

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Milwaukee Electric Tool Corporation,
Petitioner,

v.

Klein Tools, Inc.,
Patent Owner.

U.S. Patent No. 12,187,573
Case No. PGR2025-00048

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

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Ex-1001	U.S. Patent No. 12,187,573 (“’573 Patent”)
Ex-1002	Prosecution History of the application that led to the ’573 Patent
Ex-1003	Declaration of Expert Witness, Dr. David J. Eby, Ph.D., P.E., CFEI.
Ex-1004	European Patent No. 1,391,412 (“Hartranft”)
Ex-1005	International Publication No. 1997/41626 (“Bruin”)
Ex-1006	U.S. Patent No. 5,505,432 (“Noonan”)
Ex-1007	CV of Expert Witness, David J. Eby, Ph.D., P.E., CFEI
Ex-1008	Klein Tools Fish Tape Publication (“KP1”)
Ex-1009	Southwire Glow in the Dark Fish Sticks Publication (“SP1”)
Ex-1010	Internet Archive Affidavits
Ex-1011	Laura, “A Brief History of Doughnuts,” Kitchen Kat Blog (January 26, 2008), https://kitchenkat.blogspot.com/2008/01/brief-history-of-doughnuts.html
Ex-1012	“donut”. <i>The American Heritage Dictionary of the English Language</i> (3 rd Ed.), Houghton Mifflin Company, 1996, p. 551
Ex-1013	Irving, Washington. (1809) <i>Knickerbocker’s History of New York</i> . Project Gutenberg. Retrieved April 14, 2025, from https://www.gutenberg.org/files/13042/13042-h/13042-h.htm#KNICKERBOCKERSI
Ex-1014	Klein Glow Fish Tape publication
Ex-1015	Prosecution History of the application that led to the 11,713,209 Patent (“’209 Patent”)

Ex-1016	Complaint in International Trade Commission (ITC) investigation No. 337-TA-1442, titled <i>Certain Glow Fish Tape Systems, Safety Helmet Systems, and Components Thereof</i> (“ITC Complaint”)
Ex-1017	Sagon, Candy, “The Hole Story,” Washington Post (March 6, 2002), https://www.washingtonpost.com/archive/lifestyle/food/2002/03/06/the-hole-story/ce8a94e0-05c7-4639-8ff7-60c6fd46eeee/ . Wayback Machine. Archived August 25, 2018, from https://web.archive.org/web/20180825183723/https://www.washingtonpost.com/archive/lifestyle/food/2002/03/06/the-hole-story/ce8a94e0-05c7-4639-8ff7-60c6fd46eeee/?utm_term=.24e165d5cce3
Ex-1018	U.S. Patent No. 11,713,209 Patent (“’209 Patent”)
Ex-1019	“A Brief History of Fluorescence and Phosphorescence before the Emergence of Quantum Theory” by Benard Valuer and Mario N. Berberan-Santos, published in the Journal of Chemical Education.
Ex-1020	“Development of Illuminant Glow-in-the-Dark Cotton Fabric Coated by Luminescent Composite with Antimicrobial Activity and Ultraviolet Protection” by Tawfik A. Khattab, et al., published in the Journal of Fluorescence.
Ex-1021	Testimony history of Expert Witness, David J. Eby, Ph.D., P.E., CFEI

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<i>HZNP Medicines LLC v. Actavis Lab’ys UT, Inc.</i> , 940 F.3d 680, 689–91 (Fed. Cir. 2019)	106
<i>ICU Medical, Inc. v. Alaris Medical Systems, Inc.</i> , 558 F.3d 1368, 1378-1379 (2009)	94
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1. Introduction

Milwaukee Electric Tool Corporation (“Petitioner”) requests post-grant review of claims 1-18 (“Challenged Claims”) of U.S. Patent No. 12,187,573 (“Patent-at-Issue” or “’573 Patent”) (Ex-1001), which is purportedly assigned to Klein Tools, Inc. (“Patent Owner”).

The Patent-at-Issue is directed to a fish tape device with luminescent fish tape. Fish tape pulls electrical wires and fiber optic cables through conduits or into enclosed wall spaces and have been used by electricians for decades. Patent Owner did not invent fish tape devices, fish tape, or the concept of using a luminescent wire/cable puller in a fish tape device. Instead, the claimed fish tape systems are an obvious combination of known fish tape housings with the known use of luminescent fish tape material in wire/cable pullers. The Challenged Claims are, therefore, obvious. The Board should institute review and cancel all claims.

As discussed in Section 6, and summarized in the table below, the Challenged Claims are obvious in view of the below references under 35 U.S.C. §103 and are invalid under 35 U.S.C. §§112(a)-(b).

No.	Argument
1	Claims 1-4, 6-12, and 14-18 are unpatentable under 35 U.S.C. §103 in view of Hartranft and Bruin.
2	Claims 5 and 13 are unpatentable under 35 U.S.C. §103 in view of Hartranft, Bruin, and Noonan.
3	Claims 1-18 are unpatentable under 35 U.S.C. §103 in view of Klein Tools Fish Tape and Southwire Glow in the Dark Fish Sticks
4	Claims 1-18 lack written description under 35 U.S.C. §112(a) because “at least one of the sidewalls of the case is configured to allow the luminescent material to be energized,” as recited by Claims 1, 6, and 14, is not supported by the specification.
5	Claims 1-13 are indefinite under 35 U.S.C. §112(b) because the scope of Claims 1 and 6 lacks reasonable certainty due to recitation of “a donut shaped case”

2. Grounds for Standing

Petitioner certifies that the '573 Patent is available for PGR and that Petitioner is not barred or estopped from requesting PGR of the Challenged Claims on the asserted grounds.

3. Time for Filing

The '573 patent issued on January 7, 2025. This petition is being timely filed no later than the date that is nine months after the date of the grant of the '573 patent.

4. Mandatory Notices

4.1 Real Parties-in-Interest

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

4.2 Related Matters

Patent Owner is currently asserting the '573 Patent in the following cases in the District of Delaware and ITC, respectively:

- *Klein Tools, Inc. v. Milwaukee Electric Tool Corporation*, 1:25-cv-00143-JLH (D. De.); and
- *Certain Glow Fish Tape Systems, Safety Helmet Systems, and Components Thereof*, Inv. No. 337-TA-1442.

Petitioner also notes that the '573 Patent is in the same family as the '209 Patent and pending application 18/968,084. Petitioner is also challenging the '209 Patent in IPR2025-00892.

4.3 Lead and Back-up Counsel

Petitioner Milwaukee Electric Tool Corporation designates Alexander B. Stein (Reg. No. 71,397) as lead counsel for this Petition, with David Bernstein (Reg. No. 71,064), Samantha Kuo (Reg. No. 81,484) and Joyce Guo (Reg. No. 81,826) as back-up counsel.

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

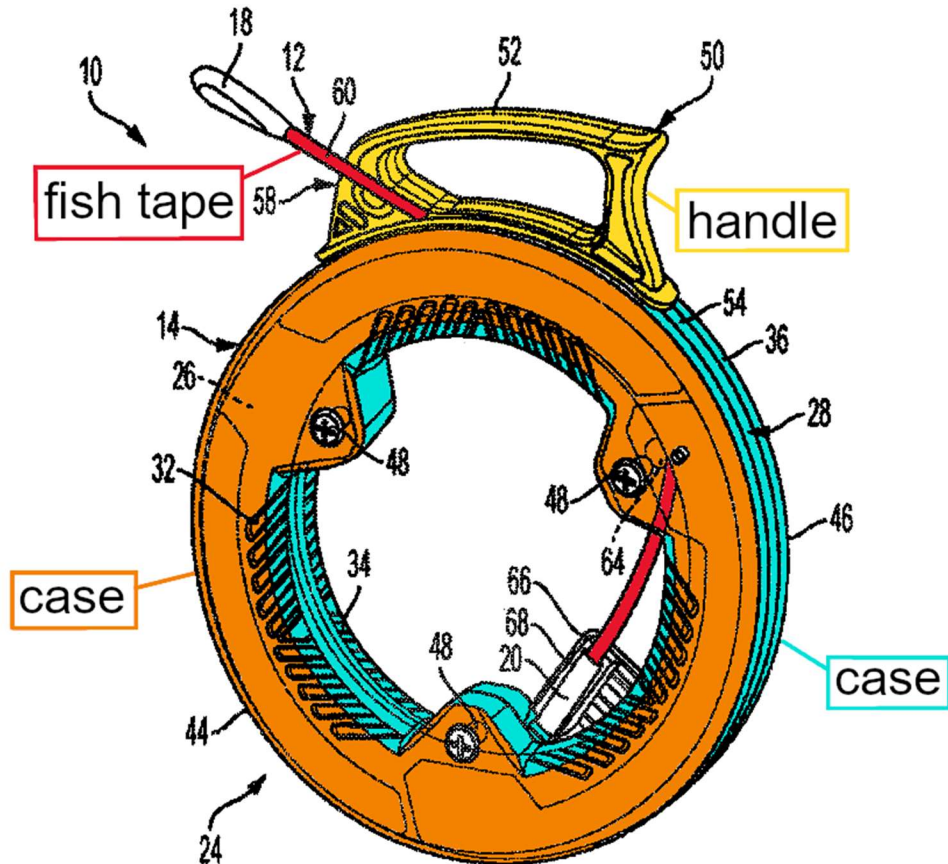
4.4 Service Information

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

5. The '573 Patent

5.1 Summary

The '573 Patent relates to a luminescent fish tape system to pull electrical wires and fiber optic cable through conduits or into enclosed wall spaces. Ex.-1001 at Abstract, 1:29-1:30. The system includes a fish tape (red, in the annotated version of Figure 1 of the '573 Patent, shown below) inside a case (orange and turquoise). *Id.* at 1:44-1:45. The length of the fish tape includes a luminescent material that emits light after being energized by exposure to a light source. *Id.* at 3:21-3:24. At least a portion of the case is transparent to allow the luminescent material to be energized by light passing through the transparent portion. *Id.* at 3:27-3:30. The case also includes a handle (yellow) engaged with the case for sliding movement along a circumference of one of the inner and outer walls, which can be used to deploy the fish tape and reload the fish tape from the storage compartment. *Id.* at 2:14-2:19.



Ex-1001 Fig. 1 (annotated with shading and text)¹

5.2 Prosecution History

The '573 Patent issued from U.S. App. No. 18/207,733 (“733 Application”), filed June 9, 2023. Ex-1002 at 5, 197. It claims priority to U.S. App.

¹ All emphasis in textual quotations and color annotations and textual labels in figures has been added throughout, unless indicated to the contrary.

No. 16/696,383 ('383 Application), filed on November 26, 2019, which issued as the '209 Patent. *Id.* at 165. All of the claims of the '383 Application were rejected under §103 as obvious over U.S. Pub. 2019/0292005 ("Miller") in view of U.S. Pat. 6,293,519 ("Faretta") in a Non-final Office Action dated June 8, 2022. Ex.-1015 at 86. The Examiner asserted that Miller teaches numerous limitations of the then-pending claims, including the limitation of independent claim 1² that recited "wherein at least one of the sidewalls of the case is transparent to allow the luminescent material to be energized by light passing through the at least one of the sidewalls." *Id.* at 87-88. The Examiner further asserted that Farretta teaches the limitation "[t]he length of the fish tape comprising a luminescent material that emits light after being energized by exposure to a light source." *Id.* at 88-89.

In response to the Non-final Office Action, Patent Owner attempted to traverse the rejection, arguing that Miller does not teach at least one of the sidewalls being "transparent to allow luminescent material to be energized by light passing through the at least one of the sidewalls." *Id.* at 144-146. However, the Examiner found Patent Owner's arguments unpersuasive. *Id.* at 154. Patent Owner then

² The '209 Patent includes three independent claims (1, 6, and 14), corresponding to claims 1, 7, and 16 of the '383 application. Petitioner does not believe the differences between the claims to be material to the issues raised in this Petition.

amended independent claim 1 of the parent application to add the limitation 1[c] (“a handle engaged with the fish tape and mounted to slide within the annular opening of the case around the entire circumference of the outer wall to deploy the fish tape from the storage compartment and to reload the fish tape into the compartment”)³, despite the fact that such handles had already been used in similar products, including Patent Owner’s, for over a decade. *Id.* at 186. Despite this fact, this amendment resulted in allowance. *Id.* at 214.

On June 3, 2024, all claims of the ’733 Application were rejected based on statutory double patenting under 35 U.S.C. §101 as claiming the same invention as that of claims 1-18 of U.S. Patent No. 11,713,209. Ex.-1002 at 131. In response, Patent Owner cancelled the claims, added 18 new claims, and filed a terminal disclaimer over the ’209 Patent. *Id.* at 158. In the new independent claims, the term “transparent” from the cancelled claims was changed to “configured.” *Id.* The new claims were otherwise identical to the cancelled claims.

A Notice of Allowance then issued on September 4, 2024, and the application issued as U.S. Patent No. 12,187,573 on January 7, 2025. *Id.* at 181, 197.

³ Patent Owner made analogous, but not identical, amendments to the other independent claims. Petitioner does not believe that the differences between the amendments are material to the issues presented herein.

Independent claims 19, 24, and 14 of the '733 Application issued as claims 1, 6, and 14 of the '573 Patent.

5.3 Priority Date

For this proceeding only, Petitioner assumes that the priority date is November 26, 2019 (“Priority Date”). *Id.* at 165. This is after March 16, 2013, so the AIA statute applies.

5.4 Ordinary Skill in the Art

A person having ordinary skill in the art (“POSA”) would have had a bachelor’s degree in mechanical engineering, industrial engineering, industrial design, with at least 2 years of industry experience and/or research/experience concerning hand tools. Ex-1003 ¶17.

5.5 Claim Construction

For this proceeding only, Petitioner believes that the plain and ordinary meanings suffice. No express constructions are required for purposes of the issues raised in this PGR.

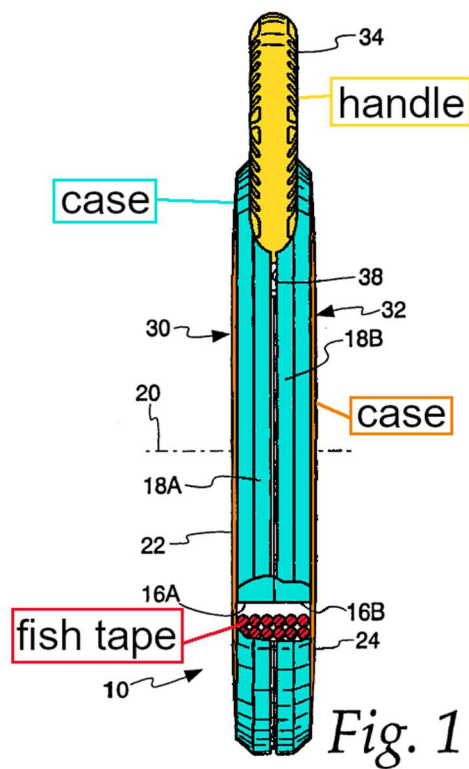
6. The Challenged Claims Are Unpatentable

6.1 Ground 1: Hartranft in view of Bruin Renders Claims 1-4, 6-12, and 14-18 obvious

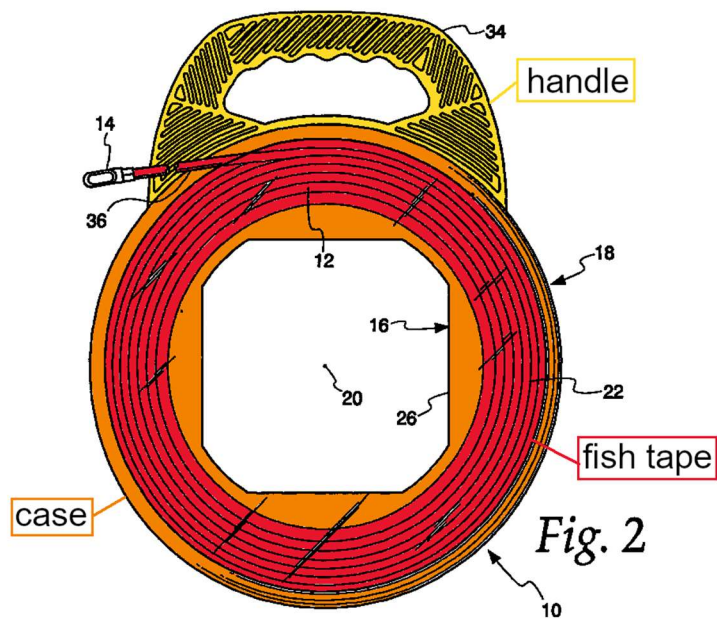
6.1.1 Overview of Hartranft

Hartranft published on February 25, 2004, and therefore qualifies as prior art under §102(a)(1). Hartranft describes “an electrician’s fish tape housing” with “a translucent or clear housing.” Ex-1004, ¶1. Hartranft specifies that “[a] fish tape is an electrician’s tool which is used to install wires in a conduit.” *Id.* at ¶2.

The housing 10 (orange and turquoise, in the annotated version of Figures 1 and 2 of Hartranft, below) that stores the fish tape 12 (red) can include a handle 34 (yellow) and be entirely or partially translucent. *Id.* at ¶¶11-12. Hartranft discloses that “[i]t is preferred that the entire housing is translucent,” but also describes embodiments in which only one housing half 30, 32 is translucent and in which only the radial walls 22, 24 are translucent while the annular walls 16, 18 are not. *Id.* at ¶12.



Ex.-1004 Fig. 1



Ex.-1004 Fig. 2

6.1.2 Overview of Bruin

Bruin published on November 6, 1997, and therefore qualifies as prior art under §102(a)(1). Bruin describes “a device and method for retrieving stringlines or cables, particularly though not exclusively stringlines or cables from within cavity walls or floors.” Ex.-1005, 1:2-6.

In particular, Bruin discloses that this device can “support[] and feed[] a flexible element through a hole in the wall.” *Id.* at 1:31-33. Bruin specifies that the element can be a cord means, with a tape being a preferred embodiment of the cord means. *Id.* at, 2:1, 2:34-35. Moreover, the cord means can be manufactured with or marked with a fluorescent material (a type of luminescent material). *Id.* at, 6:15-17.

6.1.3 Motivation to Combine Hartranft and Bruin

Hartranft and Bruin qualify as analogous art because they are in the same field as the '573 Patent—namely, devices and techniques for routing wiring through a wall cavity or conduit. Ex.-1003, ¶46; Ex.-1004, ¶2; Ex.-1005, 1:2-10; Ex.-1001, 1:29-30. At minimum, they are at least reasonably pertinent to a problem allegedly solved by the claimed invention: reducing the time and effort expended by an electrician while routing wiring through a cavity or conduit. Ex.-1003, ¶46; Ex.-1004, ¶5; Ex.-1005, 1:2-23; Ex.-1001, 1:29-37.

Ample motivation existed to (i) add a luminescent material (taught by Bruin's fluorescent cord means) to the fish tape housed in Hartranft's translucent housing or (ii) include Bruin's fluorescent cord means in Hartranft's translucent housing. Motivations for each combination are discussed in turn below.

Add Bruin's Luminescent Material to Hartranft's Fish Tape. Turning to (i), a POSA would have been motivated to add the fluorescent material disclosed by Bruin to the fish tape stored in Hartranft's transparent housing to produce a fluorescent fish tape that can be seen by an electrician or operator while routing wiring through the cavity or conduit. First, modifying Hartranft's fish tape with Bruin's fluorescent material would amount to the use of a known technique (manufacturing or marking a cord of a cable catcher, which is used to install electrical cables, with fluorescent materials) to improve a similar device in the same way (e.g., to improve a fish tape so as to "allow an operator to easily locate" the fish tape in a "conduit or cavity." Ex.-1005, 6:18-20; Ex.-1003, ¶48. Hartranft provides a base fish tape by disclosing "the coiled fish tape 12 within the housing 10," Ex.-1004, ¶9, while Bruin provides a comparable product by disclosing "a device ... for retrieving stringlines or cables, particularly though not exclusively ... from within cavity walls or floors." Ex.-1005, 1:2-6. Bruin's device (the "cord means") includes an improvement, namely, "[i]n a particularly preferred embodiment, the cord means is manufactured or at least marked with a fluorescent material." *Id.* at 6:15-17. It

would have been straightforward for a POSA to apply Bruin's improvement to Hartranft's base fish tape by manufacturing and/or marking Hartranft's fish tape with the fluorescent material. Ex.-1003, ¶48; Ex. 1004, ¶9; Ex.-1005, 1:2-6, 6:15-20.

Alternatively or additionally, Hartranft motivates a POSA to modify the fish tape in its transparent housing to arrive at a luminescent fish tape. This is due, in part, to Hartranft's disclosure providing only a general definition of pre-existing fish tapes, listing details such as common materials and lengths, Ex.-1003, ¶49; Ex.-1004, ¶¶2-3, and expressly inviting a POSA to alter and modify the fish tape system it discloses. Ex.-1004, ¶13. Accordingly, a POSA building Hartranft's fish tape system would look to find more details about the fish tape itself. Ex.-1003, ¶49. In this pursuit, a POSA would have naturally encountered Bruin, given its specific teachings about the fish tape itself. *Id.* Indeed, Bruin provides a POSA with information about issues encountered by electricians using fish tapes in the dark and solves those issues by adding a fluorescent material. Ex.-1005, 6:17-20. In particular, Bruin explains that “[a]s will be understood by persons skilled in the art, [manufacturing or at least marking the cord with a fluorescent material] will allow an operator to easily locate the loop 80 formed [by the cord means] in the dark cavity of the cavity wall.” *Id.* With knowledge of this issue and Bruin's solution, a POSA

would have been motivated to modify Hartranft's fish tape with Bruin's fluorescent material. Ex.-1003, ¶49; Ex.-1004, ¶¶2-3, 13; Ex.-1005, 6:17-20.

