

# United States Court of Appeals for the Federal Circuit

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PPC BROADBAND, INC.,  
*Appellant*

v.

CORNING OPTICAL COMMUNICATIONS RF, LLC,  
*Appellee*

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2015-1361, 2015-1366, 2015-1368, 2015-1369

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Appeals from the United States Patent and Trade-  
mark Office, Patent Trial and Appeal Board in Nos.  
IPR2013-00340, IPR2013-00345, IPR2013-00346,  
IPR2013-00347.

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Decided: February 22, 2016

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J. MICHAEL JAKES, Finnegan, Henderson, Farabow,  
Garrett & Dunner, LLP, Washington, DC, argued for  
appellant. Also represented by ROBERT L. BURNS, II,  
Reston, VA; JUSTIN A. HENDRIX, Palo Alto, CA.

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P.C., Alexandria, VA, argued for appellee. Also represent-  
ed by SCOTT LLOYD SMITH, ROGER HYUNGIL LEE.

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Before MOORE, O'MALLEY, and WALLACH, *Circuit Judges*.

MOORE, *Circuit Judge*.

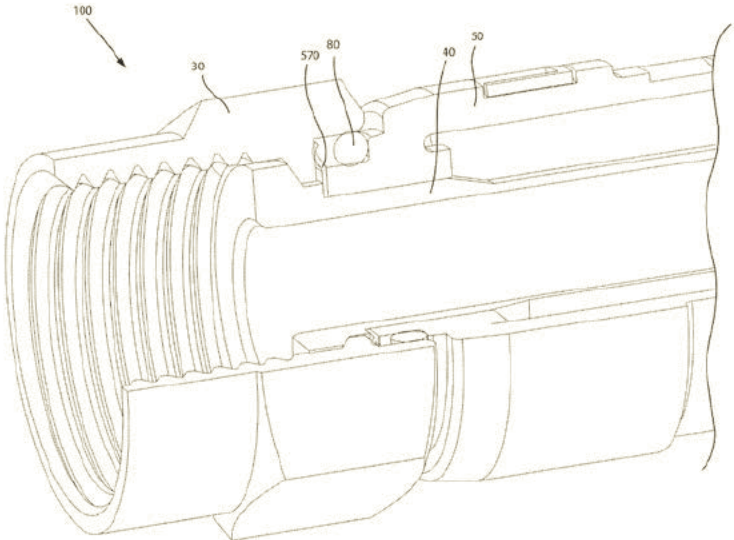
PPC Broadband, Inc. appeals from the Patent Trial and Appeal Board's ("Board") final written decisions in inter partes reviews ("IPRs") concluding that claims 1–32 of U.S. Patent No. 8,287,320, claims 1–9 of U.S. Patent No. 8,323,060, and claims 7–27 of U.S. Patent No. 8,313,353 would have been obvious. We *vacate* the Board's determination that claims 8, 16, and 31 of the '320 patent, claims 1–9 of the '060 patent, and claims 7–27 of the '353 patent are unpatentable, *affirm* the Board's determination that claims 1–7, 9–15, 17–30, and 32 of the '320 patent are unpatentable, and *remand* for further proceedings.

