

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

SCRAMOGE TECHNOLOGY LTD.,
Patent Owner.

IPR2022-00120
Patent 9,997,962 B2

Before JAMESON LEE, KARL D. EASTHOM, and
AARON W. MOORE, *Administrative Patent Judges*.

EASTHOM, *Administrative Patent Judge*.

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

I. INTRODUCTION

Apple Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting an *inter partes* review of claims 1–4, 7, 8, 18, and 19 of U.S. Patent No. 9,997,962 B2 (Ex. 1001, the “’962 patent”). Scramoge Technology Ltd. (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”). Petitioner filed a Preliminary Reply (Paper 7, “Pet. Prelim. Reply”) and Patent Owner filed a Preliminary Sur-Reply (Paper 8, “PO Prelim. Sur-Reply”) authorized by the Board to address a discretionary denial issue.

We have authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2020). Institution of an *inter partes* review requires that “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). For the reasons set forth below, we determine that there is a reasonable likelihood that Petitioner will prevail with respect to at least one challenged claim. Accordingly, we institute an *inter partes* review of the ’962 patent.

II. BACKGROUND

A. *Real Parties in Interest*

The parties identify themselves as real parties in interest. Pet. 86; Paper 4, 2.

B. *Related Matters*

The parties identify the following proceedings as related matters involving the ’962 patent: *Scramoge Tech. Ltd. v. Apple Inc.*, No. 6:21-cv-

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0579-ADA (W.D. Tex.) (the “District Court” or the “District Court case”);¹ *Scramoge Tech. Ltd. v. Samsung Electronics Co., Ltd.*, No. 6:21-cv-0454-ADA (W.D. Tex.); *Scramoge Tech. Ltd. v. Google LLC*, No. 6:21-cv-0616-ADA (W.D. Tex.). *See* Paper 4, 2; Pet. 62.

The following *inter partes* review proceeding involves the ’962 patent: *Samsung Electronics Co., Ltd. vs Scramoge Technology Ltd.*, IPR2022-00284 (PTAB December 7, 2021). The following *inter partes* review proceedings involve related patents: *Apple Inc. v. Scramoge Tech. Ltd.*, IPR2022-00117 (PTAB October 29, 2021); *Apple Inc. v. Scramoge Tech. Ltd.*, IPR2022-00118 (PTAB October 29, 2021); *Apple Inc. v. Scramoge Tech. Ltd.*, IPR2022-00119 (PTAB October 29, 2021). *See* Paper 4, 2.

C. The ’962 Patent

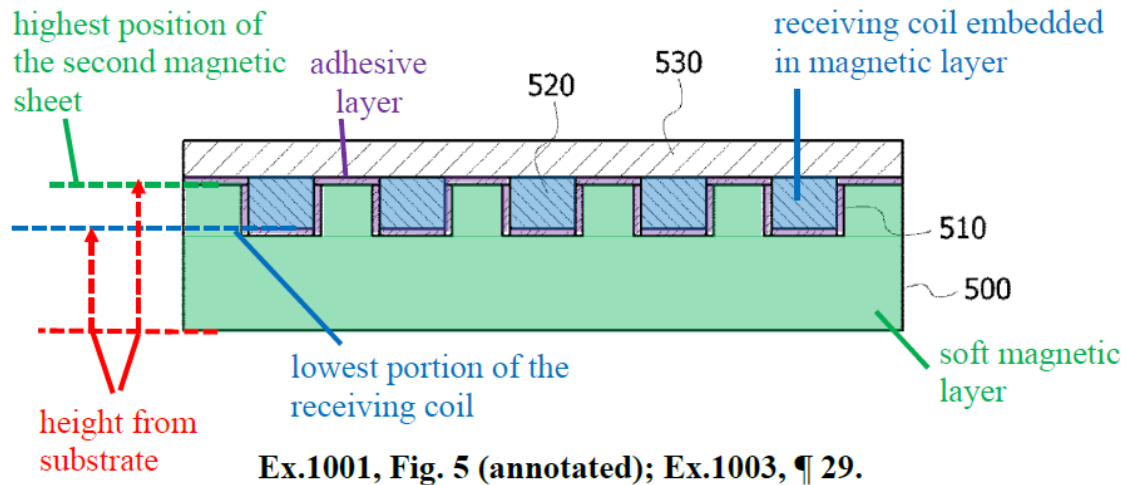
The ’962 patent relates to a wireless charging device using a transmitting primary coil coupled via electromagnetic induction to a receiving secondary coil for charging a power supply in household electronic products and other products. *See* Ex. 1001, code (57), 1:24–21.

[A]n embodiment of the present invention includes a substrate, a soft magnetic layer stacked on the substrate, and a receiving coil configured to receive electromagnetic energy emitted from a wireless power transmission device, wound in parallel with a plane of the soft magnetic layer, and formed inside of the soft magnetic layer, and an insulating layer is formed between the soft magnetic layer and the receiving coil.

Id. at code (57).

¹ This short-hand reference is to the District Court case or litigation itself, not to the case citation. *See infra* § III.D.1.

