

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

WANGS ALLIANCE CORPORATION d/b/a WAC LIGHTING CO.,
Petitioner,

v.

PHILIPS LIGHTING NORTH AMERICA CORPORATION,
Patent Owner.

Case IPR2016-01455
Patent 7,358,679 B2

Before TREVOR M. JEFFERSON, MIRIAM L. QUINN, and GARTH D.
BAER, *Administrative Patent Judges*.

JEFFERSON, *Administrative Patent Judge*.

DECISION

Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

I. INTRODUCTION

Wangs Alliance Corporation d/b/a WAC Lighting Co. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) to institute an *inter partes* review of claims 1, 3–6, 11, 17–19, 26, 38, and 43–45 of U.S. Patent No. 7,358,679 B2 (Ex. 1001, “the ’679 patent”) pursuant to 35 U.S.C. § 311 et seq. Patent Owner, Philips Lighting North America Corporation, filed a Preliminary Response to the Petition. (Paper 6, “Prelim. Resp.”). We have jurisdiction under 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a). After considering the Petition, the Preliminary Response, and associated evidence, we conclude that Petitioner has not demonstrated a reasonable likelihood that it would prevail in showing unpatentability of claims 1, 3–6, 11, 17–19, 26, 38, and 43–45.

A. *Related Proceedings*

Petitioner reports the following pending litigation matter related to this case: *Koninklijke Philips N.V. et al. v. Wangs Alliance Corporation*, Case No. 14-cv-12298-DJC (D. Mass.). Pet. 1. IPR2015-01293 and IPR2015-01294 (previously decided), and IPR2016-01453 (filed concurrently and previously decided) are also related to this case. *Id.*

B. *The ’679 Patent*

The ’679 patent discloses a method and apparatus “for providing controllable power via an A.C. power source to LED-based lighting devices having an MR16 configuration.” Ex. 1001, Abstract. The methods and apparatus of the ’679 patent’s invention “facilitate the use of LED-based light sources on A.C. power circuits that provide either a standard line

voltage or signals other than standard line voltages.” *Id.* at 2:54–57. The ’679 patent discloses that

methods and apparatus of the invention particularly facilitate the use of LED-based light sources on A.C. power circuits that are controlled by conventional dimmers (i.e., “A.C. dimmer circuits”). In one aspect, methods and apparatus of the present invention facilitate convenient substitution of LED-based light sources in lighting environments employing A.C. dimming devices and conventional light sources. In yet other aspects, methods and apparatus according to the present invention facilitate the control of one or more parameters relating to the light generated by LED-based light sources (e.g., intensity, color, color temperature, temporal characteristics, etc.) via operation of a conventional A.C. dimmer and/or other signals present on the A.C. power circuit.

Id. at 2:58–3:4.

Figure 1, below, shows an example operation of conventional A.C. dimming devices. *Id.* at 9:36–37.

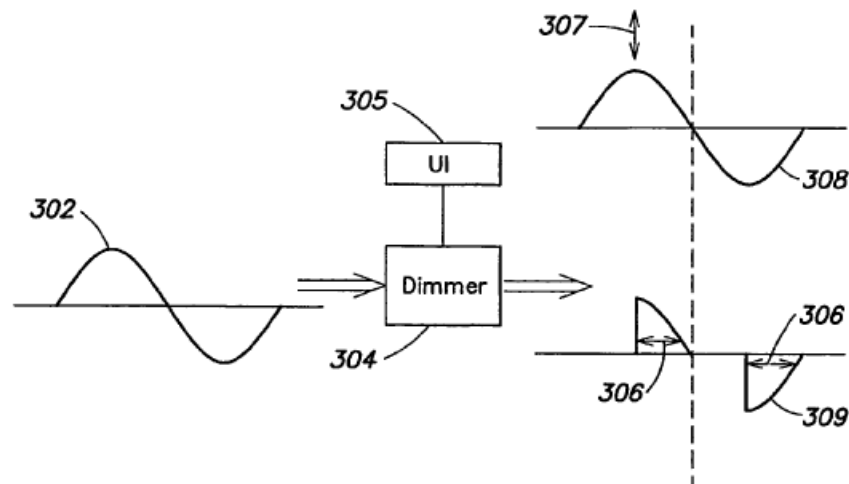


FIG. 1
(PRIOR ART)

Figure 1 “shows . . . voltage waveform 302 (e.g., representing a standard line voltage) that may provide power to one or more conventional light sources” and “a generalized A.C. dimmer 304 responsive to user interface 305.” *Id.* at 2:22–24. “[D]immer 304 is configured to output the waveform 308, in which the amplitude 307 of the dimmer output signal may be adjusted via the user interface 305.” *Id.* at 2:24–27. Dimmer 304 may also be “configured to output the waveform 309, in which the duty cycle 306 of the waveform 309 may be adjusted via the user interface 305.” *Id.* at 2:27–30.

