

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LUXSHARE PRECISION INDUSTRY CO., LTD.,
Petitioner,

v.

AMPHENOL CORP.,
Patent Owner.

IPR2022-00132
Patent 10,381,767 B1

Before MIRIAM L. QUINN, JON B. TORNQUIST, and
AVELYN M. ROSS, *Administrative Patent Judges*.

TORNQUIST, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. *Background and Summary*

Luxshare Precision Industry Co., Ltd. (“Petitioner”) filed a Petition (Paper 6, “Pet.”) requesting an *inter partes* review of claims 1–32 of U.S. Patent No. 10,381,767 B1 (Ex. 1001, “the ’767 patent”). Amphenol Corp. (“Patent Owner”) filed a Preliminary Response to the Petition. Paper 7 (“Prelim. Resp.”).

We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314; 37 C.F.R. § 42.4(a) (2021). The standard for institution is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted “unless the Director determines . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.”

Section 314(a) does not require the Director to institute an *inter partes* review. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”). Rather, a decision whether to institute is within the Director’s discretion, and that discretion has been delegated to the Board. *See* 37 C.F.R. § 42.4(a); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”).

For the reasons explained below, we exercise our discretion to deny the Petition under 35 U.S.C. § 314(a).

B. *Real Parties in Interest*

Petitioner identifies itself, Dongguan Luxshare Precision Industry Co., Ltd., Luxshare Precision Limited (HK), and Luxshare-ICT Inc., as the real parties in interest. Pet. vi.

Patent Owner identifies itself as the real party in interest. Paper 5, 1.

C. Related Matters

The parties identify *Amphenol Corporation v. Luxshare-ICT, Inc.*, 3-20-cv-06785 (N.D. Cal.) (“NDCA Action”) and ITC Investigation No. 337-TA-1241 (“ITC Litigation”) as related matters. Pet. vi; Paper 5, 1.

D. The '767 Patent

The '767 patent is titled “High Performance Cable Connector” and discloses “interconnections between cables and circuit assemblies.” Ex. 1001, 1:26–28, code (54). The '767 patent acknowledges that cable connectors for interconnecting electronic devices were known in the art, but contends the connectors of the invention “may include features that provide desirable electrical performance, such as reduced crosstalk between signals propagating through [the] interconnection system” and “less attenuation or more uniform attenuation at frequencies of signals to be conveyed through the interconnection system.” *Id.* at 4:35–42.

Figure 1 of the '767 patent is reproduced below:

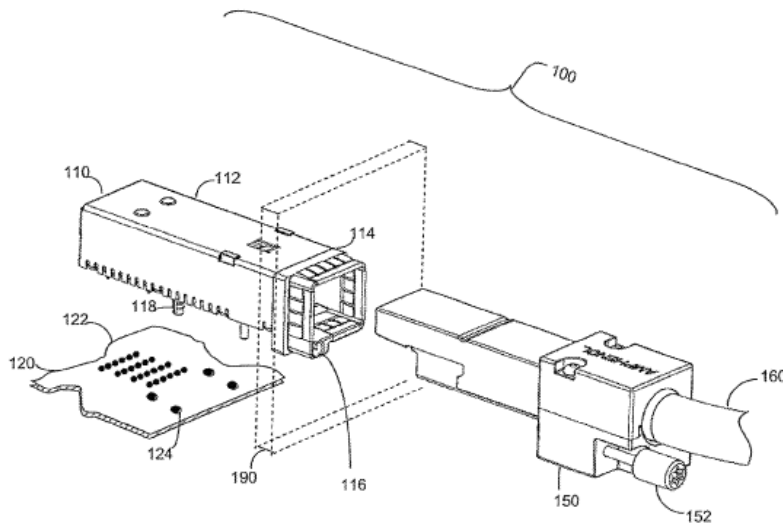


FIG. 1

Figure 1 “is a perspective view of an electronic assembly incorporating an interconnection system according to some embodiments of the invention.” *Id.* at 3:58–60. In the embodiment of Figure 1, interconnection system 100 includes cable bundle 160, plug 150, receptacle assembly 110, and panel 190. *Id.* at 5:60–66, 6:19–20, 7:25–34. Receptacle assembly 110 is attached along a lower face to printed circuit board 120 so that electrical connections may be made between printed circuit board 120 and the conductive elements of receptacle assembly 110. *Id.* at 6:19–20, 6:31–33. When plug 150 is inserted into receptacle assembly 110, conducting elements that propagate signals through receptacle assembly 110 to one or more ports may mate with conductive elements within plug 150. *Id.* at 7:25–30. Electromagnetic interference gasket 114 “provides a seal between receptacle assembly 110 and panel 190 and reduces the amount of electromagnetic radiation” emanating from or entering receptacle assembly 110. *Id.* at 7:49–55.