#### BACKGROUND

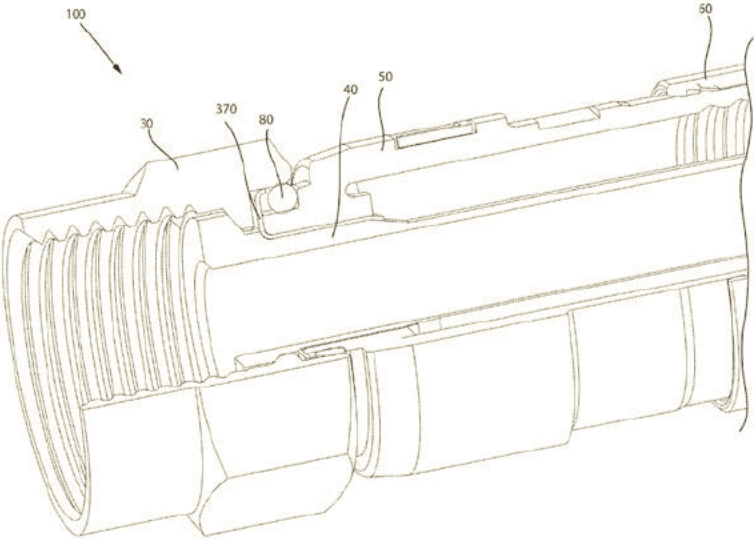
A coaxial cable has an inner electrical conductor (often called the "signal" or "signal feed") and an outer electrical conductor (often called the "ground return" or "ground"). Poor or intermittent connections on either conductor can result in noise or non-functionality. The '320 patent family discloses coaxial cable connectors having a connector body 50, a post 40, a nut 30 (also called a "coupler"), and a "continuity member" that contacts the post and the nut so that electrical grounding continuity is extended through the post and the nut. '320 patent col. 2 ll. 3–6, 15–19, 37–41.<sup>1</sup> The '320 patent discloses more than twenty embodiments of continuity members. For example, Figure 13 depicts an embodiment where the continuity member 370 extends underneath the body 50. Figure 17 depicts a continuity member 570 that is sandwiched between the post 40 and the body 50.

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<sup>1</sup> The '353 patent and the '060 patent are both continuations of the '320 patent. The three patents share the same specification, in relevant part.



**Figure 17 of the '060 patent:** In this embodiment, the continuity member 570 abuts the face of the body 50.



**Figure 13 of the '060 patent:** In this embodiment, the continuity member 370 extends underneath the body 50.

Corning Optical Communications RF, LLC, filed petitions requesting IPRs of claims 1–32 of the '320 patent, claims 1–9 of the '060 patent, and claims 7–27 of the '353 patent on grounds that these claims were unpatentable as obvious over the combination of U.S. published patent application 2006/0110977 (“Matthews”) and Japanese published patent application JP 2002-015823 (“Tatsuzuki”). Between November and December 2013, the Board instituted four separate IPR proceedings.<sup>2</sup>

The Board held a consolidated hearing for the four IPRs in this appeal and issued four separate decisions in which it concluded that all claims at issue would have been obvious. The terms “continuity member” or “electrical continuity member” are present in every claim at issue, and the construction of these terms is central to the Board’s decisions. For example, claim 1 of the '320 patent (emphases added) recites:

1. A coaxial cable connector comprising:
  - a connector body;
  - a post engaged with the connector body, wherein the post includes a flange;
  - a nut, axially rotatable with respect to the post and the connector body, the nut having a first end configured for coupling to an interface port, and an opposing second end, wherein the nut includes an internal

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<sup>2</sup> Corning also sought, and the Board granted, IPR proceedings on claims 10–25 of the '060 patent. In a separate proceeding, the Board canceled all of these claims as unpatentable for obviousness over the combination of Matthews and Tatsuzuki. PPC Broadband also appealed this decision to this court in Appeal No. 2015-1364.

lip, and wherein the second end portion of the nut starts at a side of the lip of the nut facing the first end of the nut and extends rearward to the second end of the nut;

a *continuity member* disposed only rearward of the start of the second end portion of the nut and contacting the post and the nut, so that the *continuity member extends electrical grounding continuity through the post and the nut*; and

wherein the nut does not touch the connector body, and the continuity member is configured to contact a rearward facing surface of the lip of the nut and extend between a portion of the post and a portion of the connector body.

The Board construed these terms to require “that the continuity member need only make contact with the coupler/nut and the post to establish an electrical connection there,” rather than requiring consistent or continuous contact between the coupler/nut and the post as PPC Broadband argued. J.A. 10, 102, 156, 207.