Figure 5, below, shows one embodiment of the invention using an LED-based light source. *Id.* at 9:46–48.

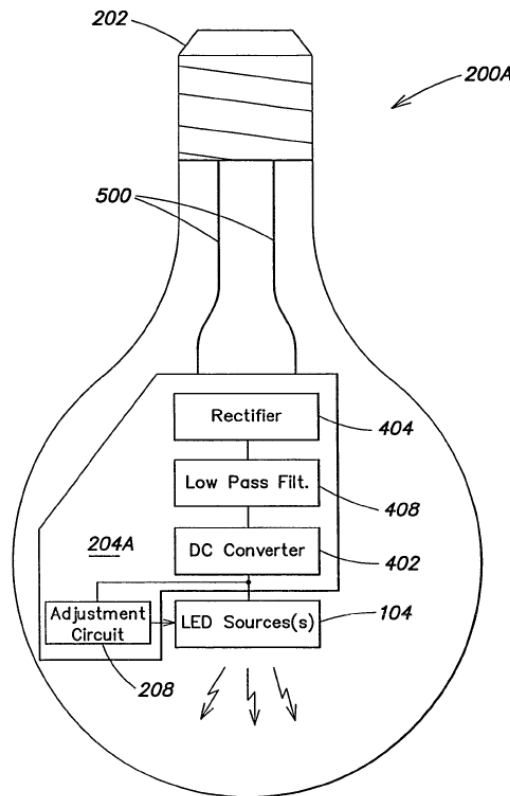


FIG. 5

Figure 5 illustrates an LED-based lighting unit 200A that is suitable for operation by a dimmer circuit. *Id.* at 15:35–38. Figure 5 shows adjustable light output that may be controlled via a dimmer, with controller 204A. *Id.* Figure 5 “includes an additional adjustment circuit 208 that further conditions a signal output from the DC converter 402. The adjustment circuit 208 in turn provides a variable drive signal to the LED-based light source 104, based on variations in the A.C. signal 500 (e.g., variations in the average voltage of the signal) in response to user operation of the dimmer.” *Id.* at 15:41–48.

The '679 patent also illustrates an LED-based lighting unit that resembles “a conventional MR16 bulb having a bi-pin base connector 202A configured to engage mechanically and electrically with a conventional MR16 socket.” *Id.* at 16:13–18. Figure 6A, below, shows an LED-based lighting unit. *Id.* at 9:53–54.

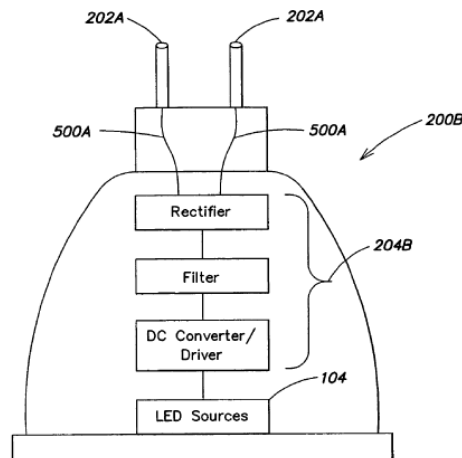


FIG. 6A

The “MR16 socket is connected to a source of A.C. power such that the A.C. signal 500A received by the unit 200B is a phase-angle modulated signal on the order of approximately 12 Volts A.C. (e.g., which may be derived, in turn, from a line voltage controlled via a switch and/or dimmer).” *Id.* at 16:20–24.

