

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD,
Petitioner,

v.

MOJO MOBILITY INC.,
Patent Owner.

IPR2023-01090
Patent 11,292,349 B2

Before WILLIAM V. SAINDON, MICHAEL J. FITZPATRICK, and
KARA L. SZPONDOWSKI, *Administrative Patent Judges*.

Opinion for the Board filed by *Administrative Patent Judge*
SZPONDOWSKI.

Opinion Concurring filed by *Administrative Patent Judge* FITZPATRICK.
SZPONDOWSKI, *Administrative Patent Judge*.

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

I. INTRODUCTION

Samsung Electronics Co., Ltd. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) to institute an *inter partes* review of claims 8, 13, and 15–18 of U.S. Patent 11,292,349 B2, issued on April 5, 2022 (Ex. 1001, “the ’349 patent”). Mojo Mobility Inc. (“Patent Owner”) filed a Preliminary Response (Paper 7, “Prelim. Resp.”). With our authorization, Petitioner filed a Preliminary Reply (Paper 8, “Reply”), and Patent Owner filed a Preliminary Sur-reply (Paper 10, “Sur-reply”).

Institution of an *inter partes* review is authorized when “the information presented in the petition . . . and any response . . . shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). Based on the current record, and for the reasons explained below, we determine that Petitioner has established a reasonable likelihood that it would prevail with respect to at least one challenged claim, and we institute an *inter partes* review.

II. BACKGROUND

A. *Real Parties-in-Interest*

Petitioner identifies Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. as the real party-in-interest. Pet. 1. Patent Owner identifies itself as the real party-in-interest. Paper 5, 2 (Mandatory Notices of Patent Owner).

B. *Related Matters*

The parties identify *Mojo Mobility Inc. v. Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc.*, Case No. 2:22-cv-00398 (E.D.

Tex.) as a related case (“district court litigation”). Pet. 1; Paper 5, 2.¹ The parties also state that Petitioner has concurrently filed another petition for *inter partes* review of the ’349 patent (IPR2023-01089). *Id.*

C. The ’349 Patent (Ex. 1001)

The ’349 patent is titled “System and Method for Powering or Charging Receivers or Devices Having Small Surface Areas or Volumes” and is generally directed to “systems and methods for enabling transfer of power, from a wireless charger or power supply, to one or more receivers placed on or near the wireless charger or power supply, including powering or charging one or multiple receivers or devices having small surface areas or volumes.” Ex. 1001, code (54), 1:54–58.

The ’349 patent discloses various embodiments of a system for wireless powering or charging of devices. Generally, “an inductive power transmitter employs a magnetic induction coil(s) transmitting energy to a receiving coil(s) in or on a device or product.” *Id.* at 4:4–7. Figure 1, reproduced below, illustrates such a system.

¹ Petitioner incorrectly identified Case No. 1:22-cv-00398. Pet. 1. Patent Owner identifies Case No. 1:22-cv-00433-JRJ (E.D. Tex.), which appears to be the original case number, before the case was transferred. Paper 5, 2.

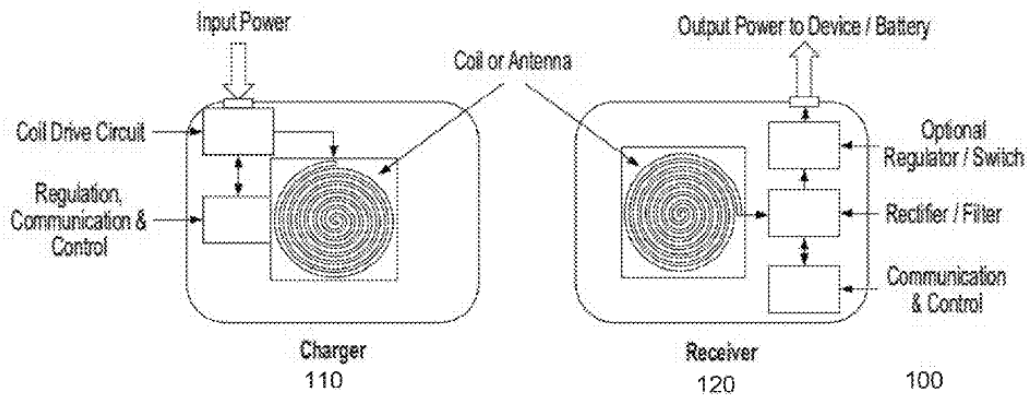


FIGURE 1

Figure 1, above, depicts a “wireless charger or power system 100,” which includes “a first charger or transmitter part 110 and a receiver 120 connected to a mobile or stationary device.” Ex. 1001, 6:17–20. Both the charger or transmitter part 100 and the receiver 120 also include a coil. *Id.* at Fig. 1.

The transmitter (or charger) coil may be “constructed of Litz wire or patterned printed circuit board (PCB).” *Id.* at 7:42–44. “[T]he charger can operate continuously, and any appropriate receiver coil placed on or near its surface will bring it to resonance and will begin receiving power.” *Id.* at 7:65–8:1. The ’349 patent describes various geometries for the charger coils. *Id.* at 7:28–8:57.

Figure 5, reproduced below, illustrates a charger geometry.

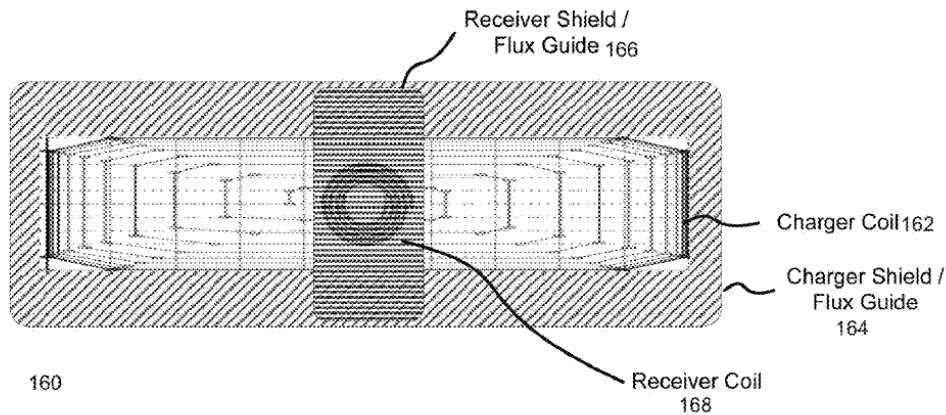


FIGURE 5

Figure 5, above, shows “geometry 160 whereby a charger coil 162 is placed on a magnetic flux guide/shielding layer 164 that extends beyond the edges of the coil.” *Id.* at 8:31–33. Additionally, receiver coil 168 “similarly has a magnetic flux/shielding layer 166 that extends beyond the size of the coil 168.” *Id.* at 8:33–35.

Figure 6, reproduced below, illustrates a return magnetic flux from a charger.

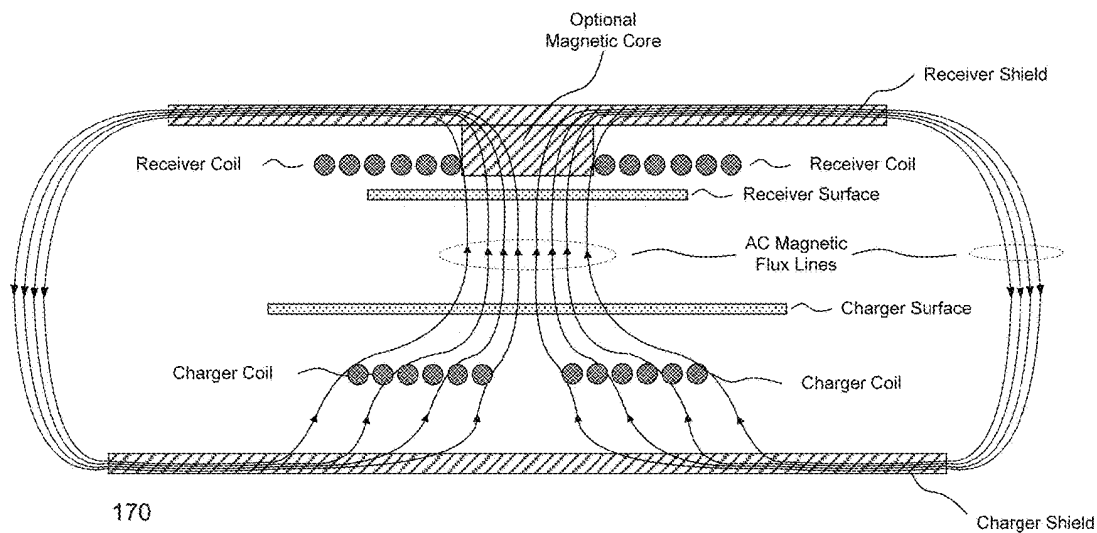


FIGURE 6

Figure 6, above, depicts, from top to bottom, a receiver shield, receiver coil, receiver surface, AC magnetic flux lines, charger surface, charger coil, and charger shield. The '349 patent further states that “the reluctance of the flux path in the receiver can be lowered by including high permeability material in the core of the receiver ring coil (similar to a solenoid).” Ex. 1001, 8:49–52. Additionally, a Litz wire receiver coil can be used. *Id.* at 8:54–57.

Figure 7, reproduced below, illustrates a wire wrapped around a core to create a solenoid type receiver.