Figure 5 of the '962 patent, as annotated by Petitioner, follows (Pet. 8):



Annotated Figure 5 of the '962 patent, above, illustrates an antenna coil and magnetic layer configuration, including “adhesive layer 510 . . . formed on a soft magnetic layer 500 [and] a receiving coil 520 . . . formed on the adhesive layer 510,” with “receiving coil 520 . . . disposed on the upper surface of the soft magnetic layer 500.” Ex. 1001, 6:11–30. “[T]he adhesive layer 510 may include a first adhesive layer 512, an insulating layer 514 formed [on] the first adhesive layer 512, and a second adhesive layer 516 formed on the insulating layer.” *Id.* at 6:42–45. As depicted and annotated by Petitioner, the highest position of a second magnetic sheet (shown above as soft magnetic layer 500) is higher from a substrate (not depicted but located at the bottom of the figure) than the lowest portion of receiving coil 520. *See infra* § II.D, claim 1, limitation 1.6.

An example of the insulating layer between the two adhesive layers is “polyethylene terephthalate (PET) material.” Ex. 1001, 6:47. The '962 specification refers to the multi-layer adhesive as “double-sided.” *Id.* at 6:37–38.

Figure 6 of the '962 patent, as annotated by Petitioner, follows (Pet. 8):

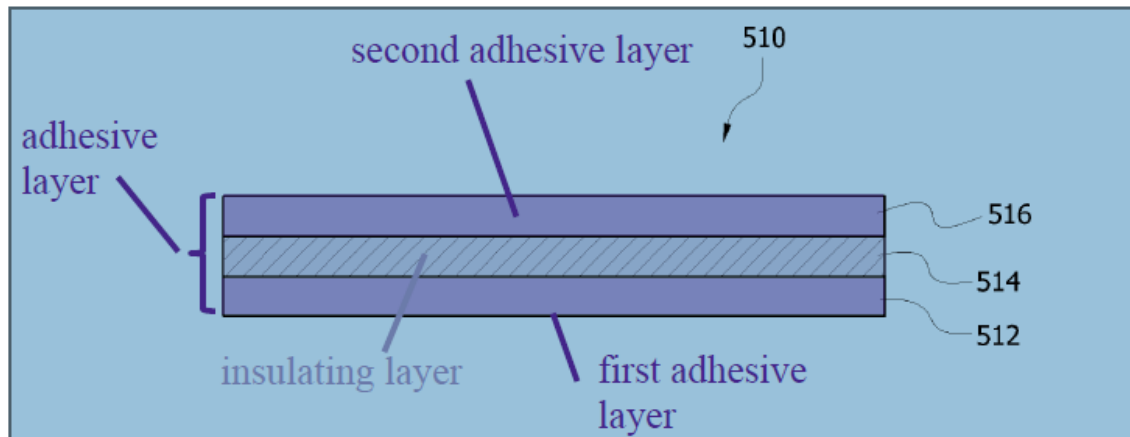


Figure 6 above illustrates the double-sided tape configuration (for attaching a coil to a magnetic layer) with first 512 and second 516 adhesive layers sandwiching insulating layer 514. *See Ex. 1001, 6:42–45.*

D. Illustrative Claim

Independent claim 1 follows:

- [1.0] A wireless power receiving antenna comprising:
 - [1.1] a substrate;
 - [1.2] a soft magnetic layer comprising a first magnetic sheet disposed on the substrate and a second magnetic sheet disposed on the first magnetic sheet;
 - [1.3] a receiving coil disposed on the second magnetic sheet; and
 - [1.4] an adhesive layer formed between the second magnetic sheet and the receiving coil,
 - [1.5] wherein the adhesive layer includes a first adhesive layer in contact with the second magnetic sheet, a second adhesive layer in contact with the receiving coil, and an

insulating layer disposed between the first adhesive layer and the second adhesive layer, and

[1.6] wherein a height of a highest position of the second magnetic sheet from the substrate is higher than a height of a lowest position of the receiving coil from the substrate.

Ex. 1001, 8:54–9:4 (bracketed information added to conform to the Petition).

E. Asserted Grounds of Unpatentability

Petitioner contends that claims 1–4, 7, 8, 18, and 19 are unpatentable as follows:²

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 18, 19	103	Suzuki, ³ Lee ⁴
2–4, 7	103	Suzuki, Lee, Sawa ⁵
8	103	Suzuki, Lee, Sawa, Park ⁶

Pet. 2–3. Petitioner supports its Petition with the Declaration of Dr. Joshua Phinney (Ex. 1003).

III. ANALYSIS

A. Legal Standards

A patent claim is unpatentable “if the differences between the claimed invention and the prior art are such that the claimed invention as

² The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. § 103. Because the ’962 patent’s effective filing date is after the March 16, 2013 effective date of the applicable AIA amendment, the post-AIA version of § 103 applies.

³ U.S. Pat. No. 8,421,574 B2, issued Apr. 16, 2013 (Ex. 1005).

⁴ U.S. Pat. No. 9,252,611 B2, issued Feb. 2, 2016 (Ex. 1006).

⁵ U.S. Pat. No. 9,443,648 B2, issued Sept. 13, 2016 (Ex. 1008).

⁶ U.S. Pat. No. 8,922,162 B2, issued Dec. 30, 2014 (Ex. 1007).

a whole would have been obvious before the effective filing date of the invention to a person having ordinary skill in the art to which the claimed invention pertains.” 35 U.S.C. § 103; *see also KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (similar language albeit with respect to the pre-AIA version of 35 U.S.C. § 103). “[W]hen a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.” *KSR*, 550 U.S. at 416 (citing *United States v. Adams*, 383 U.S. 39, 50–51 (1966)). The question of obviousness involves resolving 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 ordinary skill in the art; and (4) objective evidence of non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill in the Art

Determining whether an invention would have been obvious under 35 U.S.C. § 103 requires resolving the level of ordinary skill in the pertinent art at the time of the effective filing date of the claimed invention. *Graham*, 383 U.S. at 17. The person of ordinary skill in the art is a hypothetical person who knows the relevant art. *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). Factors in determining the level of ordinary skill in the art include the types of problems encountered in the art, the sophistication of the technology, and educational level of active workers in the field. *Id.* One or more factors may predominate. *Id.*

Petitioner contends that a

[a] Person of Ordinary Skill in The Art (“POSITA”) in June 2013 would have had a working knowledge of the network

communication art that is pertinent to the '962 patent. That person would have a bachelor's degree in electrical engineering, or equivalent training, and approximately two years of experience working in the field of wireless power transmission. Lack of work experience can be remedied by additional education, and vice versa.