C. Illustrative Claims

Independent claims 1 and 11 are illustrative of the challenged claims and reproduced below (Ex. 1001, 28:25–37, 29:31–45):

1. An apparatus, comprising:
 - at least one LED;
 - a housing in which the at least one LED is disposed, the housing including at least one connection to engage mechanically and electrically with a conventional MR16 socket; and
 - at least one controller coupled to the housing and the at least one LED and configured to receive first power from an alternating current (A.C.) dimmer circuit, the A.C. dimmer circuit being controlled by a user interface to vary the first power, at least one controller further configured to provide second power to the at least one LED based on the first power.

11. An apparatus, comprising:
 - at least one LED;
 - a housing in which the at least one LED is disposed, the housing including at least one connection to engage mechanically and electrically with a conventional MR16 socket; and
 - at least one controller coupled to the housing and the at least one LED and configured to receive a power-related signal from an alternating current (A.C.) power source that provides signals other than a standard A.C. line voltage, the at least one

controller further configured to provide power to the at least one LED based on the power-related signal,
wherein the A.C. power source is an (A.C.) dimmer circuit.

D. Asserted Grounds of Unpatentability

The information presented in the Petition sets forth proposed grounds of unpatentability for the challenged claims of the '679 patent as follows (Pet. 3–4):

Reference[s]	Basis	Claim[s] Challenged
Schie ¹	35 U.S.C. § 102(e)	1, 11, 17–19, 26, 38, and 43–45
Schie	35 U.S.C. § 103(a)	1, 11, 17–19, 26, 38, and 43–45
Schie and Dalnodar ²	35 U.S.C. § 103(a)	3–5
Lys, ³ Dalnodar, and Schie	35 U.S.C. § 103(a)	6

II. ANALYSIS

A. Claim Interpretation

In an *inter partes* review, claim terms in an unexpired patent are given their broadest reasonable construction in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b); *Cuozzo Speed*

¹ U.S. Patent No. 6,940,733 to Schie et al., filed August 22, 2003, issued Sep. 6, 2005 (“Schie,” Ex. 1003).

² U.S. Patent No. 5,504,400 to Dalnodar, issued Apr. 2, 1996 (“Dalnodar,” Ex. 1004).

³ U.S. Patent No. 6,211,626 to Lys et al., issued Apr. 3, 2001 (“Lys,” Ex. 1005).

Techs., LLC v. Lee, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard as the claim interpretation standard to be applied in *inter partes* reviews). Under this standard, we interpret claim terms using “the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant’s specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). We presume that claim terms have their ordinary and customary meaning. *See Trivascular, Inc. v. Samuels*, 812 F.3d 1056, 1062 (Fed. Cir. 2016) (“Under a broadest reasonable interpretation, words of the claim must be given their plain meaning, unless such meaning is inconsistent with the specification and prosecution history.”); *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007) (“The ordinary and customary meaning is the meaning that the term would have to a person of ordinary skill in the art in question.” (internal quotation marks omitted)).

Based on the current record, we conclude that no express claim construction is necessary for our determination of whether to institute *inter partes* review of the challenged claims. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”).

B. Grounds based on Schie (Ex. 1003)

Each of the challenged grounds presented by Petitioner relies on Schie as prior art to the '679 patent. Below we address the parties' contentions regarding the priority date of the challenged claims of the '679 patent and the priority date of Schie.

1. Priority Date of the '679 Patent

To obtain benefit under 35 U.S.C. § 120, a party must establish that an earlier U.S. application complies with the first paragraph of 35 U.S.C. § 112 with respect to each claim for which benefit is desired. *See* 35 U.S.C. § 120; *see also* 37 C.F.R. § 1.78; *see also Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1158 (Fed. Cir. 1998) (discussing requirements of claiming benefit of priority date of earlier application under 35 U.S.C. § 120). The test for written description is an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Using this test, the invention must be described in a manner sufficient to demonstrate that the inventor actually invented the claimed invention. *Ariad Pharm. Inc. v. Eli Lilly & Co.*, 598 F.3d 1336 (Fed. Cir. 2010). To satisfy 35 U.S.C. § 112, first paragraph, the written description must convey with reasonable clarity to those skilled in the art that the inventor was in possession of the claimed invention. *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563–64 (Fed. Cir. 1991). One shows “possession” of the invention by describing the invention using such descriptive means as words, structures, figures, diagrams, formulas, etc., that fully set forth the claimed invention. *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997); *see also Augustine Med., Inc. v. Gaymar Indus., Inc.*, 181 F.3d 1291,