Figure 6 of the '767 patent is reproduced below:

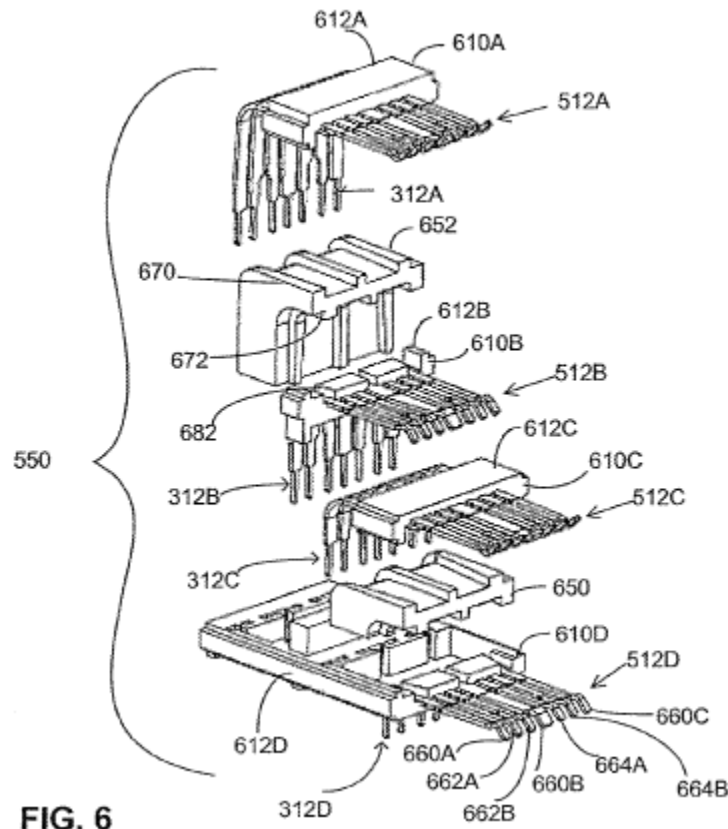


Figure 6 is an exploded view of a portion of a receptacle and shows lead sub-assembly 550, which includes lead assemblies 610A, 610B, 610C, and 610D. *Id.* at 4:3–4, 10:37–41. As shown in Figure 6, “[I]lead assembly 610A includes a column of conductive elements for which column 312A of contact tails and column 512A of mating contact portions can be seen.” *Id.* at 10:44–46. The intermediate portions of the conductive elements of lead assembly 610A are held within housing member 612A, which may be an insulative material that is molded over a portion of the conductive elements. *Id.* at 10:47–54. The '767 explains that in order to improve electrical performance, insert 650 separates lead assemblies 610D and 610C, and insert 651 separates lead assemblies 610A and 610B. *Id.* at 11:11–15.

E. Illustrative Claim

Petitioner challenges claims 1–32 of the '767 patent. Pet. 6. Claim 1, reproduced below, is illustrative of the challenged claims:

1. A receptacle adapted for mounting to a printed circuit board, comprising:

a housing having a cavity bounded by a first surface that is parallel to the printed circuit board and an opposing second surface that is parallel to the printed circuit board, each of the first and second surfaces being disposed above a first side of the printed circuit board;

a first lead assembly including:

a first monolithic housing member; and

a first plurality of conductive elements each comprising a contact tail adapted for attachment to the printed circuit board that is perpendicular to the first side of the printed circuit board, a mating contact portion disposed along the first surface of the cavity, and an intermediate portion disposed in the first monolithic housing member and coupling the contact tail to the mating contact portion,

wherein the first monolithic housing member comprises exterior projections extending away from the first plurality of conductive elements along a direction parallel to the first surface; and

a second lead assembly including:

a second monolithic housing member; and

a second plurality of conductive elements each comprising a contact tail adapted for attachment to the printed circuit board that is perpendicular to the first side of the printed circuit board, a mating contact portion disposed along the second surface of the cavity, and an intermediate portion disposed in the second monolithic housing member coupling the contact tail to the mating contact portion,

wherein the second monolithic housing member comprises exterior projections extending away from the second

plurality of conductive elements along the direction parallel to the first surface.