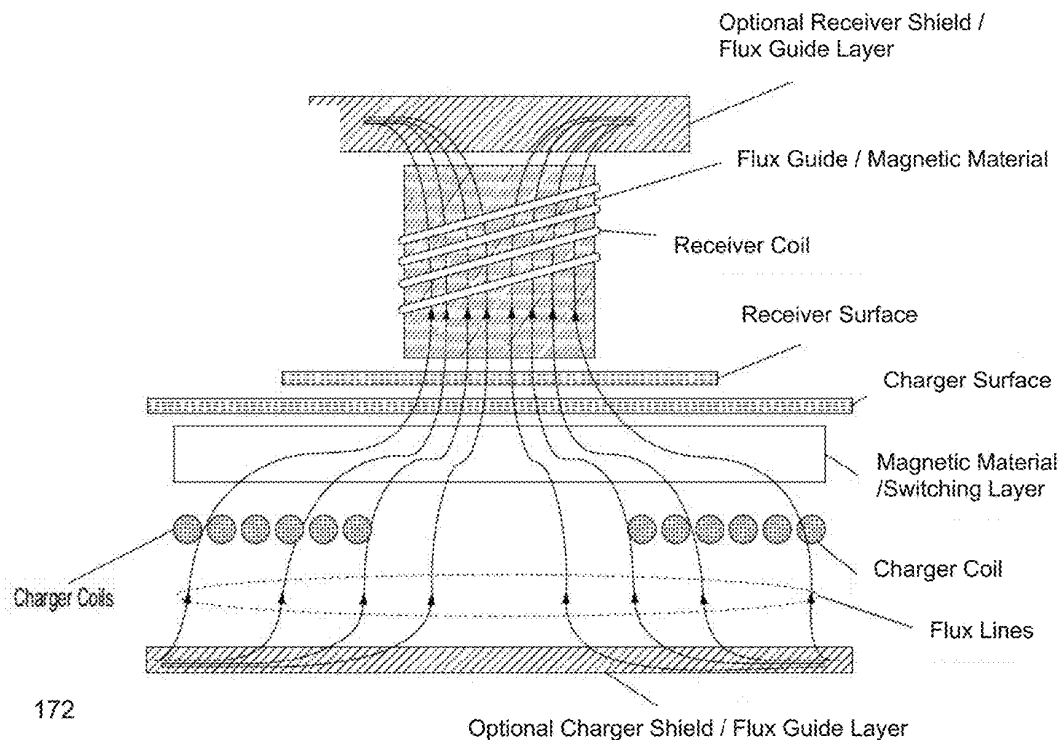


FIGURE 7

Figure 7, above, depicts, from top to bottom, an optional receiver shield/flux guide layer, flux guide/magnetic material, receiver coil, receiver surface, charger surface, magnetic material/switching layer, charger coil, flux lines, and optional charger shield/flux guide layer. Figure 7 shows Litz wire

wrapped around the core of the receiver coil to create a solenoid type receiver. *Id.* at 8:64–65.

Figure 8, reproduced below, illustrates a ferrite lower magnetic shield or flux guide.

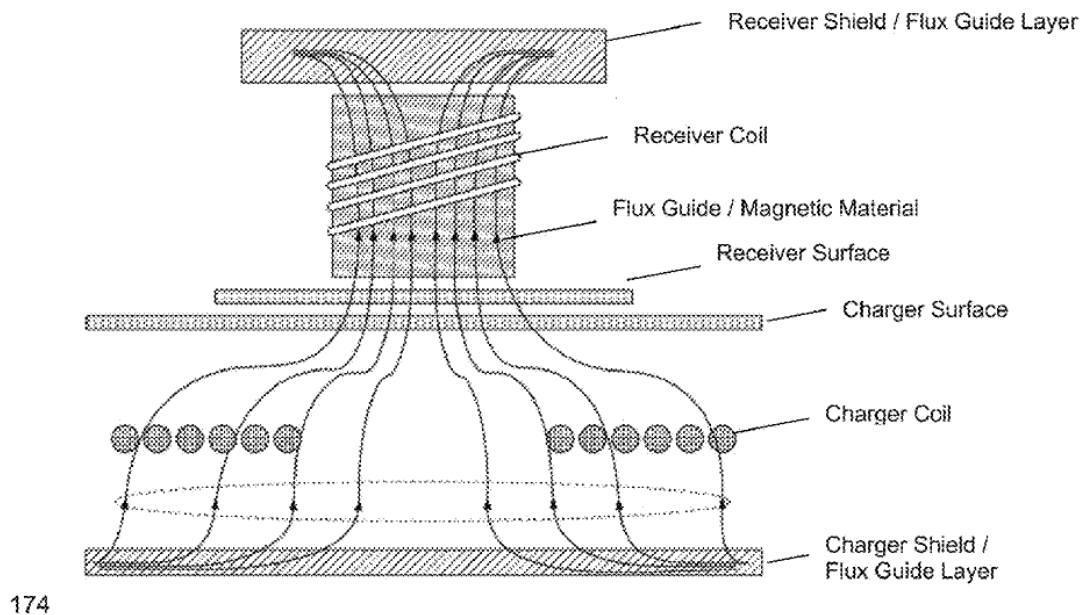


FIGURE 8

Figure 8, above, depicts, from top to bottom, a receiver shield/flux guide layer, receiver coil, flux guide/magnetic material, receiver surface, charger surface, charger coil, and charger shield/flux guide layer. Figure 8 shows an embodiment “with a thin (0.5 mm thick) ferrite lower magnetic shield/flux guide.” *Id.* at 9:11–13.

In addition, the ’349 patent describes that “the charger and or receiver can include means to provide more precise alignment between the charger and receiver coils or antennas.” *Id.* at 14:35–37. “These can include visual, physical, or magnetic means to assist the user in alignment of parts.” *Id.* at

14:37–38. “To implement more positioning freedom of the receiver on the charger, the size of the coils can also be mismatched.” *Id.* at 14:38–40.

D. Illustrative Claims

Although independent claim 1 is not directly challenged here, the challenged claims depend from it. Claim 1 is reproduced below, with Petitioner’s identifiers in brackets.

1. [1(a)] A system for inductive power transfer comprising:

[1(b)] a charger, wherein the charger is an inductive charger, and the charger includes:

[1(c)] a printed circuit board having a charger coil, wherein the charger coil has a substantially planar charger surface;

[1(d)] a substantially planar magnetic layer under the charger coil opposite the charger surface; and

[1(e)] a charger drive circuit, wherein the charger drive circuit includes a resonant capacitor and a FET switch to apply an alternating voltage to the charger coil; and

[1(f)] a first mobile device that includes a receiver to inductively receive power for the first mobile device, wherein the receiver includes:

[1(g)] a solenoid, wherein the solenoid includes:

[1(h)] a magnetic core having a relative magnetic permeability exceeding 1 and having first and second ends; and

[1(i)] Litz wire wrapped around a section of the magnetic core forming a wire wound section around the magnetic core, with the magnetic core extending beyond the wire wound section; and

[1(j)] a receiver electronic circuit, wherein the receiver electronic circuit includes a resonant capacitor and a rectifier; and

wherein:

[1(k)] the charger further includes a means for positioning the receiver in a power transfer position, proximate to the charger surface, to inductively transfer power to the receiver of the first mobile device;

[1(l)] the charger drive circuit is configured to drive the charger coil at one or more operating frequencies to inductively transfer power from the charger to the receiver when the receiver is positioned in the power transfer position, wherein when the receiver is positioned in the power transfer position, a tuned circuit, including the charger coil and the resonant capacitor of the charger drive circuit and the solenoid and the resonant capacitor of the receiver electronic circuit, has a resonant frequency that allows the charger to transfer the power to the receiver at the one or more operating frequencies;

[1(m)] the charger coil includes a conductor patterned to include multiple, substantially concentric turns for generating a magnetic flux through a first end of the solenoid when the receiver is placed in the power transfer position, wherein an outermost of the concentric turns defines a perimeter of a charger coil area;

[1(n)] the multiple concentric turns, when driven by the charger drive circuit, generate a magnetic field that is substantially perpendicular to the charger surface at a geometric center of the charger coil area,

[1(o)] the charger coil area is larger than an area of the first end and larger than an area of the second end of the magnetic core of the solenoid;

[1(p)] the magnetic layer of the charger extends beyond the charger coil area; and

[1(q)] when the receiver is in the power transfer position, the first end of the magnetic core is located proximate to the charger coil area above the charger surface to receive magnetic flux from the charger coil area and guide the magnetic flux in a closed magnetic loop from the charger coil area through the solenoid and return through the charger magnetic layer to the charger coil area to form the closed magnetic loop.

Ex. 1001, 23:24–24:22. Claim 17, which depends from claim 1, is reproduced below:

17. The system of claim 1, wherein:

the receiver and the charger include communication and control electronics circuits to communicate, between the receiver and the charger, information associated with the transfer of power to the first mobile device; and

the communication is through a charger antenna that includes the charger coil and a receiver antenna that includes the solenoid.

Id. at 25:27–35. Claim 8, which also depends from claim 1, is produced below:

8. The system of claim 1, wherein the Litz wire is selected for operation at a frequency of greater than 205 kHz.

Id. at 24:48–49.

E. Prior Art and Asserted Challenges to Patentability

Petitioner asserts that claims 8, 13, and 15–18 are unpatentable on the following challenges (Pet. 2–3):

Claims Challenged	35 U.S.C. § ²	Basis/References
17	103	Fells ³
8	103	Fells, Silva, ⁴ and Jung ⁵
13, 15, 16	103	Fells, Sagoo ⁶
17	103	Fells, Walley ⁷
18	103	Fells, Ben-Shalom ⁸
17	103	Fells, Stoner, ⁹ Nakamura ¹⁰
8	103	Fells, Stoner, Nakamura, Silva, and Jung
13, 15, 16	103	Fells, Stoner, Nakamura, and Sagoo

² Leahy-Smith America Invents Act (“AIA”), Pub L. No. 112–29, 125 Stat. 284 (2011), revised 35 U.S.C. §§ 102 and 103 effective March 16, 2013. Because the earliest possible effective filing date of the ’349 patent is after March 16, 2013, patentability is governed by the AIA versions of §§ 102 and 103. *See* Pet. 4.

³ Fells et al., US 8,587,154 B2, issued Nov. 19, 2013 (Ex. 1005) (“Fells”). Petitioner contends Fells is prior art under at least 35 U.S.C. § 102(a)(2). Pet. 4.

⁴ Silva, US 8,975,523 B2, issued Mar. 10, 2015 (Ex. 1019). Petitioner contends Silva is prior art under at least 35 U.S.C. § 102(a)(2). Pet. 4.

