

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

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**GE LIGHTING SOLUTIONS, LLC,**  
*Plaintiff-Appellant,*

**v.**

**AGILIGHT, INC.,**  
*Defendant-Appellee.*

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2013-1267

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Appeal from the United States District Court for the Northern District of Ohio in No. 12-CV-0354, Judge James S. Gwin.

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Decided: May 1, 2014

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RICHARD L. RAINEY, Executive Counsel, IP Litigation, General Electric Company, of Fairfield, Connecticut, argued for plaintiff-appellant. With him on the brief were ROBERT J. MCAUGHAN, JR. and JEFFREY A. ANDREWS, Sutton McAughan Deaver PLLC, of Houston, Texas.

JONATHAN D. PAUERSTEIN, Rosenthal Pauerstein Sandoloski Agather LLP, of San Antonio, Texas, argued for defendant-appellee. With him on the brief were HARRY D. CORNETT, JR. and BENJAMIN C. SASSÉ, Tucker Ellis LLP, of Cleveland, Ohio.

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

Opinion for the court filed by *Circuit Judge* MOORE.

Opinion concurring in part and dissenting in part filed by *Circuit Judge* REYNA.

MOORE, *Circuit Judge*.

GE Lighting Solutions, LLC (GE) appeals from the district court's grant of summary judgment that AgiLight, Inc.'s (AgiLight) accused products and processes do not infringe asserted claims of GE's U.S. Patent Nos. 7,160,140, 7,520,771, 7,832,896, and 7,633,055. We *reverse* the grant of summary judgment with regard to the '140, '771 and '896 patents and *remand*. We *affirm* the grant of summary judgment with regard to the '055 patent.

#### BACKGROUND

GE sued AgiLight, alleging infringement of various claims of the asserted patents. After claim construction, the parties stipulated to noninfringement of the '140 and '771 patents on the grounds that AgiLight's products do not include an "IDC connector" as construed by the court. The district court entered partial summary judgment consistent with the parties' stipulation. *GE Lighting Solutions, LLC v. AgiLight, Inc.*, C.A. No. 12-cv-00354-JG (N.D. Ohio Jan. 8, 2013), ECF No. 38. The district court also granted AgiLight's motion for summary judgment of noninfringement of the '896 and '055 patents. *GE Lighting Solutions, LLC v. AgiLight, Inc.*, C.A. No. 12-cv-00354-JG (N.D. Ohio Mar. 18, 2013), ECF No. 43 (*Summary Judgment Order*). GE appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

## DISCUSSION

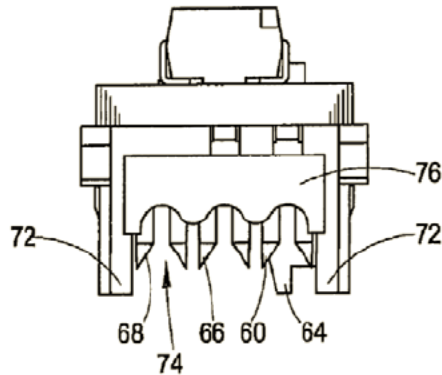
We review claim construction *de novo*. *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d 1272, 1276–77 (Fed. Cir. 2014) (en banc). We review the grant of summary judgment under the law of the relevant regional circuit. The Sixth Circuit reviews grants of summary judgment *de novo*. *Moore v. Holbrook*, 2 F.3d 697, 698 (6th Cir. 1993). Summary judgment is appropriate when there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. *Id.*

## I. '140 and '771 Patents

The '140 and '771 patents<sup>1</sup> are directed to light-emitting diode (LED) string lights that include an LED, an insulated electrical conductor (*i.e.*, wire), and an insulation displacement connector (IDC connector). '140 patent, Abstract. Power must be provided from the insulated electrical conductor to the LEDs. To accomplish this, the patents disclose an IDC connector with terminals (60, 66, 68) that are electrically connected to the LEDs and configured to displace a portion of the insulation surrounding the electrical conductor. *Id.* col. 4 ll. 5–53, Fig. 6 (reproduced in part below). For example, as a wire is received in channel 74, terminal 68 displaces (*i.e.*, cuts) insulation surrounding the wire to create an electrical connection between the wire and the terminal (and thus the LED). *Id.*

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<sup>1</sup> The '771 patent is a continuation-in-part of the '140 patent.



The asserted claims of these two patents recite a string light engine including, among other things, an IDC connector. Claim 1 of the '140 patent is representative (emphases added):

A string light engine comprising:

a flexible insulated electrical conductor;

a first support comprising a dielectric layer and circuitry;

*a first IDC connector* extending away from the first support and in electrical communication with the circuitry of the first support, *the first IDC connector* comprising a terminal that is inserted into the conductor to provide an electrical connection between the conductor and the circuitry of the first support;

a first LED mounted on the first support and in electrical communication with the circuitry of the first support; and

a first overmolded housing at least substantially surrounding the first support and a portion of the conductor adjacent the first support.