Ex. 1001, 31:2–36.

F. Prior Art and Asserted Grounds

Petitioner asserts that claims 1–32 would have been unpatentable on the following grounds (Pet. 6):

Claims Challenged	35 U.S.C. §¹	Reference(s)/Basis
1–10, 28–32	103	Cai ²
10–27	103	Cai, Cohen ³ ,
6, 28–31	103	Cai, QSFP ⁴ ,
9, 28–31	103	Cai, Droesbeke ⁵
28–31	103	Cai, QSFP, Droesbeke

In support of its grounds for unpatentability, Petitioner relies upon the declaration of Joseph C. McAlexander III. Ex. 1002.

II. ANALYSIS

A. Claim Construction

In this proceeding, the claims of the ’767 patent are construed “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. [§] 282(b).” 37 C.F.R. § 42.100(b).

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. §§ 102 and 103, effective March 16, 2013. Because the ’767 patent claims priority to a continuing application filed November 21, 2012, and because neither party argues otherwise, we apply the pre-AIA versions of §§ 102 and 103 in this Decision. *See* 35 U.S.C. § 100(i)(1)(B).

² CN 201112782 Y, published September 10, 2008 (with English-language translation). Ex. 1004 (“Cai”).

³ US 7,494,383 B2, issued February 24, 2009. Ex. 1005 (“Cohen”).

⁴ *Quad Small Form-factor Pluggable (QSFP) Transceiver Specification*, Revision 1.0, released December 1, 2006. Ex. 1006 (“QSFP”).

⁵ US Patent Application No. 2002/0192988 A1, published December 19, 2002. Ex. 1008 (“Droesbeke”).

Under that standard, the words of a claim are generally given their “ordinary and customary meaning,” which is the meaning the term would have had to a person of ordinary skill at the time of the invention, in the context of the entire patent including the specification. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc).

Neither party contends any terms of the ’767 patent require construction. *See, e.g.*, Pet. 5. And, upon review of the parties’ arguments and supporting evidence, we determine that no terms require construction for purposes of this Decision. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (quoting *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. Discretion Under 35 U.S.C. § 314(a)

Patent Owner contends that we should exercise our discretion under 35 U.S.C. § 314(a) to deny institution of *inter partes* review in light of the advanced stage of the parallel ITC Litigation. Prelim. Resp. 13–29 (citing, *e.g.*, *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”). Petitioner asserts that the facts and circumstances in this case counsel against discretionary denial. Pet. 7–10.

In *Fintiv*, the Board articulated a list of factors that we consider in determining whether to exercise discretion to deny institution based on an advanced stage of a parallel proceeding:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision;

3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board's exercise of discretion, including the merits.

Fintiv, Paper 11 at 5–6. In evaluating these factors, we take “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.* at 6.

1. *Factor 1—Likelihood of Stay*

The NDCA Action was stayed pursuant to 28 U.S.C. § 1659 pending resolution of the ITC Litigation. Prelim. Resp. 13; Pet. 7. The ITC Litigation, however, has proceeded to an initial determination and Petitioner presents no evidence that it has requested a stay of the ITC Litigation or that a stay is likely. Prelim. Resp. 17 (Patent Owner noting the March 4, 2022, due date for the initial determination in the ITC Litigation). Accordingly, factor 1 weighs in favor of discretionary denial.

2. *Factor 2—Proximity of the Trial Date to the Final Written Decision Due Date*

Patent Owner represents that “the target date for the ITC’s final determination is July 5, 2022,” or roughly ten months before the projected statutory deadline for the issuance of a Final Written Decision in this proceeding. Prelim. Resp. 18–19.