⁵ Jung et al., US 9,178,376 B2, issued Nov. 3, 2015 (Ex. 1016) (“Jung”). Petitioner contends Jung is prior art under at least 35 U.S.C. § 102(a)(2). Pet. 4.

⁶ Sagoo, US 7,791,311 B2, issued Sep. 7, 2010 (Ex. 1048). Petitioner contends Sagoo is prior art under at least 35 U.S.C. § 102(a)(2). Pet. 4.

⁷ Walley, et al., US 8,390,249 B2, issued Mar. 5, 2013 (Ex. 1049) (“Walley”). Petitioner contends Walley is prior art under at least 35 U.S.C. § 102(a)(2). Pet. 4.

⁸ Ben-Shalom, et al. WO 2012/095850 A1 (published July 19, 2012) (Ex. 1050) (“Ben-Shalom”). Petitioner contends Ben-Shalom is prior art under at least 35 U.S.C. §§ 102(a)(1) and 102(a)(2). Pet. 4.

⁹ Stoner, Jr. et al., US 8,912,686 B2, issued Dec. 16, 2014 (Ex. 1011) (“Stoner”). Petitioner contends Stoner is prior art under at least 35 U.S.C. § 102(a)(2). Pet. 4.

¹⁰ Nakamura et al., US 2005/0068019 A1, published Mar. 31, 2005 (Ex. 1010) (“Nakamura”). Petitioner contends Nakamura is prior art under at least 35 U.S.C. §§ 102(a)(1) and 102(a)(2). Pet. 4.

Claims Challenged	35 U.S.C. § ²	Basis/References
17	103	Fells, Stoner, Nakamura, and Walley
18	103	Fells, Stoner, Nakamura, and Ben-Shalom

In support of its proposed challenges, Petitioner relies on the Declaration of R. Jacob Baker, Ph.D. *See* Ex. 1002.

III. ANALYSIS

A. *Legal Standards*

A claim is unpatentable under 35 U.S.C. § 103(a) if “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of skill in the art; and (4) objective evidence of nonobviousness, i.e., secondary considerations. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3)); *see also Intelligent Biosystems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016). At this preliminary stage, we determine whether the information presented in the Petition shows there is a reasonable likelihood that Petitioner would

prevail in establishing that at least one of the challenged claims would have been obvious.

B. Level of Ordinary Skill in the Art

Petitioner asserts a person of ordinary skill in the art “would have had at least a master’s degree in electrical engineering, or a similar discipline, and two or more years of experience with wireless charging systems, including, for example, inductive power transfer systems.” Pet. 4 (citing Ex. 1002 ¶¶ 20–21). Petitioner further asserts that “[m]ore education can supplement practical experience and vice versa.” *Id.*

At this stage of the proceeding, Patent Owner does not challenge Petitioner’s definition. Prelim. Resp. 12.

We find Petitioner’s proposal is consistent with the level of ordinary skill in the art reflected by the prior art of record, and, therefore, adopt Petitioner’s proposed level of ordinary skill in the art for purposes of this Decision.

C. Discretion to Deny Institution Under § 35 U.S.C. 314(a)

Patent Owner contends that the Board should deny institution under 35 U.S.C. § 314(a) because of the related district court litigation in the Eastern District of Texas.¹¹ Prelim. Resp. 12–23; Sur-reply 1–5. In support of its arguments, Patent Owner cites the discretionary denial factors articulated in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5–6

¹¹ In the district court litigation, Patent Owner asserted claims against Petitioner for infringement of seven patents, including the ’349 patent. Ex. 2003, 1. Petitioner filed eighteen petitions challenging the validity of each of the seven patents. See IPR2023-01086–01102, -01124.

(PTAB Mar. 20, 2020) (precedential) (hereafter “*Fintiv*”). Prelim. Resp. 12–23; Sur-reply 1–5. Petitioner opposes. Pet. 99–103; Reply 1–5.

Under § 314(a), the Director has discretion to deny institution of an *inter partes* review, and that discretion has been delegated to the Board. See 37 C.F.R. § 42.4(a) (“The Board institutes the trial on behalf of the Director”). Under *Fintiv*, we consider the following factors to assess “whether efficiency, fairness, and the merits” favor discretionary denial in view of a parallel district court 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 the factors, we take “a holistic view of whether efficiency and integrity of the [patent] system are best served by denying or instituting review.” *Id.* at 6 (citing Patent Trial and Appeal Board Consolidated Trial Practice Guide, 58 & n.2 (Nov. 2019) (“CTPG”). The Director has also issued additional guidance on the application of the *Fintiv* factors. See *Interim Procedure for Discretionary Denials in AIA*

Post-Grant Proceedings with Parallel District Court Litigation, issued June 21, 2022 (“Guidance Memo”).

We consider the facts and circumstances before us in view of the *Fintiv* factors below and determine that the circumstances presented here weigh against exercising discretion to deny institution of *inter partes* review.

1. *Factor 1: Whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted*

Under the first *Fintiv* factor, we consider “whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted.” *Fintiv*, Paper 11 at 6. “A district court stay of the litigation pending resolution of the PTAB trial allays concerns about inefficiency and duplication of efforts.” *Id.* Petitioner has filed a motion for a stay in the district court litigation, which has not been ruled upon. Prelim. Resp. 16.

Petitioner contends that this factor is neutral, “as there has been no actual denial of a stay.” Reply 3; *see also* Pet. 101. Patent Owner argues that this factor weighs heavily in favor of discretionary denial because the motion “will almost certainly be denied pre-institution” given the “timing and advanced stage of litigation.” Prelim. Resp. 16–17; *see also* Sur-reply 1.

We decline to speculate based on the record in this case whether the district court will grant a stay. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 12 (PTAB May 13, 2020) (informative) (“*Fintiv II*”). Therefore, we determine that this factor is neutral.

2. *Factor 2: proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision*

Under the second *Fintiv* factor, we consider the “proximity of the court’s trial date to the Board’s projected statutory deadline for a final

written decision.” *Fintiv*, Paper 11 at 6. The district court has scheduled an August 5, 2024 trial date. Ex. 1024, 1 (Docket Control Order). Petitioner also provides median time-to-trial data from the Eastern District of Texas, which reflects that a median case would start approximately May 2024. Pet. 101 (citing Ex. 1023, 35); *see* Guidance Memo 8 (“Parties may present evidence regarding the most recent statistics on median time-to-trial for civil actions in the district court in which the parallel litigation resides.”).

Petitioner argues that it is not dispositive if the trial date comes before the final written decision date, and that the Board has also considered other factors, such as diligence in filing the petition, a stipulation, investment in the litigation, and the merits. Pet. 101–102. Therefore, Petitioner contends this factor is neutral or weighs against discretionary denial. Reply 4; Pet. 101.

Patent Owner argues that the trial date is five to six months prior to the earliest expected date for a final written decision and, therefore, this factor weighs heavily in favor of discretionary denial. Prelim. Resp. 18–19; *see also* Sur-reply 1–2.

The latest date for issuance of a final written decision in this proceeding is in January 2025, one year after we issue this decision instituting an *inter partes* review. 35 U.S.C. §§ 314(c), 316(a)(11); *see also* 37 C.F.R. § 42.100(c). We “generally take courts’ trial schedules at face value absent some strong evidence to the contrary.” *See Fintiv II*, Paper 15 at 13. However, the Director has cautioned the Board that “scheduled trial dates are unreliable and often change.” Guidance Memo 8. Therefore, the Director instructed the Board to consider additional supporting factors

regarding trial dates, such as median time-to-trial statistics. *Id.* at 8–9. If the underlying litigation begins trial after the median amount of time to trial, it would occur in approximately May 2024. Therefore, because the trial in the district court litigation is scheduled to begin five months before our deadline to reach a final written decision, and considering the median time-to-trial statistics, this factor weighs in favor of discretionary denial. *Fintiv*, Paper 11 at 9. However, the Director cautions that “when other relevant factors weigh against exercising discretion to deny institution or are neutral, the proximity to trial should not alone outweigh all of those other factors.” *Id.* at 8. Accordingly, in accordance with the Director’s Memo, we must consider the remaining factors below.

3. *Factor 3: investment in the parallel proceeding by the court and the parties*

Under the third *Fintiv* factor, we consider the “investment in the parallel proceeding by the court and the parties” at the time of the institution decision. *Fintiv*, Paper 11 at 6, 9.

Petitioner argues that this factor weighs against denial because the district court litigation is in the early stages. Pet. 102. Petitioner contends that “[f]act discovery is in its infancy,” “the parties have not engaged in expert discovery,” “[t]he parties have not yet identified terms for construction,” and that there have not been any substantive orders. *Id.*; Reply 4–5. Petitioner also argues that the Petition, which dealt with “challenging long, convoluted claims,” was diligently filed in advance of the one-year bar date and within four months of Patent Owner’s infringement contentions being served in the district court litigation. Pet. 101–102; Reply 5.

Patent Owner argues that “the district court proceeding has been pending since October 2022,” and the parties “have prepared and exchanged infringement and invalidity contentions, presented initial disclosures, and are in the midst of substantial fact discovery.” Prelim. Resp. 19; *see also* Sur-reply 2. Additionally, Patent Owner argues that claim construction will have been briefed and argued by the time of the institution decision. *Id.*; *see also id.* at 20 (district court litigation timeline). Patent Owner also argues that “Petitioner did not file its Petitions expeditiously” because “Petitioner waited many months after the district court complaint was filed to submit its Petitions.” *Id.* at 20. Therefore, Patent Owner argues that this factor “greatly weighs in favor of denying institution.” *Id.*

We have considered Patent Owner’s position, but it appears that considerable effort remains to be completed. Fact discovery is ongoing, expert discovery has not yet begun, claim construction is ongoing with a claim construction hearing scheduled for February 6, 2024, and dispositive motions are due April 29, 2024. Ex. 1024, 3. At this stage, there is no claim construction order, and no evidence in the record that the district court has issued any substantive orders relating to the ’349 patent. *See Fintiv*, Paper 11 at 10 (“If, at the time of the institution decision, the district court has not issued orders related to the patent at issue in the petition, this fact weighs against exercising discretion to deny institution.”). Moreover, there is no evidence in the record that the district court will construe any terms in the ’349 patent, and it is unclear from the present record how much investment has been made with respect to invalidity of the ’349 patent, in particular.