1302–03 (Fed. Cir. 1999) (“Different claims of [a CIP] application may therefore receive different effective filing dates. . . . Subject matter that arises for the first time in [a] CIP application does not receive the benefit of the filing date of the parent application.”). A prior application, however, need not contain precisely the same words as are found in the asserted claims. *See Eiselstein v. Frank*, 52 F.3d 1035, 1038 (Fed. Cir. 1995); *Purdue Pharma LP v. Faulding Inc.*, 230 F.3d 1320, 1323 (Fed. Cir. 2000) (holding that the disclosure does not have to provide *in haec verba* support in order to satisfy the written description requirement). In addition, “[e]ntitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed.” *In re Huston*, 308 F.3d 1267, 1277 (Fed. Cir. 2002) (quoting *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1571–72 (Fed. Cir. 1997)). The issue of whether the written description requirement has been satisfied is a question of fact. *Wang Labs., Inc. v. Toshiba Corp.*, 993 F.2d 858, 865 (Fed. Cir. 1993).

The ’679 patent states that it “claims the benefit, under 35 U.S.C. §119(e), of U.S. Provisional Application Ser. No. 60/558,235, filed Mar. 31, 2004, entitled ‘Methods and Apparatus for Providing Power to Lighting Devices’” and

also claims the benefit, under 35 U.S.C. §120, as a continuation-in-part (CIP) of U.S. Non-provisional application Ser. No. 10/435,687, filed May 9, 2003, entitled “Method and Apparatus for Providing Power to Lighting Devices,” which is now U.S. Pat. No. 7,038,399, which in turn claims priority to U.S. Provisional Application Ser. No. 60/379,079, filed May 9, 2002, entitled “Systems and Methods for Controlling LED Based

Lighting,” and U.S. Provisional Application Ser. No. 60/391,627, filed Jun. 26, 2002, entitled “Switched Current Sink.”

Ex. 1001, 1:7–20. Thus, the ’679 patent, filed March 31, 2005, claims priority as follows:

- March 31, 2004, for Provisional Application No. 60/558,235 (Ex. 1010, “the ’235 provisional”);
- May 9, 2003, for U.S. Patent No. 7,038,399 (Ex. 1009, “the ’399 patent”);
- June 26, 2002, for Provisional Application No. 60/391,627 (Ex. 1011, “the ’627 provisional”); and
- May 9, 2002, for Provisional Application No. 60/379,079 (Ex. 1012, “the ’079 provisional”).

Petitioner argues that because each of the challenged claims of the ’679 patent recites a “conventional MR16 socket,” these claims are entitled to priority no earlier than March 31, 2004, the date of the ’235 application (Ex. 1010), which contains sufficient support for the MR16 claim limitations of the ’679 patent. Pet. 3, 16. Petitioner argues that the predecessor ’399 patent (Ex. 1009) and the ’627 and ’079 provisionals (Ex. 1011, Ex. 1012) do not disclose an MR16 socket. Pet. 17, 23–24. Specifically, Petitioner contends that the general types of power connections of lighting systems discussed in the ’079 provisional (Ex. 1012) and the ’399 patent (Ex. 1009) do not disclose “a housing in which the at least one LED is disposed, the housing including at least one connection to engage mechanically and electrically with *a conventional MR16 socket*” as claimed in the ’679 patent,

and therefore, the claims of the '679 patent are not entitled to the May 9, 2002 filing date of the '079 provisional. Pet. 23–24 (citing Ex. 1006 ¶¶ 47–48); see Pet. 18–19 (noting that '399 patent never refers to an MR16 socket in examples of power connectors for light housing shapes and connectors types); Ex. 1009, 12:32–46 (describing connector types for light housings).