Petitioner does not address this factor. Pet. 7 (addressing only *Fintiv* factors 4 and 6).

Given the roughly 10-month differential between the target date for the ITC’s final determination and the projected statutory deadline for issuing

a Final Written Decision in this proceeding, factor 2 weighs in favor of discretionary denial.

3. *Factor 3—Investment in Proceedings*

Patent Owner presents evidence that the parties have invested significant efforts in the ITC Litigation. Prelim. Resp. 19–20. In particular, Patent Owner presents evidence that the parties have (1) exchanged initial and final responses to contention interrogatories, (2) conducted 13 depositions of Patent Owner’s employees, 9 depositions of Petitioner’s employees, and three depositions of named inventors, (3) completed a *Markman* hearing, (4) received claim construction rulings from the ITC related to the ’767 patent, and (5) conducted a five-day evidentiary hearing involving fact and expert testimony involving the validity of claims 1, 4–6, 9–13, 15–17, 19, 28, and 29 of the ’767 patent. *Id.* at 19–21 (citing Ex. 2010; Ex. 2014; Ex. 2004).

Petitioner does not contest that the parties have invested significant efforts in the ITC Litigation related to the ’767 patent.

Upon review of the record, we agree with Patent Owner that the parties have invested significant time and resources in the ITC Litigation that specifically relates to the ’767 patent. Accordingly, factor 3 weighs in favor of discretionary denial.

4. *Factor 4—Overlap of Issues*

Petitioner contends factor 4 weighs strongly in favor of institution because the Petition seeks review of all claims of the ’767 patent, whereas the ITC Litigation involves only claims 1, 4–6, 9–13, 15–17, 19, 23, 28, and 29 of the ’767 patent. Pet. 7. Petitioner also notes that it is no longer pursuing the Cai-based grounds in the ITC Litigation and stipulates that “if IPR is instituted, Petitioner will not pursue in the NDCA Action any of the

grounds raised or [that] could have been reasonably raised in the IPR based at least in part on Cai.” *Id.*

Patent Owner contends factor 4 favors denial because “there is significant overlap between the Petition and the ITC Litigation.” Prelim. Resp. 20. Patent Owner notes that the same Cai-based grounds asserted in this proceeding were relied upon in the ITC Litigation, and were addressed in Petitioner’s initial invalidity contentions, final invalidity contentions, and opening expert report. *Id.* at 21 (citing Ex. 2007; Ex. 2011; Ex. 2012). According to Patent Owner, “only *after* receiving [Patent Owner’s] rebuttal expert report, and in the middle of Petitioner’s expert deposition for which [Patent Owner] invested resources preparing to cross-examine Petitioner’s expert on those Cai-based grounds,” did Petitioner “unilaterally withdr[a]w all Cai-based invalidity challenges from the ITC Litigation without explanation.” *Id.* Patent Owner contends this calculated decision to unilaterally drop the Cai-based grounds “wasted significant resources and created significant inefficiencies.” *Id.* at 21–22.

Patent Owner further contends that despite Petitioner’s withdrawal of its Cai-based grounds in the ITC Litigation, there is still significant overlap between the issues raised in this proceeding and Petitioner’s remaining invalidity challenges in the ITC Litigation. *Id.* at 22–23. Patent Owner contends, for example, that the same or similar secondary references are asserted in the ITC Litigation (Cohen and the QSFP standard), as are the same purported motivations to modify a primary reference based on these secondary references. *Id.* at 22 (citing Pet. 13–14, 60–61, 79–81, 84; Ex. 2003, 199, 227–228, 260–261, 267–268).

On this record, Patent Owner demonstrates that there is at least some overlap between the issues raised in the Petition and those remaining to be

resolved in the ITC Litigation. Patent Owner also demonstrates that a majority of the claims of the '767 patent are at issue in the ITC Litigation, that those claims have been extensively addressed by the parties in that proceeding, and absent Petitioner's unilateral decision to withdraw the Cai-based grounds from the ITC Litigation, the ITC Litigation would have resolved a significant portion, if not all, of the unpatentability arguments set forth in the Petition. Prelim. Resp. 21–24 (noting that the Petition's treatment of independent claims 24 and 32 "relies primarily on the Petition's analysis of claim 1").