Finally, a POSA would have known that adding the fluorescent material disclosed by Bruin to Hartranft's fish tape would produce a luminescent fish tape. To start, a POSA would know that Bruin's fluorescent material is a type of luminescent material and, thus, can be used to produce a luminescent fish tape. Ex.-1003, ¶50. Moreover, this modification would merely involve marking and/or manufacturing Hartranft's existing fish tape with a fluorescent/luminescent material, Ex.-1005, 1:31-2:1, 2:34-3:2, 6:15-17; Ex.-1004, ¶2, which is a simple change that would not require extensive modification to the mechanical properties of Hartranft's underlying fish tape. Ex.-1003, ¶¶51-52.

Include Bruin's Fluorescent Cord Means in Hartranft's Housing. With regards to (ii), a POSA would have been motivated to replace the fish tape stored in Hartranft's transparent housing with the fluorescent cord means disclosed in Bruin. Such a modification would amount to a simple substitution of one known element (Hartranft's fish tape cord) with another (Bruin's fluorescent cord) to obtain predictable results (a fluorescent fish tape system). Ex.-1003, ¶53. First, like the fish tape recited by the '573 Patent, Hartranft discloses a "coiled fish tape 12 within the housing 10," where the fish tape 12 has a length. Ex.-1004, ¶¶9, 12. While Hartranft is silent regarding a luminescent fish tape, Bruin discloses a "cord means [that] is

manufactured ... with a fluorescent material.” Ex.-1005, 6:15-17. A POSA would have been motivated to substitute Hartranft’s fish tape with Bruin’s fluorescent cord means because Hartranft and Bruin disclose tapes with similar properties. Even though Bruin discloses that the “tape, wire, or band is preferably relatively inflexible in a plane perpendicular to the plane of the loop as compared to its flexibility in the plane of the loop,” Ex.-1005, 2:35-38, a POSA would still recognize that Bruin’s fluorescent cord means has similar properties to Hartranft’s fish tape. Ex.-1003, ¶53. For example, Hartranft discloses that its fish tape “is rigid enough to be pushed through a conduit yet flexible enough to bend around corners or curves in the conduit” and also “seeks to return to its natural straight condition and thus wants to ‘spring out’ of its coiled condition.” Ex.-1004, ¶¶2, 3. Likewise, Bruin discloses that “[i]n their unextended state, tapes 40 [of the cord means 30] are essentially linear” and that when “[t]he cord means 30 is moved to its extended position” and “extend[s] out into the cavity 300 until its distal end contacts the other side 400 of the cavity,” “the tapes 40 [] flex outwardly.” Ex.-1005, 4:18-28.

Alternatively or additionally, for at least some of the reasons discussed above with respect to (i), Hartranft motivates a POSA to replace the fish tape in its transparent housing to produce a luminescent fish tape in a clear housing. As described above, a POSA building Hartranft’s fish tape system would have encountered Bruin while seeking references that provide additional teachings about

the fish tape itself. Ex.-1003, ¶54. Consequently, a POSA would recognize that electricians have difficulty viewing fish tapes in dark cavities or conduits and encounter Bruin's solution that, "[a]s will be understood by persons skilled in the art, [manufacturing or at least marking the cord with a fluorescent material] will allow an operator to easily locate the loop 80 formed [by the cord means] in the dark cavity of the cavity wall." Ex.-1005,6:17-20. As a result, a POSA would be motivated to remedy this problem by replacing Hartranft's fish tape with Bruin's fluorescent cord means. *Id.*; Ex.-1003, ¶54.

Finally, a POSA would have known that replacing Hartranft's fish tape with Bruin's fluorescent cord means would produce a fish tape system with a luminescent fish tape because the combination of stiffness and flexibility needed by Bruin's cord means to enter a cavity and flex when met with resistance, not only makes Bruin's cord means compatible for use as Hartranft's fish tape, Ex.-1004, ¶2; Ex.-1005, 4:18-28, but this combination also allows Bruin's cord means to be stored in Hartranft's housing. Ex.-1004, ¶2; Ex.-1003, ¶55.

Under either combination, and any of the proposed rationales described above, a POSA would have recognized that the combination would allow the luminescent material of Bruin to be energized by light passing through Hartranft's transparent sidewalls.

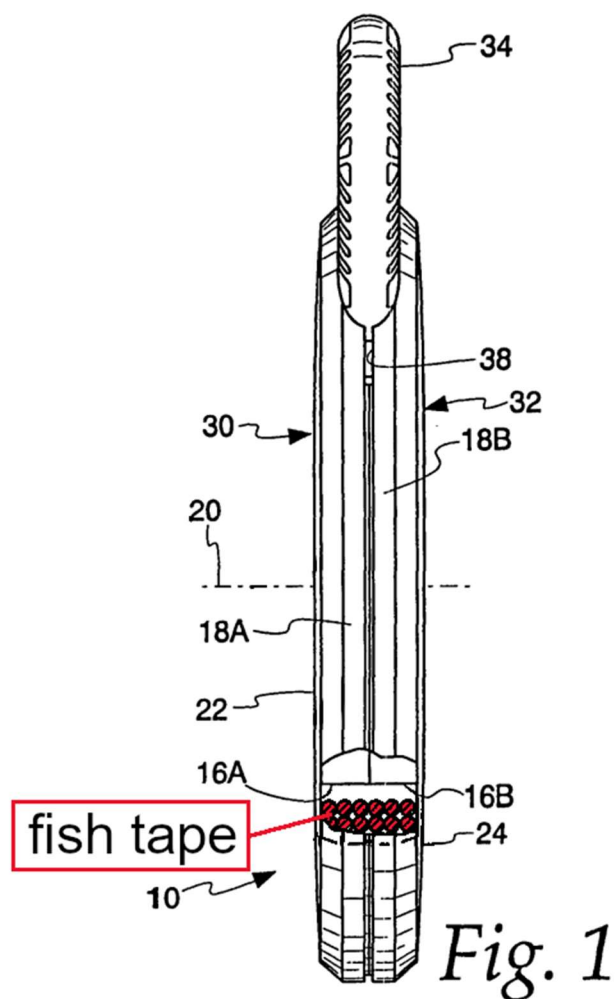
6.1.4 Claim 1**6.1.4.1 Element 1[pre]**

If limiting, Hartranft-Bruin teaches 1[pre]’s “fish tape system” at least because Hartranft teaches “an electrician's fish tape housing,” with a “coiled fish tape 12 within the housing 10.” Ex.-1004 ¶¶1, 9.

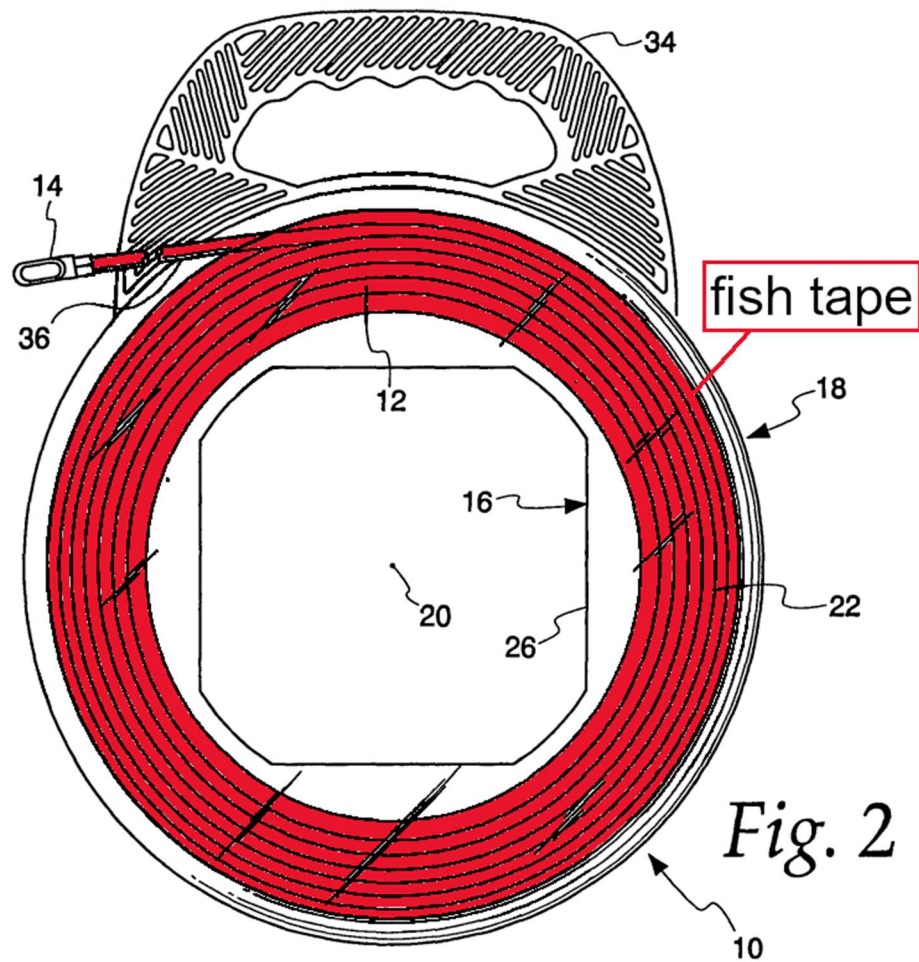
6.1.4.2 Element 1[a]

Hartranft-Bruin teaches 1[a].

Hartranft teaches a “coiled fish tape 12 within the housing 10.” *Id.* at ¶9. Hartranft’s Figures 1 and 2 illustrate the fish tape 12 (red) inside a fish tape housing 10.



Ex.-1004 Fig. 1



Ex.-1004 Fig. 2

Not only does Hartranft explicitly teach that the fish tape 12 has a length (“[t]he translucent housing 10 enables a user to determine the type, *length* and remainder of the coiled tape 12 within its chamber” *Id.* at ¶12) and at least one end (“[a]n eyelet 14 is fixed to the end of the fish tape” *Id.* at ¶9), but a POSA would also recognize that the coiled fish tape 12 of Hartranft necessarily has a first end, a second end, and a length that extends therebetween. Ex.-1003, ¶60.

Hartranft does not expressly teach that “the length of the fish tape compris[es] a luminescent material that emits light after being energized by exposure to a light source.” Bruin, however, teaches a “cord means [that] is manufactured or at least marked with a fluorescent material” and that “the cord means is provided by a tape, wire or band.” Ex.-1005, 6:15-17, 2:34-35. One of skill in the art would have recognized that such a fluorescent material meets the limitation of “a luminescent material that emits light after being energized by exposure to a light source” because a fluorescent material is one type of luminescent material. Ex.-1003, ¶61.

As discussed above, a POSA would have been motivated to (i) modify Hartranft’s fish tape to manufacture or at least mark it with a fluorescent material as taught by Bruin or (ii) place Bruin’s fluorescent cord means inside Hartranft’s translucent housing. *Supra* §6.1.3.

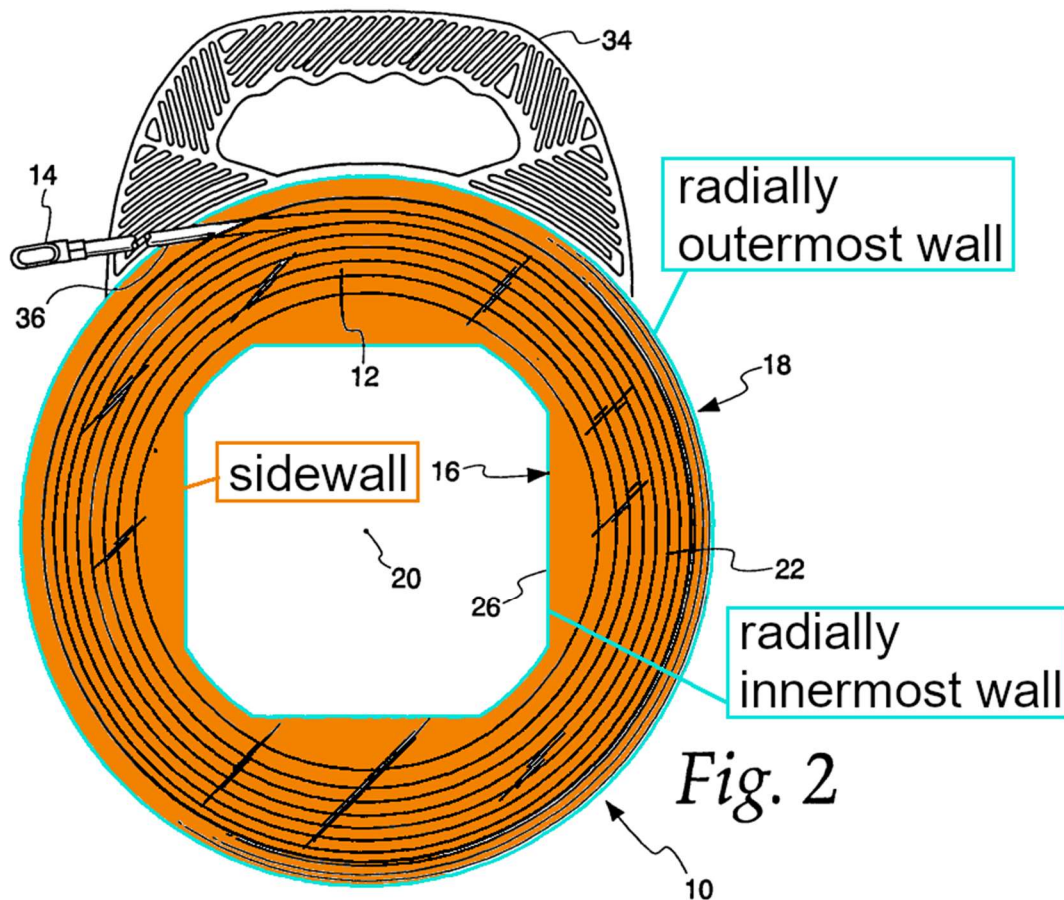
Therefore, Hartranft-Bruin teaches “a fish tape [e.g., modified Hartranft’s fish tape 12 or Bruin’s cord means in Hartranft’s housing] having a length extending from a first end to a second end, the length of the fish tape comprising a luminescent material [e.g., Bruin’s fluorescent material] that emits light after being energized by exposure to a light source.” Ex.-1003, ¶¶58-63; Ex.-1004, ¶¶9, 12; Ex.-1005, 6:15-17, 34-35.

6.1.4.3 Element 1[b]

Hartranft-Bruin teaches 1[b].

Fig. 1

22



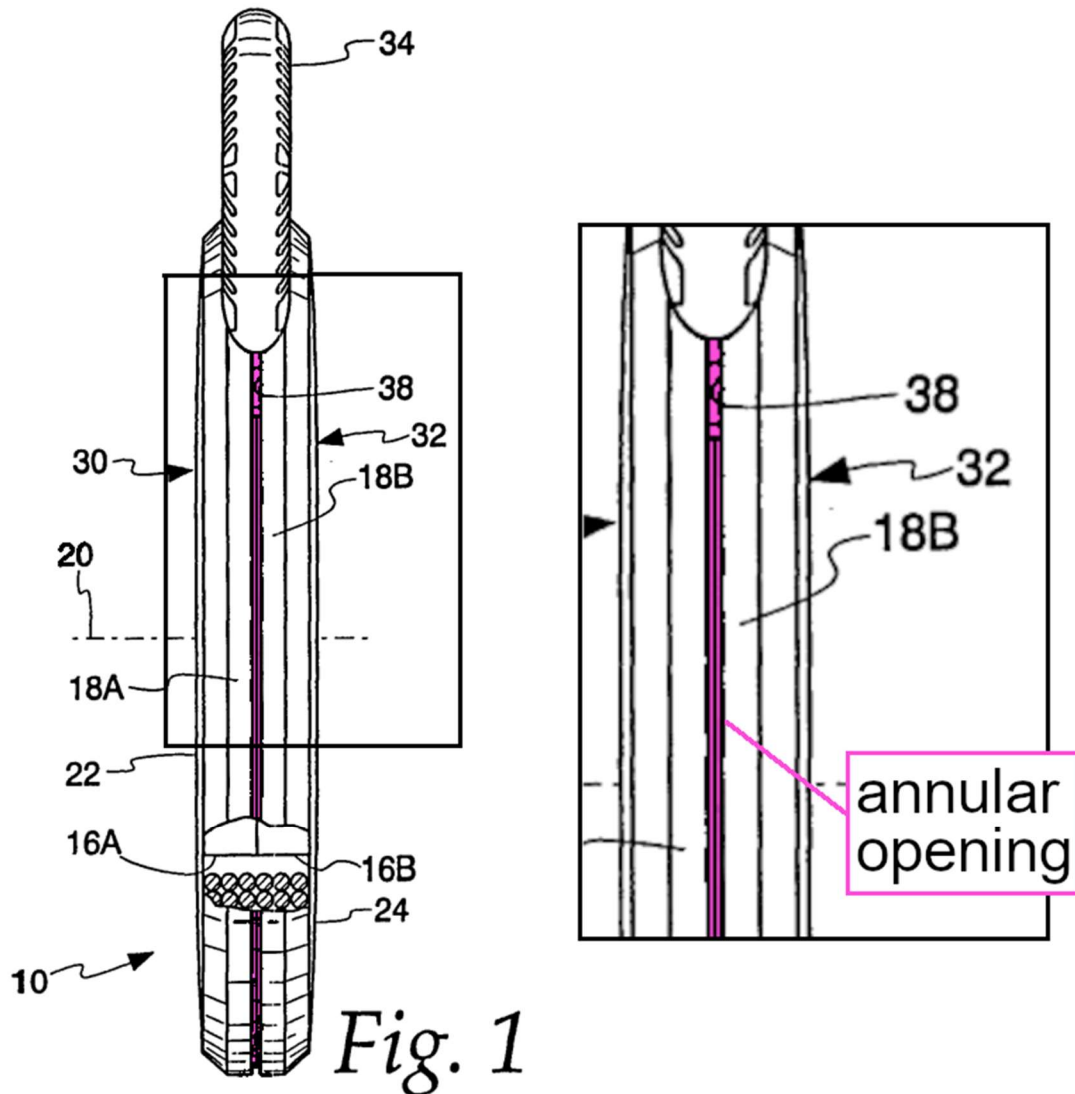
Ex.-1004 Fig. 2

Assuming, *arguendo*, that “donut shaped” is not indefinite and that a generally toroidal shape is among the possible donut shapes, Hartranft-Bruin renders obvious “a donut shaped case having a pair of sidewalls [e.g., radial walls 22, 24] extending between a radially innermost wall [e.g., inner annular wall 16] and a radially outermost wall [e.g., outer annular wall 18].” *Id.*; Ex.-1003, ¶¶64-66.

Hartranft discloses “a local slot 38 between [] outer annular half-wall portions 18A, 18B” that “provides a space through which the tape [12] may emerge

from within the housing chamber when the tape is being played out.” Ex.-1004, ¶11.

The slot 38 (pink) in the housing 10 is illustrated in Hartranft’s Figure 1.



Ex.-1004 Fig. 1

Therefore, Hartranft-Bruin teaches “the outermost wall⁴ having an annular opening [e.g., slot 38 formed by the edges of the outer annular half-wall portions 18A, 18B] extending around a circumference of the outer wall⁵ [e.g., outer annular wall 18].” *Id.*; Ex.-1003, ¶¶67-68.

Finally, in Hartranft, “the annular walls and radial walls define a chamber 28 in which the fish tape 12 resides when the tape is not in use.” *Id.* at ¶10.

Therefore, Hartranft-Bruin teaches “the sidewalls being spaced from each other to define a fish tape storage compartment [e.g., chamber 28] that stores the length of fish tape for deployment via the annular opening in the case.” *Id.*; Ex.-1003, ¶¶69-70.

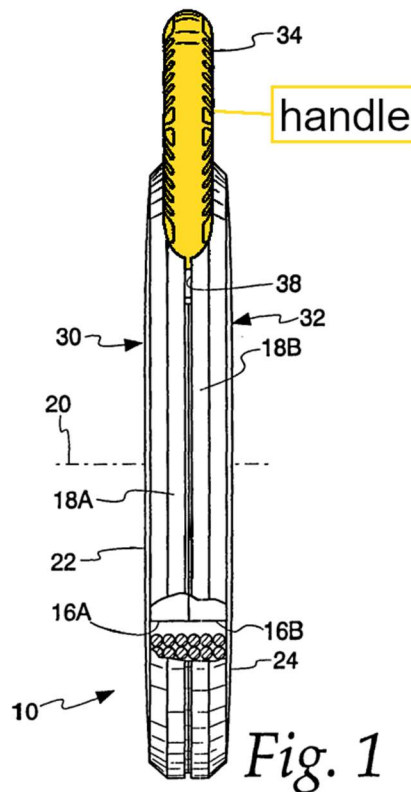
6.1.4.4 Element 1[c]

Hartranft-Bruin teaches 1[c].

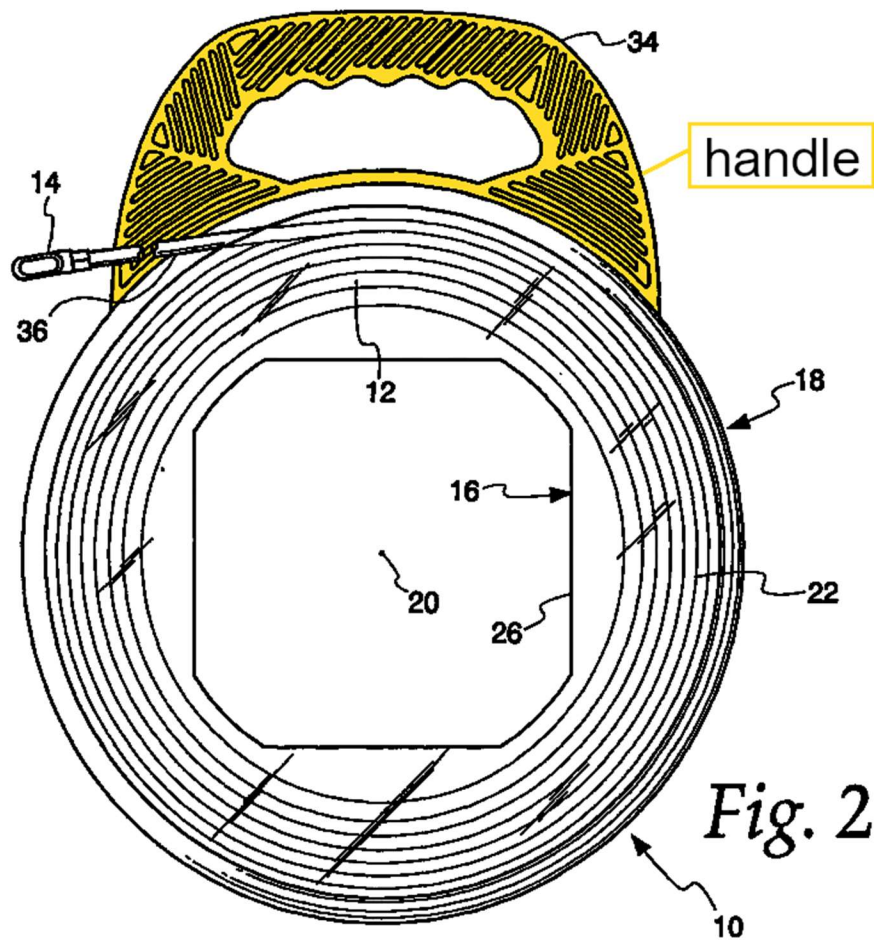
⁴ The term “the outermost wall” lacks antecedent basis. To the extent that this is not indefinite, for purposes of this Petition only, it is understood to refer to “a radially outermost wall.”

