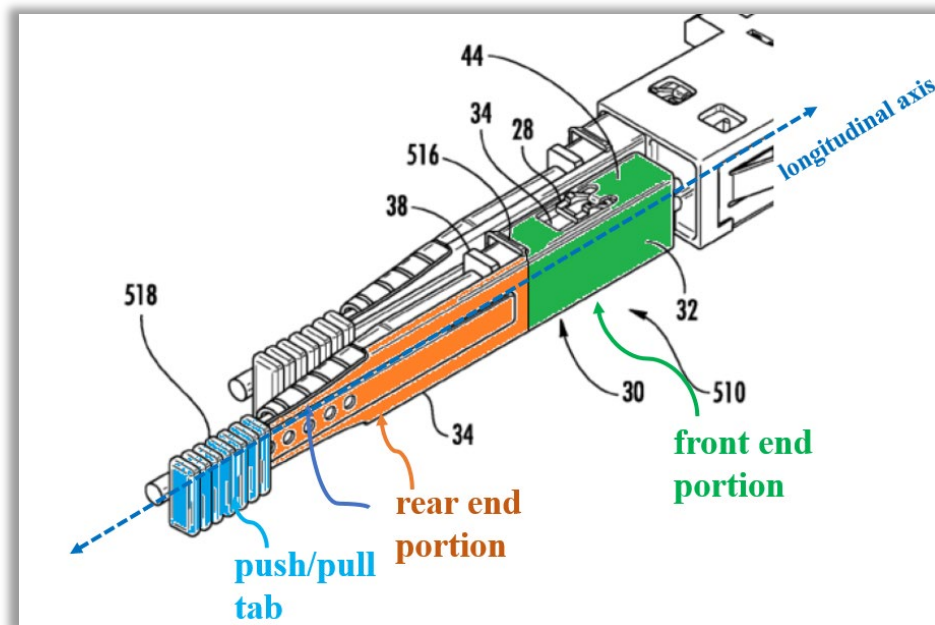
1. [21.P]-[21.6]

The features of claim 21, from the preamble through [21.6], are disclosed in Lee, particularly with regard to the connector 10. Section VIII.U.1-7.

2. [21.7]

Lee discloses 21.7 in Figure 14 and the associated description. EX1004, FIG. 14, ¶¶70; EX1011, ¶¶554-556.

To any extent PO may argue that the folded part of Lee's grip portion 34, Section VII.S.3, is not expressly a push-pull tab, it would have been obvious to modify connector 10 to have knob 518 of Lee's connector 510. EX1011, ¶¶554.



EX1004, FIG. 14 (annotated, cropped).

In the same paragraph that describes the knob 518, Lee begins the

description of Figure 14 by explaining that “[t]hose skilled in the art will appreciate that other modifications and variations can be made without departing from the spirit or scope of the invention...” EX1004, ¶70. Lee thus explicitly prompts implementing the features depicted in Figure 14 as modifications to other embodiment. In view of that prompt, and with the motivation to make the grip portion 34 easier to grasp, a POSITA would have found it obvious to apply the knob 518 to the proximal end of the grip portion 34 of the handle 30 of the connector 10. EX1011, ¶555. Because the connector 10 has the features of the preamble of claim 21 through [21.6] (Section VIII.S.1-7), and the knob 518 is a push-pull tab as recited in [21.7], the result of such a modification would have every feature of claim 21. Claim 21 therefore would have been obvious over Lee. EX1011, ¶556.

D. Claim 22

1. Preamble – [22.5]

The preamble of claim 22 is identical to the preamble of claim 1, and [22.1]-[22.5] are identical to [1.1]-[1.5]. Accordingly, Lee discloses the preamble of claim 22 and [22.1]-[22.5] for the reasons explained above with regard to the preamble of claim 1 and [1.1]-[1.5]. Sections VIII.A.1-6; EX1011, ¶557.