The district court recognized that an “IDC connector” “is commonly used in electrical engineering to connote a

range of devices,” but found that the ’140 and ’771 patents were limited to a “more specialized IDC connector.” *GE Lighting Solutions, LLC v. AgiLight, Inc.*, C.A. No. 12-cv-00354-JG, slip op. at 11 (N.D. Ohio Dec. 13, 2012), ECF No. 32 (*Claim Construction Order*). The court relied on the embodiment disclosed in Figure 6 and limitations of several dependent claims to construe IDC connector as requiring (1) four electrical terminals; (2) a two-part housing that snaps together to enclose three insulated conductors; (3) the snapping together allows the terminals to cut or pierce through the conductor’s insulation while preventing the conductor from moving out of the housing; and (4) a conductive connection between the terminal and the insulated conductor. *Id.* at 11–14. Based on this construction, the parties stipulated to noninfringement.

We hold that the district court incorrectly construed “IDC connector.” There is no dispute that the plain meaning of IDC connector is “a connector that displaces insulation surrounding an insulated conductor to make electrical contact with the conductor.” Appellant’s Br. at 34–35; *see also* Reply Br. at 11–12. Nor is there any dispute that IDC connector is a commonly used term that connotes a range of known devices.

Nothing in the intrinsic record requires a departure from this plain and ordinary meaning. AgiLight is certainly correct that claim terms must be construed in light of the specification and prosecution history, and cannot be considered in isolation. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). However, the specification and prosecution history only compel departure from the plain meaning in two instances: lexicography and disavowal. *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). The standards for finding lexicography and disavowal are exacting. To act as its own lexicographer, a patentee must “clearly set forth a definition of the disputed claim

term,” and “clearly express an intent to define the term.” *Id.* Similarly, disavowal requires that “the specification [or prosecution history] make[] clear that the invention does not include a particular feature.” *SciMed Life Sys. Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1341 (Fed. Cir. 2001).

There is no lexicography or disavowal here. The specifications and their prosecution histories do not define IDC connector or include any indication that the inventors intended to act as their own lexicographers. Likewise, while the specifications only disclose a single embodiment of an IDC connector in Figure 6, they do not disavow or disclaim the plain meaning of IDC connector or otherwise limit it to that embodiment. A patent that discloses only one embodiment is not necessarily limited to that embodiment. *Saunders Grp., Inc. v. Comfortrac, Inc.*, 492 F.3d 1326, 1332 (Fed. Cir. 2007). “[I]t is improper to read limitations from a preferred embodiment described in the specification—even if it is the only embodiment—into the claims absent a clear indication in the intrinsic record that the patentee intended the claims to be so limited.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 913 (Fed. Cir. 2004).

There are certainly cases where we have found disavowal or disclaimer based on clear and unmistakable statements by the patentee that limit the claims, such as “the present invention includes . . .” or “the present invention is . . .” or “all embodiments of the present invention are . . .” See, e.g., *Regents of Univ. of Minn. v. AGA Med. Corp.*, 717 F.3d 929, 936 (Fed. Cir. 2013); *Honeywell Int’l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1316–19 (Fed. Cir. 2006); *SciMed Life Sys., Inc.*, 242 F.3d at 1343–44. We have found disclaimer when the specification indicated that for “successful manufacture” a particular step was “require[d].” *Andersen Corp. v. Fiber Composites, LLC*, 474 F.3d 1361, 1367 (Fed. Cir. 2007). We have found

disclaimer when the specification indicated that the invention operated by “pushing (as opposed to pulling) forces,” and then characterized the “pushing forces” as “an important feature of the present invention.” *SafeTCare Mfg., Inc. v. Tele-Made, Inc.*, 497 F.3d 1262, 1269–70 (Fed. Cir. 2007). We also have found disclaimer when the patent repeatedly disparaged an embodiment as “antiquated,” having “inherent inadequacies,” and then detailed the “deficiencies [that] make it difficult” to use. *Chicago Bd. Options Exch., Inc. v. Int’l Sec. Exch., LLC*, 677 F.3d 1361, 1372 (Fed. Cir. 2012). Likewise, we have used disclaimer to limit a claim element to a feature of the preferred embodiment when the specification described that feature as a “very important feature . . . in an aspect of the present invention,” and disparaged alternatives to that feature. *Inpro II Licensing, S.A.R.L. v. T-Mobile USA Inc.*, 450 F.3d 1350, 1354–55 (Fed. Cir. 2008).

Such circumstances are not present in this case. The specifications consistently refer to the IDC connector of Figure 6 merely as a “depicted embodiment.” *See, e.g.*, ’140 patent col. 4 ll. 5–7, 16–17. They do not describe the depicted IDC connector—or any of the various limitations set forth by the district court—as the present invention, as essential, or as important. Nor do they disparage other IDC connectors. This is simply not a case where the patentee has disavowed the plain meaning of the term IDC connector.