⁵ The term “the outer wall” lacks antecedent basis. To the extent that this is not indefinite, for purposes of this Petition only, it is understood to refer to “a radially outermost wall.”

Hartranft discloses that “[a] handle 34 may be rotatably attached to the housing [10]” and “include[] an aperture 36 through which the fish tape [12] is threaded.” Ex.-1004, ¶11. In particular, “[a] lower portion of the handle 34 is located generally between the halves [30 and 32 of the housing 10] and includes channels which interfit with the edges of the annular half-wall portions 18A and 18B, allowing the handle to travel circumferentially around the housing 10.” *Id.* Hartranft’s Figures 1 and 2 illustrate the handle 34 (yellow) that is rotatably attached to the housing 10.



Ex.-1004 Fig. 1



Ex.-1004 Fig. 2

Hartranft further discloses that “[a]s the handle travels, it separates the halves 30 and 32 slightly at the location of the handle” which “opens a local slot 38 between the annular half-wall portions 18A, 18B ... through which the tape [12] may emerge from within the housing when the tape is being played out.” *Id.* Similarly, Hartranft specifies that “when the tape is returned into the housing it does so through slot 38.” *Id.*

Therefore, Hartranft-Bruin teaches “a handle [34] engaged with the fish tape [e.g., handle 34 has an aperture 36 through which the fish tape 12 is threaded] and mounted [e.g., handle 34 has channels that interfit with the edges of the annular half-wall portions 18A, 18B] to slide within the annular opening [e.g., handle 34 travels circumferentially around the housing 10 via the slot 38 formed by the annular half-wall portions 18A, 18B] of the case around the entire circumference of the outer wall [e.g., outer annular wall 18] to deploy the fish tape from the storage compartment and to reload the fish tape into the compartment.” *Id.*; Ex.-1003, ¶¶71-74.

6.1.4.5 Element 1[d]

Hartranft-Bruin teaches 1[d].

Hartranft teaches that “[t]he fish tape housing 10 is made out of any lightweight, translucent material,” which “includes materials that pass so much light that they might be considered transparent.” Ex.-1004, ¶9. Hartranft specifies that “[i]t is preferred that the entire housing is translucent since this will permit observation of the tape regardless of the orientation of the housing relative to the observer” and also discloses embodiments where “the radial walls 22, 24 could be translucent while the annular walls 16, 18 are not.” *Id.* at ¶12; Ex.-1003, ¶76.

The transparent case in Hartranft can energize a luminescent material, and this is necessarily present in Hartranft because luminescent materials are energized

by light, which is capable of passing through a transparent case. Ex.-1003, ¶77. In the combined Hartranft-Bruin system, a POSA, following the motivations noted above, would have known that because light can pass through the translucent or transparent housing taught by Hartranft, and, thus, been motivated to configure Hartranft's housing 10 to allow the fluorescent material of the modified fish tape 12 (or replaced with Bruin's tape) inside the housing 10 to be energized by the light passing through at least one of the transparent radial walls 22, 24. *Id.*

Therefore, Hartranft-Bruin teaches a fish tape system “wherein at least one of the sidewalls [e.g., radial wall 22 or 24] of the case is configured [e.g., to the extent not indefinite, this would include Hartranft's case made of materials that pass so much light that they may be considered transparent] to allow the luminescent material [e.g., the fluorescent material taught by Bruin] to be energized by light passing through the at least one of the sidewalls.” *Id.*; Ex.-1004, ¶¶9, 12; *supra* §6.1.4.2.

6.1.5 Claim 2

Claim 2 depends from claim 1, which Hartranft-Bruin renders obvious. *Supra* §§6.1.4.1-6.1.4.5. The added features of claim 2 are also obvious.

Hartranft teaches that both of the radial walls 22, 24 can be translucent or transparent, which renders claim 2 obvious. Ex.-1004, ¶12; *supra* §6.1.4.5. Moreover, because Hartranft discloses transparent radial walls 22, 24, Hartranft

necessarily teaches that light can pass through the radial walls 22, 24 to energize the fluorescent material of the modified fish tape 12 (or Bruin's fluorescent cord means) inside the housing 10. *Supra* §6.1.4.5.

Therefore, Hartranft-Bruin renders obvious a fish tape system “wherein both of the sidewalls [e.g., both radial walls 22 and 24] of the case are configured [e.g., made of materials that pass so much light that they may be considered transparent] to allow the luminescent material [e.g., the fluorescent material taught by Bruin] to be energized by light passing through the at least one of the sidewalls.” Ex.-1004, ¶¶9, 12; Ex.-1003, ¶¶79-81.

6.1.6 Claim 3

Claim 3 depends from claim 2, which Hartranft-Bruin renders obvious. *Supra* §§6.1.4.1-6.1.4.5, 6.1.5. Claim 3 adds: “wherein at least one of the innermost and outermost walls⁶ is configured to allow the luminescent material to be energized by light passing through the sidewalls.”⁷ Hartranft in view of Bruin teaches this.

⁶ The term “the innermost and outermost walls” lacks antecedent basis. To the extent that this is not indefinite, for purposes of this Petition only, it is understood to refer to “a radially innermost wall and a radially outermost wall.”

⁷ It is unclear how “the innermost and outermost walls” can be configured to allow the luminescent material to be energized by light passing through “the sidewalls.” In

Hartranft teaches that “[i]t is preferred that the entire housing is translucent since this will permit observation of the tape regardless of the orientation of the housing relative to the observer.” Ex.-1004, ¶12. With the entire housing translucent, both the radial walls 22 and 24, as well as the annular walls 16 or 18 would all be translucent.

A POSA would recognize that because Hartranft discloses an entirely transparent housing 10, Hartranft necessarily teaches that light can pass through the radial walls 22, 24 and/or the annular walls 16, 18 to energize the fluorescent material of the modified fish tape 12 (or Bruin’s fluorescent cord means) inside the housing 10. *Supra* §6.1.4.5.

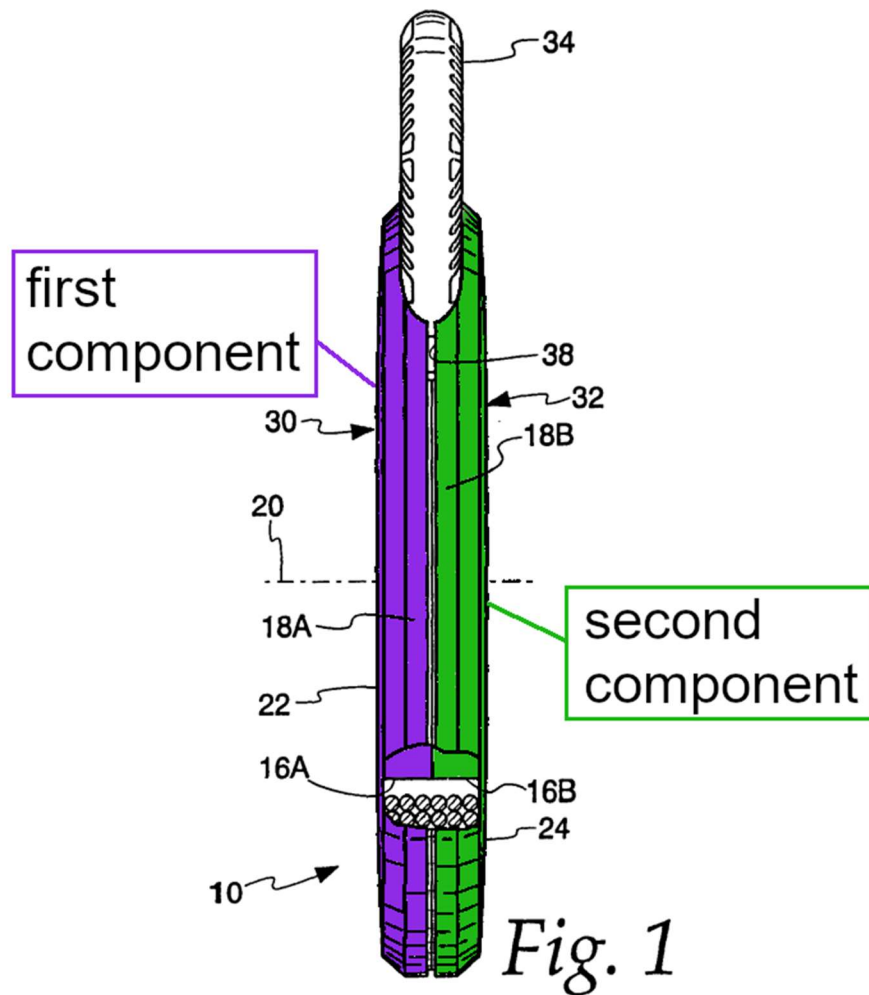
Therefore, Hartranft-Bruin renders obvious a fish tape system “wherein at least one of the innermost and outermost walls [e.g., annular wall 16 and/or 18] is configured [e.g., made of materials that pass so much light that they may be considered transparent] to allow the luminescent material [e.g., the fluorescent material taught by Bruin] to be energized by light passing through the sidewalls.” Ex.-1004, ¶¶9, 12; Ex.-1003, ¶¶82-85.

any case, Hartranft teaches that the entire housing 10 can be translucent, which encompasses both the innermost and outermost walls as well as the sidewalls. Ex.-1004, ¶12. Definiteness is not conceded.

6.1.7 Claim 4

Claim 4 depends from claim 1, which Hartranft-Bruin renders obvious.
Supra §§6.1.4.1-6.1.4.5. Claim 4's added features are obvious, too.

Hartranft teaches that “housing half 30 includes first radial wall 22 and annular half-wall portions 16A and 18A while housing half 32 has second radial wall 24 and annular half-wall portions 16B and 18B.” Ex.-1004, ¶10. Hartranft's Figure 1 illustrates the first half 30 (purple) and the second half 32 (green) of the housing 10.



Ex.-1004 Fig. 1

Hartranft also teaches that “[t]he halves 30 and 32 are joined together in facing relation,” which “defines the chamber 28 in the space within the halves 30 and 32.” *Id.* Finally, Hartranft specifies that “[t]he housing 10 restrains the coiled tape 12 within this space.” *Id.*

Therefore, Hartranft-Bruin renders obvious a fish tape system “wherein one of the sidewalls [e.g., the radial wall 22] and portions of the innermost and outermost walls [e.g., the annular half-wall portions 16A, 18A] are defined by a first component of the case [e.g., the half 30], and the other of the sidewalls [e.g., the radial wall 24] and other portions of the innermost and outermost walls [e.g., the annular half-wall portions 16B, 18B] are defined by a second component of the case [e.g., the half 32], the first and second components being assembled together to form the storage compartment [e.g., the chamber 28.].” *Id.*; Ex.-1003, ¶¶86-89.

6.1.8 Claim 6

6.1.8.1 Elements 6[pre]-6[c]

For the purposes of this Petition, 6[pre]-6[c] are substantively analogous to 1[pre]-1[c] and are taught by Hartranft-Bruin for similar reasons. *Supra* §§6.1.4.1-6.1.4.4.

Note that element 1[b] differs from element 6[b] only in that where element 1[b] recites “the outermost wall having an annular opening extending around *a circumference of the outer wall*,” element 6[b] recites “an annular opening

extending around *a circumference of one of the inner and outer walls*.⁸” Because the annular opening extends around a circumference of the outer wall, the annular opening also extends around a circumference of one of the inner and outer walls. Therefore, element 6[b] is taught by Hartranft-Bruin for reasons similar to element 1[b]. *Id.*

6.1.8.2 Element 6[d]

As compared to 1[d], 6[d] states that “at least a portion of the case is configured to allow the luminescent material to be energized by light passing through the portion,” rather than stating that “at least one of the sidewalls” does this. Because the sidewalls are a portion of the case, 6[d] is taught by Hartranft-Bruin for the same reasons as 1[d]. *Supra* 6.1.4.5.

6.1.9 Claim 7

Claim 7 depends from claim 6, which Hartranft-Bruin renders obvious. *Supra* §§6.1.8.1-6.1.8.2. Claim 7 differs from element 1[d] only in that where element 1[d] recites “at least one of the sidewalls of the case is configured to allow the luminescent material to be energized by light passing through the at least one of

⁸ The term “the inner and outer walls” lacks antecedent basis. To the extent that this is not indefinite, for purposes of this Petition only, it is understood to refer to “a radially innermost wall and a radially outermost wall.”

the sidewalls,” claim 7 refers only to “*at least a portion of* at least one of the sidewalls.”

Because at least one of the sidewalls is configured to allow the luminescent material to be energized, then *at least a portion of* at least one of the sidewalls is as well. Moreover, because Hartranft discloses transparent radial walls 22, 24, Hartranft necessarily teaches that light can pass through the radial walls 22, 24 to energize the fluorescent material of the modified fish tape 12 (or Bruin’s fluorescent cord means) inside the housing 10. *Supra* §6.1.4.5. Therefore, claim 7 is obvious for reasons similar to element 1[d]. *Id.*; Ex.-1003, ¶¶96-97.

6.1.10 Claim 8

Claim 8 depends from claim 6, which Hartranft-Bruin renders obvious. *Supra* §§6.1.8.1-6.1.8.2. Claim 8 differs from claim 2 only in that where claim 2 recites “both of the sidewalls are configured to allow the luminescent material to be energized by light passing through the sidewalls,” claim 8 refers only to “*at least portions of* both of the sidewalls of the case are configured to allow the luminescent material to be energized by light passing through the sidewalls.”

Because both of the sidewalls are configured to allow the luminescent material to be energized, then *at least portions of* both of the sidewalls are as well. Moreover, because Hartranft discloses transparent radial walls 22, 24, Hartranft necessarily teaches that light can pass through the radial walls 22, 24 to energize the

fluorescent material of the modified fish tape 12 (or Bruin's fluorescent cord means) inside the housing 10. *Supra* §6.1.4.5. Therefore, claim 8 is obvious for reasons similar to claim 2. *Id.*; Ex.-1003, ¶¶98-99.

6.1.11 Claim 9

Claim 9 depends from claim 6, which Hartranft-Bruin renders obvious. *Supra* §§6.1.8.1-6.1.8.2. Claim 9 adds: “wherein at least portions of all the walls⁹ of the case are transparent.”

Hartranft discloses that the entire housing 10 can be transparent. Ex.-1004, ¶¶9, 12. Because Hartranft discloses an entirely transparent housing 10, Hartranft necessarily teaches that light can pass through the any wall 16, 18, 22, 24 to energize the fluorescent material of the modified fish tape 12 (or Bruin's fluorescent cord means) inside the housing 10. *Supra* §6.1.4.5.

Therefore, Hartranft-Bruin renders claim 9 obvious. *Id.*; Ex.-1004, ¶¶9, 12; Ex.-1003, ¶¶100-102.

⁹ The term “all the walls” lacks antecedent basis. To the extent that this is not indefinite, for purposes of this Petition only, it is understood that this refers to “a pair of sidewalls,” “a radially innermost wall,” and “a radially outermost wall.”

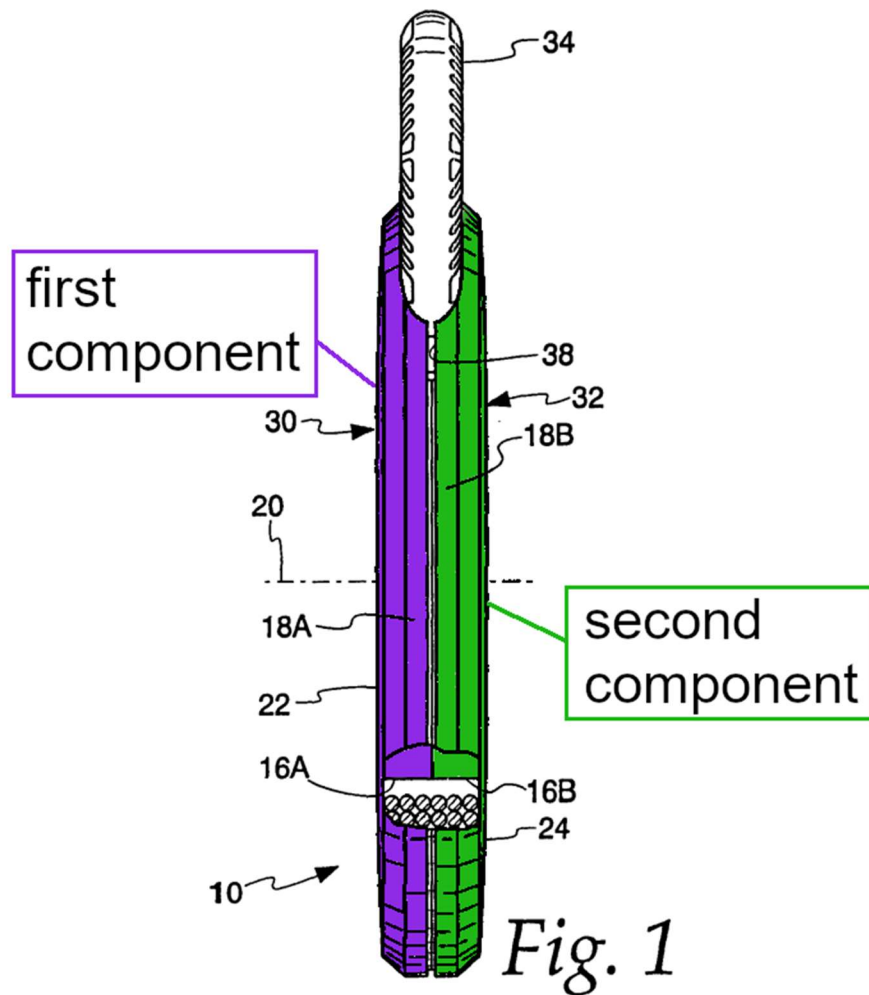
6.1.12 Claim 10

Claim 10 depends from claim 6, which Hartranft-Bruin renders obvious. *Supra* §§6.1.8.1-6.1.8.2. Added language in Claim 10 is analogous to claim 4 and is obvious for similar reasons. *Supra* §6.1.7.

6.1.13 Claims 11 and 12

Claims 11 and 12 depend from claim 10, which Hartranft-Bruin renders obvious. *Supra* §6.1.12. Claim 11 adds: “wherein at least one of the first and second components comprises a transparent material” and claim 12 says both components are transparent. Hartranft teaches both configurations.

Hartranft teaches that “one housing half could be [transparent] while the other is not.” Ex.-1004, ¶¶9, 12. Hartranft also teaches that “[i]t is preferred that the entire housing is translucent since this will permit observation of the tape regardless of the orientation of the housing relative to the observer.” *Id.* at ¶12. Hartranft also teaches that “the housing [10] is split into two identical halves 30 and 32.” *Id.* at ¶10. Hartranft’s Figure 1 illustrates the first half 30 (purple) and the second half 32 (green).



Ex.-1004 Fig. 1

Accordingly, a POSA would recognize that if Hartranft's entire housing 10 is translucent, then both halves 30 and 32 must also be translucent (and, logically then, at least one half is translucent too).

Therefore, Hartranft-Bruin renders obvious a fish tape system where one or both the first and second components (e.g., the halves 30 and 32) comprises a transparent material. *Id.* at ¶¶9, 10, 12; Ex.-1003, ¶¶105-108.

6.1.14 Claim 14

6.1.14.1 Elements 14[pre], 14[a], and 14[c]

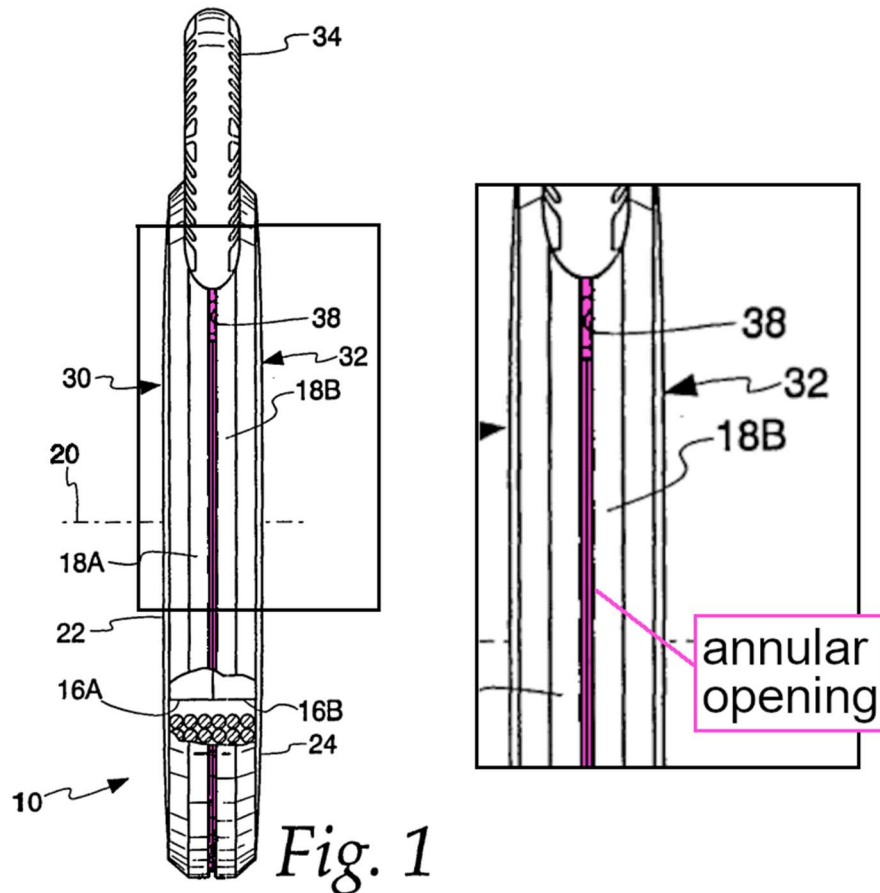
For the purposes of this Petition, elements 14[pre], 14[a], and 14[c] of claim 14 are substantively similar elements 1[pre], 1[a], and 1[c] of claim 1 and elements 6[pre], 6[a], and 6[c] of claim 6 and are taught by Hartranft-Bruin for similar reasons. *Supra* §§6.1.4.1, 6.1.4.2, 6.1.4.4, 6.1.8.1.

