

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

(Serial No. 11/073,914)

IN RE GARY J. POND

2011-1179

Appeal from the United States Patent and Trademark
Office, Board of Patent Appeals and Interferences.

Decided: January 18, 2012

PATRICK J. FLEIS, Ryan Kromholz & Manion, S.C., of
Milwaukee, Wisconsin, for appellant.

RAYMOND T. CHEN, Solicitor, Office of the Solicitor,
United States Patent and Office, of Alexandria, Virginia,
for appellee. With him on the brief were KRISTI L. R.
SAWERT, Associate Solicitor, and JOSEPH G. PICCOLO,
Associate Solicitor.

Before RADER, *Chief Judge*, DYK and REYNA, *Circuit
Judges*.

PER CURIAM.

Gary J. Pond (“Pond”) appeals the decision of the Board of Patent Appeals and Interferences (“Board”) affirming the U.S. Patent and Trademark Office’s (“PTO”) rejection of all claims of U.S. Patent Application Serial No. 11/073,914 (“’914 application”) as anticipated under 35 U.S.C. § 102(b) by U.S. Patent No. 5,127,831 to Bab (“’831 patent” or “Bab”). *In re Pond*, No. 2009-008521, 2010 Pat. App. LEXIS 18283 (B.P.A.I. Oct. 12, 2010). Because substantial evidence supports the Board’s determination, this court affirms.

I

The ’914 application claims a “unitary, one-piece” dental irrigation tip that can be used to deliver fluids to a dental site, e.g., for delivery of dental fluid into a gingival pocket. ’914 app. pp.1-2; J.A. 110. According to the specification, the claimed invention’s “unitary, one-piece construction” is accomplished by “integrally form[ing]” the rigid proximal section 102 and flexible distal section 106 via a molding process,” such as insert molding. ’914 app. p.4 ll.1-2, 15-18; p.6 ll.5-9. Claim 1 is representative and reads as follows.

A unitary, one-piece dental irrigation tip for delivering fluids from a dental tool to a dental site, said tip comprising:

a proximal section, said proximal section providing releasable locking means to said dental tool;

a distal section, said distal section providing at least one opening for fluid delivery;

a fluid passageway passing from said proximal section to said at least one opening;

said proximal section and said distal section being of *unitary, one-piece construction*.

'914 app. p.7 ll.2-12 (emphasis added).

In the First Office Action, in relevant part, the PTO rejected claims 1-9 of the '914 application under 35 U.S.C. § 102(b) as anticipated by Bab. The rejection explains:

Bab discloses a unitary, one-piece dental irrigation tip . . . for delivering fluids from a dental tool to a dental site, said dental tip formed by an insert molding process . . . , said tip comprising: a proximal section . . . ; a distal section . . . ; a fluid passageway passing from said proximal section to said at least one opening; and said proximal section and said distal section being of unitary, one-piece construction; wherein said distal end has a first end and a second end, said first end being integrally formed with said proximal section, . . . , said fluid passageway passing from said proximal section to said plurality of openings; wherein said distal section is flexible; [and] wherein said proximal section is substantially rigid.

J.A. 58. In response, Pond asserted that Bab comprised a two-piece dental tip, not a unitary, one-piece dental irrigation tip. In the Second Office Action, the PTO found Pond's arguments concerning Bab to be unconvincing and noted that, in addition to its earlier statements, Bab "specifically teaches that the flexible part section is fixed to the arm section by means such as . . . insert molding." J.A. 99. Pond then filed an appeal with the Board and made a variety of arguments, e.g., fixing two pieces together was not the same as one piece and that "[u]nitary means a single, whole section." J.A. 112. The examiner responded that Bab taught the elements of claims 1-9 of

the '914 application. Specifically, the examiner noted that the Bab reference formed a dental tip with the same process claimed in the '914 application, and that the Bab tip was a single piece and not two separate pieces together. The Board affirmed the examiner's rejection of claims 1-9 of the '914 application under 35 U.S.C. § 102(b). *Pond*, 2010 Pat. App. LEXIS 18283, at *4. The Board also did not find a "structural difference" between Bab and the '914 application and noted that Pond had not "adequately pointed to any structural difference." *Id.*