The Board also construed the terms “shaped to fit” and “configured to fit,” which are present in claims 1–9 of the '060 patent, claims 16 and 24 of the '353 patent, and claim 28 of the '320 patent. The Board held that components or surfaces that are shaped or configured to fit one another “are sized and dimensioned to abut one another,” including components whose surfaces are perpendicular. J.A. 13, 105, 159.

The Board concluded that all claims at issue would have been obvious over the combination of Matthews and Tatsuzuki. The Board considered PPC Broadband's evidence of objective considerations, but determined it did not outweigh the strong evidence of obviousness. PPC

Broadband appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4).

#### DISCUSSION

We review the Board's legal decisions de novo and its underlying factual determinations for substantial evidence. *In re Sullivan*, 498 F.3d 1345, 1350 (Fed. Cir. 2007). Obviousness is a question of law with underlying issues of fact. *Randall Mfg. v. Rea*, 733 F.3d 1355, 1362 (Fed. Cir. 2013). In IPRs, the Board gives claims their broadest reasonable interpretation consistent with the specification. *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1279 (Fed. Cir. 2015), *cert. granted*, 84 U.S.L.W. 3218 (U.S. Jan. 15, 2016) (No. 15-446). We review claim construction de novo except for subsidiary fact findings based on extrinsic evidence, which we review for substantial evidence. *Id.* at 1280.

#### I. “Continuity Member” / “Electrical Continuity Member”

PPC Broadband argues that the Board erred when it construed the terms “continuity member” and “electrical continuity member” to require “that the continuity member need only make contact with the coupler/nut and the post to establish an electrical connection there,” without requiring that contact to be consistent or continuous in time (i.e., always connected). PPC Broadband asserts that the Board did not find that the combination of Matthews and Tatsuzuki teaches consistent or continuous contact with coupler/nut and the post, as required by all claims when they are correctly construed.

Under *Cuozzo*, the Patent and Trademark Office (“PTO”) gives claim language its broadest reasonable interpretation in IPRs. 793 F.3d at 1279. Historically, the PTO applied this standard in the examination and reexamination of patents, where the applicant may freely amend the claim language to clarify the scope of the

claim. Examinations and reexaminations are not adjudicatory. Instead, the patent examiner and the applicant work together to determine the scope of the claimed invention. See *In re Buszard*, 504 F.3d 1364, 1366–67 (Fed. Cir. 2007) (“The patent examiner and the applicant, in the give and take of rejection and response, work toward defining the metes and bounds of the invention to be patented.”); *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989) (“[D]uring patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.”). By giving the claim language its broadest reasonable interpretation, the patent examiner is able to “reduce the possibility that, after the patent is granted, the claims may be interpreted as giving broader coverage than is justified.” *In re Prater*, 415 F.2d 1393, 1404–05 (CCPA 1969). While broadly construing claim language increases the likelihood that otherwise distinguishable prior art will render the claimed invention anticipated or obvious, the patentee can amend the claim language during prosecution—and narrow it if necessary—to clarify the scope of the invention and avoid rejection or cancellation of the claims.

District courts, by contrast, do not assign terms their broadest reasonable interpretation. Instead, district courts seek out the correct construction—the construction that most accurately delineates the scope of the claimed invention—under the framework laid out in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). The same is true of reexaminations before the PTO when claims have expired, and therefore may not be amended. *In re Rambus, Inc.*, 753 F.3d 1253, 1256 (Fed. Cir. 2014).

In 2011, Congress enacted the America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284 (2011). The AIA created several new adjudicatory proceedings before the PTO for determining the patentability of already-issued patent claims. These proceedings include IPRs,

post-grant reviews, and covered business method reviews (“CBMs”). IPRs are the proceedings at issue here. Post-grant reviews are available for nine months after the issuance of a patent, and IPRs are available after those nine months have passed. *See* 35 U.S.C. § 321(c). CBM review is a temporary program allowing parties sued or charged with infringing a patent covering financial products or services to challenge that patent. AIA § 18(a)–(d), 125 Stat. 284, 329–31.