6.1.14.2 Element 14[b]

Element 14[b] recites “a case having a fish tape storage compartment that stores the length of fish tape for deployment and reloading via an annular opening in the case.” Hartranft teaches this.

Hartranft discloses that the housing 10 includes “a chamber 28 in which the fish tape 12 resides when the tape is not in use.” Ex.-1004, ¶10. Hartranft describes the chamber 28 as being defined by the annular walls 16, 18 and the radial walls 22, 24 and as being defined by the halves 30 and 32—which, in turn, are defined by the annular walls 16, 18 and the radial walls 22, 24. *Id.* Hartranft also discloses that “[e]ach half includes one of the radial walls and about half of each annular wall,” and “the edges of the outer annular half-wall portions 18A and 18B[]

allow[] the handle to travel circumferentially around the housing 10.” *Id.* at ¶¶10-11. In particular, Hartranft’s housing 10 has “a local slot 38 between the outer annular half-wall portions 18A, 18B.” *Id.* at ¶11. The slot 38 (pink) in the housing 10 is illustrated in Hartranft’s Figure 1.



Ex.-1004 Fig. 1

Hartranft specifies that the slot 38 “provides a space through which the tape [12] may emerge from within the housing chamber when the tape is being

played out.” *Id.* Similarly, “when the tape is returned into the housing it does so through slot 38.” *Id.*

Therefore, Hartranft-Bruin teaches “a case [e.g., housing 10] having a fish tape storage compartment [e.g., chamber 28] that stores the length of fish tape for deployment and reloading via an annular opening [e.g., slot 38] in the case.” *Id.* at ¶¶10-11; Ex.-1003, ¶¶111-114.

6.1.14.3 Element 14[d]

Element 14[d] recites “wherein at least a portion of the case is configured to allow the luminescent material to be energized by light passing through the portion and into the storage compartment.” Hartranft-Bruin teaches this.

Hartranft teaches that “[t]he fish tape housing 10 is made out of any lightweight, translucent material,” which “includes materials that pass so much light that they might be considered transparent.” Ex.-1004, ¶9. Moreover, while Hartranft provides a preferred embodiment in which “the entire housing is translucent,” Hartranft also explains that “less than all of the housing could be translucent and still allow observation of the tape in the housing” and provides examples where “one housing half could be translucent while the other is not” and “the radial walls 22, 24 could be translucent while the annular walls 16, 18 are not.” *Id.* at ¶12.

Both Hartranft’s housing 10 and chamber 28 are defined by the annular walls 16, 18 and the radial walls 22, 24. *Id.* at ¶10. Alternatively, both the housing

10 and chamber 28 are defined by the halves 30 and 32—which, in turn, are defined by the annular walls 16, 18 and the radial walls 22, 24. *Id.* Because the housing 10 and the chamber 28 are defined by the same walls and halves, a POSA would recognize that the light passing through the transparent housing 10 would enter the chamber 28 of the fish tape system.

Therefore, Hartranft-Bruin teaches a fish tape system “wherein at least a portion of the case [e.g., the entire housing 10; one or both of the halves 30, 32; one or both of the radial walls 22, 24] is configured to allow the luminescent material [e.g., the fluorescent material taught by Bruin] to be energized by light passing through the portion and into the storage compartment [e.g., chamber 28.].” *Id.* at ¶¶9, 10, 12; Ex.-1003, ¶¶115-118; *supra* §6.1.4.5.

6.1.15 Claim 15

Claim 15 depends from claim 14, which Hartranft-Bruin renders obvious. *Supra* §§6.1.14.1-6.1.14.3. Claim 15 adds: “wherein the storage compartment has an annular shape bounded by a pair of spaced sidewalls.” Hartranft teaches this.

Hartranft discloses that “[t]he housing 10 comprises inner and outer annular walls 16 and 18” joined by “[f]irst and second radial walls 22 and 24,” where “[t]he second radial walls define a central opening 26.” Ex.-1004, ¶10. Hartranft also discloses that “[t]ogether the annular walls and radial walls define a chamber 28 in which the fish tape 12 resides when the tape is not in use.” *Id.*

Therefore, Hartranft-Bruin renders obvious a fish tape system “wherein the storage compartment [e.g., chamber 28] has an annular shape [e.g., formed by the central opening 26 in the radial walls 22 and 24] bounded by a pair of spaced sidewalls [e.g., radial walls 22 and 24.].” *Id.*; Ex.-1003, ¶¶119-121.

6.1.16 Claim 16

Claim 16 depends from claim 15, which Hartranft-Bruin renders obvious. *Supra* §6.1.15. Claim 16 adds: “wherein at least a portion of at least one of the sidewalls is transparent.” Claim 16 is otherwise analogous to claim 7 and is obvious for similar reasons. *Supra* §6.1.9.

6.1.17 Claim 17

Claim 17 depends from claim 16, which Hartranft-Bruin renders obvious. *Supra* §6.1.16. Claim 17 adds: “wherein portions of both of the sidewalls are transparent.” Claim 17 is otherwise analogous to claim 8 and is obvious for similar reasons. *Supra* §6.1.10.

6.1.18 Claim 18

Claim 18 depends from claim 16, which Hartranft-Bruin renders obvious. *Supra* §6.1.16. Claim 18 adds: “wherein the case comprises a pair of components that are joined to each other to define the storage compartment, and at least one of the pair of components comprises a transparent material.” Hartranft teaches this.

Hartranft discloses that “the housing [10] is split into two identical halves 30 and 32” where “[t]he halves 30 and 32 are joined together in facing relation” to “define[] the chamber 28 in the space within the halves 30 and 32.” Ex.-1004, ¶10.

Hartranft teaches that “[t]he fish tape housing 10 is made out of any lightweight, translucent material,” which “includes materials that pass so much light that they might be considered transparent.” *Id.* at ¶9. Hartranft also discloses that “[t]he entire housing is translucent” or “one housing half could be translucent while the other is not.” *Id.* at ¶12.

Therefore, Hartranft-Bruin renders obvious a fish tape system “wherein the case [e.g., housing 10] comprises a pair of components [e.g., halves 30 and 32] that are joined to each other to define the storage compartment [e.g., chamber 28], and at least one of the pair of components comprises a transparent material.” *Id.* at ¶¶9-10, 12; Ex.-1003, ¶¶124-127.

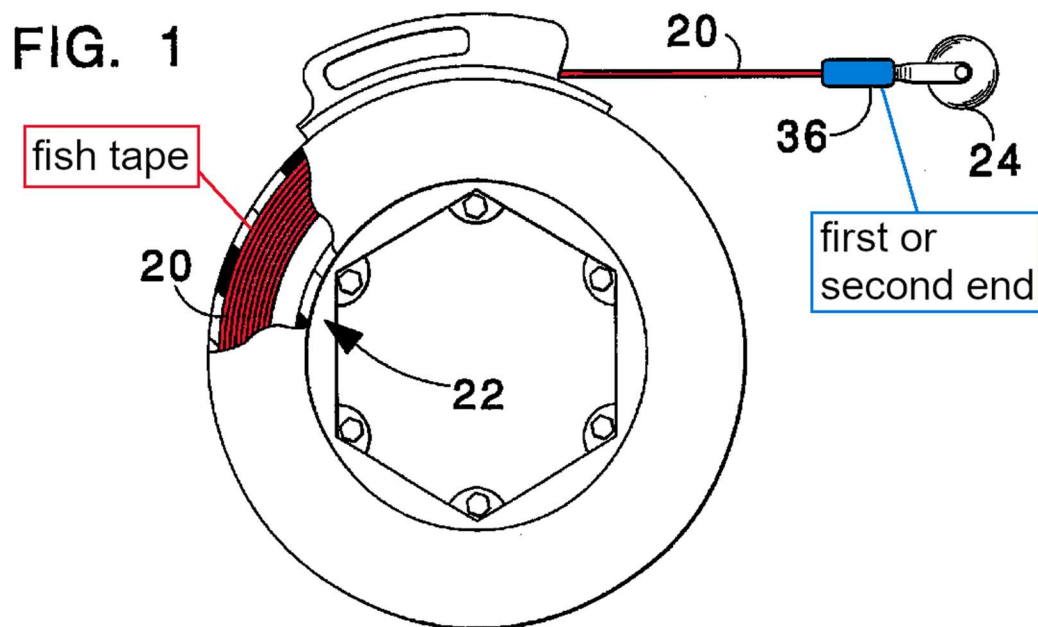
6.2 Ground 2: Hartranft in view of Bruin and Noonan Renders Claims 5 and 13 obvious

6.2.1 Overview of Noonan

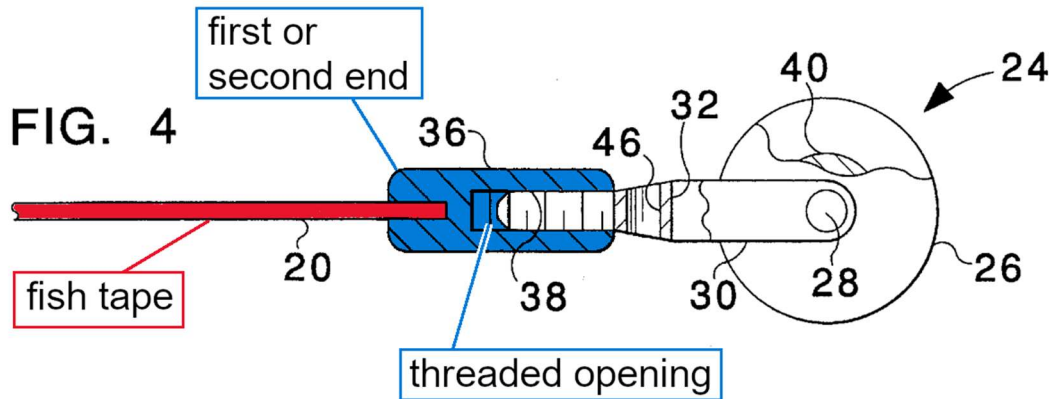
Noonan issued on April 9, 1996, and therefore qualifies as prior art under §102(a)(1). Noonan describes “improvements in ‘fish tapes’ employed in inserting elongated items into protected conduits and more particularly to anti-snagging devices therefor” and explains that “[t]he term ‘fish tape’ is commonly employed to

designate an elongated, resilient wire that is employed in installing electrical conductors in metal conduits.” Ex.-1006, 1:4-11.

Figure 1 of Noonan “illustrates a ‘fish tape’ wire 20 which is wound into a coil form on a reel 22,” where “[an] anti-snagging device 24 is mounted on the partially unwound leading end of the wire 20.” *Id.* at 3:36-40. The fish tape wire 20 is “provided, at its free, leading end, with a mounting cylinder 36,” and “[t]he mounting cylinder 36 is provided with a longitudinal threaded bore 38, the axis of which is aligned with the center of the cross section of the wire 20.” *Id.* at 3:50-54. The mounting cylinder 36 and threaded bore 38 (blue) at the leading end of the fish tape wire 20 (red) is illustrated in Noonan’s Figures 1 and 4.



Ex.-1006 Fig. 1



Ex.-1006 Fig. 4

6.2.2 Motivation to Combine Hartranft, Bruin, and Noonan

Hartranft, Bruin, and Noonan qualify as analogous art because they are in the same field as the '573 Patent—namely, devices and techniques for routing wiring through a wall cavity or conduit. Ex.-1003, ¶128; Ex.-1004, ¶2; Ex.-1005, 1:2-10; Ex.-1006, 1:4-10; Ex.-1001, 1:29-30. Moreover, Hartranft, Bruin, and Noonan are all reasonably pertinent to a problem allegedly solved by the claimed invention: reducing the time and effort expended by an electrician while routing wiring through a cavity or conduit. Ex.-1003, ¶128; Ex.-1004, ¶5; Ex.-1005, 1:2-10; Ex.-1006, 2:1-10; Ex.-1001, 1:29-37.

Ample motivation existed to (i) replace the eyelet at the end of the Hartranft's fish tape marked with the Bruin fluorescent material with a threaded

opening (taught by Noonan's mounting cylinder with a threaded bore) or (ii) use a threaded opening (taught by Noonan's mounting cylinder with a threaded bore) to attach the eyelet to the end of Hartranft's fish tape marked with the Bruin fluorescent material. Motivations for each are discussed in turn below.

Replace Hartranft-Bruin's Eyelet with Noonan's Threaded Bore. First, this modification would be a simple substitution of one known element (Hartranft's fish tape eyelet, which is present in the Hartranft-Bruin combination) with another (Noonan's mounting cylinder and threaded bore) to obtain predictable results (a fish tape with a threaded opening in at least one of its ends). Ex.-1003, ¶130. Akin to the fish tape recited by the '573 Patent, Hartranft discloses a "coiled fish tape 12 within the housing 10." Ex.-1004, ¶9. Hartranft teaches that "[a]n eyelet 14 is fixed to the end of the fish tape," *id.*, but is silent regarding its fish tape ends having a threaded opening. However, Noonan teaches that its fish tape wire ends have a mounting cylinder with a threaded bore. Ex.-1006, 3:50-53. A POSA could have substituted Hartranft's fish tape eyelet with the mounting cylinder and threaded bore taught by Noonan because both Hartranft's eyelet and Noonan's mounting cylinder provide an end of their respective fish tapes. Ex.-1003, ¶130; Ex.-1004, ¶9; Ex.-1006, 3:50-51. Additionally, a POSA could have made this substitution because both Hartranft's eyelet and Noonan's mounting cylinder and threaded bore can attach or connect an object to a fish tape. For instance, Hartranft specifies that the "eyelet 14 is fixed to

the end of the fish tape *to permit ready attachment* of a wire or cable.” Ex.-1004, ¶9.

Similarly, Noonan explains that “[a] stem 34 [of its anti-snagging device 24] is threaded into the bore 38 *to mount* the anti-snagging device 24 on the leading end of the ‘fish tape’ wire 20.” Ex.-1006, 3:54-56.

Alternatively or additionally, Hartranft motivates a POSA to modify the fish tape in its transparent housing to produce a fish tape with a threaded opening in at least one of its ends. First, Hartranft motivates a POSA to build a fish tape system that allows users to work efficiently, stating that its “translucent housing allows users of fish tapes to save time and expense by observing the condition, type and amount of tape within the housing without the added effort of removing the tape.” Ex.-1004, ¶6. Furthermore, Hartranft provides limited information about the eyelet, simply noting that “[a]n eyelet 14 is fixed to the end of the fish tape to permit ready attachment of a wire or cable.” *Id.* at ¶9. Accordingly, a POSA building Hartranft’s fish tape system would not only be interested in helping users work efficiently, but a POSA would also seek out additional references to obtain details about the eyelet. Ex.-1003, ¶131. This POSA would naturally encounter Noonan, which seeks “to minimize, if not eliminate the problem of jamming in the use of ‘fish tapes’” because “such jamming of the ‘fish tape’ is both time consuming and vexatious,” Ex.-1006, 2:1-10, and teaches details about the end or lead portion of a fish tape, *see, e.g., id.* at Abstract. Specifically, Noonan discloses a mounting cylinder with a threaded

bore. *Id.* at 3:51-53. Thus, in building Hartranft's fish tape system and following Hartranft's express motivation to improve efficiency, a POSA would have been motivated to modify Hartranft's fish tape with Noonan's mounting cylinder and threaded bore. Ex.-1003, ¶131; Ex.-1004, ¶¶6, 9; Ex.-1006, 2:1-10, 3:51-53.

Accordingly, a POSA would have known that this modification would produce a fish tape with a threaded opening in at least one of its ends because this modification merely requires replacing one fish tape end (Hartranft's fish tape eyelet) with another (Noonan's mounting cylinder having a threaded bore) without changing the function or hindering the benefits taught by Hartranft's fish tape system. Ex.-1003, ¶132.

Use Noonan's Threaded Bore to Attach Hartranft's Eyelet to Hartranft's Fish Tape. Regarding (ii), a POSA would have been motivated to use Noonan's mounting cylinder with a threaded bore to attach Hartranft's eyelet to the end of Hartranft's fish tape. This modification would have been obvious for a POSA to try because it would have been chosen from a finite number of identified, predictable solutions. Ex.-1003, ¶133. As discussed above, Hartranft discloses an eyelet at the end of a fish tape, Ex.-1004, ¶9, but does not teach a POSA how the eyelet is attached to the end of the fish tape. However, there are a finite number of methods for attaching an eyelet to the end of a fish tape. Ex.-1003, ¶133. Noonan discloses one of these methods. *See* Ex.-1006, 3:41-56. Namely, Noonan is directed to an anti-

snagging device that is mounted onto a fish tape wire and specifies that the fish tape wire has a “mounting cylinder 36 is provided with a longitudinal, threaded bore 38” and that a “stem 34 [of the anti-snagging device] is threaded into the bore 38 to mount the anti-snagging device 24 on the leading end of the ‘fish tape’ wire 20.” Ex.-1006, 3:50-56. Finally, a POSA would have known that the threaded bore in Noonan’s mounting cylinder could be used to attach Hartranft’s eyelet to the end of Hartranft’s fish tape because this is a common method for coupling eyelets or other fish tape leads to fish tapes. Ex.-1003, ¶133. Therefore, a POSA would have been motivated to attach Hartranft’s eyelet to the end of Hartranft’s fish tape using a threaded opening at the end of the fish tape, as taught by Noonan’s mounting cylinder with a threaded bore. *Id.*; Ex.-1004, ¶9; Ex.-1006, 3:41-56.

Under any of the proposed rationales described above, a POSA would have recognized that the combination would allow the mounting cylinder with the threaded bore taught by Noonan to be in at least one of the first and second ends of the fish tape of the modified Hartranft-Bruin system.

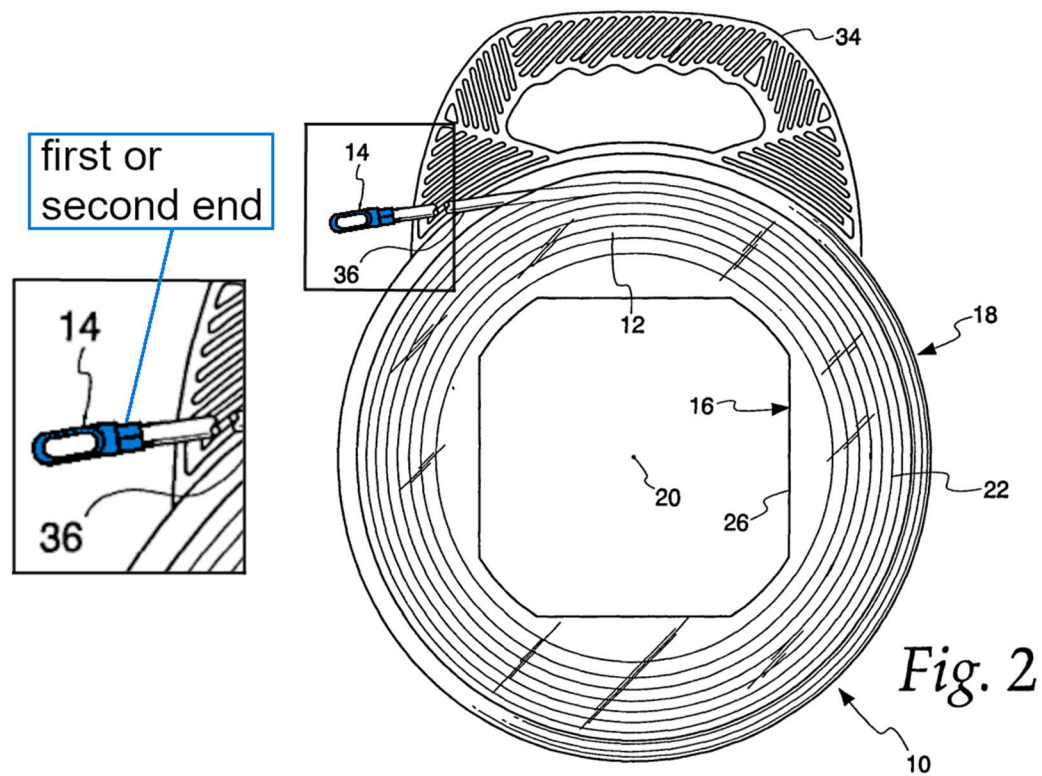
Notably, a POSA’s motivation to replace the eyelet at the end of Hartranft’s fish tape with Noonan’s mounting cylinder with a threaded bore or use Noonan’s mounting cylinder with a threaded bore to attach Hartranft’s eyelet to the end of Hartranft’s fish tape is further confirmed by the admissions in the ’573 Patent. The ’573 Patent discloses that “[n]on-limiting examples of suitable

forms/configurations for the ends 18 and 20 include eyelet ends... male threaded connector ends, or female threaded connector ends, *all of which are well known in commercially available fish tape systems and fish rod systems.*” Ex.-1001, 4:49-56.