Moreover, given the number of claims asserted against Petitioner across seven patents in the district court litigation, as well as the length of some of the claims,¹² we also find that Petitioner was diligent in filing the Petition, which was filed within four months of service of infringement contentions, and approximately eight months after the Complaint was filed. *See* Exs. 1021, 1025, 2003; *see Fintiv*, Paper 11 at 11 (stating that “it is often reasonable for a petitioner to wait to file its petition until it learns which claims are being asserted against it in the parallel proceeding.”).

On balance, given the level of investment by the parties and the district court, as well as Petitioner’s diligence in filing its Petition, we find that this factor weighs against exercising discretion to deny institution.

4. *Factor 4: overlap between issues raised in the petition and in the parallel proceeding*

This factor evaluates “concerns of inefficiency and the possibility of conflicting decisions” when substantially identical prior art arguments are submitted in both the district court and the *inter partes* review proceedings. *Fintiv*, Paper 11 at 12. In particular, “if the petition includes the same or substantially the same claims, grounds, arguments, and evidence as presented in the parallel processing, this fact has favored denial.” *Id.* (citing *Next Caller, Inc. et al. v. Trust ID, Inc. et al.*, IPR2019-00963, Paper 8 at 11–12 (PTAB Oct. 28, 2019) (same grounds asserted in both cases); *ZTE (USA) Inc. v. Fractus, S.A.*, IPR2018-01451, Paper 12 at 20 (PTAB Feb. 19, 2019) (same prior art and identical evidence and arguments in both cases)).

¹² *See* Section II.D, setting forth claim 1 of the ’349 patent.

Petitioner argues that this factor weighs against discretionary denial. Pet. 102; Reply 1–2. Petitioner has submitted a stipulation that “if this IPR is instituted, Petitioner will not pursue an invalidity defense in the Texas Litigation with respect to the challenged claims of the ’349 patent in this Petition based on (i) any of the same instituted grounds or (ii) any prior art reference that forms the basis of any instituted ground.” Reply 2. Further, Petitioner submitted evidence that Patent Owner narrowed the number of asserted claims in the district court litigation to thirty-two claims from the seven asserted patents, and is required by mid-February 2024 to further reduce that number to no more than a total of sixteen claims from the seven asserted patents. *Id.* at 1 (citing Exs. 1201, 1202). Petitioner argues that currently, claims 8 and 15–18 in this Petition will not be addressed in the district court litigation. *Id.*

Patent Owner argues that Petitioner’s stipulation “does not eliminate the substantial overlap with the district court case.” Sur-reply 2. Patent Owner argues that “institution of the IPR petitions would result in published prior art invalidity assertions being made before both the district court and the PTAB.” *Id.* at 3. Patent Owner also argues that Petitioner’s reliance on the reduction of claims accused of infringement in the district court litigation is a “diversion” because “Petitioner continues to seek to challenge the patents on published prior art validity grounds before both the district court and the PTAB.” *Id.* at 3–5. Patent Owner, too, provides a stipulation that it will “not seek to resurrect or make new infringement claims as to any claims in this IPR petition which have been or will be removed from Patent

Owner’s infringement case in the district court case per the district court focusing order, against Samsung or its products.” *Id.* at 4.

Petitioner’s stipulation is broader than the stipulation in *Sand Revolution* and narrower than the stipulation in *Sotera*. *Sand Revolution II, LLC, v. Continental Intermodal Group – Trucking LLC*, IPR2019-01393, Paper 24, 12 (PTAB June 16, 2020) (informative) (“Petitioner will not pursue the same grounds in the district court litigation”); *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12, 19 (PTAB Dec. 1, 2020) (precedential as to § II.A) (Petitioner stipulates not to pursue “any ground raised or that could have been reasonably raised”). Although Petitioner’s stipulation is not as strong as the stipulation in *Sotera*,¹³ a *Sotera* stipulation obviates the need for any *Fintiv* factor weighing. We decline to hold the fact that Petitioner did not file a *Sotera* stipulation against Petitioner in an analysis that only occurs when a *Sotera* stipulation is not filed. Further, by stipulating not to pursue the challenged claims of the ’349 patent based on (1) any instituted grounds and (2) any prior art reference that forms the basis of any instituted ground (i.e., Fells, Jung, Stoner, Nakamura), Petitioner has effectively removed any potential issue overlap with the district court litigation. In other words, the patentability issues addressed in this proceeding (i.e., relating to the grounds presented and/or prior art

¹³ The Guidance Memo provides that “[c]onsistent with *Sotera Wireless, Inc.*, the PTAB will not discretionarily deny institution in view of parallel district court litigation where a petitioner presents a stipulation not to pursue in a parallel proceeding the same grounds or any grounds that could have reasonably been raised before the PTAB.” Guidance Memo, 3 (footnote omitted).

challenges) will not be addressed in the district court litigation. This is highly relevant to this factor, because when both *NHK* and *Fintiv* discussed prevention of duplication, it was with respect to duplication of the parties' and courts' work with respect to the specific grounds of invalidity common in both proceedings. *NHK Spring Co. Ltd. V. Intri-Plex Techs. Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB 2018) (precedential) (additionally denying institution under 35 U.S.C. § 314(a) where "Petitioner asserts the same prior art and arguments" in the district court trial, implicating an "inefficient use of Board resources"); *Fintiv*, Paper 11 at 12 ("if the petition includes materially different grounds, arguments, and/or evidence . . . this fact has tended to weigh against exercising discretion to deny institution"). In the present case, Petitioner's stipulation serves to limit it to "materially different grounds, argument, and/or evidence" in the district court versus this proceeding, which *Fintiv* instructs us to "weigh against exercising discretion to deny institution." In addition, the lack of overlap is further supported because at most, only claims 1, 4, and 13 from the '349 patent¹⁴ will be addressed in the district court litigation. *See* Reply 1.

Patent Owner's stipulation does not persuade us otherwise; Patent Owner has already been ordered by the district court to narrow the asserted claims. *See* Ex. 1202, 1–2. We do not see any significance to Patent Owner's stipulation not to resurrect claims that have already been withdrawn from the district court litigation. Indeed, it is unlikely that this would even be permitted by the district court. *See id.* at 2 ("the patent claimant shall serve a Final Election of Asserted Claims, which shall identify no more than

¹⁴ Claims 1 and 4 are challenged in IPR2023-01089.

five asserted claims per patent *from among the ten previously identified claims* and no more than a total of 16 claims”) (emphasis added).

Thus, we determine this factor weighs against exercising discretion to deny institution.

5. *Factor 5: whether the petitioner and the defendant are the same in the parallel proceeding*

The parties in this proceeding are identical to the parties in the related district court litigation. Therefore, this factor weighs in favor of exercising discretion to deny institution.

6. *Factor 6: other circumstances that impact the Board’s exercise of discretion, including the merits*

Under this factor, we consider “other circumstances that impact the Board’s exercise of discretion, including the merits.” *Fintiv*, Paper 11 at 6. For example, if the merits of a ground raised in the petition seem particularly strong on the preliminary record, this fact has favored institution. *Fintiv*, 14–15. By contrast, if the merits of the grounds raised in the petition are a closer call, then that fact has favored denying institution when other factors favoring denial are present. *Id.* at 15.

The Guidance Memo states that:

Where the information presented at the institution stage is merely sufficient to meet the statutory institution threshold, the PTAB has the authority, where warranted to exercise discretion to deny institution in view of the other *Fintiv* factors. In contrast, where the PTAB determines that the information presented at the institution stage presents a compelling unpatentability challenge, that determination alone demonstrates that the PTAB should not discretionarily deny institution under *Fintiv*.

Guidance Memo 4–5. The application of the Guidance Memo is further guided by the precedential decisions in *OpenSky Indus., LLC v. VLSI Tech. LLC*, IPR2021-01064, Paper 102, 49–50 (Oct. 4, 2022) (precedential) and *CommScope Techs. LLC v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23 (Feb. 27, 2023) (precedential). We are instructed to consider compelling merits under the sixth *Fintiv* factor only after a determination that the first five *Fintiv* factors favor discretionary denial. *CommScope*, Paper 23 at 4–5.

On balance, we determine that *Fintiv* factors 1–5 do not favor discretionary denial. Specifically, we determine that Petitioner’s stipulation, reasonable diligence in filing the Petition, and the limited extent of the parties’ and district court’s investment in the district court litigation outweigh the projected trial date. *See* Guidance Memo 8 (“[W]hen analyzing the proximity of the court’s trial date under factor two of *Fintiv*, when other relevant factors weigh against exercising discretion to deny institution or are neutral, the proximity to trial should not alone outweigh all of those other factors.”). As a result, we need not decide whether Petitioner presents a compelling unpatentability challenge. *See CommScope*, Paper 23 at 4–5.

7. *Conclusion on Discretionary Denial Under § 314(a)*

We have considered the circumstances and facts before us in view of the *Fintiv* factors. Our analysis is fact driven and no single factor is determinative under § 314(a). Based on the circumstances presented, we determine that, as a whole, the factors weigh against exercising discretion to deny institution of the Petition.

D. Notice Ranking Multiple Petitions

Petitioner filed two concurrent petitions (IPR2023-01089 and IPR2023-01090) challenging the patentability of the '349 patent. Dependent claims 8, 13, and 15–18 are challenged in this Petition, and claims 1, 4, 5, 7, 10–12, and 26 are challenged in IPR2023-01089. Consistent with the Board's practice for handling parallel petitions provided in the Consolidated Trial Practice Guide ("CTPG" or "Trial Practice Guide"),¹⁵ Petitioner filed a Notice Regarding Multiple Petitions (Paper 3, "Notice"). *See* CTPG 59–60. Patent Owner did not file a response to Petitioner's Notice or address Petitioner's Notice in its Preliminary Response.