Congress intended these programs to provide “quick and cost effective alternatives” to litigation in the courts. H.R. Rep. No. 112-98, pt. 1, at 48 (2011), as reprinted in 2011 U.S.C.C.A.N. 67, 78; *see also id.* at 40 (“[AIA] is designed to establish a more efficient and streamlined patent system that will improve patent quality and limit unnecessary and counterproductive litigation costs.”). Indeed, CBM review is only available if the petitioner “has been sued for infringement of the patent or has been charged with infringement under that patent.” AIA § 18(a)(1)(B).

One hallmark of these proceedings is their adversarial nature. H.R. Rep. No. 112-98, at 46–47 (“The Act converts inter partes reexamination from an examinational to an adjudicative proceeding, and renames the proceeding ‘inter partes review.’”). To institute an IPR, a petitioner must challenge the patentability of existing patent claims by filing a petition with the PTO. 35 U.S.C. § 311(a). The patentee can file an initial response. *Id.* § 313. Within three months, the Director must decide whether to grant the petition and institute IPR. *Id.* § 314(b). If IPR is instituted, the case proceeds to discovery. The patentee is permitted discovery, and may conduct depositions. 35 U.S.C. § 316(a)(5); 37 C.F.R. § 42.120. If the patentee files a response, the petitioner is permitted discovery, including depositions. 35 U.S.C. § 316(a)(5); 37 C.F.R. § 42.51. A trial is conducted by a panel of at least three administrative law judges. 35



U.S.C. §§ 6(c), 316(c). Both discovery and trial proceed at a rapid pace. The entire IPR, including the Board's final decision, must be completed within one year from the date of institution, absent an extension for good cause. *Id.* § 316(a)(11). Moreover, claim amendments are not a matter of right for IPRs, as they are in examinations and reexaminations. *See* 35 U.S.C. § 316(d)(1); 37 C.F.R. § 42.121(a).

Despite the important differences between the new AIA proceedings and the earlier examinational proceedings, the PTO applies the same claim construction standard—the broadest reasonable interpretation—in both types of proceedings. We upheld this approach in *Cuozzo*, a decision currently under review by the Supreme Court. *Cuozzo*, 793 F.3d 1268, *cert. granted*, 84 U.S.L.W. 3218.

This case hinges on the claim construction standard applied—a scenario likely to arise with frequency. And in this case, the claim construction standard is outcome determinative. Under *Phillips*, we would hold that the correct construction of the term “continuity member” requires, as PPC Broadband argues, a continuous or consistent connection. The American Heritage College Dictionary (4th ed. 2002) defines “continuity” as “1. The state or quality of being continuous. 2. An uninterrupted succession or flow; a coherent whole.” J.A. 2967.

Furthermore, the specification discloses in multiple places that the continuity member should maintain a consistent and continuous connection. The specification teaches that “even when the coaxial connector 100 is only partially installed . . . the continuity member 70 maintains an electrical ground path,” and that “this continuous grounding path provides operable functionality of the coaxial cable connector 100 allowing it to work as it was intended even when the connector 100 is not fully tightened.” ’320 patent col. 14 ll. 20–30. It teaches that one embodiment of the continuity member is designed to “flex