The district court also erred by importing limitations from the dependent claims of the ’140 patent into the independent claims. *See Claim Construction Order* at 11–13. For example, dependent claim 11 requires the IDC connector to include three wires and dependent claim 12 requires the IDC connector to include four terminals—both features included in the district court’s construction. The doctrine of claim differentiation, however, creates a presumption that these dependent claim limitations are

not included in the independent claim. *Liebel-Flarsheim*, 358 F.3d at 909. Of course, claim differentiation is not a hard and fast rule, and the presumption can be overcome by a contrary construction required by the specification or prosecution history, such as via a disclaimer. *Seachange Int'l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1369 (Fed. Cir. 2005). In this case, however, nothing in the specification or prosecution history rebuts the presumption of claim differentiation. We thus hold that the district court erred by incorporating the dependent claim limitations into the construction of IDC connector.

An “IDC connector” in the ’140 and ’771 patents is “a connector that displaces insulation surrounding an insulated conductor to make electrical contact with the conductor.” It was error to import the structural limitations of the preferred embodiment and the structural limitations of the dependent claims into the term IDC connector. We reverse the district court’s grant of summary judgment of noninfringement of the ’140 and ’771 patents, and remand for further proceedings based on this construction.

## II. ’896 Patent

The ’896 patent discloses an optical element that houses an LED and interacts with the light emitted therefrom to increase its viewing angle. ’896 patent col. 6 ll. 25–43, Fig. 7. All of the asserted claims recite a light engine with an “optical element having a substantially ellipsoidal inner profile and generally spherical outer profile.” On appeal, GE challenges the district court’s determination on summary judgment that the accused AgiLight structure lacks a substantially ellipsoidal inner profile.

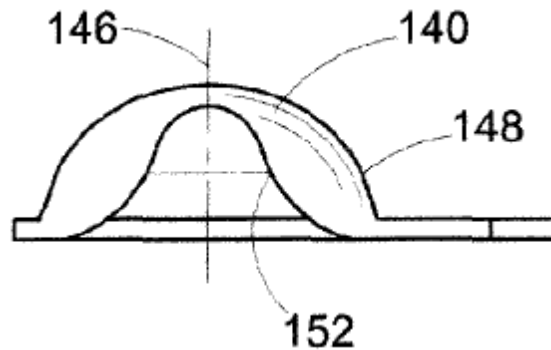


#### A. “substantially ellipsoidal inner profile”

The parties stipulated that “substantially ellipsoidal inner profile” should be construed as “an inner three-dimensional surface where the sum of the distances from two focal points and the points on the inner surface is substantially constant.” The dispute over this term pertains to an issue not addressed by the stipulation: whether the entire inner profile must be substantially ellipsoidal or whether the claims can be met if a portion of the inner profile is substantially ellipsoidal. This is not an uncommon occurrence—parties in patent cases frequently stipulate to a construction or the court construes a term, only to have their dispute evolve to a point where they realize that a further construction is necessary.

The district court held that “the *entirety* of the [AgiLight] lens” must be substantially ellipsoidal. *Summary Judgment Order* at 11–13 (emphasis added). The district court found that a portion of the AgiLight lens was “arguably” ellipsoidal, but that the AgiLight lens also included non-ellipsoidal, conical portions. *Id.* at 11. Thus, the court granted summary judgment of noninfringement. *Id.* at 13.

This is a close case: whether the entire inner profile must be substantially ellipsoidal. Neither the claim language, “the optical element having a . . . substantially ellipsoidal inner profile,” nor the stipulated construction, “an inner three-dimensional surface . . .” directly addresses this issue. In this case, were we to adopt AgiLight’s proposed construction, that the *entire* inner profile must be substantially ellipsoidal, we would exclude the specification’s only disclosed embodiment. Figure 7, reproduced in part below, depicts a side view elevation of the refractive dome 140. It includes inner profile 152 and outer profile 148.



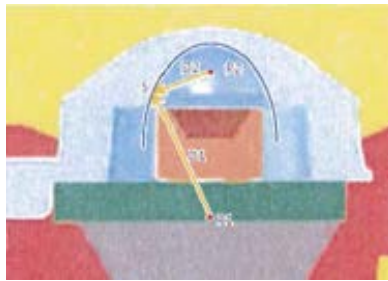
Explaining this figure, the specification states that this “dome 140 has a spherical outer profile, or outer surface, 148 and an *ellipsoidal inner profile*, or inner surface 152.” ’896 patent col. 6 ll. 33–36 (emphasis added). According to the patent, the inner profile 152 of Figure 7 is ellipsoidal. It is undisputed that only a portion of the inner profile 152 (the part above the line at 152) is substantially ellipsoidal. The bottom half of that inner profile (the portion below the line at 152) is not arguably substantially ellipsoidal. Yet the specification expressly refers to this inner profile as ellipsoidal. And this is the only reference to the ellipsoidal inner profile in the specification.