Pond timely filed this appeal. Pond did not contest the PTO's findings that Bab disclosed "a dental irrigation tip having a proximal section having a releasable locking means (a luer lock), a distal section having at least one opening for fluid delivery, and a fluid passageway passing from said proximal section to said at least one opening." *Pond*, 2010 Pat. App. LEXIS 18283, at *2-3. As such, the only claim limitation Pond contends that Bab does not disclose is the "unitary, one-piece construction" in independent claims 1 and 5. As acknowledged by Pond in its Appeal Brief to the Board, claim 5 "delineat[es] the process used to form the tip." J.A. 110.

The examiner properly noted that a product-by-process claim does not add a patentable distinction when the claimed product is the same as the cited art's product. *See In re Thorpe*, 777 F.2d 695, 697 (Fed. Cir. 1985). As such, this court need only address claim 1 because the remaining claims stand or fall with it. Therefore, the only issue presented is whether the irrigation tip disclosed by Bab is of a "unitary, one-piece construction" as required by all claims in the '914 application. This court has jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

II

This court reviews factual findings of the Board to determine if they are supported by substantial evidence. See *In re Gartside*, 203 F.3d 1305, 1312-16 (Fed. Cir. 2000). The teachings of a reference and whether a claim is anticipated are questions of fact. *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1259 (Fed. Cir. 2010); *In re Beattie*, 974 F.2d 1309, 1311 (Fed. Cir. 1992). “Substantial evidence is something less than the weight of the evidence but more than a mere scintilla of evidence, and means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” *Suitco*, 603 F.3d at 1259 (internal citations omitted).

This court must address whether the Board’s interpretation of “unitary, one-piece construction” is reasonable. The Board found “that the process of insert molding of two materials having similar properties results in bonding of the two parts such that the end product is of a unitary, one-piece construction.” *Pond*, 2010 Pat. App. LEXIS 18283, at *3 (citing ’914 app. p.2 ll.19-22, p.6 ll.5-19).

The specification for the ’914 application does not contain an express definition of “unitary, one-piece construction.” Therefore *Pond* did not act as a lexicographer and define the phrase “unitary, one-piece construction.” Moreover the ’914 application does not contain any disclosure that renders the PTO’s interpretation of that term unreasonable. See *In re Morris*, 127 F.3d 1048, 1056 (Fed. Cir. 1997).

During examination, the PTO gives claims “their broadest reasonable construction consistent with the specification.” *Suitco*, 603 F.3d at 1259 (quoting *In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007)). In this case, the PTO properly reviewed the

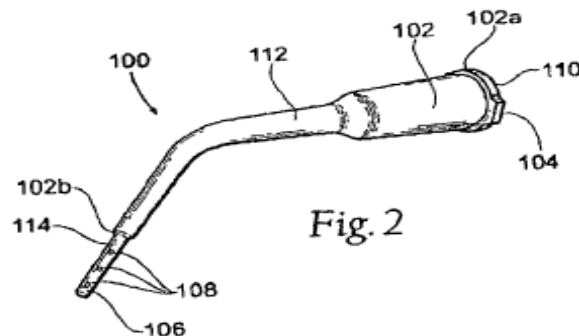
specification of the '914 application to verify the meaning of “unitary, one-piece construction.” See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1315 (Fed. Cir. 2005) (en banc) (“[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’”). The specification of the '914 application describes an embodiment that constructs the dental tip by insert molding. Thus, under the broadest reasonable construction the “unitary, one-piece construction” includes products made by insert molding. The specification describes the insert molding process as “injecting a polymer around a core material, which could be another polymer, a ceramic perform [sic] or a metal component.” '914 app. p.6 ll.10-12. With insert molding, a separate piece, i.e., the “insert,” is placed in the cavity prior to injection, and the fluidized plastic is injected around it such that the insert becomes encapsulated in the final piece. See *Chambers Dictionary of Science and Technology* 607 (Peter M B Walker ed., 1999) (defining “insert”). Thus, the Board gave a reasonable reading to the contested claim term.