and retain constant physical and electrical contact with the nut 30, thereby ensuring continuity of a grounding path extending through the nut 30.” *Id.* at col. 15 ll. 2–10. It describes other embodiments as making “resilient and consistent physical and electrical contact” with the nut, *id.* at col. 18 ll. 52–59, as “enhanc[ing]” the continuity member’s “ability to make consistent operable contact with a surface of the nut,” *id.* at col. 18 ll. 62–65, and as creating “a continuous electrical shield” from the cable through the port, *id.* at col. 16 ll. 10–17. It teaches that “[t]hose skilled in the art should appreciate [sic] that other geometric configurations may be utilized for the post contact portion 1277, as long as the electrical continuity member 1270 is provided so as to make consistent physical and electrical contact with the post.” *Id.* at col. 19 ll. 16–21 (emphasis added). Indeed, the specification teaches that the fundamental purpose of the invention is to “ensur[e] ground continuity” and thereby solve problems associated with intermittent ground connections in the prior art, such as “loss of ground and discontinuity of the electromagnetic shielding.” *Id.* at col. 1 ll. 44–53. In light of the ordinary meaning of “continuity” and the specification, which is replete with discussion of the “continuous” or “consistent” contact established by the continuity member, the correct construction of “continuity member” under the framework laid out in *Phillips*, 415 F.3d 1303, requires “consistent or continuous contact with the coupler/nut and the post to establish an electrical connection.”

However, claim construction in IPRs is not governed by *Phillips*. Under *Cuozzo*, claims are given their broadest reasonable interpretation consistent with the specification, not necessarily the correct construction under the framework laid out in *Phillips*. *Cuozzo*, 793 F.3d at 1279. Here, the Board’s construction is not unreasonable.

While the ordinary meaning of “continuity” and “continuous” often refers to something that is uninterrupted

in time, these terms can also refer to something that is uninterrupted in space. See J.A. 2967 (defining “continuous” as “1. Uninterrupted in time, sequence, *substance*, or *extent*” (emphasis added)). For example, a continuous line is continuous for the length of the line; there is no additional requirement of temporal continuity. Corning argues that “continuity member” should not be construed to require temporal continuity, as PPC Broadband argues. Instead, Corning argues that “continuity member” only requires spatial continuity—a physical connection that extends without interruption through the post, the continuity member, and the nut.

There is some language in the specification to support Corning’s interpretation of “continuity member.” The specification discloses that the continuity member “extends electrical grounding continuity through the post and the nut.” ’320 patent col. 2 ll. 5–6, 17–19. It also teaches a “continuous ground path” that “extends from the interface port 20 to the nut 30, to the continuity member 70, to the post 40, to the conductive grounding shield 14.” *Id.* at col. 14 ll. 20–30. This description of a “continuous ground path” extending from component to component is consistent with Corning’s argument that the term “continuity” refers to an unbroken *physical* route, not necessarily a connection that is uninterrupted over time. We thus conclude that the Board’s construction—“that the continuity member need only make contact with the coupler/nut and the post to establish an electrical connection there,” without requiring consistent or continuous contact—is the broadest reasonable construction.

Under the Board’s construction, there is no requirement of consistent or continuous contact through the post and the nut. Because the Board’s construction does not include this additional temporal limitation, it is broader than PPC Broadband’s proposed construction. Thus, while the Board’s construction is not the correct construction under *Phillips*, it is the broadest reasonable interpre-

tation of “continuity member,” and because this is an IPR, under our binding precedent, we must uphold the Board’s construction of “continuity member” and “electrical continuity member.”

## II. The “Maintain Electrical Continuity” Limitations

Although the broadest reasonable interpretation of “continuity member” does not require the temporal continuity argued for by PPC Broadband, there are several claims that require such temporal continuity by virtue of other claim limitations. Claim 1 of the ’060 patent, claims 7 and 20 of the ’353 patent, and claims 8, 16, and 31 of the ’320 patent require the continuity member “maintain electrical continuity” during the operation of the connector. Independent claim 1 of the ’060 patent (emphasis added) recites:

1. A connector for coupling an end of a coaxial cable, . . . the connector comprising:

. . .

a continuity member disposed only rearward of the forward facing lip surface of the internal lip of the coupler, the continuity member having a continuity base portion extending between the continuity post engaging surface of the post and the continuity body engaging surface of the connector body, and a continuity contact surface configured to be biased against the rearward facing lip surface of the internal lip of the coupler *so as to maintain electrical continuity between the coupler and the post when the coupler is in the partially tightened position on the interface port, even when the coupler is in the fully tightened position on the interface port, and*

*even when the post moves relative to the coupler.*

Similarly, independent claims 7 and 20 of the '353 patent recite methods of assembling a coaxial cable connector, the method comprising “positioning an electrical continuity member so as to . . . maintain electrical continuity between the post and the nut when the post pivots relative to the nut.” And dependent claims 8, 16, and 31 of the '320 patent require the continuity member to “maintain electrical continuity when the nut is in both the partially tightened position on the interface port and in the fully tightened position on the interface port.”