We normally do not construe claims in a manner that would exclude the preferred embodiment, especially where it is the only disclosed embodiment. *See MBO Labs., Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333 (Fed. Cir. 2007). In particular, “where claims can reasonably [be] interpreted to include a specific embodiment, it is incorrect to construe the claims to exclude that embodiment, absent probative evidence on the contrary.” *Oatey Co. v. IPS Corp.*, 514 F.3d 1271, 1277 (Fed. Cir. 2008). No such evidence exists in this case that would require us to construe “substantially ellipsoidal inner profile” in a manner that would exclude the Figure 7 embodiment. There are no statements during prosecution

or in the specification that indicate the patentee's intent to limit his claim to an entire inner profile that is substantially ellipsoidal. And the specification makes clear that the patentee considered Figure 7 to have an "ellipsoidal inner profile." We conclude that district court erred when it required the entire inner profile to be substantially ellipsoidal. The "substantially ellipsoidal inner profile" limitation can be met if a portion of the inner profile is substantially ellipsoidal determined in accordance with the stipulation.

Given this construction, there is a genuine factual dispute as to whether the accused structure includes a "substantially ellipsoidal inner profile." The district court recognized that a portion of the inner profile of AgiLight's structure is "arguably" ellipsoidal. *Summary Judgment Order* at 11. The depictions of the accused product, over which GE's attorney imposed an image that AgiLight agrees meets the construction of "substantially ellipsoidal inner profile," reflect a genuine factual dispute as to whether the AgiLight structure includes a substantially ellipsoidal inner profile. *See* J.A. 865, 867 (reproduced below).

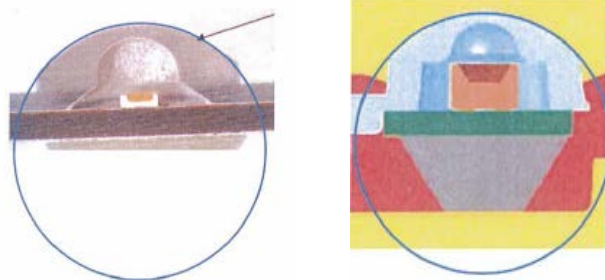




We agree with AgiLight that attorney argument, alone, may not create a material question of fact regarding technical evidence. Here, however, it was AgiLight's own expert who provided the cross-sectional images of the AgiLight devices. Those images are evidence. GE's attorney merely placed an image of an undisputedly substantially ellipsoidal inner profile over AgiLight's cross-sectional images. These cross-sectional images point to a genuine dispute as to whether AgiLight's accused devices include a substantially ellipsoidal inner profile. We thus reverse the district court's grant of summary judgment with regard to the '896 patent and remand.

#### B. "generally spherical outer profile"

As an alternative basis for affirming summary judgment of noninfringement of the '896 patent, AgiLight argues that its accused products do not include a "generally spherical outer profile." The parties stipulated that "generally spherical outer profile" should be construed as "an outer three-dimensional surface where the points on the surface are generally equidistant from a center point." AgiLight asserts that its expert explained that the outside of the lens could not be considered generally spherical. It contends that GE's attorney annotations of the AgiLight cross sections (reproduced below) only show that the lens looks circular, not that it has an outer surface with points that are "generally equidistant from a center point." Appellee's Br. at 37 (citing J.A. 848–49).



For similar reasons, we find that the drawings of the accused products point to a genuine factual dispute as to whether the AgiLight structure’s outer profile is generally spherical. Again, the cross-sectional images came from AgiLight’s own expert and are themselves evidence. GE’s attorney merely overlaid an undisputedly circular image over AgiLight’s expert’s cross section. Surely an expert is not required to create a fact question about whether something is generally spherical to preclude summary judgment. We thus reject AgiLight’s argument that the “generally spherical outer profile” feature provides an alternative basis to affirm the district court’s grant of summary judgment.

### III. ’055 Patent

The ’055 patent is directed to an overmolding process that applies a protective sealant over the printed circuit board (PCB) to which an LED is attached, but not over the LED itself. ’055 patent Abstract. To ensure that the protective sealant does not cover the LED, an “annular gasket” surrounds the LED before it is placed into an injection mold. *Id.* col. 6 ll. 18–30, Fig. 11. A generally hollow member seals against the annular gasket, enclosing the LED and isolating it from the protective sealant, which is then injected into the mold. *Id.* col. 6 ll. 18–30, 59–64, col. 8 ll. 30–65. Figure 4, reproduced below, shows a perspective view of an exemplary annular gasket 32 surrounding an LED 16 before a generally hollow member

(not shown) is sealed against the top of the annular gasket to fully enclose the LED.