2. [22.6]

[22.6] is identical to claim 11. Accordingly, Lee discloses [22.6] for the reasons explained above with regard to claim 11. Section VIII.L; EX1011, ¶557.

3. [22.7]

[22.7] is identical to claim 18. Accordingly, Lee renders the features of [22.7] obvious for the reasons explained above with regard to claim 18. Section IX.A; EX1011, ¶¶557-558.

XI. THE BOARD SHOULD NOT EXERCISE ITS DISCRETION TO DENY THE PETITION.

A. The Board should not deny the Petition under *Fintiv*.

The '369 patent is in litigation that was filed on January 24, 2023. EX1020. However, the Board should not deny this Petition under *Fintiv* because the Petition sets forth a compelling unpatentability challenge to at least one claim. Further, if instituted, Petitioner stipulates not to pursue in the district court the grounds in the Petition or any ground that reasonably could have been raised in the Petition. Accordingly, *Fintiv* does not favor denial of institution. *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020) (precedential).

B. The Board should not deny the petition under § 325(d).

Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH, IPR2019-01469, Paper 6, 7-8 (P.T.A.B. Feb. 13, 2020) (precedential) strongly

favors institution because the IPR grounds here rely on art that was not presented to, or substantively considered by, the Office during prosecution of the '369 patent.

The Office has not considered Scherer or Lee, at least one of which appears in each Ground. Further, Scherer and Lee have not been asserted in any other challenge to the '369 patent before the Office or any other tribunal.

XII. MANDATORY NOTICES (37 C.F.R. § 42.8(A)(1))

Real Party-in-Interest (37 C.F.R. § 42.8(b)(1)): The real party-in-interest is Petitioner US Conec Ltd. Petitioner US Conec Ltd. states that the following entities each own 10% or more of its stock: Corning Optical Communications, LLC; Fujikura Ltd.; and NTT Advanced Technology Corporation. This statement should not be interpreted as an admission or concession that the above-listed parties are real parties-in-interest or in privity with US Conec Ltd.

Related Matters (37 C.F.R. § 42.8(b)(2)): The '369 patent is asserted against US Conec Ltd. in *Senko Advanced Components, Inc. v. US Conec Ltd.*, 1:23-cv-00083 (D. Del.), filed on January 24, 2023.

Lead and Back-up Counsel: Pursuant to 37 C.F.R. § 42.8(b)(3) and 42.10(a), Petitioner appoints Jason D. Eisenberg (Reg. No. 43,447) as its lead counsel, and Joseph K. Venier (Reg. No. 76,838) as its back-up counsel, all at the address: STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C., 1101 K St. N.W.,

10th Floor, Washington, D.C. 20005; phone number: (202) 371-2600; and
facsimile: (202) 371-2540.

Service Information (37 C.F.R. § 42.8(b)(4)): Please direct all
correspondence regarding this Petition to counsel at the email addresses: jasone-
PTAB@sternekessler.com, jvenier-PTAB@sternekessler.com, and
PTAB@sternekessler.com. US Conec Ltd. consents to service by email at the
addresses above.

**XIII. CERTIFICATION THAT THE PATENT MAY BE CONTESTED VIA
INTER PARTES REVIEW BY THE PETITIONER AND STANDING
(37 C.F.R. § 42.104(A))**

US Conec Ltd. certifies that the '369 patent is available for IPR and US
Conec Ltd. is not barred or estopped from requesting IPR of any '369 patent claim.

XIV. CONCLUSION

Claims 1-22 are unpatentable and *inter partes* review is warranted.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX PLLC

/Jason D. Eisenberg/

Jason D. Eisenberg, Reg. No. 43,447
Joseph K. Venier, Reg. No. 76,838
Counsel for Petitioner US Conec Ltd.