6.2.3 Claim 5

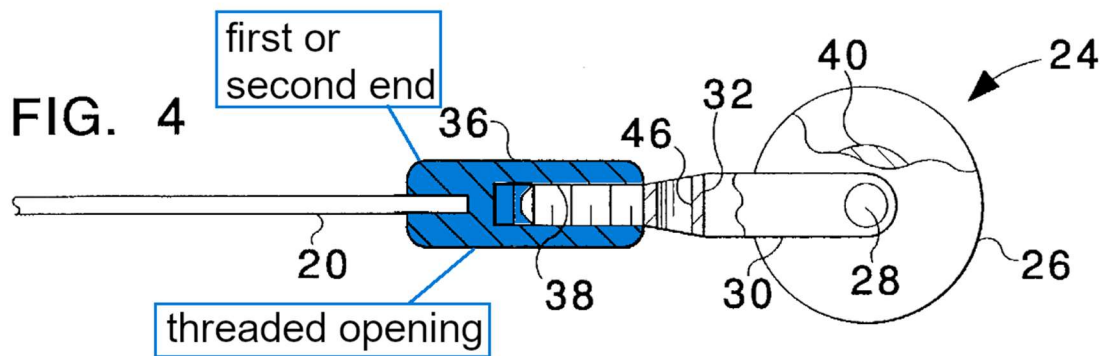
Claim 5 depends from claim 1, which Hartranft-Bruin renders obvious. *Supra* §§6.1.4.1-6.1.4.5. Claim 5 adds: “wherein the fish tape further comprises a threaded opening in at least one of the first and second ends.” Hartranft in view of Noonan teaches this.

First, Hartranft teaches that “[a]n eyelet 14 is fixed to the end of the fish tape.” Ex.-1004, ¶9. The eyelet 14 (blue) is illustrated in Hartranft’s Figure 2.



Ex.-1004 Fig. 2

Next, Noonan teaches a fish tape wire that “is provided at its free, leading end, with a mounting cylinder 36” and that “[t]he mounting cylinder 36 is provided with a longitudinal threaded bore 38, the axis of which is aligned with the center of the cross section of the wire 20.” Ex.-1006, 3:50-54. The mounting cylinder 36 with the threaded bore 28 (blue) is illustrated in Figure 4 of Noonan.



Ex.-1006 Fig. 4

As discussed above, a POSA would have been motivated to (i) replace the eyelet at the end of Hartranft-Bruin's fish tape with a threaded opening (taught by Noonan's mounting cylinder with a threaded bore) or (ii) use a threaded opening (taught by Noonan's mounting cylinder with a threaded bore) to attach Hartranft's eyelet to the end of Hartranft's fish tape. *Supra* §6.2.2.

Therefore, Hartranft-Bruin-Noonan renders obvious a fish tape system “wherein the fish tape [e.g., the fish tape 12 in Hartranft or the fish tape wire 20 in Noonan] further comprises a threaded opening [e.g., the threaded bore 38] in at least one of the first and second ends [e.g., the eyelet 14 at the end of the fish tape 12 in Hartranft or the mounting cylinder 36 at the end of the fish tape wire 20 in Noonan].” Ex.-1004, ¶9; Ex.-1006, 3:50-54; Ex.-1003, ¶¶136-140.

Finally, the '573 Patent discloses that “[n]on-limiting examples of suitable forms/configurations for the ends 18 and 20 include eyelet ends... male threaded

connector ends, or female threaded connector ends, *all of which are well known in commercially available fish tape systems and fish rod systems.*” Ex.-1001, 4:49-56. Thus, the ’573 Patent itself recognized that a fish tape with a threaded opening in at least one of the first and second ends existed in the prior art.

6.2.4 Claim 13

Claim 13 depends from claim 6, which Hartranft-Bruin-Noonan renders obvious. *Supra* §§6.1.8.1-6.1.8.2. Claim 13 is analogous to claim 5 and is obvious for similar reasons. *Supra* §6.2.3.

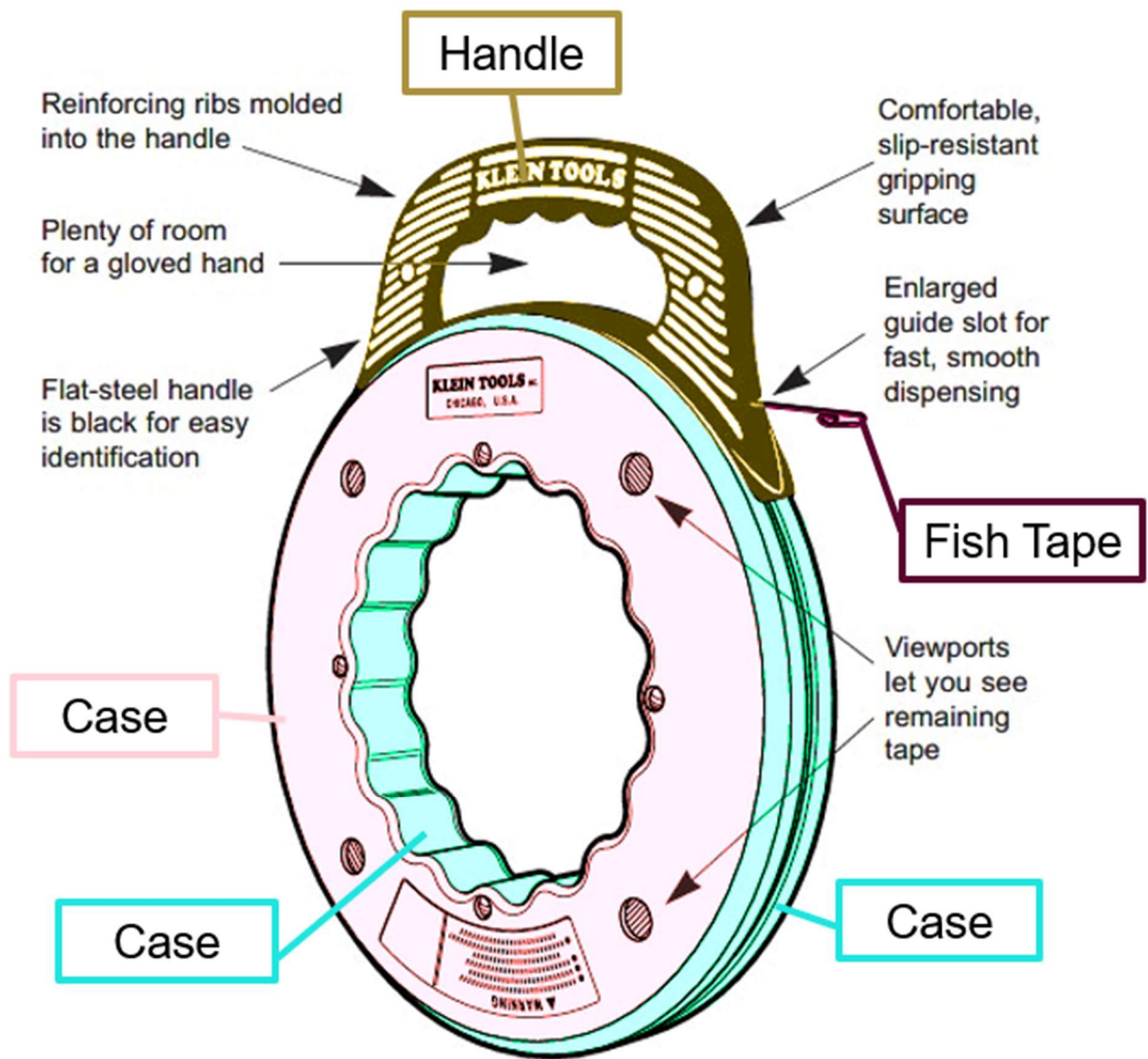
6.3 Ground 3: Klein Fish Tape Publication in view of Southwire Glow in the Dark Fish Sticks Publication Renders Claims 1-18 Obvious

6.3.1 Overview of Klein Fish Tape Publication (KP1)

Klein Fish Tape Publication (“KP1”) was published on October 28, 2011, and therefore qualifies as prior art under §102(a)(1). Ex. 1010 at 10.

KP1 is a publication describing the instructions for the Klein Flat Steel Fish Tape product. Ex. 1008 at 1. The publication describes that the fish tape is for “pulling through conduit” and comes in a winder reel (orange and turquoise) that stores the fish tape (red) and has a handle (yellow) with four viewports on either side that allow the user to see the remaining tape in the case. *Id.* To deploy and rewind the tape, a user holds the handle while “rotating the reel.” *Id.* at 2. KP1 also teaches

that the flat steel fish tape inside the Klein Winder Reel can be replaced by opening up the winder reel, or case, halves. *Id.* Klein fish tape leaders can also be easily added on and off the fish tape using the threaded opening at the end of the fish tape. *Id.*



Ex. 1008 at 1

6.3.2 Overview of Southwire Glow in the Dark Fish

Sticks Publication (SP1)

The Southwire Glow in the Dark Fish Sticks Publication (SP1) was published on July 19, 2018, and therefore qualifies as prior art under §102(a)(1). Ex.-1010 at 13.

SP1 is a publication describing the glow in the dark fish sticks product. Ex.-1009 at 1. The SP1's glow in the dark fish sticks product is used for wire/cable pulling, and thus functions similarly to the fish tape system described in the Patent-at-Issue. *Id.* The SP1's glow in the dark fish sticks are also luminescent, making "fishing through walls or over ceiling easier." *Id.* SP1's glow in the dark fish sticks also are "highly flexible" and because of their threaded opening ends, "individual sections easily screw together to form a single rod." *Id.*



Ex.-1009 at 1

6.3.3 Motivation to Combine KP1 and SP1

As a threshold matter, KP1 and SP1 qualify as analogous art. They are both in the same field of endeavor as the '573 Patent and one another—namely, devices and techniques for routing wiring through a wall cavity or conduit. Ex.-1008 at 1; Ex.-1009 at 1; Ex.-1001 at 1:29-30. At minimum, they are at least reasonably pertinent to a problem allegedly solved by the claimed invention: reducing the time and effort expended by an electrician while routing wiring through a cavity or conduit. *Id.*

Ample motivation existed to (i) add a luminescent material (taught by SP1) to the fish tape housed in KP1's fish tape case with view ports or (ii) include SP1's glow in the dark fish sticks in KP1's fish tape case with view ports. Motivations for each combination are discussed in turn below.

Add SP1's Luminescent Material to KP1's Tape. Turning to (i), a POSA would have been motivated to add the luminescent material disclosed by SP1 to the fish tape stored in KP1's fish tape case to produce a luminescent fish tape that can be seen by an electrician or operator while routing wiring through the cavity or conduit, and KP1 itself implicitly calls for improvement. First, modifying KP1's fish tape with SP1's glow in the dark fish sticks' luminescent material would amount to the use of a known technique (manufacturing wire/cable pullers with luminescent materials) to improve a similar device in the same way (e.g., to improve a fish tape so as to "make fishing through walls or over ceilings easier"). Ex.-1009 at 1. KP1 provides a base fish tape by disclosing a fish tape that can be "pull[ed] through conduit which contains...other wires." Ex.-1008 at 1. SP1 provides a comparable product by disclosing "[l]uminescent fiberglass rods that glow in the dark" that "[m]ake fishing through walls or over ceilings easier." Ex.-1009 at 1. SP1's glow rods includes an improvement, namely, the glow in the dark feature to "make fishing through walls or over ceilings easier." *Id.* A POSA could have applied SP1's improvement of luminescent material in the entirety of the length of the glow rod by

manufacturing KP1's fish tape with luminescent material along the length of the fish tape. This would yield a bright glow with high visibility in dark conduits, and would allow an electrician to better see the fish tape even if the conduit is dark or crowded with other wires, an advantage that KP1 does not have.

Further, it is an improvement that KP1 implicitly calls for. The KP1 fish tape cautions that the fish tape may be used in areas that could result in injury to the user, such as warning users to "NOT use any fish tape on or near live circuits. Use extreme caution when working near any electrical equipment," and "when pulling through conduit which contains any other wires, be certain that power to those wires has been turned off or disconnected." Ex.-1008 at 1 (warning label and step 2 in "How to Use a Klein Flat Steel Fish Tape.") A POSA would recognize that pulling wires/cables through conduit can be an extremely dangerous and risky job, and the high importance of visibility of the tape to the safety of the user. The POSA would have naturally looked to an analogous reference like SP1 to improve the visibility of the KP1 fish tape system to make it safer. By adding the SP1's glow in the dark fish stick's luminescent material to the KP1 fish tape, the fish tape can be used to pull wires through conduits that pose potential risks in a safer manner due to the increased visibility.

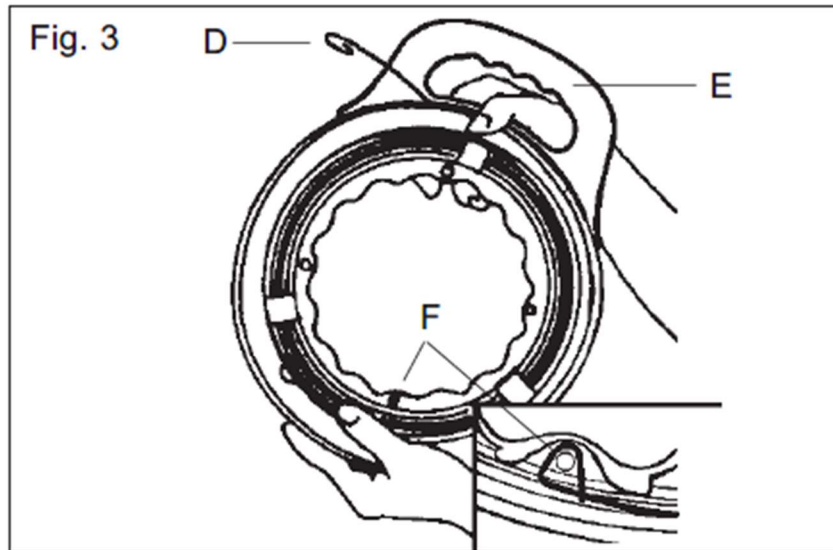
Alternatively or additionally, KP1 motivates a POSA to modify the fish tape in its case to arrive at a luminescent fish tape through its emphasis on the

difficulty of pulling when the fish tape gets caught in an obstruction. KP1 teaches “Do not force a pull that has become hung up. It is best to remove the wire, clear any kinks or obstructions and, if necessary, use additional lubricant.” Ex.-1008 at 1 (step 7 in “How to Use a Klein Flat Steel Fish Tape.”) This implies the common problem of the fish tape becoming caught and stopping the pull. A POSA would recognize that increased visibility for the fish tape in the dark conduits would allow the user to better navigate the fish tape, and thus result in fewer aborted pulls due to it being caught in obstructions. Accordingly, a POSA using KP1’s fish tape system would pursue additional references to find more details about high visibility wire/cable pullers in dark conduits. In this pursuit, a POSA would have naturally encountered SP1, given its specific teachings about glow in the dark wire/cable pullers. Indeed, SP1 provides a POSA with information on how its “[l]uminescent fiberglass rods” “[m]ake fishing through walls or over ceilings easier.” Ex.-1009 at 1. With knowledge of this issue of fish tape entanglement in obstructions within conduits and SP1’s solution, a POSA would have been motivated to modify KP1’s fish tape with SP1’s luminescent material.

Finally, a POSA would have known that applying SP1’s glow in the dark fish stick’s luminescent material to KP1’s fish tape would produce a luminescent fish tape. Luminescent materials were well known before the ’573 Patent and were widely used in electrician’s tools. Ex.-1003, ¶149. A POSA could merely have used

a luminescent material to make the fish tape, could have painted the currently existing fish tape with luminescent paint, or even just used luminescent tape to wrap around the fish tape. *Id.* All of these modifications are simple changes that would not require extensive modification to the mechanical properties of KP1's underlying fish tape. *Id.* Thus, applying luminescent material to KP1's fish tape was a well-known process to implement and would have resulted in a working system. *Id.*

Include SP1's glow in the dark fish sticks in KP1's fish tape case. With regards to (ii), a POSA would have been motivated to replace the fish tape stored in KP1's case with the luminescent glow in the dark fish stick disclosed in SP1. First, replacing KP1's fish tape with SP1's glow in the dark fish sticks so that the SP1 glow in the dark fish stick sits in the KP1 case would amount to a simple substitution of one known element (SP1's glow in the dark fish sticks) with another (KP1's fish tape system) to obtain predictable results (a luminescent fish tape system). First, KP1 discloses that its fish tape can be replaced with ease by opening up the "winder reel" shown below. Ex.-1008 at 2 ("How to Replace Flat Steel Fish Tape in Klein Winder Reel.")



Ex.-1008 at 2.

In fact the whole process of putting new tape into the case takes only 6 outlined steps and no advanced tools. Ex.-1008 at 2 (“How to Replace Flat Steel Fish Tape in Klein Winder Reel.”) This implies that it is easy to replace the tape within the reel with another. KP1 further teaches that the replacement fish tape that can be loaded into the case comes in varying lengths, 50’ (15.2 m), 100’ (30.5 m), and 200’ (61 m). Ex.-1008 at 1 (“Replacement Flat-Steel Fish Tapes (without reel)”). Thus, there is implied flexibility in the size of the fish tape that can fit into the case. Ex.-1003, ¶151. A POSA could have substituted KP1’s steel fish tape with SP1’s luminescent glow in the dark fish sticks because KP1 and SP1 disclose wire/cable pullers with similar properties. For example, KP1 discloses that its fish tape is used to “pull[] through conduit.” Ex.-1008 at 1 (step 2 of “How to Use a Klein Flat Steel

Fish Tape.”) Similarly, SP1 discloses that its glow in the dark fish sticks “make fishing through walls or over ceilings easier.” Ex.-1009 at 1.

Alternatively or additionally, KP1 implicitly calls for such improvement to its system to produce the luminescent fish tape claimed in the ’573 Patent by showing how the fish tape can be bought separately from the reel and then added into the case easily. Since KP1 shows that fish tape can be purchased separately from the reel, i.e. for refills, it implies that the case and the fish tape are two separate components that can be mixed and matched. Ex.-1008 at 1 (“Replacement Flat-Steel Fish Tapes (without reel).”) In fact, as acknowledged by Patent Owner, albeit after the filing date, the fish tape housed within their Klein Glow Fish Tape cases are “fully removable from case for wall cavity, drop ceiling, and conduit pass through feeding...allowing this fish tape to also function as a super-flex glow rod.” Ex.-1014 at 2. Thus, a POSA would recognize that solutions to the problem of visibility in dark conduits could be solved by mixing *different* wire/cable pullers with the Klein fish tape case, and look to similar standalone wire/cable pullers without a case, such as glow in the dark fish sticks, and thus would have naturally looked to an analogous reference like SP1 to further improve KP1’s fish tape system.

Finally, a POSA would have had a reasonable expectation of success in including SP1’s glow in the dark fish sticks to KP1’s fish tape case. SP1 discloses that the fish sticks are “[h]ighly flexible.” Ex.-1009 at 1. Further flexible materials

were well known before the effective filing date and were also widely used in electrician's tools. Ex.-1003, ¶153. SP1 also teaches that the glow in the dark fish sticks can be made longer, by disclosing that "[i]ndividual sections easily screw together to form [a] single rod." *Id.* A POSA could have used the highest flexibility version of the SP1 glow in the dark fish stick and increased the length of the glow in the dark fish stick by screwing together sections and wrapping that final glow in the dark fish stick into the KP1 fish tape case. A POSA could have also additionally or alternatively re-manufactured SP1's glow in the dark fish stick into an even more flexible and longer version of the fish stick and wrapped that into the KP1 fish tape case. Thus, including SP1's luminescent glow in the dark fish sticks to KP1's fish tape was a well-known process to implement and would have resulted in a working system.

Under either combination, and any of the proposed rationales described above, a POSA would have recognized that the combination of KP1 and SP1 would allow the luminescent material of SP1 to be energized by the four viewports of KP1's fish tape case.

To the extent that Patent Owner argues the viewports would be insufficient to energize the material, a POSA would have also recognized that the viewports could be made bigger by simply cutting out more of the case, resulting in larger viewports to view the fish tape, less cost to manufacture the fish tape case because

of the decrease in materials, and more luminescent fish tape length that gets energized by the light. Ex.-1003, ¶155.

6.3.4 Claim 1

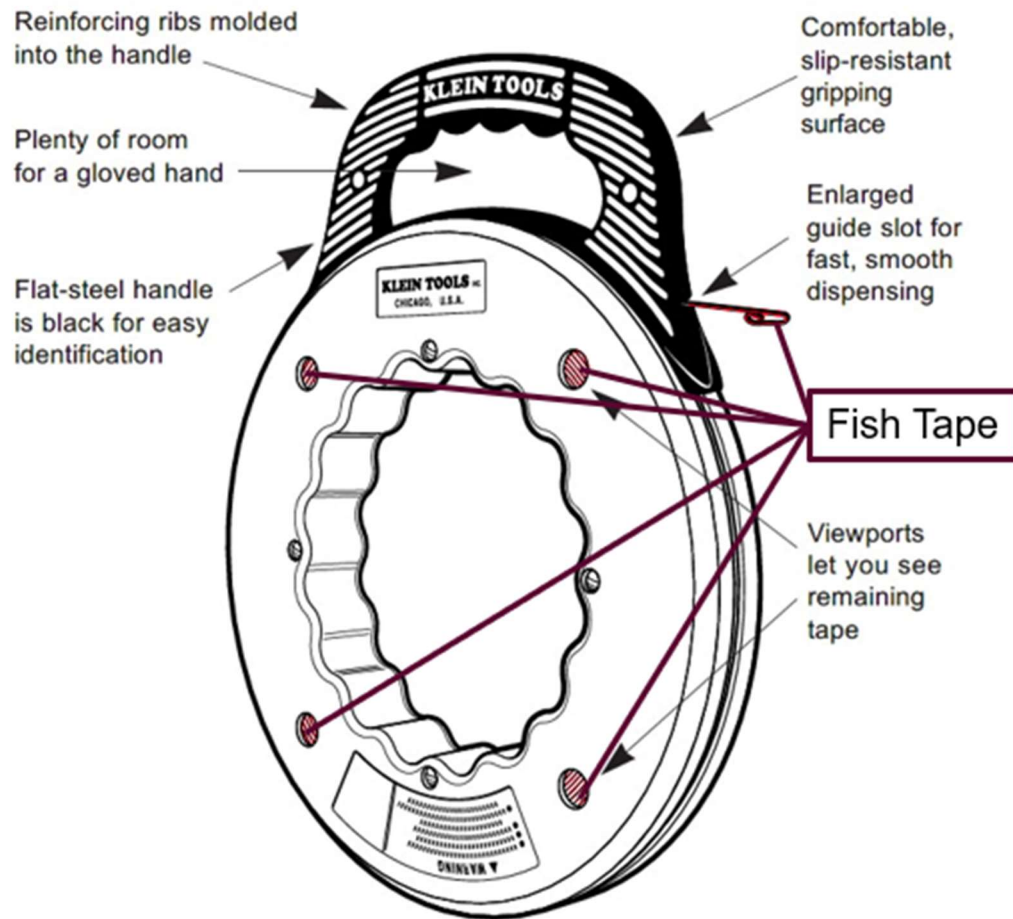
6.3.4.1 Element 1[pre]

Element 1[pre] recites a “fish tape system.” If limiting, KP1 teaches this. For example, KP1 teaches “Flat Steel Fish Tapes and Winder Reels ” that “pull[] through conduit.” Ex.-1009 at 1.

