

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PENNINGTON S. HOPKINS

Appeal No. 2006-2280
Application No. 10/244,011
Technology Center 3600

ON BRIEF

Before CRAWFORD, LEVY and HORNER, *Administrative Patent Judges*.
HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from the examiner's final rejection of claims 1-28, all of the claims pending in the application.

We affirm-in-part and enter new grounds of rejection of claims 17, 18 and 26-28 pursuant to 37 C.F.R. § 41.50(b).

BACKGROUND

The appellant's invention relates to a support adapted to be mounted on a crutch or cane. Claims 1 and 23, reproduced below, are representative of the subject matter on appeal. A copy of all of the claims on appeal can be found in the appendix to the appellant's brief.

1. A support adapted to be mounted on a crutch having at least one longitudinally extending crutch strut of a selected length with a bottom end for engaging a walking surface and a top end with at least one under arm support extending laterally from the crutch strut, or adapted to be mounted on a cane of a selected length with a cane shaft having a bottom end for engaging a walking surface and a top end with a handle extending laterally from the can [*sic*] shaft, the support comprising:

a flexible pad having a first surface and a second surface in opposed relation to the first surface;

an adhesive area on at least one of the surfaces of the pad for adhering to the other surface of the pad upon engaging the other surface; the pad being adapted to form a tube when folded around the strut or shaft, the tube having an interior surface provided by the first surface for frictionally engaging the crutch strut or cane shaft to mount the tube thereon, the tube further having an exterior consisting essentially of an exterior surface adapted to frictionally engage an edge or curved surface to keep the crutch or cane supported at an angle to the vertical with the bottom end resting on a

walking surface, the tube having a length selected to be substantially less than that of the crutch strut or cane shaft.

23. In combination with a crutch having at least one longitudinally extending crutch strut with a bottom end for engaging a walking surface and a top end with at least one under arm support extending laterally from the crutch strut, or in combination with a cane with a cane shaft having a bottom end for engaging a walking surface and a top end with a handle extending laterally from the cane shaft:

an attachment on the crutch strut or cane shaft, the attachment having an exterior consisting essentially of an exterior surface for frictionally engaging an edge or curved surface to keep the crutch or cane supported with the bottom end resting on a walking surface, the attachment having a length extending above the center of gravity of the strut or shaft when the strut or shaft is vertically oriented.

The examiner relies upon the following as evidence of unpatentability:

Carpenter	4,884,730	Dec. 05, 1989
Crusor	6,000,414	Dec. 14, 1999
Finegan	6,036,607	Mar. 14, 2000
Shrader	6,410,848	Jun. 24, 2002
		Filed: Apr. 24, 2000

The following rejections are before us for review.

1. Claims 1-14 stand rejected under 35 U.S.C. § 112, second paragraph, for failing to particularly point out and distinctly claim the invention.

2. Claims 1 and 12-14 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Shrader.
3. Claims 1-7, 10-12 and 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Finegan.
4. Claims 1, 3-6, 10-12, 14-16, 19-21 and 23-28 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Carpenter.
5. Claims 23, 25, 26 and 28 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Crusor.
6. Claims 8, 9 and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Finegan in view of Shrader.
7. Claims 1-7, 10-12 and 14-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Carpenter in view of Finegan.
8. Claims 8, 9, 13 and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Carpenter in view of Finegan and Shrader.

Rather than reiterate in detail the conflicting viewpoints advanced by the examiner and the appellant regarding this appeal, we make reference to the examiner's answer (mailed January 6, 2006) for the examiner's complete reasoning in support of the rejections and to the appellant's brief (filed October 27, 2005)¹ and reply brief (filed March 3, 2006) for the appellant's arguments.

¹ The appellant filed a first Appeal Brief on April 18, 2005; however, the examiner found the brief defective because it did not comply with 37 C.F.R. § 41.37. *See* Notice of Non-Compliant Appeal Brief, mailed June 23, 2005. The appellant filed a second Appeal Brief on July 19, 2005, which was also defective. *See* Notice of Non-Compliant Appeal Brief, mailed September 27, 2005. The appellant filed a Revised Appeal Brief on October 27, 2005, on which we rely for the appellant's arguments. When we refer throughout this opinion to the appellant's brief, we are referring to the Revised Appeal Brief.

OPINION

In reaching our decision in this appeal, we have carefully considered the appellant's specification and claims, the applied prior art, and the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations that follow.