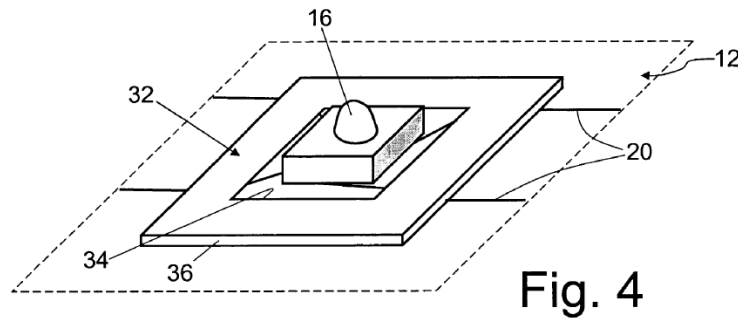
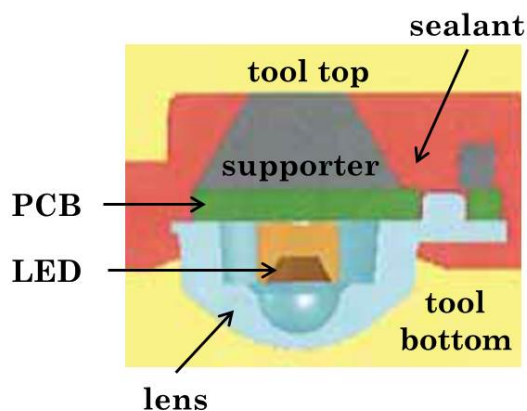


Fig. 4

The asserted claims are directed to an overmolding method and recite “disposing an annular gasket on [a PCB] to surround the [LED].” *E.g., id.* claims 1–3, 7, 9, 13. The district court construed “annular gasket” to be “a three-dimensional deformable material used to make a pressure-tight joint between stationary parts, with an *opening* in its center capable of sealing off its center area when bonded statically between stationary parts on its top and bottom.” *Claim Construction Order* at 8 (emphasis added).

As shown in the image below, in AgiLight’s accused process, a concave lens (the alleged “annular gasket”) is fit tightly into a socket in a tool bottom. A PCB with an LED mounted on it is placed over the lens, such that the LED is surrounded by the lens. A supporter and tool top are placed over the PCB, and sealant is injected into the cavities between the tool top and bottom.



The district court granted summary judgment of non-infringement based on the “annular gasket” limitation.<sup>2</sup> *Summary Judgment Order* at 6–10. The district court determined that the AgiLight lens is not an “annular gasket” because its concave inner surface lacks an “opening” as required by the court’s construction. *Id.* at 6–8. In doing so, the district court made clear that the inside of a concave surface cannot be an “opening” in the context of its construction of “annular gasket.” *Id.* at 8.

We agree with the district court that AgiLight’s dome-shaped lens is not an annular gasket because it does not have “an opening.” While the volume inside a dome may be considered an “opening” in a general sense, it is not an opening in the context of an “annular gasket.” This is consistent with plain and ordinary meaning of a “gasket” and with the annular gaskets disclosed in the ’055 patent,

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<sup>2</sup> The district court also granted summary judgment to AgiLight based on the “generally hollow member” limitation, which is also recited in all of the asserted claims. Because our conclusion regarding the “annular gasket” limitation is sufficient to affirm the grant of summary judgment, we do not address the district court’s construction of “generally hollow member.”

which are ring-shaped (including circular, elliptical, square, etc., profiles) and can be cut from a “sheet” of material. ’055 patent col. 5 ll. 21–36, 50–52, Figs. 4–5. There is no genuine issue of material fact. Under the proper claim construction, AgiLight’s dome-shaped lens is not an annular gasket because it lacks an opening. We affirm the court’s grant of summary judgment of the ’055 patent on this ground.

#### CONCLUSION

We *affirm* the grant of summary judgment with regard to the ’055 patent. We *reverse* the grant of summary judgment with regard to the ’140, ’771 and ’896 patents and *remand*.

#### **AFFIRMED-IN-PART, REVERSED-IN-PART, REMANDED**

#### COSTS

No costs.



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Appeal from the United States District Court for the Northern District of Ohio in No. 12-CV-0354, Judge James S. Gwin.

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

REYNA, *Circuit Judge*, concurring-in-part and dissenting-in-part.

I agree with the majority's opinion regarding the construction of "IDC connector" in the '140 and '771 patents and "annular gasket" in the '055 patent. I therefore concur in the majority's resolution of the issues regarding those patents. I disagree, however, with the majority's interpretation of the terms "substantially ellipsoidal inner profile" and "generally spherical outer profile" in the '896 patent. In my view, the stipulated constructions must apply to the full inner and outer profiles (or surfaces), not

simply any mere part of those profiles. I therefore dissent to the majority's outcome concerning the '896 patent.