Pet. 10 (citing Ex. 1003 ¶¶ 18–20).

Patent Owner neither disputes Petitioner's proposed level of ordinary skill in the art, nor proposes a different level. *See generally* Prelim. Resp.

Based on a review of the preliminary record, for purposes of the Institution Decision, we adopt Petitioner's proposed level of ordinary skill in the art because it is consistent with the evidence of record, including the asserted prior art and '962 patent specification.

C. Claim Construction

In *inter partes* reviews, the Board interprets claim language using the district-court-type standard, as described in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). *See* 37 C.F.R. § 42.100(b) (2020). Under this standard, claim terms have their ordinary and customary meaning, as would be understood by a person of ordinary skill in the art at the time of the invention, in light of the language of the claims, the specification, and the prosecution history. *See Phillips*, 415 F.3d at 1313–14.

Neither party provides an explicit claim construction for any claim term here. At this stage, it is not necessary to explicitly construe any claim terms, because doing so would have no effect in the analyses below of Petitioner's asserted grounds. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (stating that “we need only construe terms ‘that are in controversy, and only to the extent

necessary to resolve the controversy” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

D. Discretion Under 35 U.S.C. § 314(a)

Patent Owner argues that we should exercise discretion to deny institution under 35 U.S.C. § 314(a) in view of the District Court litigation. Prelim. Resp. 4–8 (citing, *inter alia*, *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”)).

Institution of an *inter partes* review is discretionary. *See* 35 U.S.C. § 314(a) (authorizing institution of an *inter partes* review under particular circumstances, but not requiring institution under any circumstances); *Cuozzo Speed Techs., LLC v. Lee*, 579 U.S. 261, 273 (2016) (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”); *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018) (“[Section] 314(a) invests the Director with discretion on the question whether to institute review” (emphasis omitted)); *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.”).

An advanced state of a parallel district court proceeding is a “factor that weighs in favor of denying the Petition under § 314(a).” *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential) (“*NHK*”). Specifically, an early trial date is part of a “balanced assessment of all relevant circumstances in the case, including the merits.” Consolidated Trial Practice Guide November 2019 (“TPG”) 58.⁷

⁷ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

This balanced assessment involves consideration of the following factors:

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.

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

The parties agree that a stay has neither been requested nor granted in the District Court case involving Apple (*supra* § II.B (identifying Related Matters)). See Pet. 12; Pet. Prelim. Reply 1; Prelim. Resp. 30; PO Prelim. Sur-reply 2.

Accordingly, this factor is neutral as to exercising discretion to deny institution.

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

The Board assesses this factor on a case-by-case basis. On one hand, the Board takes a district court's trial schedule at "face value" and declines to question it "absent some strong evidence to the contrary." *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 12–13 (PTAB May 13, 2020)

(informative). On the other hand, the Board considers the uncertainty in the schedule (including that caused by the parties agreeing to jointly request rescheduling of the trial date on several occasions) despite a scheduled trial date. *Sand Revolution II, LLC v. Cont'l Intermodal Grp. Trucking LLC*, IPR2019-01393, Paper 24 at 11–12 (PTAB June 16, 2020) (informative) (“*Sand Revolution II*”).

The projected date of the Board’s final written decision here is May 4, 2023. Petitioner argues that the District Court’s “*Markman* hearing has been delayed and a trial date will not be set until after an institution decision is due.” Pet. Prelim. Reply 1. Petitioner points out that “the District Court ‘expects to set [the trial] date at the conclusion of the *Markman Hearing*.’” *Id.* at 2 (quoting Ex. 1015 (revised District Court original scheduling order), 4). Petitioner explains that “[t]he *Markman* hearing . . . has been delayed to May 23, 2022—after the Board’s institution decision which is due by May 16, 2022.” *Id.* (citing Ex. 2015, 1). The District Court’s revised scheduling order supports Petitioner. Exhibit 2015, 1.

Nevertheless, Patent Owner responds that “Petitioner does not seriously dispute that the [D]istrict [C]ourt case is on track for trial in March 2023, which is months before a final written decision would be due.” PO Prelim. Sur-reply 2. Patent Owner’s argument does not dispute Petitioner’s showing based on Exhibit 2015 that the District Court has not set a trial date.

This factor involves comparing a district court trial date to the expected final written decision date and assessing weight. This comparison is a proxy for the likelihood that the trial court will reach a decision on validity issues before the Board reaches a final written decision. In general, any trial set to occur soon after the institution decision is likely to happen prior to the Board’s final written decision. Here, however, the District Court

has not yet set a trial date so any comparison to the projected date of a final written decision involves speculation.

Accordingly, this factor weighs against exercising discretion to deny institution.