In the Notice, Petitioner states that "[t]here was no practicable way to fit the challenges in a single petition" due to the length of the claims and the substantially different features in the dependent claims. Notice 3. Therefore, "Petitioner had to separate the challenges into two petitions—which challenge different claims of the '349 patent—in order to ensure the grounds associated with each challenged claim contain the necessary specificity as to how the prior art meets the recited limitations within the word limit[s]." *Id.* Petitioner argues that "the level of detail included in the petitions is appropriate." *Id.* at 5. Petitioner also states that, based on the overlapping prior art references and concurrent filing of the petitions, "a relatively small amount of effort is required by the parties and the Board to address the prior art and claim limitations across the multiple petitions." *Id.* at 4–5. Petitioner also asserts that there was no timing advantage gained because both petitions were filed concurrently. *Id.* at 5.

¹⁵ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

The Trial Practice Guide provides that “multiple petitions by a petitioner are not necessary in the vast majority of cases” but acknowledges that “there may be circumstances in which more than one petition is necessary.” CTPG 59–60. In light of the circumstances presented here, we find persuasive Petitioner’s reasons for filing two parallel petitions, particularly because the petitions challenge different claims of the ’349 patent. In effect, the two petitions were filed instead of one merely because our Rules have page limit restrictions. 37 C.F.R. § 42.24(a)(1)(i) (setting a limit of 14,000 words); *see also* Federal Register, Vol. 77, No. 157, at 48635 (Aug. 14, 2012) (the USPTO suggesting in response to comment 91 that “the filing of multiple petitions directed to subsets of related claims should be considered” when the proceeding is complex). Under these circumstances, conducting two related *inter partes* reviews will not stress the Board’s finite resources or unduly burden the Board or Patent Owner. Although we have discretion to deny a parallel petition under 35 U.S.C. § 314(a) (*see* CTPG 61), we decline to exercise that discretion here.

E. Independent Claim 1

As described above, Petitioner has filed two petitions challenging different claims of the ’349 patent, this Petition and a separate petition in IPR2023-01089 (Paper 1). All of the challenged claims in this Petition depend from independent claim 1, which is challenged in IPR2023-01089. Petitioner devotes approximately half of the Petition for its contentions for independent claim 1. Pet. 7–55 (Fells), 92–94 (Fells, Stoner, Nakamura combination). Our review of both petitions leads us to the conclusion that Petitioner’s contentions for independent claim 1 are essentially the same in

both IPR2023-01089 and in this Petition. *See id.*; IPR2023-01089, Paper 1, 7–63 (Fells), 86–88 (Fells, Stoner, Nakamura combination).¹⁶ Patent Owner, similarly provides the same arguments against Petitioner’s contentions for claim 1 as in IPR2023-01089. *See* Prelim. Resp. 23–38 (Fells), 38–42 (Fells, Stoner, Nakamura combination); IPR2023-01089, Paper 7, 24–39 (Fells), 39–43 (Fells, Stoner, Nakamura combination). Both parties also provide the same arguments regarding claim construction. *See* Pet. 5–6; Prelim. Resp. 10–12, 30, 32, 34, 35; IPR2023-01089, Paper 1, 5–6 (Petition); Paper 7, 12, 28, 32, 33 (Prelim. Resp).

In the interest of brevity, we do not repeat the parties’ contentions and arguments and our analysis for independent claim 1. Rather, we refer to the contentions, arguments, and our analysis set forth in IPR2023-01089, where Petitioner challenges claim 1. *See* IPR2023-01089, Paper 11 (Institution Decision), 12–14 (claim construction), 35–55 (Fells), 59–62 (Fells, Stoner, Nakamura combination). The only difference in Petitioner’s contentions here is that, in the combination of Fells, Stoner, and Nakamura (i.e., Grounds 6–10 in this Petition), Petitioner additionally contends that, to the extent Fells does not disclose the resonant capacitors and tuned circuit features (limitations 1(e), 1(j), 1(l)), a person of ordinary skill in the art would have found it obvious in view of Stoner to configure Fells’ system to

¹⁶ The decreased number of pages in this Petition addressing independent claim 1 appears to be the result of Petitioner’s rephrasing in a manner that does not affect the substance of the contentions (e.g., providing a citation to the record without the accompanying language in quotation marks following) and the omission of Petitioner’s concurrent analysis of independent claim 26.

use resonant technologies in the charger driver and receiver circuits to provide a tuned circuit. Pet. 93–94. Patent Owner does not respond to these contentions. *See generally* Prelim. Resp. However, as set forth in the Institution Decision in IPR2023-01089, we are satisfied that Petitioner has sufficiently shown, for purposes of institution, that Fells teaches each of the limitations in claim 1, including limitations 1(e), 1(j), and 1(l). IPR2023-01089, Paper 11, 35–55 (Fells). Additionally, we are also satisfied that Petitioner has sufficiently shown, for purposes of institution, that combination of Fells, Stoner, and Nakamura teaches the limitations in claim 1. IPR2023-01089, Paper 11, 59–62 (Fells, Stoner, and Nakamura).

Accordingly, for the reasons set forth in the Institution Decision in IPR2023-01089, Petitioner has sufficiently shown that there is a reasonable likelihood that claim 1 is unpatentable under 35 U.S.C. § 103 over Fells or over Fells, Stoner, and Nakamura.

F. Ground 1: Alleged Obviousness Over Fells (Claim 17)

Petitioner contends dependent claim 17, which depends from claim 1, would have been obvious over Fells. Pet. 55–58. Aside from Patent Owner’s arguments regarding independent claim 1 (*see* Section III.E), Patent Owner does not respond to Petitioner’s contentions as to claim 17. *See generally* Prelim. Resp.

1. Fells (Ex. 1005)

Fells is titled “Inductive Power Supply” and generally describes an inductive power transfer system that includes a primary unit and a secondary device. Ex. 1005, codes (54), (57). Fells states:

To make recharging more convenient a recharging pad has been proposed in which there is a surface upon which devices may

be placed in order to receive power wirelessly. This removes the need to physically connect a power cable to the portable device. It may also be designed such that a range of different models and types of device[s] can share the same charger. Further, it may be large enough to accommodate more than one device, so that multiple devices can be recharged simultaneously. However, it is particularly advantageous if it is possible to simply drop the device onto the pad without having regard for the position or orientation of the device on the pad.

Id. at 1:4–15. Fells discloses various embodiments for transferring power from a charger to a portable device.

Figure 1, reproduced below, shows a system for transferring power from a charger to a portable device:

Fig. 1

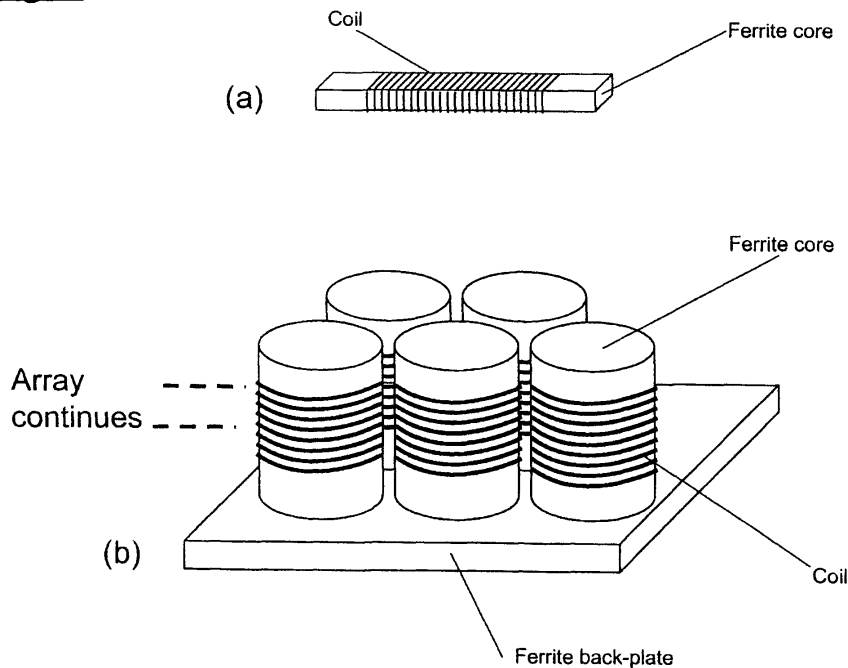


Figure 1(a), above, shows a power receiver with a ferrite core and coil wound around the core. Figure 1(b), above, shows part of a charging pad for transmitting power to the receiver. “The pad consists of an array of coils, each wound around a ferrite core. These cores are attached to a ferrite backplate. A charging surface is formed across the ends of the cores, such that the coil axes are perpendicular to the charging surface.” *Id.* at 6:61–65. “Preferably Litz wire is used for both the primary and secondary coils.” *Id.* at 7:3–4.

Figure 2, reproduced below, also shows a system for transferring power from a charger to a portable device:

Fig. 2

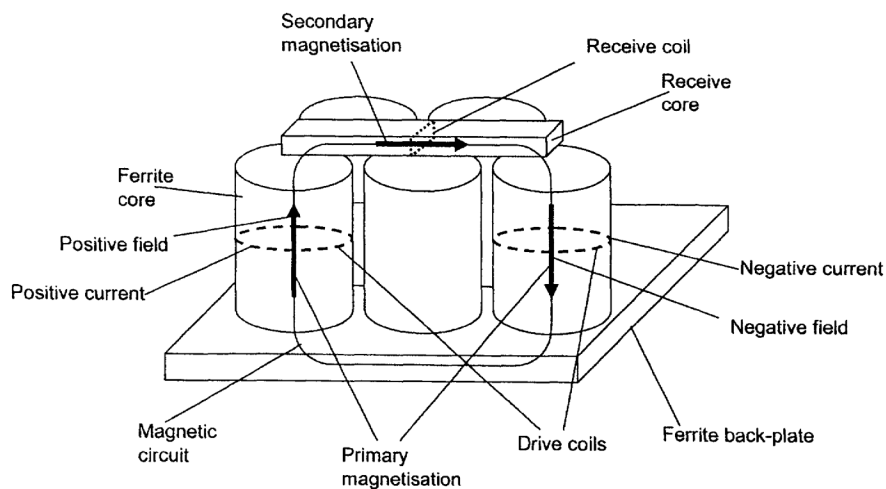


Figure 2, above, shows “the magnetic circuit formed when the power receiver is placed on the charging surface.” *Id.* at 7:9–10. Fells describes that “[a] coil in proximity to one end of the receiver is driven with current in

a positive sense and a coil in proximity to the other end is driven in a negative sense.” *Id.* at 7:10–13. “The field is concentrated in the ferrite and forms a magnetic circuit from the first coil, through the receiver core, through the second coil and through the ferrite backplate to complete the circuit.” *Id.* at 7:13–16.