Patent Owner argues that the '399 patent and '079 provisional provide adequate written support for the “conventional MR16 socket” limitations of the challenged claims. Prelim. Resp. 12–18. Patent Owner argues that the '399 specification depicts a conventional incandescent light bulb having a screw-type base connector, but contemplates other housing shapes and connectors, including multi-pin and conventional halogen type sockets. Prelim. Resp. 13. The '399 patent states in full that:

FIG. 3 illustrates an LED-based lighting unit 200 according to one embodiment of the present invention. For purposes of illustration, the lighting unit 200 is depicted generally to resemble a conventional incandescent light bulb having a screw-type base connector 202 to engage mechanically and electrically with a conventional light socket. It should be appreciated, however, that the invention is not limited in this respect, as a number of other configurations including *other housing shapes and/or connector types are possible* according to other embodiments. Various examples of power connector configurations include, but are not limited to, screw-type connectors, wedge-type connectors, *multi-pin type connectors*, and the like, to facilitate engagement with conventional incandescent, *halogen*, fluorescent or high intensity discharge (HID) *type sockets*. Such sockets, in turn, may be connected directly to a source of A.C. power (e.g., line voltage), or via a switch and/or dimmer to the source of A.C. power.

Ex. 1001, 13:60–14:10 (emphasis added).

Patent Owner argues that “[t]hese disclosures in the ’399 patent—including “multi-pin type connectors” and “halogen . . . type sockets”—reasonably convey to a person of ordinary skill the use of conventional MR16 bulbs having bi-pin connectors because of its wide acceptance as a commonly used and standardized halogen incandescent bulb.” Prelim. Resp. 14. Thus, Patent Owner contends that an ordinarily skilled artisan would have understood the inventors possessed the claims that include a conventional MR16 socket, which is widely known as a conventional multi-pin type connector for halogen type sockets. *Id.*

Patent Owner further contends that the ’079 provisional contains the same disclosure as the ’399 patent, stating that “[t]he power adapter may be an incandescent-style base, *halogen-style base*, fluorescent style base, compact fluorescent-style base, high intensity discharge (HID) style base, screw base, wedge base, *pin base* or other adapter to allow the lighting system 200 to be connected to a power system.” Prelim. Resp. 16–17 (quoting Ex. 1012, 12:24–27). Patent Owner further notes that the ’079 provisional describes that “[s]uch an adapter may be used to connect an LED lighting system to a *conventional* control system, power system, or *socket*.” Prelim. Resp. 17 (quoting Ex. 1012, 12:27–28). Finally, Patent Owner notes that claim 59 in the ’079 provisional, expressly recites that “the power connector comprises a halogen-style lamp base.” Prelim. Resp. (quoting Ex. 1012, 27:2–3).

In sum, Patent Owner contends that these express disclosures of a genus of connectors—including “pin base” and “halogen-style lamp base”—

conveys to a person of ordinary skill in the art that inventor possessed the specific MR16 species of connector. Prelim. Resp. 17–18.

Upon review of the record and evidence, we agree with Patent Owner that the '399 patent and '079 provisional satisfy the written description requirement showing that the inventors possessed the conventional MR16 socket claimed in the '679 patent. In this case, the '079 provisional and '399 patent disclose the general types of connectors and housing using terms a person of ordinary skill in the art would understand include the general types of lighting of which the MR16 is just one variant. *See* Ex. 2001, 7.24 (discussing “standard MR16 lamps” using “a 2-pin or turn-and-lock base”); Prelim. Resp. 6 n.6 (providing citations for MR16 bulbs as being well known and conventional). The general housing disclosures in the '399 patent and '079 provisional provide sufficient detail necessary to convey to a person of ordinary skill in the art that the scope of the claims include non-screw type bases such as halogen and pin-type bases and connectors. *See also Novozymes A/S v. DuPont Nutrition Biosciences APS*, 723 F.3d 1336, 1347 (Fed. Cir. 2013) (“[I]n some cases, broad or generic disclosures can adequately describe particular constituent species.”); *Cordis Corp. v. Medtronic AVE, Inc.*, 339 F.3d 1352, 1365 (Fed. Cir. 2003) (“A specification may . . . contain a written description of a broadly claimed invention without describing all species that [the] claim encompasses.” (alteration in original)); *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc) (noting that level of detail required to establish possession of the claimed subject matter as of the filing date “varies depending on the nature and scope of the claims and on the

complexity and predictability of the relevant technology”). The disclosure of the type of bulb housing, e.g. halogen, and type of connectors, e.g. pin-type, is adequate written description support for the particular type of housing claimed in the ’679 patent.