The majority's reversal of the district court's grant of summary judgment of non-infringement under the '896 patent was premised on its erroneous conclusion that the use of the term "profile" in the claims referred only to "a portion" of the recited profiles. Under the majority's view, there are a limitless number of inner and outer "profiles" envisioned by the claims and, so long as one of those innumerable inner profiles meets the "substantially ellipsoidal" limitation and one of the innumerable outer profiles meets the "generally spherical" limitation, the claims have been infringed. I believe this is an improper view of the scope of the claims because it is inconsistent with the context provided by the claim language, the plain meaning of the term "profile," and GE's disclaimer during prosecution.

The claim element with the disputed terms from the '896 patent recites the following:

a substantially dome-shaped refractive optical element covering the LED, the optical element *having a generally spherical outer profile and substantially ellipsoidal inner profile* to increase the primary viewing angle of the LED to provide an altered viewing angle that is greater than the primary viewing angle;

'896 patent col. 8 ll. 30-35. As a preliminary matter, this element refers to the entirety of the "substantially dome-shaped refractive optical element." That feature of the claimed invention is described in association with limitations regarding its outer and inner profile. In context, the most consistent reading of the profile terms is that they serve to describe the overall geometric features of the claimed "refractive optical element." *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) (en banc) ("[T]he claims themselves provide substantial guidance as

to the meaning of particular claim terms. To begin with, the context in which a term is used in the asserted claim can be highly instructive.”). Not, as the majority’s construction allows, merely any portion given that no further description is provided for the other portions, no matter how insubstantial or insignificant, of the outer and inner profiles of that “refractive optical element.”

The context supplied by the claim language is also consistent with the plain meaning of the word “profile.” While “profile” has different meanings in different contexts, the definition applicable to the present case is “an outline of an object, as a molding, formed on a vertical plane passed through the object at right angles to one of its principal horizontal dimensions.”<sup>1</sup> RANDOM HOUSE WEBSTER’S COLLEGE DICTIONARY (2d ed. 1999). Indeed, the patent describes and depicts exactly such an outline on a vertical plane in connection with cross-sectional views of the disclosed optical element. The patent explains, consistent with the dictionary definition, that the refractive domes “can be an integrally *molded* plastic or glass piece, i.e., a one-piece unit.” ’896 patent col. 6 ll. 21-23 (emphasis added). The patent further describes Figures 6 and 7 as the “cross-sectional view of an optical element . . . shown in cross-section taken through the center of the optical element in the x-y plane” and “the cross-sectional view of FIG. 6 shown in side elevation,” respectively. *Id.*, col. 3, ll. 33-37. These images depict the outlines of the optical elements with two refractive domes as follows:

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<sup>1</sup> “[W]e are free to consult dictionaries regardless of whether they have been offered by a party in evidence or not.” *Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp.*, 320 F.3d 1339, 1346 (Fed. Cir. 2003)

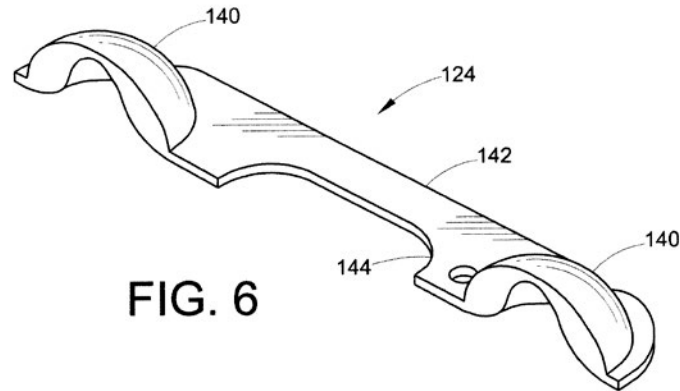


FIG. 6

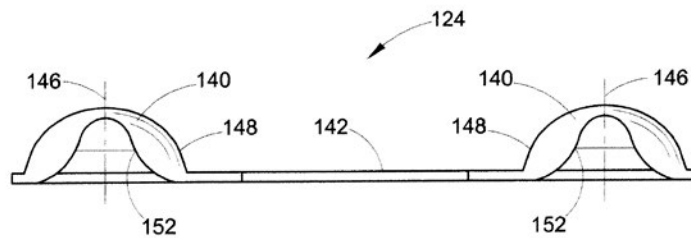


FIG. 7

*Id.*, figs. 6 & 7.