I. Rejection under 35 U.S.C. § 112, second paragraph

The examiner rejected claims 1-14 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the appellant regards as the invention. In particular, the examiner found that a portion in claim 1, which recites that the length of the tube is substantially less than the length of the crutch strut or cane shaft, is vague and indefinite because the cane and crutch are unclaimed articles, which makes the metes and bounds of the claim unclear. Answer, p. 3.

The appellant argues that the scope of the claim is clear, because the preamble recites that both the crutch strut and cane shaft have selected lengths. As such, the appellant argues that the crutch and cane are preexisting structures to which the inventive structure is applied. Brief, p. 11.

The test for definiteness under 35 U.S.C. § 112, second paragraph, is whether "those skilled in the art would understand what is claimed when the claim is read in light of the specification." *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986) (citations omitted). In this case, we hold that the claim language that recites the length of the tube is substantially less than the length of the crutch strut or cane shaft is not unclear. We find that one skilled in the art would understand that the limitation depends on the length of the cane or crutch to which the support is attached, and

thus the limitation is not vague just because there are many different sizes of crutches and canes. Accordingly, we do not sustain the examiner's rejection of claims 1-14 under 35 U.S.C. § 112, second paragraph.

II. Rejections under 35 U.S.C. § 102(b)

The examiner rejected claims 1-7, 10-12, 14-16, 19-21 and 23-28 under 35 U.S.C. §§ 102(e) and 102(b) over various references. The appellant argues generally that none of the cited references discloses a pad having “an exterior surface for frictionally engaging an edge or curved surface to keep the crutch or cane supported at an angle to the vertical with the bottom end resting on a walking surface.” Brief, p. 11. We address each rejection in turn.

A. Shrader

The examiner rejected claims 1 and 12-14 under 35 U.S.C. § 102(e) as being anticipated by Shrader. The appellant argues the rejected claims as a group. Brief, p. 12. As such, we select claim 1 as a representative claim. 37 C.F.R. § 41.37(c)(1)(vii) (2006).

The examiner found that Shrader discloses a flexible pad (20) having adhesive (11) on one surface to be connected to the other opposing surface, as shown in Figure 4, when the pad forms the tube, and wherein the adhesive has a removable patch (12). Answer, p. 3. The examiner further determined that although Shrader refers to a jacket for a cable, it is capable of being mounted on a crutch or a cane and the exterior surface of the jacket is capable of frictional engagement with an edge or surface. Answer, p. 7. The examiner correctly noted that a recitation of intended use of the claimed invention must result in a structural difference over the prior art in order to overcome an anticipation rejection, and if a prior art structure is capable of performing the intended use, then it meets the

claim. Answer, p. 7 (*citing In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963)).

The appellant argues that Shrader is non-analogous art, and that Shrader does not anticipate because it fails to solve the problem solved by the structure of the claims. Brief, p. 12 and Reply Brief, p. 2. The appellant further argues that the jacket of Shrader does not anticipate the claimed support, because it is “not adapted for mounting on a crutch or a cane” as claimed. Brief, p. 12.

It is well settled that the question of whether a reference is analogous art is irrelevant to whether that reference anticipates. *See State Contracting & Engineering Corp. v. Condotte America, Inc.*, 346 F.3d 1057, 1068, 68 USPQ2d 1481, 1488 (Fed. Cir. 2003) and *In re Schreiber*, 128 F.3d 1473, 1478, 44 USPQ2d 1429, 1432 (Fed. Cir. 1997) (holding that “[a] reference may be from an entirely different field of endeavor than that of the claimed invention or may be directed to an entirely different problem from the one addressed by the inventor, yet the reference will still anticipate if it explicitly or inherently discloses every limitation recited in the claims.”) Further, the recitation of a new intended use for an old product does not make a claim to that old product patentable. *Id.* at 1477, 44 USPQ2d at 1432. As such, we reject the appellant’s arguments that Shrader is not anticipatory because it is directed to non-analogous art and is directed to a different problem than the claimed invention.

The question before us, raised by the appellant’s other argument, is whether Shrader explicitly or inherently discloses every limitation recited in the claims. The appellant argues that Shrader does not disclose the limitation of a support adapted for mounting on a crutch or a cane. This limitation is found only in the preamble of claim 1. We must determine whether this language of the preamble

provides a structural limitation to the claimed support or whether it is merely a recitation of intended use of the claimed support.