These limitations require the continuity member “maintain electrical continuity” during certain specified periods of operation of the connector. For example, claims 7 and 20 of the '353 patent require the connector to maintain electrical continuity “when the post pivots relative to the nut.” *See also* '320 patent, claims 8, 16, and 31 (requiring the continuity member to maintain electrical continuity “when the nut is in both the partially tightened position on the interface port and in the fully tightened position on the interface port”); '060 patent, claim 1 (requiring the continuity member to maintain electrical continuity “when the coupler is in the partially tightened position on the interface port, even when the coupler is in the fully tightened position on the interface port, and even when the post moves relative to the coupler.”). These claims require the continuity member maintain electrical continuity when the coupler is in a certain position or during certain modes of operation. Maintaining electrical continuity requires consistent or continuous contact—under both the broadest reasonable interpretation standard required by *Cuozzo* and the framework laid out in *Phillips*.

Nowhere in its decisions did the Board find that the combination of Matthews and Tatsuzuki maintains elec-

trical continuity during the specific positions or modes of operation required by these limitations. Corning argues that the Board did not ignore these limitations, but considered it as part of its claim construction analysis for the terms “continuity member” and “electrical continuity member.” *See* Appellee’s Br. 36–37. But the portions of the Board decisions cited by Corning suggest the opposite. As the Board explained:

[W]e decline to import limitations into the disputed claim limitation that would require the “continuity member” to make “consistent contact” with the coupler/nut and the post such that it *maintains* a “continuous electrical connection” between these components.

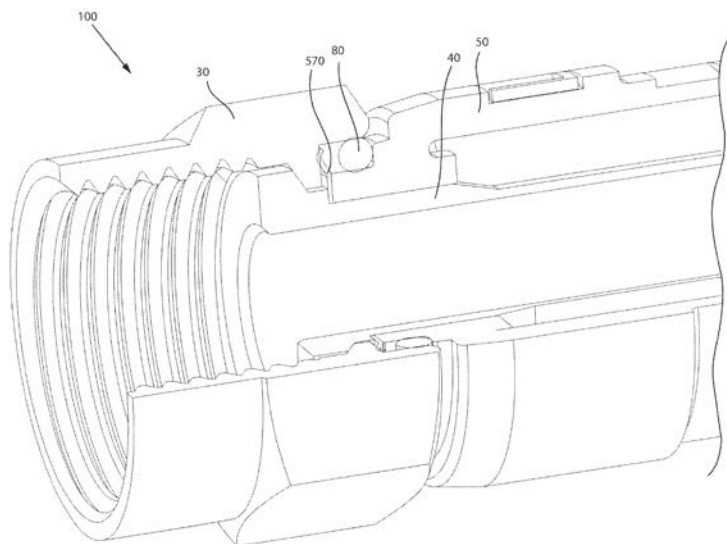
J.A. 10; J.A. 101–02; J.A. 155; J.A. 206–07. The Board explicitly declined to require the continuity member to “maintain[] a ‘continuous electrical connection.’” *Id.* But when the coupler is in a certain position or during certain modes of operation, that is exactly what these claims expressly require—not because they use the term “continuity member,” but because they use the phrase “maintain electrical continuity.”