Date: January 6, 2024

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XV. APPENDIX: CHALLENGED CLAIMS

1. **[Preamble]** An optical fiber connector comprising:

[1.1] first and second optical fiber ferrules;

[1.2] a connector housing having a front end portion and a rear end portion spaced apart along a longitudinal axis, the connector housing comprising a top portion and a bottom portion spaced apart along a transverse axis perpendicular to the longitudinal axis, **[1.3]** the connector housing holding the first and second optical fiber ferrules such that the first and second optical fiber ferrules are exposed through the front end portion for making an optical connection and the first and second optical fiber ferrules are spaced apart from one another along the transverse axis,

[1.4] a depressible latch above the top portion of the connector housing; and

[1.5] an elongate arm connected to the connector housing above the top portion and configured to be pulled to actuate the depressible latch;

[1.6] wherein the connector housing comprises a guide connecting the elongate arm to the optical fiber connector.

2. The optical fiber connector as set forth in claim 1, wherein the guide defines a groove extending along the longitudinal axis.

3. The optical fiber connector as set forth in claim 2, wherein the elongate arm is slidably received in the groove.

4. The optical fiber connector as set forth in claim 1, wherein the elongate arm comprises a front end portion and a rear end portion spaced apart along the longitudinal axis.

5. The optical fiber connector as set forth in claim 4, wherein the front end portion of the elongate arm defines an opening.

6. The optical fiber connector as set forth in claim 5, wherein the depressible latch is received in the opening.

7. The optical fiber connector as set forth in claim 6, wherein the depressible latch has a front end portion and rear end portion spaced apart along the longitudinal axis and wherein the depressible latch extends upward along the transverse axis as the depressible latch extends along the longitudinal axis from the front end portion to the rear end portion of the depressible latch.

8. The optical fiber connector as set forth in claim 7, wherein the rear end portion of the depressible latch is spaced apart above the top portion of the connector housing along the transverse axis.

9. The optical fiber connector as set forth in claim 8, wherein the front end portion of the elongate arm includes an edge defining a front end of the opening.

10. The optical fiber connector as set forth in claim 9, wherein the depressible latch has an upper surface, the edge opposing the upper surface.

11. The optical fiber connector as set forth in claim 1, wherein the connector

housing includes a front body and a back body.

12. The optical fiber connector as set forth in claim 11, further comprising a single cable boot extending rearward from the back body.

13. The optical fiber connector as set forth in claim 1, further comprising a single cable boot extending rearward from the connector housing.

14. The optical fiber connector as set forth in claim 10, wherein the elongate arm is configured to be pulled rearward along the longitudinal axis with respect to the connector housing whereby the edge slides longitudinally along the upper surface to depress the depressible latch.

15. The optical fiber connector as set forth in claim 14, wherein the guide defines a groove extending along the longitudinal axis.

16. The optical fiber connector as set forth in claim 15, wherein the elongate arm is slidably received in the groove.

17. The optical fiber connector as set forth in claim 15, wherein the connector housing includes a front body and a back body.

18. The optical fiber connector as set forth in claim 17, wherein the front body includes a recess and the back body includes a protrusion received in the recess to connect the back body to the front body.

19. The optical fiber connector as set forth in claim 18, further comprising a single cable boot extending rearward from the connector housing.

20. **[Preamble]** An optical fiber connector comprising:

[20.1] first and second optical fiber ferrules;

[20.2] a connector housing having a front end portion and a rear end portion spaced apart along a longitudinal axis, the connector housing comprising a top portion and a bottom portion spaced apart along a transverse axis perpendicular to the longitudinal axis, **[20.3]** the connector housing holding the first and second optical fiber ferrules such that the first and second optical fiber ferrules are exposed through the front end portion for making an optical connection and the first and second optical fiber ferrules are spaced apart from one another along the transverse axis,

[20.4] a depressible latch above the top portion of the connector housing;
and

[20.5] an elongate arm connected to the connector housing above the top portion and configured to be pulled to actuate the depressible latch;

[20.6] wherein the elongate arm comprises a front end portion and a rear end portion spaced apart along the longitudinal axis;