6.3.4.2 Element 1[a]

KP1-SP1 teaches 1[a]

KP1 teaches a “flat steel fish tape” for “pulling through conduit.” Ex.-1008 at 1 (step 2 of “How to Use a Klein Flat Steel Fish Tape.”) KP1 illustrates the fish tape (red) inside a fish tape housing, below.



Ex.-1008 at 1

Not only does KP1 explicitly teach that the fish tape has a length (it is available in three different lengths) and at least one end (it comes with two possible leader types, a Klein Fish-Tape Leader or Klein Fish-Tape Ball), but a POSA would also recognize that the coiled fish tape shown in the above figure has a first end, a second end, and a length that extends therebetween. Ex.-1008 at 1 (showing available lengths 50', 100' and 200'), 2 ("How to Attach a Klein Fish-Tape Leader

or a Klein Fish-Tape Ball”). Therefore, KP1’s fish tape necessarily has “a length extending from a first end to a second end.”

KP1 does not expressly teach that “the length of the fish tape comprising a luminescent material that emits light after being energized by exposure to a light source.” SP1, however, teaches “[l]uminescent fiberglass rods [that] glow in the dark.” Ex.-1009 at 1. One of skill in the art would have recognized that such luminescent material meets the limitation of “a luminescent material that emits light after being energized by exposure to a light source.” Ex.-1003, ¶160.

As discussed above, a POSA would have been motivated to take (i) KP1’s fish tape and manufacture it with a luminescent material as taught by SP1 or place SP1’s glow in the dark fish sticks inside KP1’s case with viewports. *Supra* §6.3.3.

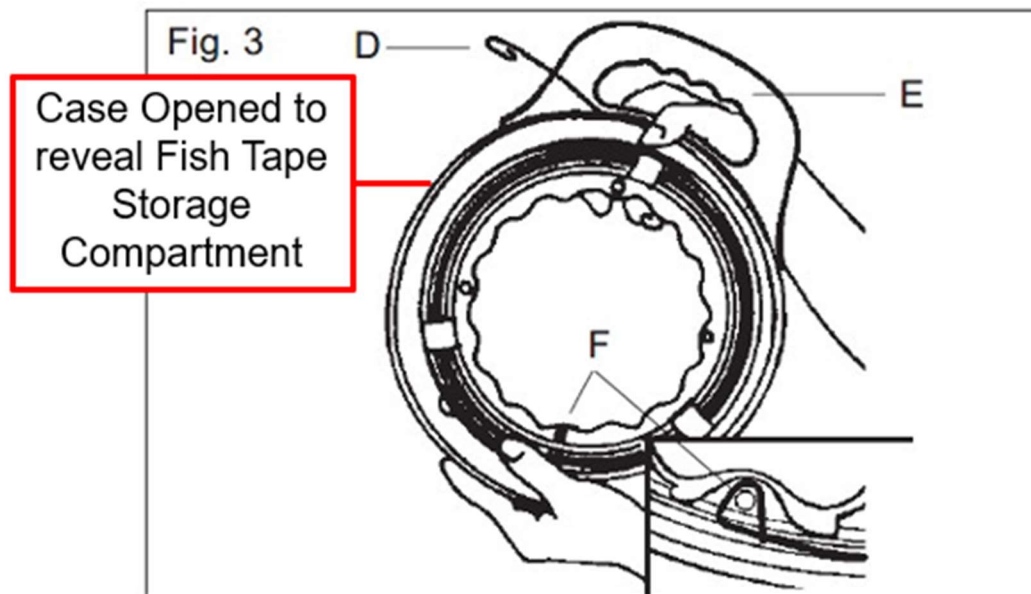
Therefore, KP1 in view of SP1 teaches “a fish tape [e.g. KP1’s fish tape or SP1’s glow in the dark fish sticks] having a length extending from a first end to a second end, the length of the fish tape comprising a luminescent material [e.g. SP1’s glow in the dark fish sticks] that emits light after being energized by exposure to a light source.” Ex.-1008 at 1; Ex.-1009 at 1; Ex.-1003, ¶¶157-162.

6.3.4.3 Element 1[b]

KP1-SP1 teaches 1[b].

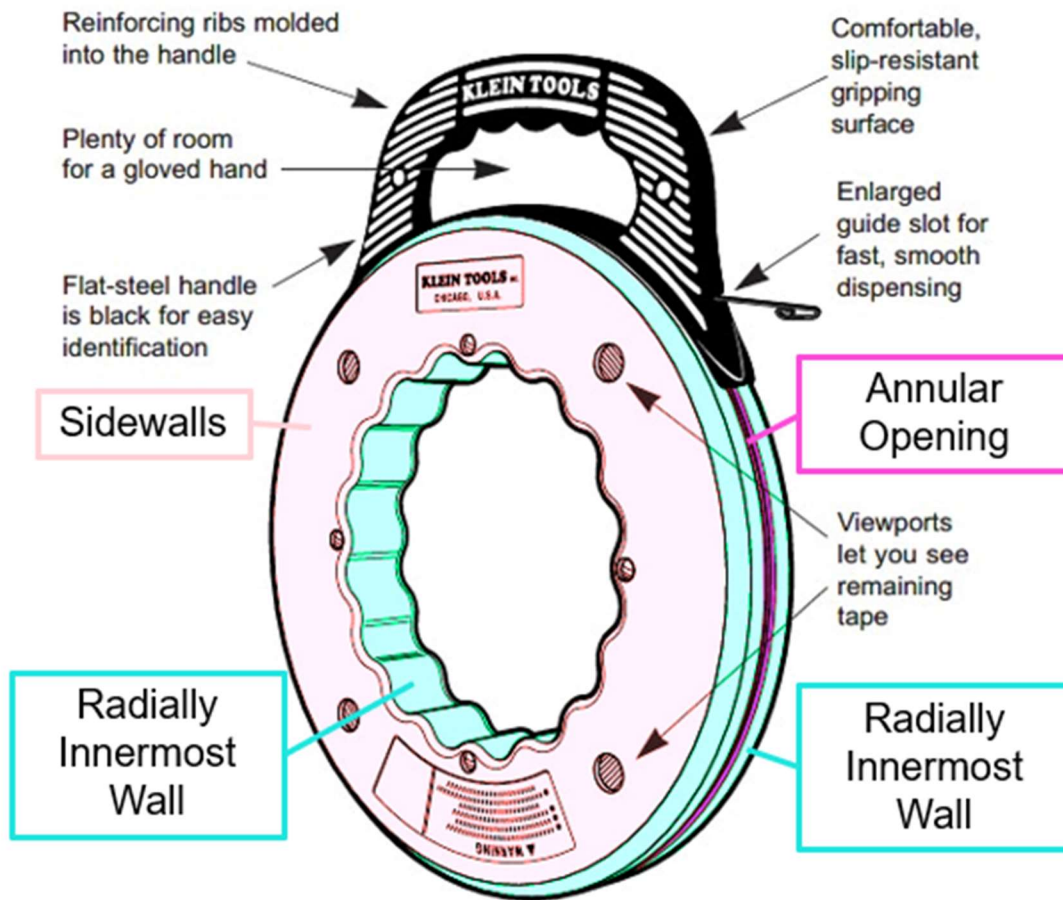
The annotated figures of KP1 below illustrate the pair of sidewalls (orange) between a radially innermost wall and a radially outermost wall (turquoise). The

annular opening extending around the circumference of the outer wall is also annotated in purple. KP1 teaches that the handle aligns “in the groove at the outside edge of the reel.” Ex.-1008 at 2 (step 3 of “How to Replace a Klein Fish-Tape Handle.”) It can also be seen from the figure that the sidewalls are spaced from each other to define a fish tape storage compartment that stores the length of fish tape, since the viewports show the fish taped stored within the storage compartment defined by the sidewalls (orange). KP1 also teaches that a user can “open the reel halves” to remove or reload the fish tape into the storage compartment defined by the two sidewalls, as shown below. Ex.-1008 at 2 (step 4 of “How to Replace Flat Steel Fish Tape in Klein Winder Reel.”)



Ex.-1008 at 2

KP1 also shows that the length of fish tape is deployed via the annular opening in the case, as the user rewinds the tape by “holding the handle firmly with one hand while rotating the reel” and deploys the tape by “hold[ing] the winder handle with one hand, pulling tape from the reel with the other hand.” Ex.-1008 at 3 (step 8 and step 3 of “How to Use a Klein Flat Steel Fish Tape.”) KP1 also teaches that on the annular opening, there is an “[e]nlarged guide slot for fast, smooth dispensing.” *Id.* at 1. To the extent that the term “donut shaped” can be construed, KP1’s central opening shown below, together with the aforementioned walls, define a donut shaped case.



Ex.-1008 at 1

Therefore, KP1 teaches “a donut shaped case [to the extent “donut shaped” is not indefinite, it is formed by the central opening of the case] having a pair of sidewalls [shown in green] extending between a radially innermost wall and a

radially outermost wall [shown in turquoise], the outermost wall¹⁰ having an annular opening extending around a circumference of the outer wall¹¹ [shown in purple] the sidewalls being spaced from each other to define a fish tape storage compartment that stores the length of fish tape for deployment via the annular opening in the case [shown when the case is opened to reload fish tape].” Ex.-1008 at 1, 2. Ex.-1003, ¶¶163-166.

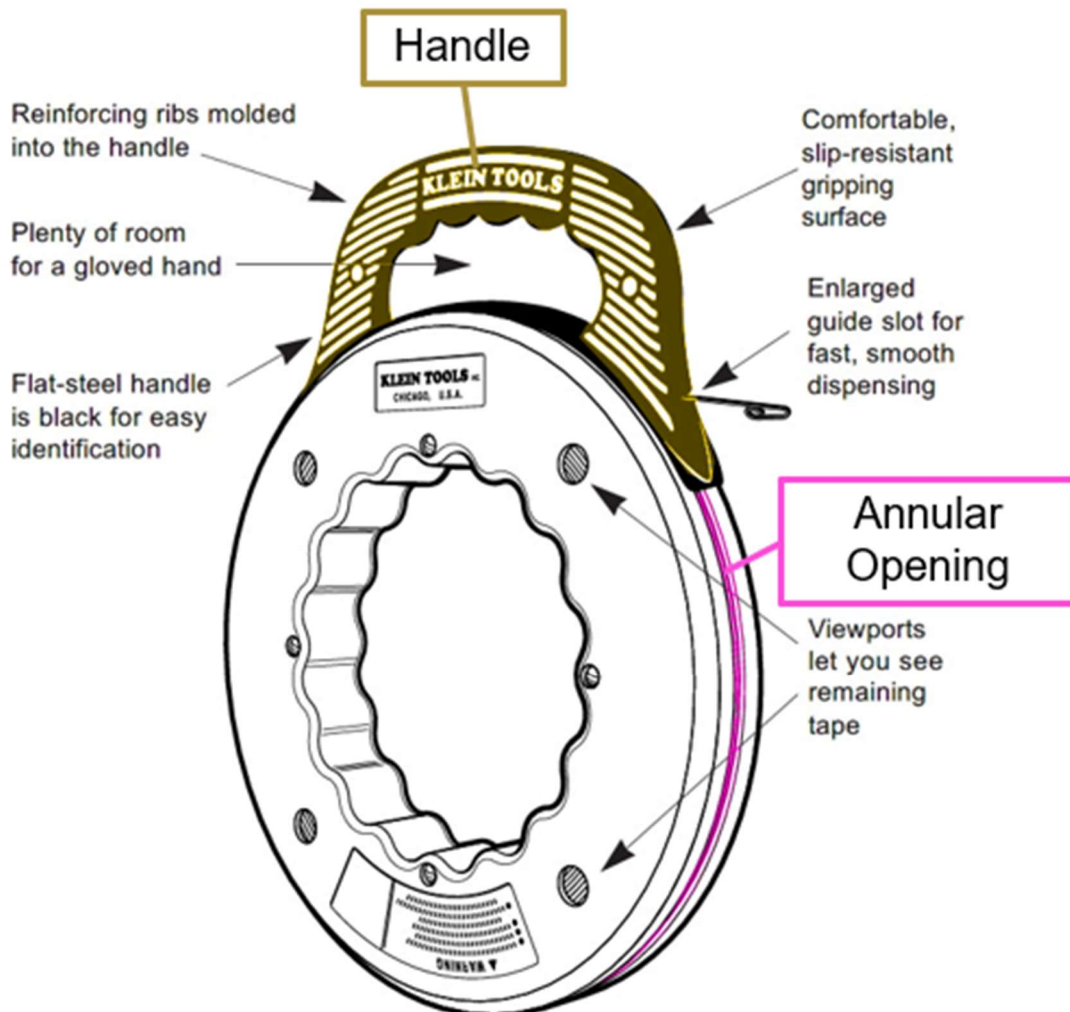
6.3.4.4 Element 1[c]

KP1-SP1 teaches element 1[c].

KP1 teaches that the length of fish tape is deployed via the annular opening in the case, as the user rewinds the tape by “holding the handle firmly with one hand while rotating the reel” and deploys the tape by “hold[ing] the winder handle with one hand, pulling tape from the reel with the other hand.” Ex.-1008 at 3 (step 8 and step 3 of “How to Use a Klein Flat Steel Fish Tape.”) The KP1, below, illustrates

¹⁰ The term “the outermost wall” lacks antecedent basis. To the extent that this is not indefinite, for purposes of this Petition only, it is understood that this refers to “a radially outermost wall.”

¹¹ The term “the outer wall” lacks antecedent basis. To the extent that this is not indefinite, for purposes of this Petition only, it is understood that this refers to “a radially outermost wall.”



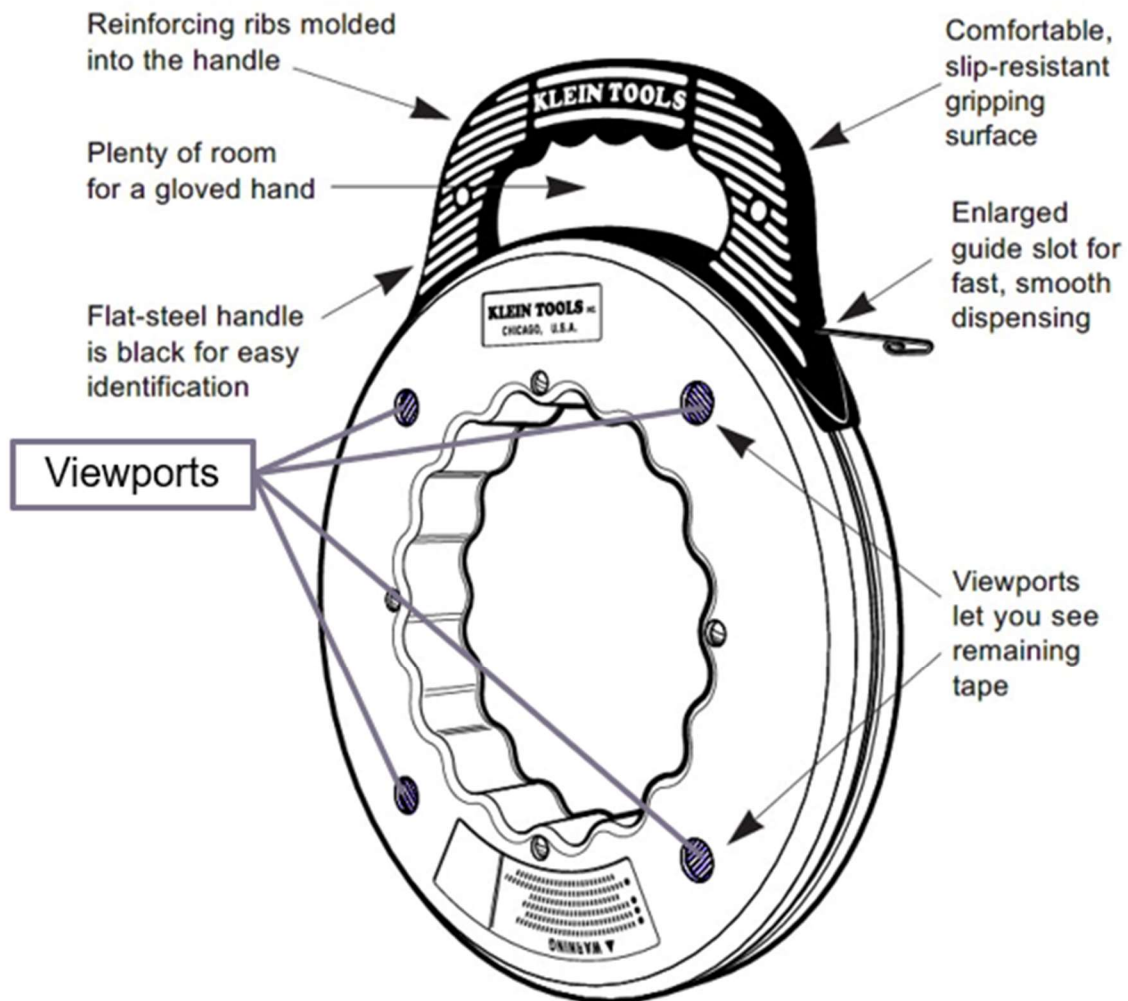
Ex.-1008 at 1

Therefore, KP1 discloses “a handle [shown in yellow] engaged with the fish tape and mounted to slide within the annular opening of the case around the entire circumference of the outer wall [shown in purple] to deploy the fish tape from the storage compartment and to reload the fish tape into the compartment [shown by viewports which view into the storage compartment of the case].” Ex.-1008 at 1; Ex.-1003, ¶¶167-169.

6.3.4.5 Element 1[d]

KP1-SP1 teaches 1[d].

KP1 teaches four viewports on the sidewalls of the case (shown in dark purple, below) that allow users to see the amount of remaining fish tape. The viewports, since they are cutouts on the sidewalls, would allow luminescent material to be energized by the light passing through the viewport.



Ex.-1008 at 1

Petitioner notes that element 1[d] does not require the full length of the luminescent material to be energized. But to the extent Patent Owner argues that the viewports are not sufficient to allow luminescent material to be energized, it would have been obvious to a POSA to modify the viewports to make them larger. Making them larger would only require cutting out a bigger segment than the current

viewports taught by KP1. Ex.-1003, ¶172. A POSA would be motivated to do so as it would not only allow luminescent material to be charged, but would also allow for more of the fish tape to be viewed, so that an electrician can better tell how much length of fish tape is remaining. *Id.* Additionally, it would be cheaper to manufacture the case, since the case would use less material. *Id.*

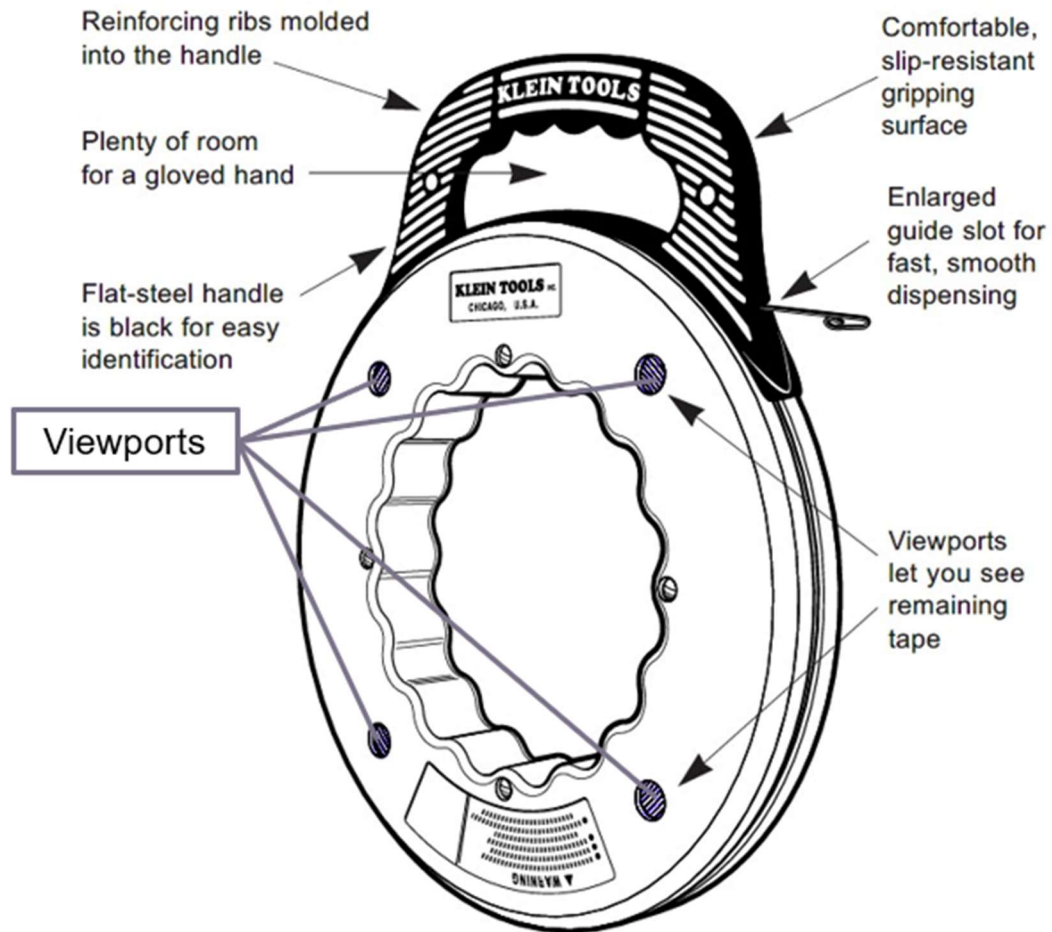
Therefore KP1-SP1 teaches a fish tape system “wherein at least one of the sidewalls of the case [the sidewall of the KP1 case] is configured to allow the luminescent material to be energized by light passing through the at least one of the sidewalls [the viewports of the KP1 case or, in the alternative, larger viewport cutouts in the KP1 case that would have been obvious to a POSA to make].” Ex.-1008 at 1; Ex.-1003, ¶¶170-173.