“[A] claim preamble has the import that the claim as a whole suggests for it.” *Bell Communications Research, Inc. v. Vitalink Communications Corp.*, 55 F.3d 615, 620, 34 USPQ2d 1816, 1820 (Fed. Cir. 1995). “If the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is ‘necessary to give life, meaning, and vitality’ to the claim, then the claim preamble should be construed as if in the balance of the claim.” *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999) (*quoting Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 480-81 (CCPA 1951)). “If, however, the body of the claim fully and intrinsically sets forth the complete invention, including all of its limitations, and the preamble offers no distinct definition of any of the claimed invention's limitations, but rather merely states, for example, the purpose or intended use of the invention, then the preamble is of no significance to claim construction because it cannot be said to constitute or explain a claim limitation.” *Id.* The appellant has made clear that “the crutch and cane shafts [of the preamble] are not part of the invention, but are rather structures on which the invention is used.” Brief, p. 11 (emphasis added). We find that the “adapted to” language used in the preamble is merely a statement of the intended use of the support and is not a limitation of the claim. Rather, this language merely requires that the support is capable of being used on a cane shaft or a crutch strut. We see no reason why the jacket of Shrader would not be capable of such use. As such, we sustain the examiner’s rejection of claims 1 and 12-14 under 35 U.S.C. § 102(e) as being anticipated by Shrader.

B. Finegan

The examiner rejected claims 1-7, 10-12 and 14 under 35 U.S.C. § 102(b) as being anticipated by Finegan. The examiner determined that Finegan discloses a flexible rubber pad (30) having an adhesive area on a surface being a hook/loop type (34) to engage an opposing surface with hook/loop type fastener (32) when formed into a loop. Answer, p. 3.

The appellant argues the rejected claims as a group. Brief, pp. 12-13. As such, we select claim 1 as a representative claim. 37 C.F.R. § 41.37(c)(1)(vii) (2006). The appellant argues that the adjustable grip of Finnegan has a tapered grip which is adapted for use on a golf club. The appellant contends that the grip of Finnegan is not adapted for use on crutches or canes because they do not require a tapered grip. Brief, p. 12. For the reasons set forth *supra* in section II.A., we find that the “adapted to” language used in the preamble of claim 1 is merely a statement of the intended use of the support and is not a limitation of the claim. As such, the appropriate question for an anticipation determination is whether the adjustable grip of Finegan is capable of being used as the claimed support on a crutch or cane. Although crutches and canes might not require a tapered grip, as argued by the appellant, this does not mean the Finegan’s grip is not capable of being mounted on a crutch or a cane and frictionally engaging an edge or curved surface to keep the crutch or cane supported at an angle to the vertical with the bottom end resting on a walking surface. As such, we sustain the examiner’s rejection of claims 1-7, 10-12 and 14 under 35 U.S.C. § 102(b) as anticipated by Finegan.

C. Carpenter

The examiner rejected claims 1, 3-6, 10, 11, 12, 14-16, 19-21 and 23-28 under 35 U.S.C. § 102(b) as being anticipated by Carpenter. The examiner determined that Carpenter discloses a flexible pad of a strip of material (7) having hook and loop fastener (9) to form a sleeve on the shaft of a cane and is capable of sliding on the shaft of the cane and thus inherently could be located above the center of gravity of the cane when supported vertically against a surface. The examiner further determined that the strip of material (7) of Carpenter would inherently frictionally engage an edge or curved surface when the cane is leaned on the edge or curved surfaces. Answer, p. 4.

The appellant argues claims 1, 3-6, 10, 11, 12, 14-16, 19-21 and 23-25 as one group (Brief, p. 13) and argues claims 26-28 as another group (Brief, p. 14). We select claim 23 as a representative claim of the first group and claim 26 as a representative claim of the second group. 37 C.F.R. § 41.37(c)(1)(vii) (2006).

With regard to claim 23, the appellant argues that Carpenter does not disclose an attachment having an exterior surface for frictionally engaging an edge or curved surface. The appellant argues that the exterior surface of the strap (10) of Carpenter is used to facilitate engagement with a hook (4) connected to a chain (6), which is in turn mounted on the belt of the cane user. Brief, p. 13.