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

If, at the time of the institution decision, a district court has issued substantive orders related to the challenged patent, such as a claim construction order, this circumstance weighs in favor of denial. *See Fintiv*, Paper 11 at 9–10. On the other hand, if the district court has not issued such orders, this circumstance weighs against discretionary denial. *Id.* at 10. Moreover, in evaluating this factor, “[i]f the evidence shows that the petitioner filed the petition expeditiously, such as promptly after becoming aware of the claims being asserted, this fact has weighed against exercising the authority to deny institution under *NHK*.” *Id.* at 11.

Patent Owner identifies completion of *Markman* briefing, and exchange of preliminary infringement and invalidity contentions. *See Prelim. Resp.* 34. Patent Owner notes that “pre-trial disclosures (jury instructions, exhibits lists, witness lists, discovery and deposition designations) are due on December 20, 2022.” *Id.* at 32 (citing Ex. 2002, 4).

Petitioner argues that neither party explicitly construes any claim terms here so that “even if the [D]istrict [C]ourt issues a *Markman* order soon after institution, as speculated by Patent Owner, that order will not reflect any investment in the merits of the invalidity issues here.” *Pet. Prelim. Reply* 4. Petitioner points out that “final invalidity contentions are not due until after institution.” *Id.* at 4 (citing Ex. 2015, 1).

The record does not show a significant investment in the District Court in terms of substantive orders or actions by parties toward the patentability issues presented here. As Patent Owner notes, pre-trial disclosures are not due until December 20, 2022. *Cf. Sand Revolution II*, Paper 24 at 11 (“[W]e recognize that much work remains in the district court case as it relates to invalidity: fact discovery is still ongoing, expert reports are not yet due, and substantive motion practice is yet to come.”). Similar to the circumstances in *Sand Revolution II*, fact and expert discovery, final invalidity contentions, and dispositive motions, are not complete in the District Court. *See Fintiv*, Paper 11 at 9–10 (this factor concerns, in part, “duplicative costs”); *Apple Inc. v. Parus Holdings, Inc.*, IPR2020-00686, Paper 9 at 17 (PTAB Sept. 23, 2020) (noting *Fintiv*’s concern with “duplicative costs” and finding “as far as claim construction is concerned, there is little risk of the parties or us duplicating work performed in the Texas case should we proceed to a trial” where the parties relied on the plain meaning in the IPR).

Petitioner also asserts that it filed the Petition “prompt[ly] within two months after being served infringement contentions.” Pet. Prelim. Reply 5. The record supports Petitioner and shows that Petitioner filed the Petition diligently (October, 29 2021) less than two months after Patent Owner served its preliminary invalidity contentions (September 7, 2021, according to the District Court scheduling order). *See Ex. 1015, 4*. Petitioner’s diligence factors holistically with the noted minimal investment in the District Court parallel proceeding as summarized above.

Accordingly, this factor weighs against exercising discretion to deny institution.

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

Petitioner “stipulates that it will not pursue in the parallel district court proceeding (WDTX-6-21-cv-00579) the prior art obviousness combinations on which trial is instituted for the claims on which trial is instituted.” Pet. Prelim. Reply 5 (citing *Sand Revolution II*, Paper 24 at 11–12 (addressing a stipulation)). Patent Owner argues that Petitioner’s

narrow stipulation is insufficient and fails to resolve concerns of duplicative issues and inconsistent rulings. The stipulation only concerns the particular obviousness combinations directed to particular claims for which trial is instituted. Petitioner, however, would still be free to raise different combinations based on the same references, or even the same combinations directed to different claims. In addition, Petitioner would still be free to raise anticipation arguments based on the same references.

Prelim. Resp. 4.

Notwithstanding Patent Owner’s arguments, anticipation is not at issue here and the stipulation does not appear too narrow as it refers to not pursuing the “obvious combinations” at issue here. Therefore, at the least, Petitioner’s stipulation “mitigates to some degree the concerns of duplicative efforts between the district court and the Board, as well as concerns of potentially conflicting decisions.” *Sand Revolution II*, Paper 24 at 12.

Accordingly, this factor weighs marginally against exercising our discretion to deny institution.

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

The parties here are the parties in the District Court litigation. *See* Pet. Prelim. Reply 5. Accordingly, this factor is neutral or, assuming the final written decision will precede trial in the District Court given the

absence of a confirmed trial date at this point, weighs against discretionary denial.

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

The factors typically considered in the exercise of discretion are part of a balanced assessment of all the relevant circumstances in the case, including the merits. *Fintiv*, Paper 11 at 14. For example, if the merits of a ground raised in the petition seem particularly strong on the preliminary record, this fact has favored institution. *Id.* at 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. In *Sand Revolution II*, the panel determined that this factor weighed in favor of not exercising discretion when the petitioner had “set forth a reasonably strong case for the obviousness of most challenged claims.” *Sand Revolution II*, Paper 24 at 13.

As summarized below, Petitioner sufficiently shows that at least challenged independent claim 1 is unpatentable for purposes of institution.

This factor is neutral as to exercising discretion to deny institution.

7. *Conclusion*

The Board “holistic[ally] view[s] . . . whether efficiency and integrity of the system are best served by denying or instituting review” under § 314(a) when evaluating the *Fintiv* factors. *Fintiv*, Paper 11 at 6. Evaluating all of the factors on this record, we decline to exercise our discretion under § 314(a) to deny institution of *inter partes* review.⁸

⁸ Given this decision, no need exists to reach Petitioner’s arguments in support of its assertion that “the *Fintiv* framework should be overturned.” *See* Pet. 14.