[20.7] wherein the front end portion of the elongate arm defines an opening;

[20.8] wherein the depressible latch is received in the opening;

[20.9] wherein the depressible latch has a front end portion and rear end portion spaced apart along the longitudinal axis and wherein the depressible latch

extends upward along the transverse axis as the depressible latch extends along the longitudinal axis from the front end portion to the rear end portion of the depressible latch;

[20.10] wherein the rear end portion of the depressible latch is spaced apart above the top portion of the connector housing along the transverse axis;

[20.11] wherein the front end portion of the elongate arm includes an edge defining a front end of the opening;

[20.12] wherein the depressible latch has an upper surface, the edge opposing the upper surface;

[20.13] wherein the elongate arm is configured to be pulled rearward along the longitudinal axis with respect to the connector housing whereby the edge slides longitudinally along the upper surface to depress the depressible latch.

21. **[Preamble]** An optical fiber connector comprising:

[21.1] first and second optical fiber ferrules;

[21.2] a connector housing having a front end portion and a rear end portion spaced apart along a longitudinal axis, the connector housing comprising a top portion and a bottom portion spaced apart along a transverse axis perpendicular to the longitudinal axis, [21.3] the connector housing holding the first and second optical fiber ferrules such that the first and second optical fiber ferrules are exposed through the front end portion for making an optical connection and the

first and second optical fiber ferrules are spaced apart from one another along the transverse axis,

[21.4] a depressible latch above the top portion of the connector housing;
and

[21.5] an elongate arm connected to the connector housing above the top portion and configured to be pulled to actuate the depressible latch;

[21.6] wherein the elongate arm comprises a front end portion and a rear end portion spaced apart along the longitudinal axis;

[21.7] the optical fiber connector further comprising a push/pull tab extending from the rear end portion of the elongate arm.

22. **[Preamble]** An optical fiber connector comprising:

[22.1] first and second optical fiber ferrules;

[22.2] a connector housing having a front end portion and a rear end portion spaced apart along a longitudinal axis, the connector housing comprising a top portion and a bottom portion spaced apart along a transverse axis perpendicular to the longitudinal axis, [22.3] the connector housing holding the first and second optical fiber ferrules such that the first and second optical fiber ferrules are exposed through the front end portion for making an optical connection and the first and second optical fiber ferrules are spaced apart from one another along the transverse axis,

[22.4] a depressible latch above the top portion of the connector housing;

and

[22.5] an elongate arm connected to the connector housing above the top portion and configured to be pulled to actuate the depressible latch;

[22.6] wherein the connector housing includes a front body and a back body;

[22.7] wherein the front body includes a recess and the back body includes a protrusion received in the recess to connect the back body to the front body.

CERTIFICATE OF WORD COUNT (37 C.F.R. § 42.24(d))

1. This Petition for *Inter Partes* Review complies with the type-volume limitation of 14,000 words, comprising 11,576 words, excluding the parts exempted by 37 C.F.R. § 42.24(a)(1).

2. This Petition for *Inter Partes* Review complies with the general format requirements of 37 C.F.R. § 42.6(a) and has been prepared using Microsoft® Word 2016 in 14-point Times New Roman font.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX PLLC

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Date: January 6, 2024

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CERTIFICATE OF SERVICE (37 C.F.R. §§ 42.6(e), 42.105(a))

I certify that the above-captioned **PETITION FOR *INTER PARTES***
REVIEW FOR U.S. PATENT NO. 11,307,369 and associated Exhibits 1001-
1020 were served in their entireties upon the Patent Owner on January 6, 2024, via
FedEx® Express at the following addresses:

SENKO ADVANCED COMPONENTS, INC.
2 Cabot Road, Suite 103
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Patent Owner's Correspondence Address of Record for U.S. Patent No.
11,307,369

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Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX PLLC

/Jason D. Eisenberg/

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Lead Counsel for Petitioner US Conec Ltd.

Date: January 6, 2024

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