At the same time, Petitioner provides a stipulation regarding the NDCA Action, and the ITC will not resolve all of the Cai-based grounds at issue in this proceeding. Thus, factor 4 weighs, at least to some extent, against discretionary denial.

5. Factor 5—Identity of Parties

The parties are the same in this proceeding and in the ITC Litigation. Prelim. Resp. 25. Given that Petitioner is a party to both proceedings and the ITC is scheduled to issue a final determination before the projected statutory deadline for a Final Written Decision in this proceeding, this factor weighs in favor of discretionary denial.

6. Factor 6—Other Circumstances

The sixth *Fintiv* factor takes into account any other relevant circumstances that would counsel for or against exercising discretion to deny institution, including the merits. *Fintiv*, Paper 11, 14–15. Petitioner argues that this factor weighs against discretionary denial because the challenged claims "are void of inventive concepts," Patent Owner failed to submit or list the SFP and QSFP standards on an IDS during prosecution, and the "Applicants improperly filed a non-publication request in violation of

35 U.S.C. § 122(b)(2)(B)(i).” Pet. 8–10. According to Petitioner, these errors and/or procedural steps prevented the Examiner from considering all pertinent information during prosecution of the ’767 patent. *Id.* at 9–10.

Patent Owner contends factor 6 weighs in favor of discretionary denial because, among other reasons, “despite being on notice that [Patent Owner] challenges whether Cai discloses a ‘lead *assembly*’ as required by *every Challenged Claim*, the Petition fails to adequately explain how that limitation is satisfied by the prior art.” Prelim. Resp. 25.

Each independent claim of the ’767 patent requires a “first lead assembly” and a “second lead assembly.” Ex. 1001, 31:9–32, 33:27–55, 34:47–35:8, 36:15–47. Upon review of the parties’ arguments and supporting evidence, we find that Patent Owner raises significant questions as to whether Cai discloses either of those limitations. First, Patent Owner presents evidence that the term “lead assembly” in the ’767 patent is used to denote a sub-unit that is assembled prior to the formation of the connector, and presents evidence that each of the elements of Cai identified by Petitioner as making up the first and second lead assemblies are assembled individually, and not as an identifiable sub-unit of the claimed connector. Prelim. Resp. 37–39; Ex. 1001, 10:52–57 (noting that lead assembly 610A is “formed” by, for example, molding housing member 612A over a portion of the conductive elements in lead assembly 610A); Ex. 1004, 22 (Cai explaining how and when each individual structure is assembled into the disclosed connector)⁶.

⁶ Our citations to Cai are to the page numbers added by Petitioner in the lower right corner of the document.

Second, despite being aware of Patent Owner’s position (raised during the ITC Litigation) that Cai does not teach or suggest the first and second “lead assembly” limitations, Petitioner fails to explain where Cai discloses these limitations. *See* Ex. 2008 ¶¶ 539–541 (Patent Owner’s expert addressing the first and second “lead assembly” limitations of the ’767 patent during the ITC Litigation). Rather, Petitioner merely identifies where it contends each component of the claimed assemblies may be found in Cai, without clearly explaining why these components collectively constitute a “lead assembly.” *See, e.g.*, Pet. 21–24. In view of these issues, we determine that factor 6 is, at best, neutral.

7. Balancing the Fintiv Factors

Applying a holistic analysis of the relevant facts and the particular circumstances of this case, we conclude that the factors counseling in favor of exercising discretion outweigh those counseling against exercising discretion. Accordingly, we exercise our discretion to deny institution under 35 U.S.C. § 314(a).

III. ORDER

In consideration of the foregoing, it is:

ORDERED that the Petition is *denied* and no trial is instituted.

IPR2022-00132
Patent 10,381,767 B1

FOR PETITIONER:

Jason A. Engel
Ragae M. Ghabrial
Katherine L. Allor
K&L GATES LLP
jason.engel.ptab@klgates.com
ragae.ghabrial@klgates.com
katy.allor@klgates.com

FOR PATENT OWNER:

Richard Giunta
Edmund Walsh
WOLF GREENFIELD & SACKS, P.C.
rgiunta-ptab@wolfgreenfield.com
ewalsh-ptab@wolfgreenfield.com