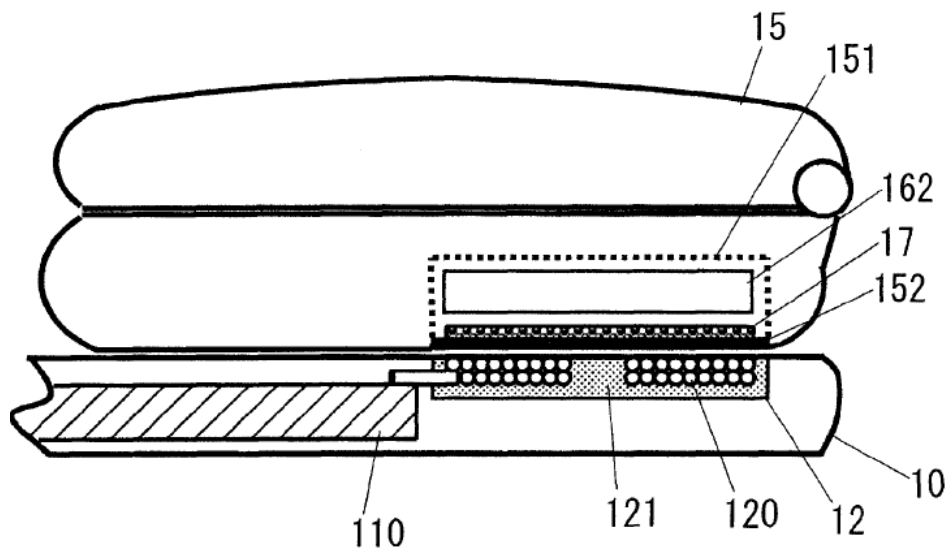
E. Ground 1: Asserted Obviousness Based on Suzuki and Lee

Petitioner asserts that claims 1, 18 and 19 are unpatentable under 35 U.S.C. § 103(a) based on the combined teachings of Suzuki and Lee. Pet. 17–46.

1. Suzuki

Suzuki generally describes a wireless charging device using a primary coil coupled via electromagnetic induction to a secondary coil in consumer items such as “a cordless phone, a shaver, an electric toothbrush, a personal digital assistance or the like (hereinafter referred to as a ‘secondary device’).” Ex. 1005, 1:17–26.

Suzuki’s Figure 1A follows:



Suzuki’s Figure 1A above shows primary coil 120 in charger device 10 for charging cell phone 15 via electromagnetic induction with cell phone secondary coil 17[0].⁹ See Ex. 1005, 4:48–59.

⁹ In describing Figures 1A and 3, the specification refers to “secondary coil[] . . . 170” and “secondary coil 170,” respectively, so “17” in those figures is a misprint. See Ex. 1005, 4:48–59, 6:34.

With respect to the secondary device (e.g., cell phone 15), “a secondary side of contactless power transmission apparatus” includes “a holding member which is physically separated from a primary side; a magnetic layer; a shield layer for shielding [the] electromagnetic noise; and a heat insulation layer.” *Id.* at code (57). The holding member supports a planar secondary coil. *Id.* “[T]he magnetic layer is laminated on one side of the planar coil and unified with the planar coil.” *Id.* “[T]he secondary side of the apparatus includes a plurality of magnetic layers.” *Id.*

2. *Lee*

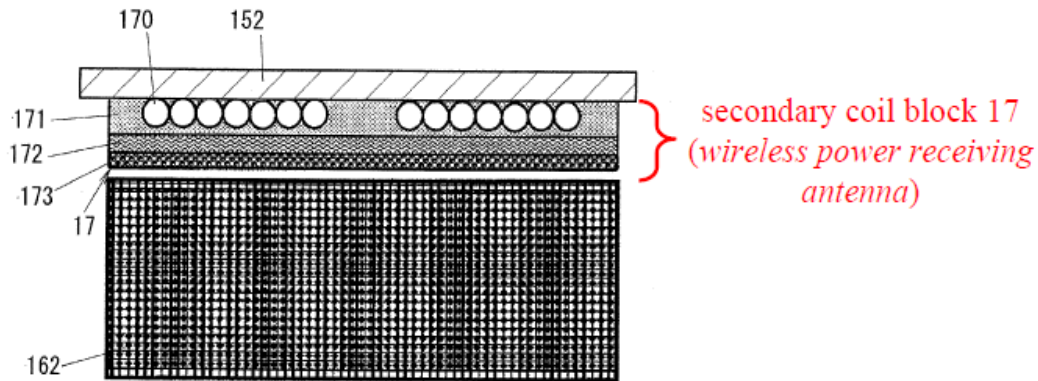
Similar to Suzuki, Lee also discloses a secondary coil in a portable mobile terminal (e.g., cell phone) for wirelessly charging the phone. *See* Ex. 1006, code (57), Fig. 17. In Lee, a “receiving-side secondary coil 6 of the wireless charger is attached on an upper portion of a protective film of a magnetic field shield sheet 10 by using a double-sided tape 30b.” *Id.* at 16:31–40.