Figure 4, reproduced below, shows a configuration for transferring power to a power receiver.

Fig. 4

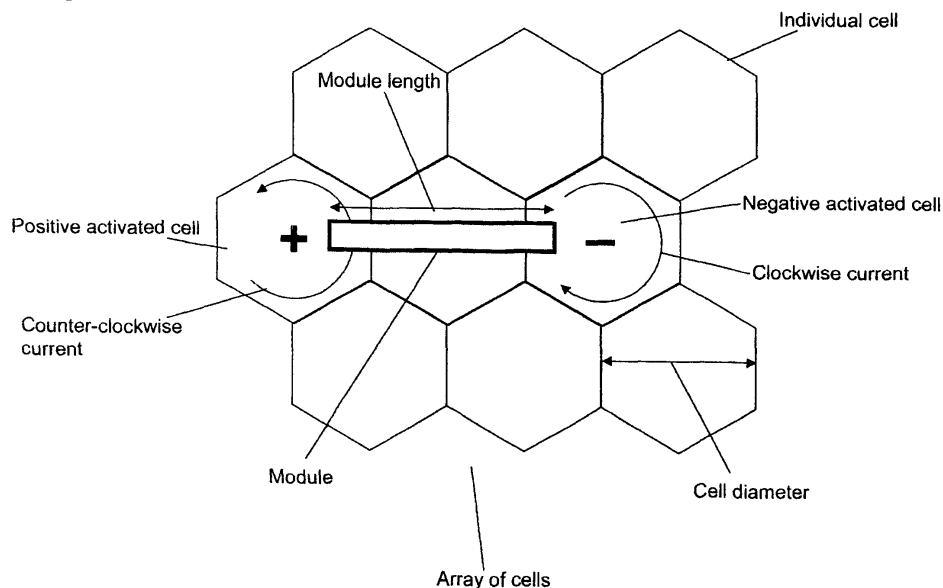


Figure 4, above, “illustrates the dimensional relationship between the power receiver and the charger coils.” *Id.* at 7:31–32. The coil positions are represented by hexagonal cells, and the energized coils are represented by a “+” for current flowing in a counter clockwise direction and a “-” for current flowing in a clockwise direction. *Id.* at 7:32–36.

Figure 16, reproduced below, shows a charger formed using a PCB implementation.

Fig. 16

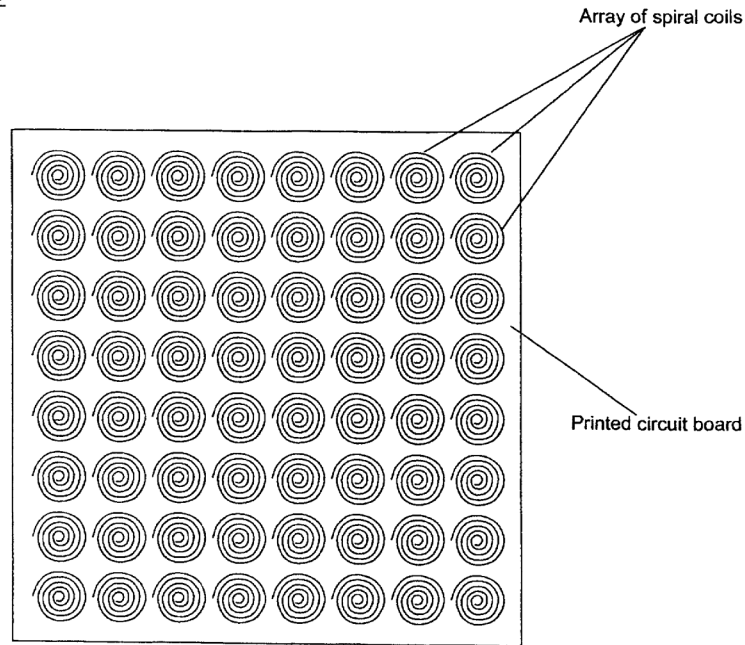


Figure 16, above, shows an array of planar spiral coils used to generate vertical fields. *Id.* at 10:27–28. “A ferrite back plate would typically be [used] to complete the magnetic circuit.” *Id.* at 10:31–32.

Figure 17, reproduced below, shows another charger configuration using a PCB implementation.

Fig. 17

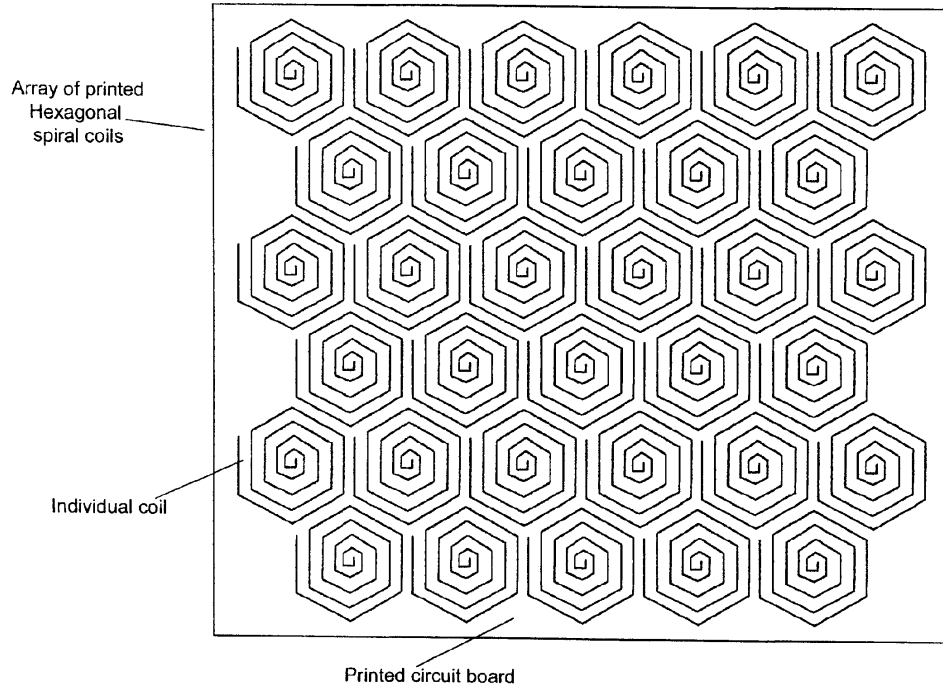


Figure 17, above, shows an array of hexagonal coils which are close-packed together. *Id.* at 10:35–37.

Figure 18, reproduced below, shows a hybrid charger system that allows two different types of receivers within the portable device to be used. *Id.* at 10:38–40.

Fig. 18

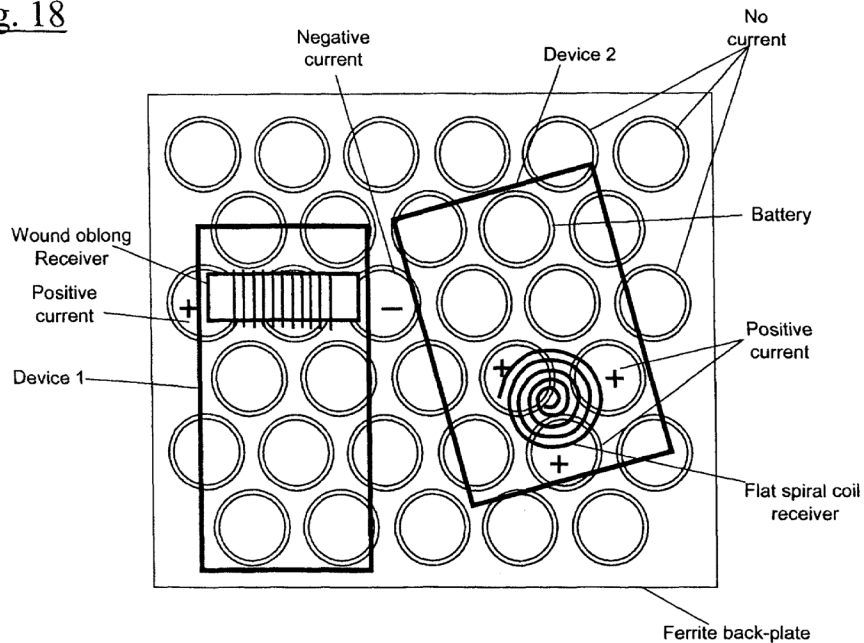


Figure 18, above, shows device 1 with a horizontal coil axis wound around magnetic material, and device 2 with a flat spiral coil as its power receiver. *Id.* at 10:40–42.

Figure 23, reproduced below, shows another charger configuration, that is described as “a simpler and lower cost alternative to a flat pad charger.” *Id.* at 11:45–46.