6.3.5 Claim 2

Claim 2 depends from claim 1, which KP1-SP1 renders obvious. *Supra* §§6.3.4.1-6.3.4.5. The added features of claim 2 are also obvious.

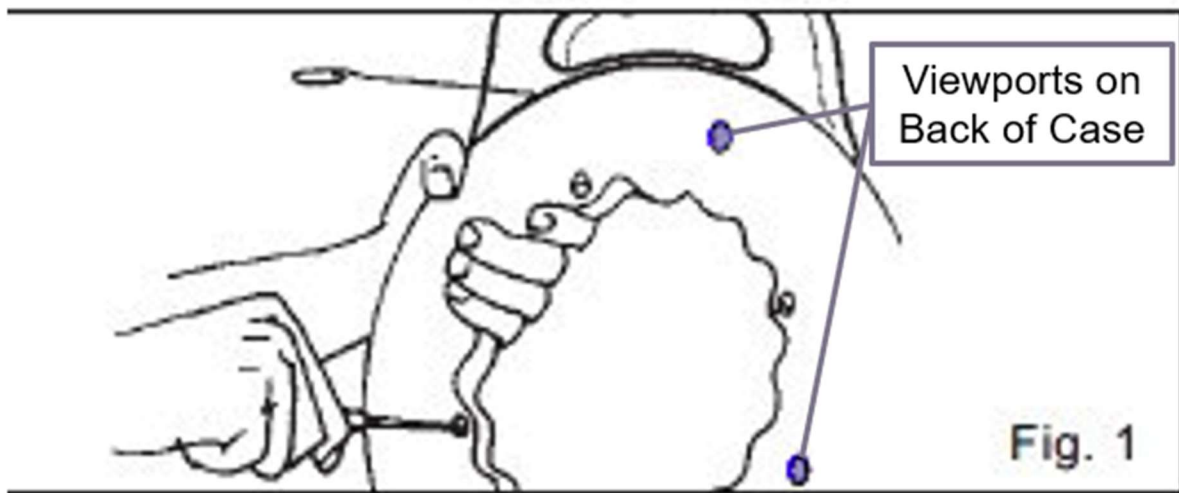
KP1 teaches four viewports cut out in the case to allow viewing of “remaining tape.” *Supra* §6.3.4.5; Ex.-1008 at 1. KP1 also teaches that the back of the fish tape also has these four viewports (purple).¹²

¹² Only two viewports on the back of the case are visible in the illustration. However it would have been expected that the case would be manufactured to have identical



Ex.-1008 at 1

viewports on both sides of the case, and thus the four viewports can be inferred from the diagram. Ex.-1003, ¶175.



Ex.-1008 at 1

Therefore, KP1-SP1 renders obvious a fish tape system “wherein both of the sidewalls of the case are configured to allow the luminescent material to be energized by light passing through the sidewalls [viewport cutouts].” *Supra* §6.3.4.5; Ex.-1008 at 1; Ex.-1003, ¶¶174-176.

6.3.6 Claim 3

Claim 3 depends from claim 2, which KP1- SP1 renders obvious. *Supra* §§6.3.4.1-6.3.4.5, 6.3.5. Claim 3 adds: “wherein at least one of the innermost and outermost walls¹³ is configured to allow the luminescent material to be energized by

¹³ See *supra* note 3 in § 6.1.6.

light passing through the sidewalls.”¹⁴ It would have been obvious for a POSA to have modified the KP1 case to teach this limitation.

As detailed in sections §§6.3.4.5,6.3.5, KP1 teaches viewport cut outs that allow electricians to view the progress of the fish tape as it is being used. It would have been obvious to a POSA to modify KP1 to create these cutouts for viewports in the innermost or outermost walls of the case to both allow for more of the fish tape to be inspected by an electrician, to allow luminescent material to be energized by light passing through the walls, and because it would be cheaper to manufacture as it would require less materials, as described in §§6.1.4.5,6.1.5.

Therefore, KP1-SP1 renders obvious a fish tape system wherein at least one of the innermost and outermost walls is configured to allow the luminescent material to be energized by light passing through the sidewalls. *Supra* §§6.3.3, 6.3.4.5, 6.3.5; Ex.-1003, ¶¶177-179.

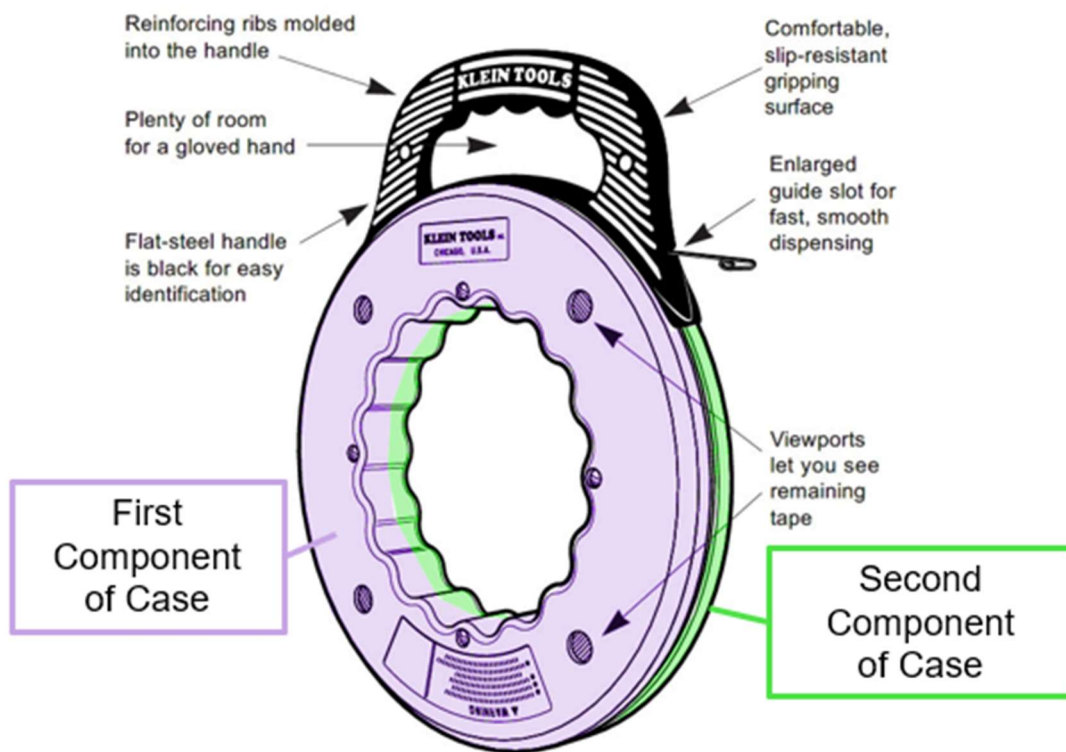
6.3.7 Claim 4

Claim 4 depends from claim 1, which KP1-SP1 renders obvious. *Supra* §§6.3.4.1-6.3.4.5. Claim 4’s added features are obvious, too.

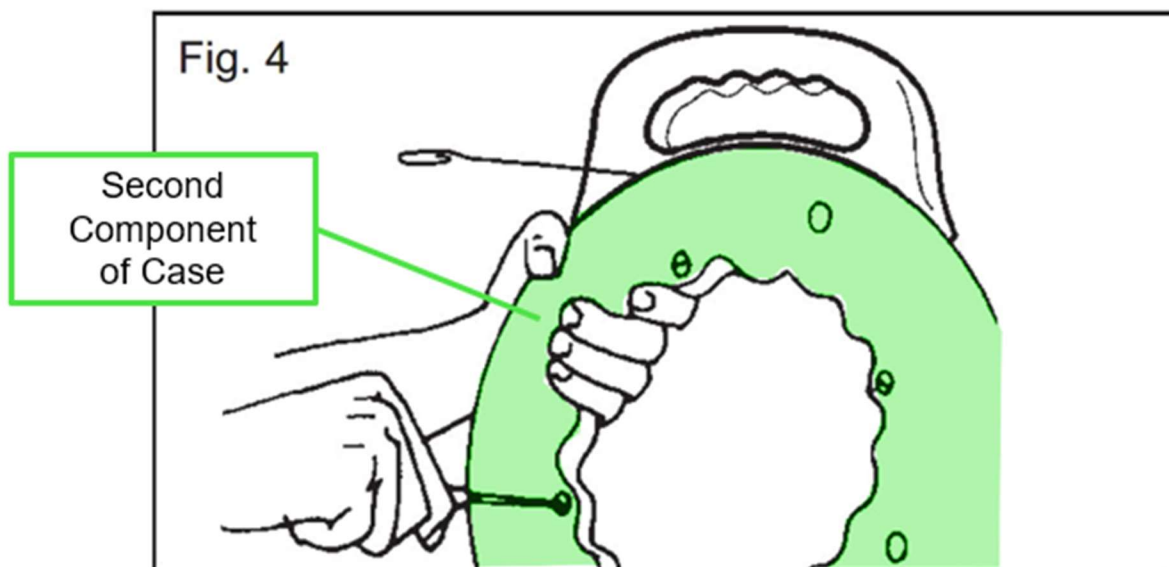
As shown below, the KP1 fish tape case is composed of a first component of the case (purple) and a second component of the case (green). The first component

¹⁴ See *supra* note 4 in § 6.1.6.

defines the sidewalls and portions of the innermost and outermost wall, and the second component defines the other of the sidewalls and other portions of the innermost and outermost walls. Together, the two components form the storage compartment, where the fish tape can be seen in the figures through the two viewports.

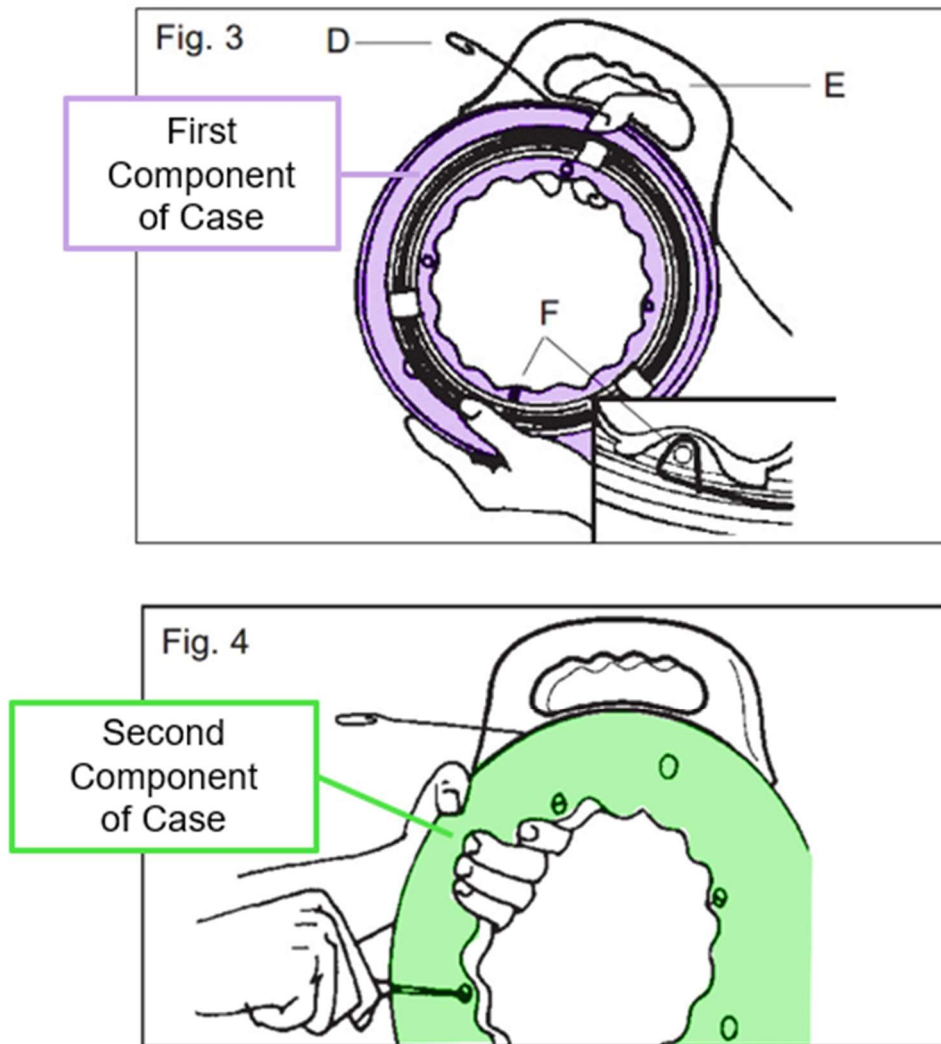


Ex.-1008 at 1



Ex.-1008 at 2

KP1 also teaches that these two components are separate and can open to reload the fish tape, as shown below and as further explained in §6.1.4.3.



Ex.-1008 at 2

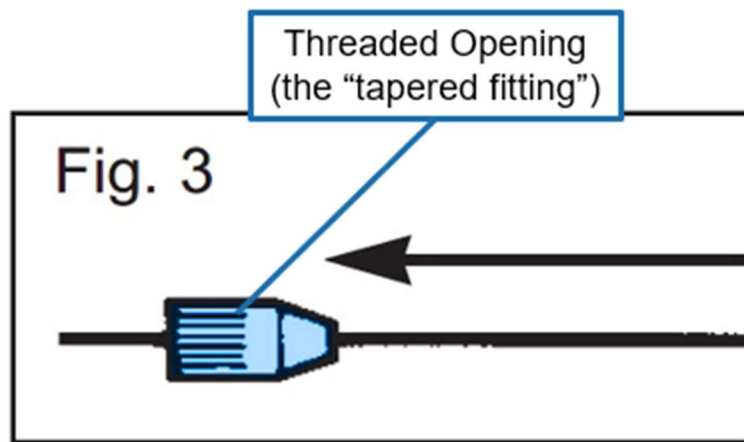
Therefore, KP1-SP1 renders obvious a fish tape system “wherein one of the sidewalls and portions of the innermost and outermost walls are defined by a first component of the case [shown in purple], and the other of the sidewalls and other portions of the innermost and outermost walls are defined by a second component of the case [shown in green], the first and second components being assembled

together to form the storage compartment [shown in when the two components are opened to reveal the fish tape in the storage compartment].” Ex.-1008 at 1, 2; Ex.-1003, ¶¶180-183.

6.3.8 Claim 5

Claim 5 depends from claim 1, which KP1-SP1 renders obvious. *Supra* §§5.3.2.1-5.3.2.5. Claim 5’s added features are obvious, too.

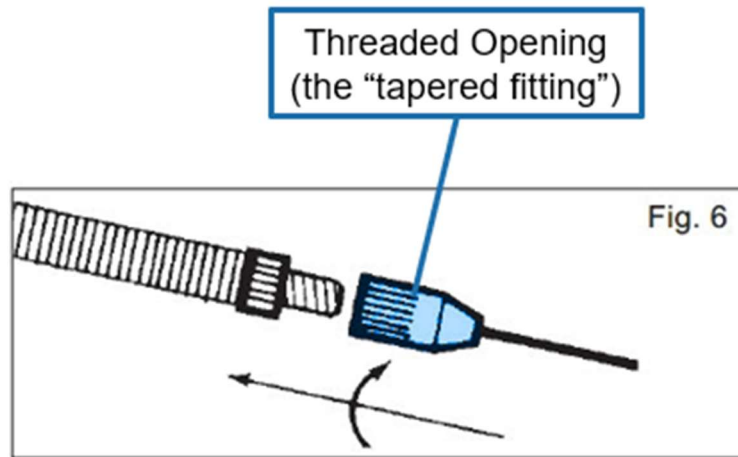
As shown in the annotated figure below, KP1 teaches that the “pulling loop at [the] end of [the] flat steel tape” can be “cut” or broken off and replaced with a “tapered fitting” (blue) that is pushed onto the tape end. Ex.-1008 at 2 (step 2 and step 3 in “How to Attach a Klein Fish-Tape Leader or Klein Fish-Tape Ball.”)



Ex.-1008 at 2

KP1, as shown below, teaches that this “tapered fitting,” or threaded opening (blue), can be used to attach a leader to the end of the fish tape by “turn[ing]

tapered fitting onto exposed threads of leader (Fig. 6). Be sure leader turns freely on tape end.” Ex.-1008 at 2.



Ex.-1008 at 2

Therefore, KP1 renders obvious a fish tape system “wherein the fish tape further comprises a threaded opening (shown in blue, the tapered fitting) in at least one of the first and second ends.” Ex.-1008 at 2; Ex.-1003, ¶¶184-187.

6.3.9 Claim 6

6.3.9.1 Elements 6[pre]-6[c]

As explained in § 6.1.8.1, for the purposes of this Petition, 6[pre]-6[c] are broader, and substantively analogous, to 1[pre]-1[c]. Thus 6[pre]-6[c] are also rendered obvious by KP1-SP1. *Supra* §§6.3.4.1-6.3.4.4; Ex.-1003, ¶188.

6.3.9.2 Elements 6[d]

As compared to 1[d], 6[d] states that “at least a portion of the case is configured to allow the luminescent material to be energized by light passing

through the portion,” rather than stating that “at least one of the sidewalls” does this. Because the sidewalls are a portion of the case, 6[d] is obvious for the same reasons as 1[d]. *Supra* §6.1.4.5.

Therefore, KP1-SP1 renders obvious a fish tape system “wherein at least a portion of the case [e.g., the viewports on the sidewalls of the case] is configured to allow the luminescent material [e.g., the luminescent material taught by SP1] to be energized by light passing through the portion.” *Supra* §6.3.4.5; Ex.-1003, ¶¶189-190.

6.3.10 Claim 7

Claim 7 depends from claim 6, which KP1- SP1 renders obvious. *Supra* §§6.3.9.1-6.3.9.2. Claim 7 differs from element 1[d] only in that where element 1[d] recites “at least one of the sidewalls of the case is configured to allow the luminescent material to be energized by light passing through the at least one of the sidewalls,” claim 7 refers only to “at least a portion of at least one of the sidewalls.” *Supra* § 6.3.4.5.

If at least one of the sidewalls is configured to allow the luminescent material to be energized, then at least a portion of at least one of the sidewalls is as well.

Therefore, KP1-SP1 renders obvious a fish tape system “wherein at least a portion of at least one of the sidewalls of the case is configured to allow [e.g., the

viewports on the sidewalls] the luminescent material [e.g., the luminescent material taught by SP1] to be energized by light passing through the at least one of the sidewalls.” *Id.*; Ex.-1003, ¶¶191-193.

6.3.11 Claim 8

Claim 8 depends from claim 6, which KP1-SP1 renders obvious. *Supra* §§6.3.9.1-6.3.9.2. Claim 8 differs from claim 2 only in that where claim 2 recites: “both of the sidewalls are configured to allow the luminescent material to be energized by light passing through the sidewalls,” claim 8 refers only to “*at least portions of* both of the sidewalls of the case are configured to allow the luminescent material to be energized by light passing through the sidewalls.”

If both of the sidewalls are configured to allow the luminescent material to be energized, then *at least portions of* both of the sidewalls are as well.

Therefore, claim 8 is obvious for reasons similar to claim 2. *Supra* §6.3.5; Ex.-1003, ¶¶194-196.

6.3.12 Claim 9

Claim 9 depends from claim 6, which KP1-SP1 renders obvious. *Supra* §§6.3.9.1-6.3.9.2. Claim 9 adds: “wherein at least portions of all the walls¹⁵ of the case are transparent.¹⁶” It would have been obvious for a POSA to modify KP1 to teach this.

As discussed in §6.1.5, KP1-SP1 has viewport cutouts on both of the sidewalls of the case. Further, as discussed in §6.3.6, it would have been obvious to a POSA to modify the KP1 fish tape case to have viewport cutouts in “at least one of the innermost and outermost walls.” It would have been obvious to a POSA for the same reasons to have viewport cutouts in *both* the innermost and outermost walls since viewport cutouts in both the innermost and outermost walls would allow even more of the fish tape to be inspected by an electrician (e.g., to see if the fish tape had

¹⁵ The term “all the walls” lacks antecedent basis. To the extent that this is not indefinite, for purposes of this Petition only, it is understood to refer to “a pair of sidewalls,” “a radially innermost wall,” and “a radially outermost wall.”

¹⁶ In the ITC, PO has asserted that “a lack of material” in the case can be within the scope of “transparent to allow,” which while Petitioner reserves the right to contest this understanding, Petitioner has adopted it in Ground 3 in this Petition. Ex.-1016 at ¶ 23

gotten tangled or caught in the case), would allow even more luminescent material to be energized by light passing through the walls, and because it would be even cheaper to manufacture and would require less materials when compared to only having viewport cutouts in *either* the innermost and outermost walls. §§6.1.4.5, 6.1.5, 6.1.6.