The issue for an anticipation determination is not what Carpenter teaches for the use of the strap; the question is whether the exterior surface of the attachment of Carpenter is capable of the claimed use. The examiner took the position that the strip of material (7) of Carpenter is capable of and would inherently frictionally engage an edge surface when leaned against such surface. We agree. Although the perpendicular strap (10) of Carpenter is used to hook the cane to the user's belt,

the strap (7) that is securely encircling the elongate shaft of the cane is, when put to the intended use of leaning it against an edge or curved surface, capable of frictionally engaging that edge or surface. Further, the top of the strap (7) is secured about the cane shaft by a “rubbery O-ring”. Carpenter, col. 1, lines 36-37 and col. 2, lines 2-5. We find that the rubbery O-ring attachment to the cane shaft would certainly frictionally engage the edge or curved surface to keep the cane supported with the bottom end resting on walking surface, as claimed. As such, we sustain the examiner’s rejection of claims 1, 3-6, 10, 11, 12, 14-16, 19-21 and 23-25 under 35 U.S.C. § 102(b) as being anticipated by Carpenter.

With regard to claim 26, the appellant argues that the claim is directed to the combination of a crutch and a pad and that Carpenter is directed only to canes and not to crutches. We agree. In order for a reference to anticipate a claimed invention, each and every element of the claim must be disclosed in a single reference. We find that claim 26 positively recites the crutch as part of a claimed combination, and there is no disclosure in Carpenter of applying the strap (7) to a crutch. As such, we do not sustain the examiner’s rejection of claims 26-28 under 35 U.S.C. § 102(b) as being anticipated by Carpenter.

We find it necessary, however, to enter a new ground of rejection of claims 26-28 under 35 U.S.C. § 103(a) as being unpatentable over Carpenter in view of U.S. Patent No. 4,300,742 to Hunn. Carpenter teaches that the purpose of its guard device is to enable a user to retrieve a cane if it is accidentally misplaced or dropped. Carpenter, col. 1, lines 21-24. Carpenter recognizes that “[m]any individuals who require the help of a cane when walking do not have the ability to recover a cane when it is accidentally dropped or misplaced.” Carpenter, col. 1, lines 9-11. Carpenter does not, however, disclose attaching this guard to a crutch.

We find that the common knowledge of one having ordinary skill in the art at the time the invention was made was that both crutches and canes suffer from the same problem of accidentally falling when leaned against the edge of a table or other surface. *See Dystar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1367, 80 USPQ2d 1641, 1650 (Fed. Cir. 2006) (“Our suggestion test is in actuality quite flexible and not only permits, but requires, consideration of common knowledge and common sense.”) Those persons having ordinary skill in the art recognized that a mechanism to maintain walking aid devices, such as crutches and canes, in a vertical position against the edge of a table or similar horizontal structure was needed. *See Hunn*, col. 1, lines 22-26 (directed to preventing a crutch from falling by using “an improved cane, crutch or pole holder which is removably attached to the cane itself, and provides positive clamping means by which the cane is held in a vertical position against the edge of a table or similar horizontal structure.”) The common knowledge was that this need was the same for canes and for crutches, both of which are devices used to aid a user in walking, and which are often rested against an edge of a table or other surface when not in use as a walking aid. We find that one having ordinary skill in the art, possessed with the teachings of Carpenter and with the common knowledge of one of ordinary skill that canes and crutches are both walking aid devices suffering from the same slippage problem, as noted in Hunn, would have been led to apply the guard device of Carpenter to a crutch to prevent a crutch from being dropped.

With regard to dependent claim 27, we find that Carpenter discloses that the attachment (shaft strap 7) is a sleeve, which is wrapped around the shaft of the cane. Carpenter, col. 1, lines 59-63. With regard to dependent claim 28, we find

that Carpenter discloses that the attachment is a strip of material (shaft strap 7) affixed to the shaft of the cane. We hold that it would have been obvious, in view of the teaching of the structure of the cane guard of Carpenter, to attach the strap (7) to a crutch strut based on the common knowledge, as acknowledged in Hunn, that crutches have a similar slippage problem when rested against an edge or other surface.

D. Crusor

The examiner rejected claims 23, 25, 26 and 28 under 35 U.S.C. § 102(b) as being anticipated by Crusor. The examiner determined that Crusor discloses a cane or crutch with frictional strip attachment (26) having a length above the center of gravity of the crutch when supported vertically from a curved surface (32). The examiner further determined that Crusor's assembly inherently can be used to support the cane even with the bottom end of the cane resting on a walking surface. Answer, p. 4.