3. *Claims 1 and 18–19*

Petitioner contends that the combined teachings of Suzuki and Lee would have rendered independent claims 1 and 18 and dependent claim 19 obvious. Pet. 17–46. Patent Owner disagrees. Prelim. Resp. 12–27.

a) *Claim 1*

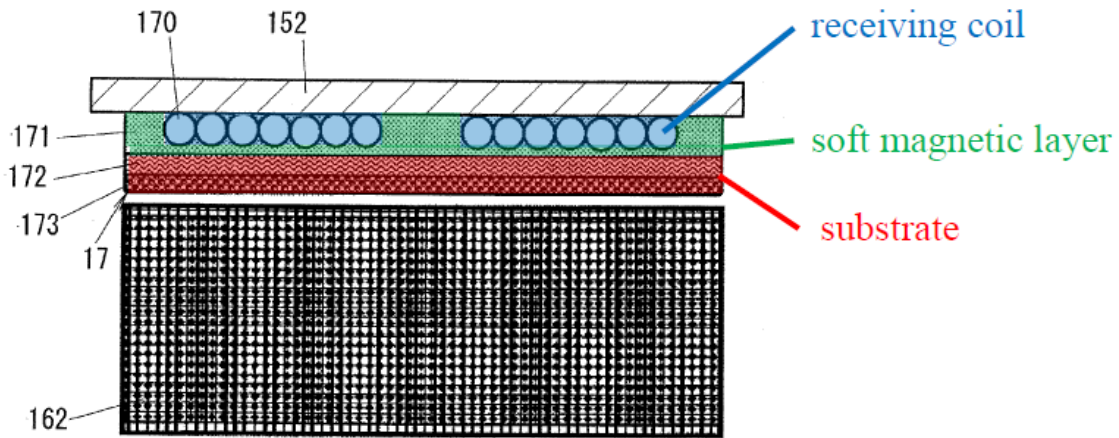
The preamble of claim 1 recites “[a] wireless power receiving antenna comprising.” Petitioner contends that to the extent the preamble is limiting, “Suzuki renders [it] obvious,” “because Suzuki teaches a contactless power transmission apparatus that includes a power receiver with a secondary coil block antenna.” Pet. 32 (citing Ex. 1005, Fig. 3; Ex. 1003 ¶ 57). To support the showing, Petitioner annotates Suzuki’s Figure 3 as follows:



Annotated Figure 3 of Suzuki above shows secondary coil 17[0] (identified by Petitioner in red text) as the “wireless power receiving antenna” as recited in the preamble of claim 1. Pet. 32. Petitioner explains that Suzuki’s “power receiver includes a ‘secondary coil block 17[0]’ . . . with multiple layers, including ‘a magnetic layer 171, a shield layer 172 for shielding electromagnetic noise, and a heat insulation layer 173, which together are unified with the secondary coil 170.’” *Id.* at 31–32 (quoting Ex. 1005, 6:29–33).

Limitation 1.1 recites “a substrate.” Petitioner reads “a substrate” on Suzuki’s “shield layer 172 and/or insulation layer 173.” Pet. 33 (citing Ex. 1003 ¶ 59; annotating Ex. 1005, Fig. 3).

Limitation 1.2 recites “a soft magnetic layer comprising a first magnetic sheet disposed on the substrate and a second magnetic sheet disposed on the first magnetic sheet.” To address this limitation, Petitioner begins with the following annotated version of Suzuki’s Figure 3 (Pet. 34):



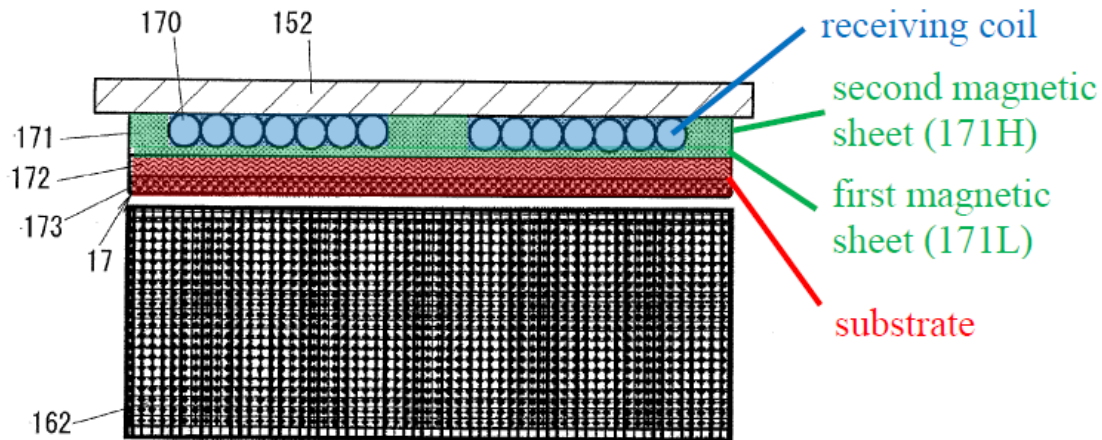
Annotated Figure 3 above shows receiving coil 170 (blue) embedded in soft magnetic layer 171 (green) on substrate 171/172 (red). *See* Pet. 34 (citing Ex. 1005, 6:29–46; Ex. 1003 ¶ 62).

To address the first and second magnetic sheets, Petitioner relies on Suzuki’s teaching with respect to another embodiment (*see* Figure 17A). Pet. 25. Describing the invention in general and the embodiment associated with Figure 17A, Suzuki states that “in order to further reduce the influence of noise, at least secondary side of the present invention includes a plurality of magnetic layers.” *Id.* (quoting Ex. 1005, 10:63–65). Further addressing this plurality of magnetic layers, Petitioner quotes Suzuki as follows:

[T]he plurality of magnetic layers of the secondary side are magnetic layers 171H and 171L that are laminated on one side of the secondary coil 170. Specifically, the magnetic layer (first magnetic layer) 171H is laminated on the one side of the primary [sic: secondary] coil 170, and the magnetic layer (second magnetic layer) 171L is laminated on the magnetic layer 171H.