The specification explains that the profiles describe the surfaces of the dome-shaped optical elements. The depiction in Figure 7 is described as follows: “For the depicted optical element each dome 140 has a spherical outer profile, or outer surface, 148 and *an ellipsoidal inner profile*, or inner surface 152.” *Id.*, col. 3, ll. 33-37 (emphasis added). During oral argument, GE’s counsel referred to Figure 7 and the disclosure in the specification by stating that “[i]f you look at Figure 7 of the ’896 patent, that is clearly showing you—which by the way is described as a substantially ellipsoidal inner profile—if you

look at that profile, it is very clearly not ellipsoidal across its entire profile.” Hr’g at 3:18-3:33 (<http://oralarguments.cafc.uscourts.gov/default.aspx?fl=2013-1267.mp3>). Notwithstanding the fact that the specification does not describe the ellipsoidal inner profile depicted in Figure 7 as *substantially* ellipsoidal, the statement from GE’s counsel is revealing because it (accurately) equates the word “profile” with the “entire profile.” This is relevant because it further indicates that the disclosed “profile” implicitly refers to the *entire* outline of the depicted cross-section. Yet, GE’s arguments deviate from this plain meaning regarding the entire profile by seeking a construction for merely a *partial* profile, and the majority adopted this view by recasting “profile” to mean “a portion of” the profile. This departs from the language of the claims by importing an extraneous adjectival modifier into the claim, which, in effect, impermissibly rewrites the patent’s claims. *See Nike Inc. v. Wolverine World Wide, Inc.*, 43 F.3d 644, 647 (Fed. Cir. 1994) (rejecting the patentee’s proposed claim construction that would, “in effect, rewrite its patent claims to suit its needs in this litigation”).

There is no dispute that the specification wrongly describes the shape of the inner profile depicted in Figure 7. The specification says the depicted inner profile is “ellipsoidal” when the full profile clearly is not. The majority resolved this flaw in favor of the patentee by parsing the claimed profiles to any portion thereof. While I believe that express ambiguity in a patent document that affects the scope of the claims should typically be resolved in favor of the public over the patentee, the ambiguity here is most directly resolved from the amendments and remarks made by the patentee during prosecution.

The majority states that “there are no statements during prosecution or in the specification that indicate the patentee’s intent to limit his claim to an entire inner

profile that is substantially ellipsoidal.” Maj. Op. at 10-11. This is not so. The profile limitations of the present dispute were added to the claims during prosecution in order to overcome a rejection that relied, in part, on U.S. Pat. No. 6,566,824 (“the ’824 patent”). The amendment changed the disputed element as follows:

a substantially dome-shaped refractive optical element covering the LED, the optical element ~~being configured~~ having a generally spherical outer profile and substantially ellipsoidal inner profile to increase the primary viewing angle of the LED to provide an altered viewing angle that is greater than the primary viewing angle;

Claim Amendment in File History of Pat. Appl. No. 12/105,963 (June 29, 2010) at 4. In short, the claim went from having no limitations regarding the geometry of the optical element to the specifically recited geometries for the inner and outer profiles.

The amendment was made in order to overcome the specific geometries of the optical elements expressly disclosed in the prior art. In particular, the amendment sought to overcome the disclosure in Figure 14 of the ’824 patent, which depicts the following optical element with inner and outer surfaces referred to as a “Bugeye®” lens:

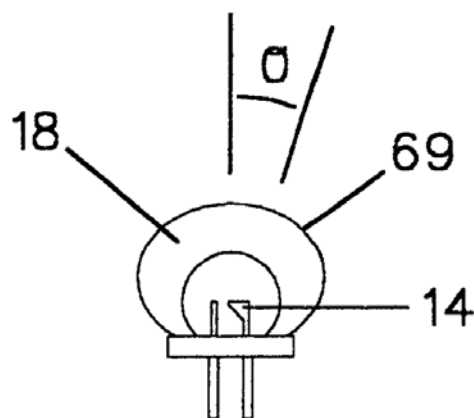


FIG. 14

'824 patent, Fig. 14, col. 2 ll. 60-62 (“FIG. 14 is a cross-sectional view of one of the BugEye™ lenses of FIG. 13 showing a cone of light emanating therefrom”). In arguing that the amendment overcame the disclosure of the '824 patent, the patentee stated that:

[The '824 patent] displays various domes in Figures 10, 12, and 14. However, neither of the domes depicted in [the '824 patent] is spherical in its outer profile and elliptical in its inner profile. In fact, *Figure 14 could, arguably, be interpreted as the inverse of the presently claimed invention.*

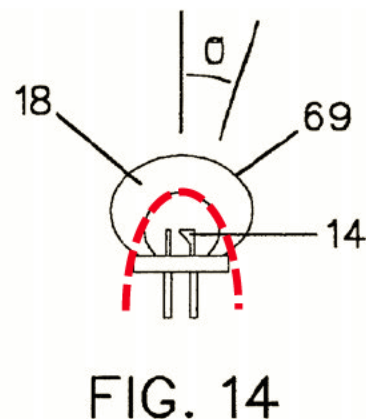
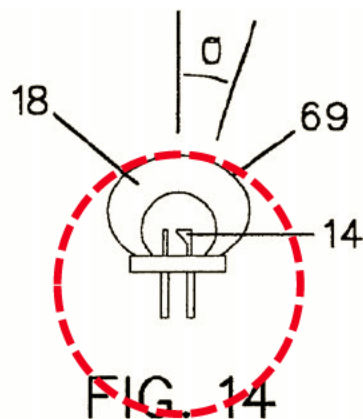
Remarks in File History of Pat. Appl. No. 12/105,963 (June 29, 2010) at 6 (emphasis added).