Contrary to Petitioner’s contentions, we do not find that the lack of express reference to a conventional MR16 socket in either the ’399 patent or ’079 provisional indicates that such a socket is new matter or shows that the inventor did not possess the inclusion of an MR16 socket. Pet. 17. We are also not persuaded by Petitioner’s conclusory declarant testimony, which does not address the multi-pin or halogen type bulb disclosures and instead observes that the ’079 provisional and ’399 patent do not *expressly* mention or describe an MR16 bulb. Ex. 1006 ¶¶ 44–48.

We disagree with Petitioner’s assertion that the ’679 patent priority is limited to the ’235 provisional (as new matter) based on the lack of express disclosure of the conventional MR16 socket in the ’079 provisional and the ’399 patent. Pet. 16–17 (discussing new matter in ’235 provisional), 18–34 (describing lack of express disclosure in ’079 provisional and ’399 patent).

Finally, we also disagree with Petitioner’s argument that the ’399 patent and ’079 provisional do not provide adequate written description of the “conventional MR16 socket” through incorporation by reference. Pet. 19–20. To incorporate material by reference, “the host document must identify with detailed particularity what specific material it incorporates and clearly indicate where that material is found in the various documents.” *Adv. Display Sys., Inc. v. Kent State Univ.*, 212 F.3d 1272, 1282 (Fed. Cir. 2000). We agree with Patent Owner that the ’399 patent and ’079

provisional properly incorporate the identified applications and patents with particular, clear references to incorporate the entire document. *See* Ex. 1009, 1:8–14, 7:46–8:21; Ex. 1012, 1:4–23; *see Harari v. Lee*, 656 F.3d 1331, 1335–36 (Fed. Cir. 2011). The ’399 patent states that “[t]he following patents and patent applications are hereby incorporated herein by reference,” and identifies a list of patents/applications by title, number, and filing/issue date. Ex. 1009, 7:46–8:21. The ’079 provisional expressly states that “[t]his application is related to and hereby incorporates by reference herein the entire disclosure of the following U.S. Patent Applications” and provides two applications that refer to MR16 lighting and provide a figure showing and MR16 type housing and connector. Ex. 1012, 1:4–23; *see* Pet. 19–20 (citing Ex. 1015 ¶ 0305; Ex. 1016, Figure 9, 11:32–35 and acknowledging the two cited documents refer to MR16 lighting). Accordingly, we find that the references incorporated into the ’079 provisional (and ’399 patent) also provide sufficient written description support for the “conventional MR16 socket” limitations of the ’679 patent.

Petitioner does not challenge the written description support for any other limitations of the challenged claims, apart from the “conventional MR16 socket” limitation. Pet. 16–24. Patent Owner, however, provides a thorough and persuasive chart showing written description support in the ’399 patent and ’079 provisional for each of the challenged claims of the ’679 patent. Prelim. Resp. 29–62 (chart with citations to the ’399 patent and ’079 provisional for claims 1, 3–6, 11, 17–19, 26, 38, and 43–45 of the ’679 patent).

Based on the foregoing, we find that the priority date of the challenged claims of the '679 patent is the date of the '079 provisional, May 9, 2002, as both the '399 patent and the '079 provisional provide adequate written description support for the “conventional MR16 socket limitation” of the challenged claims.

2. Schie (Ex. 1003) as Prior Art to the '679 Patent

Given our finding above that the priority date of '679 patent is May 9, 2002, we find that Petitioner has not shown that Schie, with an earliest available priority date of August 22, 2002 (Pet. 24–39; Prelim. Resp. 1–2), is prior art to the '679 patent under 35 U.S.C. § 102(e). Because each of Petitioner's grounds for challenging the '679 patent relies on Schie (Pet. 3–4, 41–67), we find that Petitioner has not demonstrated a likelihood that it would prevail in showing that claims 1, 3–6, 11, 17–19, 26, 38, and 43–45 of the '679 patent are unpatentable.

III. CONCLUSION

For the foregoing reasons, we determine that the Petition fails to establish a reasonable likelihood of prevailing on the asserted grounds that claims 1, 3–6, 11, 17–19, 26, 38, and 43–45 of the '679 patent are unpatentable.

IV. ORDER

Accordingly, it is

ORDERED that the petition is denied as to all challenged claims and no trial is instituted.

IPR2016-01455
Patent 7,358,679 B2

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