The appellant argued claims 23 and 25 as one group and claims 26 and 28 as another group. As such, we treat claim 23 as a representative claim for the first group and claim 26 as a representative claim for the second group. 37 C.F.R. § 41.37(c)(1)(vii) (2006).

With regard to claim 23, the appellant argued that hooks and loops of the Velcro patch on the cane of Crusor do not create a frictional surface because the hooks and loops will slide against a corner or edge. The appellant further argued that because Crusor does not teach resting the cane against a corner or edge that it does not meet the limitation of a cane shaft or crutch strut having "an exterior surface for frictionally engaging an edge or curved surface to keep the cane or crutch supported with the bottom and resting on a walking surface." Brief, p. 13.

The examiner responded that the claim does not preclude a surface having a complimentary hook or loop. The examiner determined that Crusor's hook and loop patch would provide frictional engagement when the cane is disposed on the walking ground and leaned against an edge surface, because even a smooth contacting surface would provide some degree of friction depending on the edge surface material or the weight of the cane or crutch. Answer, p. 8.

With regard to the appellant's argument that Crusor does not teach leaning the cane against a corner or edge, for the same reasons provided *supra* in Section II.A., we hold that such a teaching is not required for an anticipation rejection as long as the structure disclosed in Crusor is capable of performing the recited function of frictionally engaging the edge or curved surface to keep the crutch or cane supported with the bottom end resting on a walking surface. As such, we do not find the appellant's argument about the lack of teaching in Crusor to be persuasive.

With regard to the appellant's argument that the attachment disclosed in Crusor would not frictionally engage an edge, but rather would slide against the edge, we must define the phrase "frictionally engage" to resolve this issue. The examiner has taken a broad interpretation of frictionally engage that is satisfied by virtually any material attached to a cane or crutch, because such material will inherently frictionally engage an edge when the cane is leaned against it so that the material attached to the cane comes in contact with the edge. The degree of frictional engagement will vary depending, for example, on the material attached to the cane and the weight of the cane.

We determine the scope of the claims in patent applications "not solely on the basis of the claim language, but upon giving claims their broadest reasonable

construction ‘in light of the specification as it would be interpreted by one of ordinary skill in the art.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) (*en banc*) (*quoting In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364, 70 USPQ2d 1827, 1830 (Fed. Cir. 2004)). We must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *See Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875, 69 USPQ2d 1865, 1868 (Fed. Cir. 2004) (“Though understanding the claim language may be aided by explanations contained in the written description, it is important not to import into a claim limitations that are not part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.”) The challenge is to interpret claims in view of the specification without unnecessarily importing limitations from the specification into the claims. *See E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003).

We remind appellant that it is their burden to precisely define the invention, not the PTO’s. *In re Morris*, 127 F.3d 1048, 1056, 44 USPQ2d 1023, 1029 (Fed. Cir. 1997). Appellant always have the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969).

The specification discusses the frictional engagement between the support and an edge of a table as follows:

The support device 20 is positioned above the center of gravity of the crutch 22. Consequently, when the bottom

end 36 of the crutch 22 is resting on a surface such as the walking surface 40, and the crutch is leaning against an edge 42 of, for example a table 44 (Fig. 1) or a counter top (Fig. 6), the weight of the crutch is applied against the support 20, generally in the form of a horizontal or lateral force component. This force component is sufficient to provide a frictional engagement between the support 20 and the edge 42 of the table 44. Preferably, the support 20 is made of a deformable material such as rubber so that there is increased area to provide sufficient frictional force to keep the crutch partially upright and available to a person when the person needs to resume use of the crutch 22. (Specification, page 5, lines 9-19).

In one example, the specification contrasts the conventional “smooth” surface of a strut of a crutch to the rubber, or rubber-like support material (20) having an exterior surface (80) that frictionally engages the edge (42) of a counter or the like or other supporting surface. The exterior surface (80) has a series of indentations (82) defining edges (84) which enhance frictional engagement with an edge (42) or other surface. Specification, page 7, line 5-6 and page 8, lines 16-20.

We must be careful not to read into the “frictionally engage” language the requirement that the support be made of rubber or a rubber-like material or that the exterior surface contain indentations, as described in one embodiment of the specification. We see no explicit definition of frictionally engage in the specification that defines an amount of frictional engagement between the support and an edge or other surface. We find, thus, that the broadest reasonable interpretation of “frictionally engage” means any amount of force between the exterior surface of the support and the edge or other surface against which it rests that resists relative motion between the support and the surface to keep the crutch or cane supported with the bottom end resting on a walking surface.