Corning argues that we should nonetheless affirm the Board’s decision because the combination of Matthews and Tatsuzuki teaches these limitations. The Board did not make any such fact findings, and we will not make fact findings for the first time on appeal. We therefore *vacate* the Board’s determination that claims 8, 16, and 31 of the ’320 patent, claims 1–9 of the ’060 patent, and claims 7–27 of the ’353 patent are unpatentable.

### III. The “Shaped to Fit” / “Configured to Fit” Limitations

Claims 1–9 of the ’060 patent, claims 16 and 24 of the ’353 patent, and claim 28 of the ’320 patent recite a post and a body that are “shaped to fit” or “configured to fit”

one another. The Board held that components that are shaped or configured to fit one another “are sized and dimensioned to abut one another,” including components with surfaces that do not face one another.



**Figure 17 of the '060 patent:** Certain claims require the body 50 to be “shaped to fit” or “configured to fit” the post 40.

PPC Broadband does not dispute that the plain meaning of “fit” is that “an object is the proper size and shape.” Appellant’s Br. 31. Instead, PPC Broadband argues that this plain meaning requires the two surfaces that are shaped or configured to fit one another to be somewhat parallel—that one surface “has a complementary size and shape as, *and faces*” the other surface. Appellant’s Br. 31 (emphasis added). It argues that components whose surfaces do not face one another cannot be “shaped to fit” or “configured to fit” one another. It argues that we should vacate and remand the Board’s determination as to these claims because the Board did not find that the combination of *Matthews* and *Tatsuzuki* teaches this limitation.

We hold that the Board correctly construed these terms. Under their broadest reasonable interpretation, these terms have their ordinary meaning, which merely requires one surface to have a complementary size and shape as the other surface. PPC Broadband puts forth no dictionary definition supporting its argument that the surfaces must be somewhat parallel.

Nor does PPC Broadband point to any disavowal or disclaimer in the specifications of the '320 patent family compelling departure from this ordinary meaning. PPC Broadband argues that the specifications refer to surfaces that are configured to fit one another as “opposing complimentary surfaces,” which excludes perpendicular surfaces. '320 patent col. 19 ll. 45–52, fig. 50. But there is no disclaimer or disavowal here; indeed, the specifications’ descriptions of “opposing complimentary surfaces” do not include the terms “configured to fit” or “shaped to fit.” *Id.* Second, PPC Broadband notes that the specifications teach that the continuity member extends between two fitting surfaces such that the body, the continuity member, and the post are secured “both axially and rotationally,” and argues that surfaces that are perpendicular cannot be secured as the specifications describe. '320 patent col. 13 ll. 15–20. But perpendicular surfaces can be fitted together in a manner that prevents movement of the surfaces relative to each other, thereby ensuring the surfaces are axially and rotationally secured. Finally, PPC Broadband argues that the Board’s construction is inoperable. For example, it notes that claim 1 of the '060 patent requires that the “body is positioned around a portion of the post,” with the continuity member “extend[ing] between” the post and the body. It argues that if the surfaces of the post and body are perpendicular, the continuity member cannot extend between them. We disagree, and see no reason a continuity member could not extend between two perpendicular surfaces.



We therefore uphold the Board's construction of "shaped to fit" and "configured to fit." Because PPC Broadband's argument that the combination of Matthews and Tatsuzuki does not disclose this limitation is entirely predicated on our adoption of its claim construction, we *affirm* the Board's decision that claim 28 of the '320 patent is unpatentable. And although we vacate the Board's determination that claims 1–9 of the '060 patent and claims 16 and 24 of the '353 patent are unpatentable because of the "maintain electrical continuity" limitation, the Board correctly found that the prior art teaches the "shaped to fit" and "configured to fit" limitation in these claims.

#### IV. Objective Considerations

Although the Board found that certain objective considerations pointed towards non-obviousness, it concluded that Corning's strong evidence of obviousness outweighed these considerations. On appeal, the parties dispute the Board's findings with respect to the various indicia of nonobviousness, including long-felt but unresolved need, failed attempts by Corning, copying by Corning, and commercial success, as well as the overall weight given by the Board to these indicia.