Therefore, KP1-SP1 renders obvious a fish tape system “wherein at least portions of all the walls of the case are transparent [e.g., the viewport cutouts on the sidewalls and the viewport cutouts that would have been obvious to a POSA to make on the innermost and outermost walls].” *Id.*; Ex.-1003, ¶¶197-199.

6.3.13 Claim 10

Claim 10 depends from claim 6, which KP1-SP1 renders obvious. *Supra* §§6.3.9.1-6.3.9.2. Added language in Claim 10 is analogous to claim 4 and is obvious for similar reasons. *Supra* §6.3.7. Ex.-1003, ¶200.

6.3.14 Claims 11 and 12

Claim 11 and 12 depend from claim 10, which KP1-SP1 renders obvious. *Supra* §6.3.13. Claim 11 adds: “wherein at least one of the first and second components comprises a transparent material” and claim 12 says both components are transparent. KP1-SP1 teaches both configurations.

As described in §6.1.4.5, 6.1.5, KP1 teaches viewport cutouts in both the sidewalls of the case. Since the sidewalls are part of “the first and second

components,” of the case, and since, to the extent Patent Owner argues that cutouts meets the limitation requiring transparent material sections, cutouts are “a transparent material,” KP1-SP1 also teaches this limitation.

Therefore, KP1-SP1 renders obvious a fish tape system wherein one or both the first and second components (e.g., the sidewalls) comprises a transparent material (e.g., the viewport cutouts). §6.1.4.5, 6.1.5; Ex.-1003, ¶¶201-203.

6.3.15 Claim 13

Claim 13 depends from claim 6, which KP1-SP1 renders obvious. *Supra* §§6.1.8.1-6.1.8.2. Added language in Claim 13 is analogous to claim 5 and is obvious for similar reasons. *Supra* §6.3.8, Ex.-1003, ¶204.

6.3.16 Claim 14

6.3.16.1 Elements 14[pre], 14[a], and 14[c]

For the purposes of this Petition, 14[pre], 14[a], 14[c] are broader, and substantively analogous, to 6[pre], 6[a], 6[c]. It thus follows *a fortiori* that 14[pre], 14[a], 14[c] are also taught by KP1-SP1. *Supra* §§6.1.8.1-6.1.8.2; Ex.-1003, ¶205.

6.3.16.2 Element 14[b]

KP1-SP1 teaches element 14[b].

As described in §6.3.9.1 for limitation 6[b], KP1-SP1 teaches “a donut shaped **case** having a pair of sidewalls extending between a radially innermost wall and a radially outermost wall, an annular opening extending around a circumference

of one of the inner and outer walls, the sidewalls being spaced from each other to define **a fish tape storage compartment that stores the length of fish tape for deployment via the annular opening in the case.**” (emphasis added to show similarity in claim language). Since limitation 6[b] is a broader version of limitation 14[b], and since KP1-SP1, as show in §6.3.9.1, teaches limitation 6[b], KP1-SP1 also teaches limitation 14[b] for similar reasons. *Id.*; Ex.-1003, ¶¶206-207.

6.3.16.3 Element 14[d]

As compared to 6[d], 14[d] states that “wherein at least a portion of the case is configured to allow the luminescent material to be energized by light passing through the portion and into the storage compartment,” adding on the terms “*and into the storage compartment.*”

If the luminescent material on the fish tape is “energized by light passing through the portion” of the case, then that light also passes *into the storage compartment* because the fish tape is stored entirely within the storage compartment. *Supra* §6.3.4.3.

Therefore, element 14[d] is obvious for reasons similar to element 6[d]. *Id.*; Ex.-1003, ¶¶208-210.

6.3.17 Claim 15

Claim 15 depends from claim 14, which KP1-SP1 renders obvious. *Supra* §§6.3.16.1-6.3.16.3. Claim 15 adds: “wherein the storage compartment has an annular shape bounded by a pair of spaced sidewalls.”

As described in §6.3.9.1 for claim 6[b], KP1 teaches “a donut shaped case having a pair of sidewalls extending between a radially innermost wall and a radially outermost wall, **an annular opening** extending around a circumference of one of the inner and outer walls, **the sidewalls being spaced from each other to define a fish tape storage compartment** that stores the length of fish tape for deployment via the annular opening in the case.” (emphasis added to show similarity in claim language).

If the case has an annular opening extending around a circumference of one of the inner and outer walls and the sidewalls are spaced from each other to define a fish tape storage compartment, then the case is “has an annular shape” and is “bounded by a pair of spaced sidewalls.” *Id.*

Therefore, KP1-SP1 renders claim 15 obvious for similar reasons to element 6[b]. *Id.*; Ex.-1003, ¶¶211-214.

6.3.18 Claim 16

Claim 16 depends from claim 15, which KP1-SP1 renders obvious. *Supra* §6.3.17. Claim 16 adds: “wherein at least a portion of at least one of the sidewalls is transparent.”

As described in §6.3.10 for claim 7, KP1-SP1 teaches “wherein at least a portion of at least one of the sidewalls of the case is configured to allow the luminescent material to be energized by light passing through the at least one of the sidewalls” via the viewports on the sidewalls of the case.

If the viewports on the sidewalls of the case allow the luminescent material to be energized by light passing through the at least one of the sidewalls, then “at least a portion of at least one of the sidewalls is transparent.”

Therefore, KP1-SP1 renders claim 16 obvious for similar reasons to claim 7. *Id.*; Ex.-1003, ¶¶215-218.

6.3.19 Claim 17

Claim 17 depends from claim 16, which KP1-SP1 renders obvious. *Supra* §6.3.18. Claim 17 differs from claim 8 only in that where element claim 8 recites “at least portions of both of the sidewalls of the case are configured to allow the luminescent material to be energized by light passing through the sidewalls,” claim 17 leaves out “at least” and swaps out “configured to allow the luminescent material to be energized by light passing through the sidewalls” for “transparent.”

As described in §6.3.11 for claim 8, KP-SP1 teaches “wherein at least portions of both of the sidewalls of the case are configured to allow the luminescent material to be energized by light passing through the sidewalls” via the viewports on the sidewalls of the case.

If viewports on both of the sidewalls of the case allow the luminescent material to be energized by light passing through the sidewalls, then “portions of both of the sidewalls are transparent.”

Therefore, KP-SP1 renders obvious claim 17 for similar reasons to claim 8. *Id.*; Ex.-1003, ¶¶219-222.

6.3.20 Claim 18

Claim 18 depends from claim 16, which KP1-SP1 renders obvious. *Supra* §6.3.18. Claim 18 is substantively analogous, if not identical, to the combined limitations of claims 10 and 11 and is obvious for similar reasons. *Supra* §6.3.13, 6.3.14; Ex.-1003, ¶223.

6.4 Ground 4: Claims 1-18 Lack Written Description under 35**U.S.C. §112(a)****6.4.1 The Phrase “configured to allow the luminescent material to be energized,” as Recited by Claims 1, 6, and 14, is Not Supported By the Specification**

Section 112(a) contains a written description requirement separate from the enablement requirement. *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1344 (Fed. Cir. 2010). In particular, the Federal Circuit has held that “claims may be no broader than the supporting disclosure,” and are invalid if they attempt to expand beyond what is described as the invention. *Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1479-81 (Fed. Cir. 1998) (invalidating claims for lack of written description where the patent described sofas with recliner controls located on a central console but the claims read on sofas with recliner controls located elsewhere); *ICU Medical, Inc. v. Alaris Medical Systems, Inc.*, 558 F.3d 1368, 1378-1379 (2009) (finding claims that did not require a valve with a spike to lack written description support when the only disclosed embodiment described a medical valves with spikes).

With respect to this ground, claim 1 is representative of the independent claims. Claim 1 of the '573 Patent differs from claim 1 of the '209 Patent by a single

word. Namely, claim 1 of the '573 Patent states that “at least one of the sidewalls” is “configured” (as opposed to “transparent”) “to allow the luminescent material to be energized by light passing through the portion.”¹⁷

To the extent that Patent Owner argues that claims 1 of the '573 and '209 Patent differ in scope (which Patent Owner must to avoid statutory double patenting), claim 1 of the '573 Patent lacks written description because neither the original specification of the '573 Patent nor its parent application (which is substantively identical) describes “sidewalls of the case” being “configured to allow the luminescent material to be energized” in any manner other than transparent portions of the sidewalls. Rather, every sentence describing how the luminescent material is energized, each reproduced below, explains that a portion of the case is transparent:

¹⁷ Claims 6 and 14 state “wherein at least a portion of the case is configured to allow the luminescent material to be energized by light passing through the portion.” Claims 6 and 14 are identical to claims 6 and 14 of the '209 Patent, but for the “configured”/“transparent” change.

At least a portion of the case is transparent to allow the luminescent material 22 to be energized by light passing through the transparent portion and into the storage compartment.	Abstract
At least a portion of the case is transparent to allow the luminescent material to be energized by light passing through the portion	Col. 1, ll. 57-59 (Brief Summary of the Disclosure)
As one feature, the outermost wall has the annular opening extending around a circumference of the outer wall, and at least one of the sidewalls of the case is transparent to allow the luminescent material to be energized by light passing through the at least one of the sidewalls.	Col. 1, ll. 60-64 (Brief Summary of the Disclosure)

In one feature, both of the sidewalls of the case are transparent to allow the luminescent material to be energized by light passing through the sidewalls.	Col. 1, ll. 65-67 (Brief Summary of the Disclosure)
According to one feature, at least one of the innermost and outermost walls is transparent to allow the luminescent material to be energized by light passing through the sidewalls.	Col. 2, ll. 1-4 (Brief Summary of the Disclosure)
At least a portion of the case is transparent to allow the luminescent material to be energized by light passing through the portion and into the storage compartment.	Col. 2, ll. 45-47 (Brief Summary of the Disclosure)

At least a portion of the case 14 is transparent to allow the luminescent material 22 to be energized by light passing through the transparent portion and into the storage compartment 26.	Col. 3, ll. 27-30 (Detailed Description of Preferred Embodiments)
In the illustrated and highly preferred embodiment, the walls 32, 34 and 36 are all transparent to allow the luminescent material 22 to be energized by light passing into the compartment 26 through the wall 32, 34, and 36.	Col. 3, ll. 55-58 (Detailed Description of Preferred Embodiments)

As can be seen above, the '573 Patent does not disclose different ways to energize the luminescent material or teach a myriad of configurations that allow light to pass through to the case. Rather, the '573 Patent describes only a single way: a transparent portion of the case. Indeed, the '573 Patent's detailed description includes only two sentences that address this aspect of the invention at all, with the remaining sentences from the brief description merely parroting the original claim

language of the parent application. Moreover, the only differing embodiments relating to this feature concern which and how many portions of the case are transparent. The '573 Patent does not evidence the fact that Patent Owner was in possession of any way to energize the luminescent material other than a transparent portion of the case. Ex.-1003 ¶¶224-228. This is exactly analogous to Gentry Gallery's sofa console. *See Beigene USA, Inc. and Beigene, Ltd. V. Pharmacyclics LLC*, PGR2024-00009, Paper 9 at 22, 26-27, 43. (PTAB May 1, 2024) (instituting post-grant review because the specification failed to provide written description for the full scope of the structural limitations of claims 1 and 8); *Development Technologies, LLC v. E.I. Du Pont De Nemours and Company*, PGR2018-00102, Paper 6 at 7-9 (PTAB April 3, 2019) (instituting post-grant review for the "once filled...the porous tubes will remain filled" limitation of claim 1 as the specification lacked "any meaningful description of the fluid-retention capability of claim 1").

Thus, claims 1, 6, and 14, and their associated dependent claims, are invalid for lack of sufficient written description because the claimed "configured" term is broader than the disclosure of a "transparent" housing. Ex.-1003 ¶¶224-228.

6.5 Ground 5: Claims 1-13 are indefinite under 35 U.S.C.**§112(b)****6.5.1 The Specification Does Not Provide an Objective Standard for the Term “donut shaped,” as Recited by Claims 1 and 6**

“Cognizant of the competing concerns” the definiteness requirement §112(b) requires “that a patent’s claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty. The definiteness requirement, so understood, mandates clarity, while recognizing that absolute precision is unattainable.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 910 (2014). “When a subjective term is used in the claim, the [question is] whether the specification supplies some objective standard for measuring the scope of the term. Some objective standard must be provided in order to allow the public to determine the scope of the claim. A claim term that requires the exercise of subjective judgment without restriction may render the claim indefinite.” MPEP 2173.05(b); *In re Musgrave*, 431 F.2d 882, 893 (CCPA 1970).

A donut is not defined only by its shape. Rather “[a] doughnut, or donut, is a sweet, deep-fried piece of dough or batter. The two most common types are the torus-shaped ring doughnut and the filled doughnut, a flattened sphere injected with

jam/jelly, cream, custard, or another sweet filling.” Ex.-1011 at 1; *see also* Ex.-1012 at 3 (showing “donut” as an alternate spelling of “doughnut”). In fact, Washington Irving described ‘dough-nuts’, in his 1809 History of New York, as ‘**balls** of sweetened dough, fried in hog’s fat, and called dough-nuts, or olykoeks.” (emphasis added). Ex.-1013 at 67. The ring donut was purportedly not introduced until 1847, 38 years after Washington Carver described the donut as a ball. Ex.-1017 at 2. Thus, the term “donut shaped” is subjective, as the shape of a donut is in the eye of its creator, and critically there is more than one common shape for a donut. Ex.-1003 ¶¶ 229-230.

However, the specification and prosecution history do not provide an objective standard for applying any particular shape to the term. Ex.-1003 ¶231. The only description of “donut shaped” cases is as follows:

In the illustrated embodiment, the case 14 is **donut shaped** and includes a pair of sidewalls 32 (best seen in FIG. 5) extending between a radially innermost wall 34 and a radially outermost wall 36. The wall 36 includes the opening 28 in the form of an annular opening 28 extending around the entire circumference of the wall 36. The sidewalls 32 are spaced from each other, and in combination with inwardly facing annular surfaces 38 and 40 of the walls 34 and 36, respectively, define the storage compartment 26 with an annular shape. As best seen in FIGS. 1 and 5 , the illustrated and preferred case 14 is an assembly of two, half- case components 44 and 46 that are joined to each other using threaded fasteners 48. Each of the components 44 and 46 define one of the sidewalls 32 and approximately one-half of each of the walls 34 and 36 and are preferably molded using a

suitable process, such as injection molding. The annular opening 28 is defined between each portion of the wall 36 defined by each of the components 44 and 46. **Such constructions for donut shaped fish tape cases are well known**, with a few examples of such commercially cases being offered by Ideal Electronics under model numbers 31-542, 31-056, and 31-064; by Gardner Bender under model numbers FTS-125R, FTS-250R, and FTS-50B; and Klein Tools under model numbers 56001, 56014, 56002, and 56005.

(’573 Patent, col. 1, ll. 31-54).

The text above describes how donut shaped cases that include an annular opening may be constructed (“Such constructions for donut shaped fish tape cases are well known”), and one can fairly infer that a storage compartment with an annular shape is an example of a donut shaped case. But this disclosure falls short of providing an objective measure of the metes and bounds of the shape of a donut, as it fails to inform a POSA of the limits of the term donut shaped. Ex.-1003 ¶¶231-232. Moreover, while the particular models of fish tape cases listed above all have holes, the holes are not all the same or even similar in shape, as shown below:



Gardner Bender FT-250R



Ideal Electric 31-064



Klein Tools 56331

Do the claims require an annular opening, or are the models shown above merely examples of donut shaped cases? If an annular opening is required, does any construction with an annular opening, even a long cylinder, or an annular opening with an irregular shape, fall within the scope of the claims? The specification does

not inform a POSA of the answers to these questions. Ex.-1003 ¶¶232-240. Reasonable certainty is lacking. *Id.*; see *Mantissa Corp. v. First Fin. Corp.*, No. 2022-1963, 2024 WL 607717, at *3 (Fed. Cir. Feb. 14, 2024) (finding the term “transaction partner” in a limitation was indefinite because the term has “no commonly accepted definition” and was not supported by the specification); *HZNP Medicines LLC v. Actavis Lab’ys UT, Inc.*, 940 F.3d 680, 689–91 (Fed. Cir. 2019) (finding the term ‘Impurity A’ indefinite when the specification “provides no clue as to the identity of” it).

Thus, claims 1, 6, and their associated dependent claims are indefinite and thus invalid. Ex.-1003 ¶¶229-240.

7. No Secondary Considerations

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

8. Reservation of Rights Based on Bifurcated Discretionary-Denial

Considerations

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

9. Payment of Fees

The U.S. Patent and Trademark Office is hereby authorized to charge any fees due during the PGR proceeding to Deposit Account No. 50-0310 (Order No. 010768-8004).

10. Conclusion

As demonstrated above, the Challenged Claims are unpatentable, and, therefore, need to be canceled.

Dated: April 21, 2025

Respectfully Submitted,

/ Alexander B. Stein /

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

U.S. PATENT NO. 12,187,573 – LISTING OF CHALLENGED CLAIMS

Claim No.	Claim Element(s)
1[pre]	A fish tape system comprising:
1[a]	a fish tape having a length extending from a first end to a second end, the length of the fish tape comprising a luminescent material that emits light after being energized by exposure to a light source
1[b]	a donut shaped case having a pair of sidewalls extending between a radially innermost wall and a radially outermost wall, the outermost wall having an annular opening extending around a circumference of the outer wall, the sidewalls being spaced from each other to define a fish tape storage compartment that stores the length of fish tape for deployment via the annular opening in the case
1[c]	a handle engaged with the fish tape and mounted to slide within the annular opening of the case around the entire circumference of the outer wall to deploy the fish tape from the storage compartment and to reload the fish tape into the compartment
1[d]	wherein at least one of the sidewalls of the case is configured to allow the luminescent material to be energized by light passing through the at least one of the sidewalls
2	The fish tape system of claim 1, wherein both of the sidewalls of the case are configured to allow the luminescent material to be energized by light passing through the sidewalls.
3	The fish tape system of claim 2, wherein at least one of the innermost and outermost walls is configured to allow the luminescent material to be energized by light passing through the sidewalls.
4	The fish tape system of claim 1, wherein one of the sidewalls and portions of the innermost and outermost walls are defined by a first component of the case, and the other of the sidewalls and other portions of the innermost and outermost walls are defined

	by a second component of the case, the first and second components being assembled together to form the storage compartment.
5	The fish tape system of claim 1, wherein the fish tape further comprises a threaded opening in at least one of the first and second ends.
6[pre]	A fish tape system comprising:
6[a]	a fish tape having a length extending from a first end to a second end, the length of the fish tape comprising a luminescent material that emits light after being energized by exposure to a light source
6[b]	a donut shaped case having a pair of sidewalls extending between a radially innermost wall and a radially outermost wall, an annular opening extending around a circumference of one of the inner and outer walls, the sidewalls being spaced from each other to define a fish tape storage compartment that stores the length of fish tape for deployment via the annular opening in the case
6[c]	a handle engaged with the fish tape and mounted to slide within the annular opening of the case around the entire circumference to deploy the fish tape from the storage compartment and to reload the fish tape into the compartment
6[d]	wherein at least a portion of the case is configured to allow the luminescent material to be energized by light passing through the portion
7	The fish tape system of claim 6, wherein at least a portion of at least one of the sidewalls of the case is configured to allow the luminescent material to be energized by light passing through the at least one of the sidewalls.
8	The fish tape system of claim 6, wherein at least portions of both of the sidewalls of the case are configured to allow the

	luminescent material to be energized by light passing through the sidewalls.
9	The fish tape system of claim 6, wherein at least portions of all the walls of the case are transparent.
10	The fish tape system of claim 6, wherein one of the sidewalls and portions of the innermost and outermost walls are defined by a first component of the case, and the other of the sidewalls and other portions of the innermost and outermost walls are defined by a second component of the case, the first and second components being assembled together to form the storage compartment.
11	The fish tape system of claim 11, wherein at least one of the first and second components comprises a transparent material.
12	The fish tape system of claim 11, wherein both of the first and second components comprises a transparent material.
13	The fish tape system of claim 6, wherein the fish tape further comprises a threaded opening in at least one of the first and second ends.
14[pre]	A fish tape system comprising:
14[a]	a fish tape having a length extending from a first end to a second end, the length of the fish tape comprising a luminescent material that emits light after being energized by exposure to a light source
14[b]	a case having a fish tape storage compartment that stores the length of fish tape for deployment and reloading via an annular opening in the case
14[c]	a handle engaged with the fish tape and mounted to slide within the annular opening of the case around an entire circumference of the annular opening to deploy the fish tape from the storage compartment and to reload the fish tape into the compartment

14[d]	wherein at least a portion of the case is configured to allow the luminescent material to be energized by light passing through the portion and into the storage compartment
15	The fish tape system of claim 14, wherein the storage compartment has an annular shape bounded by a pair of spaced sidewalls.
16	The fish tape system of claim 15, wherein at least a portion of at least one of the sidewalls is transparent.
17	The fish tape system of claim 16, wherein portions of both of the sidewalls are transparent.
18	The fish tape system of claim 16, wherein the case comprises a pair of components that are joined to each other to define the storage compartment, and at least one of the pair of components comprises a transparent material.

CERTIFICATION OF COMPLIANCE WITH TYPE-VOLUME LIMITS

As counted by Microsoft Word, this Petition includes 17,277 words and is therefore in compliance with the 18,700-word limit established by 37 C.F.R. §42.24(a)(1)(i). Accordingly, pursuant to 37 C.F.R. §42.24(d), Petitioners' lead counsel hereby certifies that this Petition complies with the type-volume limits established for a PGR petition.

Dated: April 21, 2025

Respectfully Submitted,

/ Alexander B. Stein /

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

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §42.6(e)(4) and 42.105, lead counsel for Petitioners hereby certifies that on April 21, 2025, copies of this Petition and all supporting exhibits were sent via Federal Express to the correspondence address of record for the '573 Patent:

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

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