In the case of Crusor, the material that is secured to the cane (10) is a strip (26) of cooperative hook-pile fastening material. Crusor, col. 3, lines 10-12. Crusor describes that this material is conventionally fabricated of nylon. Crusor, col. 3, lines 47-48. We find that in a hook-pile fabric, the hooks on the exterior surface of the strip (26) provide an uneven surface. We find that this uneven nylon surface would be capable of frictionally engaging an edge or other surface when leaned against such surface, because the uneven surface and the hooks of the hook-pile material would engage the surface to provide a force to resist relative motion between the material and the surface. As such, we sustain the examiner's rejection of claims 23 and 25 under 35 U.S.C. § 102(b) as being anticipated by Crusor.

With regard to claim 26, the appellant argued that the claim is directed to the combination of a crutch and a pad and that Crusor is directed only to canes and not to crutches. We agree. As explained in Section II.C. *supra*, claim 26 positively recites the crutch as part of a claimed combination. We find no disclosure in Crusor of applying the hook-pile attachment to a crutch. As such, we do not sustain the examiner's rejection of claims 26 and 28 under 35 U.S.C. § 102(b) as being anticipated by Crusor.

III. Rejections under 35 U.S.C. § 103(a)

A. Finegan and Shrader

The examiner rejected claims 8, 9 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Finegan in view of Shrader. The examiner determined that Finegan discloses all of the claimed features except for the adhesive area being provided with a removable patch. The examiner found that Shrader teaches a flexible pad (20) having adhesive (11) on one surface to be connected to the other opposing surface when the pad forms the tube and shows that the adhesive has a

removable patch (12). The examiner found that it would have been obvious to one of ordinary skill in the art to modify the fastener of Finegan by providing adhesive with a removable patch, as taught in Shrader, because such modification would have involved mere substitution of one well-known fastener for another well-known type which is well within the ambit of one of ordinary skill in the art. Answer, pp. 4-5.

The appellant argues that Shrader is non-analogous art and that only in the light of the appellant's claimed invention would one combine Shrader, which relates to a cable jacket, with Finnegan, which relates to an adjustable grip for a golf club. We agree with the appellant.

The analogous-art test requires that the Board show that a reference is either in the field of the applicant's endeavor or is reasonably pertinent to the problem with which the inventor was concerned in order to rely on that reference as a basis for rejection. *In re Oetiker*, 977 F.2d 1443, 1447 (Fed. Cir. 1992). References are selected as being reasonably pertinent to the problem based on the judgment of a person having ordinary skill in the art. *Id.* (“[I]t is necessary to consider ‘the reality of the circumstances,’ -in other words, common sense-in deciding in which fields a person of ordinary skill would reasonably be expected to look for a solution to the problem facing the inventor.” *Id.* (quoting *In re Wood*, 599 F.2d 1032, 1036 (C.C.P.A.1979))).

In re Kahn, 441 F.3d 977, 986-87, 78 USPQ2d 1329, 1335-1336 (Fed. Cir. 2006).

We find that Shrader is not in the field of the applicant's endeavor of attaching flexible pads to crutches or canes. We further see no reason why one having ordinary skill in the art would combine the teaching of a reference relating to cable jackets with the teachings of a reference relating to a golf club grip to solve the

problem facing the inventor. A person of ordinary skill would not reasonably be expected to look for a solution to the inventor's problem in the field of heat shrinkable plastic jackets supporting cables. As such, we do not sustain the examiner's rejection of claims 8, 9 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Finegan in view of Shrader.

B. Carpenter and Finegan

The examiner rejected claims 1-7, 10-12 and 14-21 under 35 U.S.C. § 103(a) as being unpatentable over Carpenter in view of Finegan. The examiner determined that Carpenter disclose a flexible elastomeric or rubber sleeve (2) that is slidable on the shaft of the cane and would inherently frictionally engage an edge or surface when the cane is placed on the walking surface and leaned against such surface. The examiner found that Carpenter does not disclose that the rubber sleeve (2) is a pad rolled into a sleeve using Velcro or adhesive areas on the pad surface. The examiner relied on Finegan for the teaching of a flexible rubber pad (30) having an adhesive area (11) on a surface being a hook/loop type (34) to engage an opposing surface with a hook/loop type fastener (32) when formed into a loop to facilitate easy assembly. The examiner found that it would have been obvious to one of ordinary skill in the art to modify the rubber sleeve of Carpenter such that it is of a pad type rolled into a sleeve form connected by a hook/loop type fastener, as taught by Finegan, for easy assembly. Answer, p. 5.