The only reasonable interpretation of the patentee's argument during prosecution is that it was referring to the full profiles depicted in Figure 14 of the '824 patent. That image depicts a lens that has a substantially ellipsoidal *outer* profile and a generally spherical *inner* profile. But, this is only true if one considers the entirety of the

depicted inner profile and the entirety of the depicted outer profile. If one were to consider any and all subparts of the depicted profiles, as the majority has done, then it is readily apparent there are *portions* of the outer profile that have a generally spherical curvature and *portions* of the inner profile that are substantially ellipsoidal that would read on the amended claim.<sup>2</sup> Accordingly, such an interpretation would negate the patentee's statement that "Figure 14 could, arguably, be interpreted as the inverse of the presently claimed invention." Since the patentee's argument in support of patentability relies on an interpretation that governs the full profile, that same interpretation must also apply here. See *Torpharm, Inc. v. Ranbaxy Pharms., Inc.*, 336 F.3d 1322, 1329 (Fed. Cir. 2003) ("A patentee of course may not recapture during litigation subject matter that was ultimately rejected as unpatentable during prosecution, nor may the patentee

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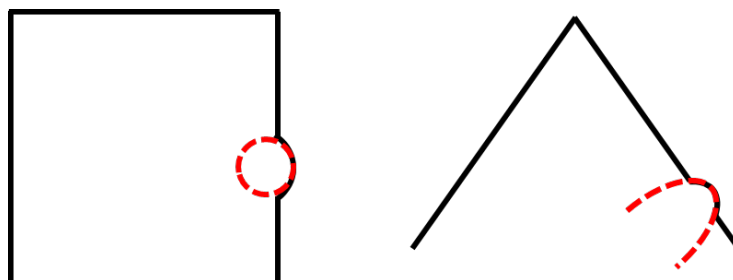
<sup>2</sup> This largely derives from the fact that, similar to what Appellant has done in attempting to demonstrate infringement, it is easy to draw a circle that overlaps with a portion of the outer profile and an ellipse that overlaps with a portion of the inner profile of the lens depicted in Figure 14 of the '824 patent:





adopt a position contrary to that adopted before the PTO and expect to be believed.”); *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995) (“Claims may not be construed one way in order to obtain their allowance and in a different way against accused infringers.”). To do otherwise, as the majority has done here, allows the patentee to recapture surrendered claim scope and ensnare the prior art. See, e.g., *Omega Eng’g, Inc., v. Raytek Corp.*, 334 F.3d 1314, 1323 (Fed. Cir. 2003) (“prosecution disclaimer is well established in Supreme Court precedent, precluding patentees from recapturing through claim interpretation specific meanings disclaimed during prosecution”). This further demonstrates the majority’s error.

Finally, the majority’s construction allows for illogical results. The claim terms in dispute are a “generally spherical outer profile” and “substantially ellipsoidal inner profile.” To me, this language means that there is an outer profile that is generally spherical and an inner profile that is substantially ellipsoidal. By contrast, the majority’s construction allows the claims to cover profiles that are, when viewed in their entirety, neither generally spherical nor substantially elliptical. For instance, the majority’s construction considers the following to represent profiles of three-dimensional surfaces that are “generally spherical” and “substantially ellipsoidal,” respectively:



In my view, a more natural interpretation of the foregoing profiles is that they depict a structure that is gen-

erally *cubic* and a structure that is substantially *conical*, respectively. That the majority's construction allows for such a radical departure from the plain import of the claim language further demonstrates the flaw in that interpretation. See *Interactive Gift Express, Inc. v. CompuServe Inc.*, 256 F.3d 1323, 1336 (Fed. Cir. 2001) (rejecting claim construction that is "illogical and does not accord with the plain import of the claim language").

The parties stipulated to constructions for the disputed profile terms. They agreed that "generally spherical outer profile" meant "an outer three-dimensional surface where the points on the surface are generally equidistant from a center point" and that "substantially elliptical inner profile" meant "an inner three-dimensional surface where the sum of the distances from two focal points and the points on the inner surface is substantially constant." As the majority recognized, the stipulation did not resolve the parties' dispute as to whether the claim limitations applied to the full profile or simply a portion of the profile. Based on the foregoing analysis, I conclude that the patent's use of the term "profile" means the full outline created by a cross section of the entire "substantially dome-shaped refractive optical element." That is, the claim addresses the *entire* inner and outer profiles. Under that interpretation, the Appellant has not submitted adequate evidence to raise a genuine issue of fact regarding infringement and I would therefore affirm the district court's grant of summary judgment of non-infringement of the '896 patent.