Substantial evidence supports the Board's conclusions on long-felt but unresolved need, failed attempts, and copying. The Board rejected PPC Broadband's argument that there was a long-felt but unsolved need for coaxial cable connectors where ground continuity could be established even if the connector was only loosely connected to the port. Substantial evidence supports the Board's findings that this long-felt need had been satisfied by earlier connectors invented before the priority date of the patents at issue here. Substantial evidence also supports the Board's finding that Corning had both successful and unsuccessful attempts to design a prototype coaxial cable with a continuity member, but that none of these success-

ful designs were manufactured or sold to consumers. In light of Corning's failure to manufacture connectors with a continuity member that could be sold to consumers, this factor weighs in favor of a finding of non-obviousness. Substantial evidence also supports the Board's conclusion that there was copying by Corning. This too weighs in favor of non-obviousness.

Lastly, the Board found that PPC Broadband had not presented persuasive evidence of commercial success. In coming to this conclusion, the Board found that PPC Broadband had not established that its SignalTight connectors met all of the elements of the challenged claims at issue. Here, the Board erred. PPC Broadband alleges that its SignalTight connectors are commercial embodiments of the connectors recited in the claims. PPC Broadband presented multiple declarations supporting this allegation. Corning did not argue to the Board that the SignalTight connectors are not commercial embodiments of the claimed connectors. When the patentee has presented undisputed evidence that its product is the invention disclosed in the challenged claims, it is error for the Board to find to the contrary without further explanation. There was no such explanation here. The Board in its opinions did not explain why the SignalTight connectors fail to embody the claimed features, or what claimed features in particular are missing from the SignalTight connectors.<sup>3</sup> Nor does Corning justify this finding on

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<sup>3</sup> Without any detailed explanation, the Board also noted that commercial success is not established where a product has a very large market share if that product was replacing the same party's earlier version which likewise enjoyed a high market share. We note that it would be wrong to conclude that a product with a high market share is not commercially successful *solely* because it is

appeal. Substantial evidence does not support the Board's finding on this point.

Because the evidence shows that the SignalTight connectors are “the invention disclosed and claimed in the patent,” we presume that any commercial success of these products is due to the patented invention. *J.T. Eaton & Co. v. Atl. Paste & Glue Co.*, 106 F.3d 1563, 1571 (Fed. Cir. 1997). This is true even when the product has additional, unclaimed features. *See, e.g., Ecolchem, Inc. v. S. Cal. Edison Co.*, 227 F.3d 1361, 1378 (Fed. Cir. 2000) (applying presumption even through commercial embodiment had unclaimed mobility feature); *Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1312 (Fed. Cir. 2006) (holding that evidence that commercial success was due to unclaimed or non-novel features of device “clearly rebuts the presumption that [the product’s] success was due to the claimed and novel features”). This presumption does not apply in the ex parte context, where the PTO cannot gather evidence supporting or refuting the patentee’s evidence of commercial success. *See, e.g., In re DBC*, 545 F.3d 1373, 1384 (Fed. Cir. 2008); *In re Huang*, 100 F.3d 135, 139–40 (Fed. Cir. 1996). It does, however, apply in contested proceedings such as IPRs, where the petitioner has the means to rebut the patentee’s evidence. We leave to the Board the commercial success fact findings in the first instance under the correct claim construction.

#### CONCLUSION

For the foregoing reasons, we *vacate* the Board’s determination that claims 8, 16, and 31 of the ’320 patent, claims 1–9 of the ’060 patent, and claims 7–27 of the ’353 patent are unpatentable, *affirm* the Board’s determination that claims 1–7, 9–15, 17–30, and 32 of the ’320

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replacing a similarly successful earlier version of the product produced by the same company.

patent are unpatentable, and *remand* for further proceedings.

**AFFIRMED-IN-PART, VACATED-IN-PART, AND  
REMANDED**

COSTS

No costs.