“To anticipate a claim, a single prior art reference must expressly or inherently disclose each claim limitation.” *Finisar Corp. v. DirecTV Group, Inc.*, 523 F.3d 1323, 1334 (Fed. Cir. 2008). See also, *Verdegaal Bros. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987). The Board discovered no error in the examiner’s finding that “Bab disclose[d] the proximal and distal sections can both be made of polyethylene and that the tip can be formed by an insert molding process,” which “results in a unitary, one-piece dental irrigation tip.” *Pond*, 2010 Pat. App. LEXIS 18283, at *3. According to the '914 application, insert molding had “not [been] previously used for forming dental tips,” '914 app. p.6 ll.12-13; however, Bab repeatedly discloses using insert molding to form dental

tips. Indeed, Pond cited Bab in the '914 application as “[a]n example” of a flexible end dental tip, '914 app. p.1 ll.13-18.

Turning to the cited art, Bab discloses a flexible-end irrigation probe consisting of two parts: “a rigid, straight, or bent, metal or plastic arm with a proximal connection,” e.g., luer lock, and “a short, flexible, plastic distal end with a blunt tapered or round tip.” '831 patent col.2 ll.41-46. Further, Bab discloses that, based on the combination of materials, the flexible end may be fixed to the arm by a variety of means, including insert molding. *Id.* col.2 ll.46-49, col.3 ll.14-23. The probe is used “for the delivery of antibiotic/antiseptic or other physiologic and medically compatible solutions” and the distal end is “designed for the atraumatic nonsensitizing penetration into the gingival sulcus/periodontal pockets.” *Id.* col.2 ll.51-60. Pond repeatedly argues that Bab does not anticipate the '914 application because Bab discloses two separate parts that are joined together and cannot disclose a “unitary, one-piece construction.” To the contrary, Bab recites a plastic distal end that may be fixed to a plastic arm using insert molding. *See id.* col.3 ll.5-23.

The examiner and the Board discerned no structural difference between Bab and the claimed invention of the '914 application. Figure 2 of the '914 application illustrates a front perspective view of the claimed invention.



According to the specification the “unitary, one-piece construction” is made by “integrally form[ing]” the rigid proximal section 102 and flexible distal section 106 using a molding process and includes “insert molding” as an example. ’914 app. p.4 ll.1, 15-18; p.6 ll.5-9. Figures 1(a)-(c) of Bab illustrate side views of the claimed device, where Figures 1(b)-(c) illustrate bent probes. ’831 patent col.2 ll.24-30.

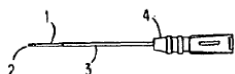


FIG. 1(a)

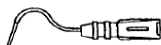


FIG. 1(b)

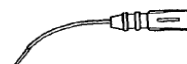


FIG. 1(c)

Bab discloses a dental irrigation probe having a flexible distal end 1 with a blunt tapered/round tip 2 that is fixed to a rigid arm 3 and a connection hub 4, where the distal end can be fixed to the rigid arm by insert molding. *Id.* col.2 ll.24-30, 46-48. Further, comparison between the specifications reveals that Bab describes the claimed invention in like fashion to the ’914 application. Therefore the record shows that Bab does describe a “unitary, one-piece construction.” See ’914 app. p.4 ll.20-22 (“While the sections [] are described as individual sections, they are nonetheless formed as a single unitary dental tip 100.”). Thus, the record shows that the Board correctly found that Bab contains all limitations of claims 1-9 of the ’914 application.

For the aforementioned reasons, this court determines that the Board did not err in either its interpretation of the contested claim term or anticipation analysis. Therefore, this court affirms because substantial evidence

supports the Board's determination that claims 1-9 of the '914 application are anticipated under 35 U.S.C. § 102(b) by Bab.

AFFIRMED.