Pet. 35 (second alteration by Petitioner (quoting Ex. 1005, 11:14–17); citing Ex. 1003 ¶ 66). Petitioner combines Suzuki’s teachings related to these two embodiments, annotating Suzuki’s Figure 3 to include the two magnetic

layers 171L and 171H (as described in connection with Suzuki's embodiment as illustrated with respect to Figure 17A), as follows:



As annotated by Petitioner, Suzuki's Figure 3 above shows substrate 172, 173 (red), first magnetic sheet 171L (green), second magnetic sheet 171H (green), and secondary receiving coil 170 (blue). Pet. 36 (citing Ex. 1005, Fig. 3; Ex. 1003 ¶ 68).

Petitioner relies on the following advantages of employing two magnetic layers instead of just one as described in Suzuki: “[P]ower transmission efficiency between primary and secondary sides **can be enhanced with the two magnetic layers.**” Pet. 35 (quoting Ex. 1005, 10:51–56) (emphasis by Petitioner). “[I]n order to **further reduce the influence of noise**, at least secondary side of the present invention includes a plurality of magnetic layers.” *Id.* (quoting Ex. 1005, 10:63–65) (emphasis by Petitioner). Petitioner reasons that these advantages (enhanced power transmission efficiency and noise reduction) would have rendered it obvious to employ Suzuki's dual magnetic layers (171L, 171H) as described in connection with Figure 17A instead of using Suzuki's single magnetic layer 170 as described in connection with Figure 3. *See id.* (citing Ex. 1003 ¶ 67).

Patent Owner argues that Petitioner fails to provide a reason to employ Suzuki's dual magnetic layers in place of Suzuki's single magnetic layer. Prelim. Resp. 13 (arguing that "the Petition improperly attempts to combine the teachings of separate embodiments disclosed in Suzuki without providing any motivation to make the combination or a reasonable expectation that such a combination would be successful"), 15 (arguing that "Petitioner fails to provide any justification or motivation to combine these entirely separate embodiments"). Patent Owner also argues that "Figure 3 discloses only a single 'magnetic layer 171'." *Id.* at 14.

These arguments do not address Petitioner's showing as summarized above. Contrary to Patent Owner's arguments, on this preliminary record, Petitioner provides sufficient reasons supported by the record for combining Suzuki's separate embodiments. In other words, Petitioner does not rely solely on Suzuki's Figure 3 (or teachings associated therewith).

Patent Owner also argues that "Suzuki teaches that the two magnetic layers (171H and 171L) are attached to the coil and are not disposed on a substrate (as required by the '962 patent claims)." Prelim. Resp. 17 (reproducing Ex. 1005, Fig. 17A). This argument does not undermine Petitioner's showing because it separately attacks Suzuki's Figure 17A embodiment in isolation without addressing Petitioner's reliance on the combination of teachings about the two embodiments as summarized above. Moreover, Suzuki states that "the *present invention* includes a plurality of magnetic layers," "to further reduce the influence of noise," indicating that its multiple magnetic layer teachings apply generally to the invention—i.e., instead of a single embodiment. *See* Ex. 1005, 10:63–65 (emphasis added).

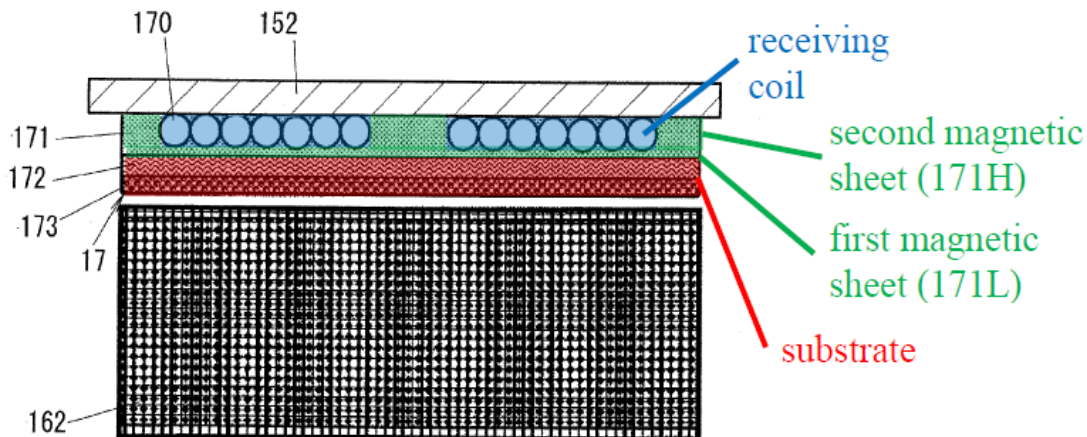
Patent Owner also argues that layers 171H and 171L have "different materials and sizes." Prelim. Resp. 18 (citing Ex. 1005, 11:42–45). It is not

clear how this is relevant to Petitioner’s showing. The challenged claims do not preclude different materials and sizes, and Suzuki does not necessarily require the two layers to be different sizes or materials, because Suzuki generally refers to a plurality of magnetic layers in some instances and also refers to the “invention” as noted above. *See* Ex. 1005, code 57 (“According to a second aspect, the secondary side of the apparatus includes a plurality of magnetic layers.”); 10:63–65 (quoted above). In summary, Petitioner provides sufficient design reasons supported by the preliminary record to employ two magnetic layers (to provide enhanced power transmission efficiency and noise reduction), and the preliminary record suggests that an artisan of ordinary skill readily would have been able to alter sizes and materials or use different sizes and materials. *See id.* at code 57, 10:63–67, 12:23–40.