Fig. 23

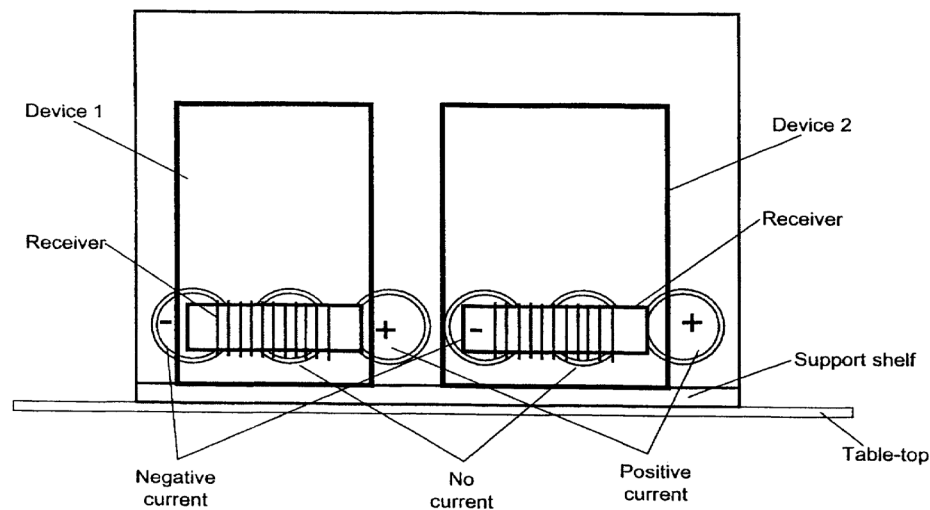


Figure 23, above, shows a charger in the form of a shelf such that the device stands upright on a ledge, with a single line of charger coils. *Id.* at 11:46–48. “The receiver is positioned in the portable device a set distance away from the bottom edge. Thus, there is always alignment in one dimension.” *Id.* at 11:48–51. “Depending on which part of the shelf the device is placed, different coils are accordingly activated. The shelf allows devices to be placed anywhere along a line.” *Id.* at 11:51–54. Fells further states:

Wound Litz-wire primaries are the ultimate solution for low primary losses. Wound components with or without ferrite cores can be used. Ferrite cores can be added to give a small shape-factor benefit (if cost-effective) and to produce an even flatter coupling factor. However, overall cost and manufacturability is less attractive. Other planar coil technologies such as PCB coils or watch-spring coils can be

used to reduce cost, but typically exhibit higher losses (lower coil Qs).

Id. at 11:56–64. Further, “[a] ferrite back-plate may be used behind the vertical cores to act as a flux return path, and this improves the coupling factor.” *Id.* at 11:67–12:2. “The permeable material from which the cores and/or back-plate are manufactured is preferably Mn–Zn ferrite, but other magnetic materials . . . could be used.” *Id.* at 12:3–8.

2. *Analysis of Claim 17*

Petitioner contends that Fells teaches each limitation of dependent claim 17. Pet. 55–58. In support, Petitioner identifies certain passages and figures in the references and explains their significance with respect to the corresponding claim limitation. *Id.*

Petitioner contends that Fells discloses “implementations involving exchanging information between the charger and mobile device to control the transfer of power.” Pet. 55–56 (citing Ex. 1005, 10:55–59 (“[i]t may be necessary for the portable device to communicate what type of receiver it is to the charger, so that the charger can correctly determine which coils should be activated and with what polarity configuration”)). For example, Petitioner contends that Fells teaches that “the secondary coil has ‘dual use as an RFID antenna’ that would communicate with the charger ‘over the RFID channel’ formed by ‘inductive communications using the primary and secondary coils’ for purposes of sensing location/position of the ‘receiver coil.’” *Id.* at 56 (citing Ex. 1005, 12:20–22, 12:37–40) (emphasis omitted). According to Petitioner, “[t]he communication necessarily includes ‘information associated with the transfer of power to the first mobile device’

given the location of the receiver coils is used by the charger to activate selected coils.” *Id.* at 56–57 (citing, e.g., Ex. 1005, 12:60–61 (“[t]he position of the secondary is sensed and then power is transferred by switching on the appropriate primaries”)) (emphasis omitted)).

Petitioner further contends that a person of ordinary skill in the art would have understood that “by use of an ‘RFID channel’ with the secondary coil ‘antenna,’ that Fells necessarily discloses the primary coil has dual use as an ‘antenna’ to communicate information over the channel.” *Id.* at 57 (citing Ex. 1002 ¶ 228; Ex. 1005, 12:37–40). Alternatively, Petitioner contends that it would have been obvious “to configure the Fells system to utilize the charger coil as an antenna to facilitate the exchange of information over the ‘RFID channel’ like the mobile device’s secondary coil (‘solenoid’).” *Id.* (citing Ex. 1002 ¶ 229).

Aside from Patent Owner’s arguments regarding independent claim 1, Patent Owner does not separately challenge Petitioner’s analysis of claim 17 in the Preliminary Response. *See* Prelim. Resp. Based on our review and consideration of the current record, Petitioner has sufficiently shown that Fells teaches the limitations in claim 17 for purposes of institution. Accordingly, we determine, for purposes of this Decision, that the information presented in the Petition demonstrates a reasonable likelihood that claim 17 is unpatentable under 35 U.S.C. § 103 over Fells.

G. Ground 2: Alleged Obviousness over Fells, Silva, and Jung (Claim 8)

Petitioner contends that claim 8, which depends from claim 1, would have been obvious over Fells, Silva, and Jung. Pet. 59–64. In support, Petitioner identifies certain passages and figures in Fells, Silver, and Jung

and explains their significance with respect to the corresponding claim limitations. *Id.* Aside from Patent Owner’s arguments regarding independent claim 1 (*see* Section III.E), Patent Owner does not respond to Petitioner’s contentions as to claim 8. *See generally* Prelim. Resp.

1. *Silva (Ex. 1019)*

Silva is titled “Optimized Litz Wire” and is generally directed to a system and methods for providing an optimized litz wire. Ex. 1019, code (54), 3:31–32. Among other things, *Silva* discloses that “[i]t will be appreciated that the gauge selected for the various strands of the wire 130 may be chosen dependent upon the frequency and magnitude of the current intended for the application.” *Id.* at 6:16–19.

2. *Jung (Ex. 1016)*

Jung is titled “Non-Contact Charging Station With Power Transmission Planar Spiral Core, Non-Contact Power-Receiving Apparatus, and Method for Controlling the Same.” Ex. 1016, code (54). *Jung* discloses various embodiments “in which a primary core of the non-contact charging station transmitting a power signal using an induced magnetic field toward a portable device is configured as a planar-spiral power transmission Printed Circuit Board (PCB) core to simplify its shape, so that applicability to a non-contact charger and the like can be improved.” *Id.* at 2:39–45. *Jung*’s Table 3 is reproduced below:

TABLE 3

Comparison with Convention Litz Core			
Items	Litz core	PSR PTPCB core	EGPL-PTPCB core
Material	Copper (99.99%)	Copper (70 μ m) + PSR Coating	Copper (70 μ m) + Electroless plating (0.03 μ m)
Thickness	0.35 mm	0.4 mm	0.4 mm
Size	32 $\times$ 32 mm	32 $\times$ 32 mm	32 $\times$ 32 mm
Shape	Rectangular	Planar rectangular	Planar hexagon
Number of turns	20 (Litz shape)	24/(1Layer)	24/(2Layer)
Number of threads per turn	7	1	1
Thickness of wire	0.15 Φ	1 mm/2 oz	1 mm/2 oz
Inductance	7.7 μ H	11 μ H	7.8 μ H
Q (no shield)	27	9	20
DCR (Internal resistance)	230 m Ω	850 m Ω	350 m Ω
Efficiency@2.5 W (5 V $\times$ 500 mA)	61%	53%	60%
Temp@2.5 W (5 V $\times$ 500 mA)	40	42	40
Rate of change of inductance	1.5%	0.5%	0.5%
Operation frequency	100~250 kHz	100~250 kHz	100~250 kHz
Cost	Middle (Facility investment required)	Low	Middle (Facility investment not required)
Performance	Average	Average	Good

Table 3, above, shows a comparison of conventional Litz cores with the characteristics of the cores described in Jung. *Id.* at 14:64–67. In particular, the “Litz core” describes an “operation frequency” at “100–250 kHz.”

3. Analysis of Claim 8

Petitioner contends that, although Fells does not expressly state the Litz wire is selected for operation at a frequency greater than 205 kHz, it would have been obvious to configure Fells’ system to use such a Litz wire

in view of Silva and Jung. Pet. 59 (citing Ex. 1002 ¶ 233). Petitioner contends that a person of ordinary skill in the art “would have understood the selection/properties of Litz wire as disclosed by Fells.” *Id.* at 60 (citing, e.g., Ex. 1005, 7:3–8 (“[p]referably Litz wire is used for both the primary and secondary coils”)). Petitioner contends that Silva teaches configuring Litz wire for certain applications, such as high frequencies. *Id.* at 60–61 (citing, e.g., Ex. 1019, 6:16–19 (describing that “[i]t will be appreciated that the gauge selected for the various strands of the wire 130 may be chosen dependent upon the frequency and magnitude of the current intended for the application”)). Petitioner contends that Jung teaches that it was known to select Litz wire for a wireless charging coil operating at 100–250 kHz. *Id.* at 62 (citing, e.g., Ex. 1016, 15:1–25, Table 3). Petitioner contends that a person of ordinary skill in the art would have been motivated to select a Litz wire for operation at various high frequencies to accommodate given applications, including at a frequency greater than 250 kHz. *Id.* at 62 (citing Ex. 1002 ¶ 242); *see also id.* at 63 (to “add versatility in the types of implementations contemplated by Fells (e.g., operations at relatively high frequencies)”)).

Aside from Patent Owner’s arguments regarding independent claim 1, Patent Owner does not separately challenge Petitioner’s analysis of claim 8 in its Preliminary Response. *See* Prelim. Resp. Based on our review and consideration of the current record, Petitioner has sufficiently shown that the combination of Fells, Silva, and Jung teaches the limitations in claim 8 for purposes of institution. Accordingly, we determine, for purposes of this Decision, that the information presented in the Petition demonstrates a

reasonable likelihood that claim 8 is unpatentable under 35 U.S.C. § 103 over Fells, Silva, and Young.