The appellant argues that Carpenter solves the problem of retrieving a cane that has been misplaced or dropped by using a complex structure that attaches the cane to the user's belt. The appellant contends that there is no teaching or suggestion in Carpenter to solve the problem of preventing a cane from falling over in the first place by attaching a pad that is adapted to frictionally engage an edge or

curved surface. The appellant further argues that Finegan does not cure the deficiencies of Carpenter and that one skilled in the art would not think of combining Finegan with Carpenter in the absence of the appellant's teachings. Brief, pp. 15-16. The motivation-suggestion-teaching test for obviousness was recently described in *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1337 (Fed. Cir. 2006),

[T]he "motivation-suggestion-teaching" test asks not merely what the references disclose, but whether a person of ordinary skill in the art, possessed with the understandings and knowledge reflected in the prior art, and motivated by the general problem facing the inventor, would have been led to make the combination recited in the claims. From this it may be determined whether the overall disclosures, teachings, and suggestions of the prior art, and the level of skill in the art – i.e., the understandings and knowledge of persons having ordinary skill in the art at the time of the invention-support the legal conclusion of obviousness. (internal citations omitted).

The court further explained that the general problem facing the inventor in this analysis "is not the specific problem solved by the invention but the general problem that confronted the inventor before the invention was made. *Kahn*, 441 F.3d at 988, 78 USPQ2d at 1336 (citations omitted). In this case, the general problem to be solved was to develop a mechanism for preventing a cane or crutch from falling when not in use. We agree with the appellant that a person having ordinary skill in the art at the time of the invention, possessed with the teaching of Carpenter to attach the cane to a user's belt and the teaching of Finegan to attach an adjustable grip to a golf club, would not have been led to solve the problem facing the invention by making the support recited in the claims absent hindsight.

As such, we do not sustain the examiner's rejection of claims 1-7, 10-12 and 14-21 under 35 U.S.C. § 103(a) as being unpatentable over Carpenter in view of Finegan.

We find it necessary, however, to enter a new ground of rejection of claims 17 and 18 under 35 U.S.C. § 103(a) as being unpatentable over the combined teachings of Carpenter and U.S. Patent No. 6,520,194 to Frazier. We find that Carpenter discloses a flexible pad (shaft strap 7) which has an adhesive area (hook and loop fastening means 9) for adhering first and second opposed surfaces of the pad, where the pad forms a tube when folded around the cane shaft (Figure 1), and an exterior adapted to frictionally engage an edge or curved surface to keep the cane supported (see Section II.C. *supra*), where the tube (strap 7) has a length substantially less than the shaft (Figure 1). We further find that the tube of Carpenter is disposed between the center of gravity of the cane and the handle. Carpenter, Figure 1. Carpenter does not disclose that the strap (7) is made of rubber or is deformable under the lateral component of the weight of the cane, as recited in claims 17 and 18, respectively.

Frazier discloses a holder for canes for reducing the possibility that the cane will fall when it is hung on a table, counter, or other elevated, horizontal surface. Frazier, col. 1, lines 30-33. Frazier teaches "a tubular member that fits onto a cane, umbrella or similar accessory on the handle or otherwise one or near one end of the longitudinal member of the accessory." Frazier, col. 1, lines 38-41. Frazier further teaches that "[t]he tubular member may be split in order to allow the tubular member to fit over a larger range of sizes of handles or longitudinal members." Frazier, col. 1, lines 46-48. In one embodiment, Frazier describes that the tubular member (100) has diameter that allows the end of the longitudinal member (201) to be inserted into the tubular member (100) and frictionally held in place. Frazier,

col. 2, lines 20-23. Frazier further teaches that the tubular member (100) is at least partly constructed of a flexible material or the entire holder may be formed of the same flexible material. Frazier, col. 2, lines 23-27. Frazier teaches applying a contact surface (105, 305) to the tubular member (100) and that this contact surface must be of a high-friction texture which is preferably formed of rubber. Frazier, col. 3, lines 24-36. We note that rubber is a flexible and deformable material. Frazier does not teach an adhesive area on the ends of the tubular member for adhering the ends together.

One having ordinary skill in the art at the time of the invention, possessed with the teaching of Frazier to use a tubular member around the shaft (longitudinal portion) of a cane having a high friction contact surface of rubber to prevent slippage, and possessed with the teachings of Carpenter to attach a strap around cane shaft to form a tube using a hook-and-loop fastener on the ends of the strap, would have been led to add a hook-and-loop attachment to the tubular member of Frazier in order to make the attachment of the tubular member to the cane stronger. *See Dystar*, 464 F.3d at 1368, 80 USPQ2d at 1651 (holding that when an improvement is technology independent, an implicit motivation to combine can be found based on a universal desire to enhance commercial opportunities when the combination results in a product or process that is more desirable, for example because it is stronger, cheaper, cleaner, faster, lighter, smaller, more durable, or more efficient.)

C. Carpenter, Finegan and Shrader

The examiner rejected claims 8, 9, 13 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Carpenter in view of Finegan and Shrader. The examiner determined that Carpenter and Finegan combined disclose all of the claimed

features except for the adhesive area being provided with a removable patch. The examiner found that Shrader teaches a flexible pad (20) having adhesive (11) on one surface to be connected to the other opposing surface when the pad forms the tube and shows that the adhesive has a removable patch (12). The examiner found that it would have been obvious to one of ordinary skill in the art to modify the sleeve forming fastener of Carpenter and Finegan combined by providing adhesive with a removable patch, as taught in Shrader, because such modification would have involved mere substitution of one well-known fastener for another well-known type, which is well within the ambit of one of ordinary skill in the art. Answer, pp. 5-6. For the reasons set forth in Sections III.A. and III.B. *supra*, we find no motivation to combine the teachings of Carpenter, Finegan and Shrader that would have led one having ordinary skill in the art to the support as claimed. As such, we do not sustain the examiner's rejection of claims 8, 9, 13 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Carpenter in view of Finegan and Shrader.

CONCLUSION

To summarize:

1. The decision of the examiner to reject claims 1-14 under 35 U.S.C. § 112, second paragraph, is not sustained.
2. The decision of the examiner to reject claims 1 and 12-14 under 35 U.S.C. § 102(e) as being anticipated by Shrader is sustained.
3. The decision of the examiner to reject claims 1-7, 10-12 and 14 under 35 U.S.C. § 102(b) as being anticipated by Finegan is sustained.

4. The decision of the examiner to reject claims 1, 3-6, 10-12, 14-16, 19-21 and 23-25 under 35 U.S.C. § 102(b) as being anticipated by Carpenter is sustained.
5. The decision of the examiner to reject claims 26-28 under 35 U.S.C. § 102(b) as being anticipated by Carpenter is not sustained.
6. The decision of the examiner to reject claims 23 and 25 under 35 U.S.C. § 102(b) as being anticipated by Crusor is sustained.
7. The decision of the examiner to reject claims 26 and 28 under 35 U.S.C. § 102(b) as being anticipated by Crusor is not sustained.
8. The decision of the examiner to reject claims 8, 9 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Finegan in view of Shrader is not sustained.
9. The decision of the examiner to reject claims 1-7, 10-12 and 14-21 under 35 U.S.C. § 103(a) as being unpatentable over Carpenter in view of Finegan is not sustained.
10. The decision of the examiner to reject claims 8, 9, 13 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Carpenter in view of Finegan and Shrader is not sustained.
11. We enter a new ground of rejection, pursuant to 37 C.F.R. § 41.50(b), of claims 26-28 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Carpenter and Hunn.
12. We enter a new ground of rejection, pursuant to 37 C.F.R. § 41.50(b), of claims 17 and 18 under 35 U.S.C. § 103(a) as being unpatentable over the combination of Frazier and Carpenter.

This decision contains new grounds of rejection pursuant to 37 C.F.R. § 41.50(b), which provides, "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review." 37 C.F.R. § 41.50(b) also provides that the appellant, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of the appeal as to the rejected claims:

- (1) *Reopen prosecution*. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner....
- (2) *Request rehearing*. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. The request for rehearing must address any new ground of rejection and state with particularity the points believed to have been misapprehended or overlooked in entering the new ground of rejection and also state all other grounds upon which rehearing is sought.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED IN PART; 37 CFR § 41.50(b)

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MURRIEL E. CRAWFORD)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
STUART S. LEVY)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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LINDA E. HORNER)	
Administrative Patent Judge)	

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