H. Grounds 6 and 7: Alleged Obviousness Over Fells, Stoner, and Nakamura (Claim 17) and Obviousness Over Fells, Stoner, Nakamura, Jung, and Silva (Claim 8)

Petitioner contends claim 17 would have been obvious over Fells, Stoner, and Nakamura, and that claim 8 would have been obvious over Fells, Stoner, Nakamura, Jung, and Silva. Pet. 92–95. Petitioner’s contentions for these challenges track the contentions for Grounds 1 and 2, with the addition of combining Fells, Stoner, and Nakamura to teach limitation 1(k) in independent claim 1. *See id.* As discussed above, we have addressed Petitioner’s contentions and Patent Owner’s arguments regarding the Fells, Stoner, Nakamura combination for claim 1 in the Institution Decision in IPR2023-01089. *See* IPR2023-01089, Paper 11, 59–62. Aside from Patent Owner’s arguments regarding independent claim 1, Patent Owner does not separately challenge Petitioner’s analyses of claims 8 or 17 for these grounds in the Preliminary Response. *See* Prelim. Resp.

Therefore, for the reasons discussed above, as well as the reasoning in our Institution Decision in IPR2023-01089, Petitioner has sufficiently shown that the combination of Fells, Stoner, and Nakamura teaches the limitations in claim 17 for purposes of institution, and that Fells, Stoner, Nakamura, Silva, and Jung teach the limitations in claim 8 for purposes of institution. Accordingly, we determine, for purposes of this Decision, that the information presented in the Petition demonstrates a reasonable likelihood that claims 17 and 8 are unpatentable under 35 U.S.C. § 103 over Fells,

Stoner, and Nakamura (claim 17) and Fells, Stoner, Nakamura, Silva and Jung (claim 8).

I. Remaining Grounds

Aside from Patent Owner's arguments regarding independent claim 1, Patent Owner does not separately challenge Petitioner's contentions for the remaining grounds. Because we determine above that Petitioner demonstrated a reasonable likelihood of prevailing in its challenge to at least one claim of the '349 patent, we institute *inter partes* review on all claims and grounds. *See* 37 C.F.R. § 42.108(a) ("When instituting . . . review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.").

IV. CONCLUSION

After considering the evidence and arguments presented in the Petition, Preliminary Response, Preliminary Reply, and Preliminary Sur-reply, we determine Petitioner has established a reasonable likelihood of prevailing on its assertion that at least one claim of the '349 patent is unpatentable on at least one ground, and we institute an *inter partes* review on all the challenged claims and challenges presented in the Petition. *See* 37 C.F.R. § 42.108(a) ("When instituting *inter partes* review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim").

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that pursuant to 35 U.S.C. § 314, *inter partes* review is instituted as to the challenged claims of the '349 patent and all challenges of unpatentability presented in the Petition; and

FURTHER ORDERED that *inter partes* review is commenced on the entry date of this Order, and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD,
Petitioner,

v.

MOJO MOBILITY INC.,
Patent Owner.

IPR2023-01090
Patent 11,292,349 B2

FITZPATRICK, *Administrative Patent Judge*, concurring.

I concur in the majority’s decision to grant the Petition because, in my view, the Petition has compelling merits in relation to at least one of the challenged claims. “[T]he compelling merits standard is a higher standard than the standard for institution set by statute.” *Commscope Techs. LLC v. Dali Wireless Inc.*, No. IPR2022-01242, Paper 23 at 3 (PTAB Feb. 27, 2023) (precedential) (“*Commscope*”); *see also* 35 U.S.C. § 314(a). “[W]hen determining whether there is a compelling unpatentability challenge, the Board evaluates whether the Petition presents challenges in which the evidence, if un rebutted in trial, would plainly lead to a conclusion that one or more claims are unpatentable by a preponderance of the evidence.”

Commscope at 3 (quotation marks and citation omitted). Put another way, the compelling merits standard is satisfied “if it is highly likely that the petitioner would prevail with respect to at least one challenged claim.” *Id.* at 4 (citation omitted). In my view, the same evidence and arguments identified in the majority opinion as showing a reasonable likelihood of Petitioner prevailing on Ground 1 claim 17 also demonstrate that the same challenge to claim 17 has compelling merits.

However, I disagree with the majority opinion’s determination that, as a whole, the *Fintiv* factors weigh against discretionary denial of the Petition. *See Apple Inc. v. Fintiv, Inc.*, No. IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”). I am of the opposite opinion—that the *Fintiv* factors favor denial. Hence, I would apply the compelling merits standard. *See Commscope* at 5 (“In circumstances where . . . the Board’s analysis of *Fintiv* factors 1–5 favors denial of institution, the Board shall then assess compelling merits.”).

Factor 1: Whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted

The majority opinion finds this factor to be neutral. I agree for the reasons identified in the majority opinion.

Factor 2: proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision

The majority opinion finds this factor favors discretionary denial because trial in the district court litigation is scheduled to begin five months before our deadline to reach a final written decision. I agree, but I would place much more weight on this factor.

In *NHK Spring Co. v. Intrix-Plex Techs., Inc.*, No. IPR2018-00752, Paper 8 (PTAB Sept. 12, 2018) (precedential) (“*NHK*”), the Board denied a petition under 35 U.S.C. § 314(a)¹⁷ where institution would have led to a final written decision approximately six months prior to a scheduled trial in a pending civil action involving the same patent. *NHK* at 20. In *Fintiv*, the Board discussed *NHK* and held the following:

NHK applies to the situation where the district court has set a trial date to occur earlier than the Board’s deadline to issue a final written decision in an instituted proceeding. In a case where, in contrast to the facts present in *NHK*, the district court has set a trial date after the Board’s deadline to issue a final written decision in an instituted proceeding, the Board may be less likely to deny institution under 35 U.S.C. § 314(a) based on district court trial timing depending on other factors as set forth below.

Fintiv at 3. The instant situation is the former one described above by *Fintiv* and to which “*NHK* applies.”

I would weigh this factor *heavily* in favor of discretionary denial.

Factor 3: investment in the parallel proceeding by the court and the parties

The majority opinion finds this factor weighs against discretionary denial. I agree, but I would place less weight on this factor.

¹⁷ In *NHK*, the Board additionally denied institution under 35 U.S.C. § 325(d). *NHK* at 18. However, the determination under § 325(d) was “independent” of the determination under 35 U.S.C. § 314(a). See *Fintiv*, at 5 n.8 (“To the extent we refer to such a denial of institution as a ‘denial under *NHK*,’ we refer to *NHK*’s § 314(a) denial due to the earlier trial date in the district court and not the independent basis for denial under § 325(d).”).

Understandably, Petitioner stresses what remains to take place in the litigation while Patent Owner stresses what has already transpired. Pet. 102; Reply 4–5; Prelim. Resp. 19–20. The majority opinion correctly notes “that considerable effort remains to be completed.” *Supra*. However, this does not mean that significant investments have not already been made. They have. For example, Patent Owner argues, and Petitioner does not dispute, that “the district court proceeding has been pending since October 2022,” and the parties “have prepared and exchanged infringement and invalidity contentions, presented initial disclosures, and are in the midst of substantial fact discovery.” Prelim. Resp. 20; *see* Reply 4–5 (not disputing these arguments). Additionally, Patent Owner argues, and Petitioner does not dispute, that claim construction will have been briefed and argued by the time of the institution decision. Prelim. Resp. 20; *see* Reply 4–5 (not disputing this argument).

I find this factor to be not very significant unless it is lopsided in one direction, which is not the situation here.

In sum, I find this factor weighs slightly against discretionary denial.

*Factor 4: overlap between issues raised in the
petition and in the parallel proceeding*

The majority opinion finds this factor weighs against discretionary denial. I agree in view of Petitioner’s stipulation that, “if this IPR is instituted, Petitioner will not pursue an invalidity defense in the Texas Litigation with respect to the challenged claims of the ’349 patent in this Petition based on (i) any of the same instituted grounds or (ii) any prior art reference that forms the basis of any instituted ground.” Reply 2. However, I do not agree that the stipulation goes as far as the majority opinion

characterizes it. Specifically, I do not agree that the stipulation limits invalidity challenges of the same claims in the district court litigation to those involving “materially different grounds, argument, and/or evidence.” *Supra*. For example, it does not preclude challenges based on redundant or cumulative references, should they exist.

In sum, I find this factor weighs moderately against discretionary denial.

*Factor 5: whether the petitioner and the defendant
are the same in the parallel proceeding*

The majority opinion finds this factor weighs in favor of discretionary denial. I agree for the reason identified in the majority opinion, namely, that the parties in this proceeding are identical to the parties in the related district court litigation.

*Factor 6: other circumstances that impact the
Board’s exercise of discretion, including the merits*

Fintiv states that, “in evaluating the factors, the Board takes a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Fintiv* at 6. Here, there are “other factors” present that should be considered in forming this holistic view.

The district court litigation involves seven patents asserted by Patent Owner. *See* Pet. 1 (listing the seven patents). Petitioner filed the instant Petition, along with seventeen additional IPR petitions, to challenge collectively various claims of the same seven patents. *See* Prelim. Resp. 1 n.1 (listing all eighteen petitions). The district court litigation can resolve the entire seven-patent dispute between the parties.

It strikes me as inefficient to conduct, in parallel with the district court litigation, multiple *inter partes* reviews of the same seven patents. This is particularly the case here where the best available evidence indicates that the district court litigation will go to trial approximately five months prior to a final written decision in the instant *inter partes* review and five to six months before a final written decision will be entered in any of the remaining *inter partes* reviews, if also instituted. Thus, I find this additional reason favors discretionary denial.

Conclusion

I believe, as a whole, the *Fintiv* factors weigh in favor of discretionary denial of the Petition, with factors 2, 5, and 6 weighing in favor of discretionary denial (factor 2 heavily so) and factors 3 and 4 weighing against it. However, as I believe the Petition contains a compelling merits challenge, I concur with the ultimate decision to grant the Petition. See *Commscope* at 4 (“[T]he PTAB will not deny institution based on *Fintiv* if there is compelling evidence of unpatentability.”) (quotation marks and citation omitted).

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