Patent Owner also argues that “the Petition does not establish any reasonable expectation of success for the combination.” Prelim. Resp. 17. Contrary to this argument, Suzuki provides evidence of a reasonable expectation of success by describing advantages to a dual magnetic layer design (reduced noise, increased power transmission efficiency) “in the present invention” (Ex. 1005, 10:64), as Petitioner shows on this preliminary record. *See* Pet. 34–36 (citing Ex. 1005, 10:51–56, 10:63–65, 11:9–33; Ex. 1003 ¶ 66); Ex. 1005, 10:51–67, 12:23–40 (further describing the multiple magnetic layer teachings). The level of ordinary skill here suggests that employing two magnetic layers instead of just one magnetic layer under these circumstances would have been relatively straightforward and predictable. *See KSR*, 550 U.S. at 402–03 (“When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill in the art has good

reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.”); *Tokai Corp. v. Easton Enters. Inc.*, 632 F.3d 1358, 1371 (Fed. Cir. 2011) (“the nature of the mechanical arts is such that ‘identified, predictable solutions’ to known problems may be within the technical grasp of a skilled artisan”) (quoting *KSR*, 550 U.S. at 421); Pet. 26–27 (quoting *Tokai Corp.*, 632 F.3d at 1371, in the context of showing a reasonable expectation of success in employing Lee’s double-sided tape “to align with Suzuki’s manufacturing goals” to yield a “predictable result” “well within the skill of a person of ordinary skill in the art”). On this preliminary record, Patent Owner does not advance a specific reason that undermines Petitioner’s sufficient showing that combining Suzuki’s dual magnetic layer teachings with the more generic embodiment associated with Figure 3 would have been within the skill level of a person of ordinary skill in the art acting with a reasonable expectation of success.

Limitation 1.3 recites “a receiving coil disposed on the second magnetic sheet.” Petitioner annotates Figure 3, as modified via the teachings with respect to the dual magnetic layers addressed in connection with limitation 1.2, as follows (Pet. 36):



Suzuki's Figure 3, as annotated and modified by Petitioner, shows receiving coil 17 (blue) embedded in second magnetic sheet 171H (green) based on Petitioner's obviousness contention of employing two magnetic layers 171H and 171L instead of a single magnetic layer 171. *See* Pet. 36–37. Petitioner states that Suzuki teaches that “when the magnetic layer 171 comprises two layers, the magnetic layer 171H is laminated on the one side of the coil 170.” *Id.* at 36 (citing Ex. 1005, 11:9–33; Ex. 1003 ¶ 69). As noted above in addressing the two magnetic layers of limitation 1.2, Petitioner quotes Suzuki as follows: “Specifically, the magnetic layer (first magnetic layer) 171H is laminated on the one side of the primary [sic: secondary] coil 170, and the magnetic layer (second magnetic layer) 171L is laminated on the magnetic layer 171H.” *Id.* at 35 (quoting Ex. 1005, 11:9–33; citing Ex. 1003 ¶ 66).

Limitation 1.4 recites “an adhesive layer formed between the second magnetic sheet and the receiving coil.” Petitioner relies on Suzuki's teaching that “[t]he secondary coil 170 is then stuck on the other side (a lower surface) of the magnetic layer 171 with adhesive or pressure sensitive adhesive.” Pet. 37 (quoting Ex. 1005, 8:8–10). Petitioner adds that after using layers 171H and 171L instead of single layer 171 to create a multi-sheet layer 171 for the reasons as set forth with respect to limitation 1.2, “the adhesive would connect the coil 170 to the top layer 171H,” rendering obvious limitation 1.4. *See id.* at 37–38 (citing Ex. 1003 ¶¶ 171–172).

Patent Owner argues that “the Petition fails . . . because it again seeks to apply its improper combination of the teachings of separate embodiments disclosed in Suzuki without providing any motivation to make the combination or a reasonable expectation that such a combination would be

successful.” Prelim. Resp. 19. This argument tracks Patent Owner’s unsupported arguments with respect to limitation 1.2.

Patent Owner also argues that Petitioner’s annotated “drawing [on page 38 of the Petition] does not disclose an adhesive layer formed *between the second magnetic sheet and the receiving coil.*” Prelim. Resp. 20. This argument about Petitioner’s annotated drawing does not address Petitioner’s showing that relies on adhering Suzuki’s coil to top layer 171H and adhering layer 171L to layer 171H.¹⁰ As Petitioner shows, Suzuki does not disclose adhering layer 171L to the coil or adhesive, but rather discloses adhering it to layer 171H. In other words, as noted above, Petitioner quotes Suzuki as follows: “Specifically, the magnetic layer (first magnetic layer) 171H is laminated on the one side of the primary [sic: secondary] coil 170, and the magnetic layer (second magnetic layer) 171L is laminated on the magnetic layer 171H.” *Id.* at 35 (quoting Ex. 1005, 11:9–33; citing Ex. 1003 ¶ 66).

Alternatively, on this preliminary record, even if some portions of the adhesive layer penetrate into layer 171L as Patent Owner appears to argue that Petitioner illustrates on page 38 of the Petition, the vertical portions of double-sided adhesive layer would still be between “the second magnetic sheet [171H] and the receiving coil” as depicted there. *See* Pet. 38 (annotated Figure 3).¹¹

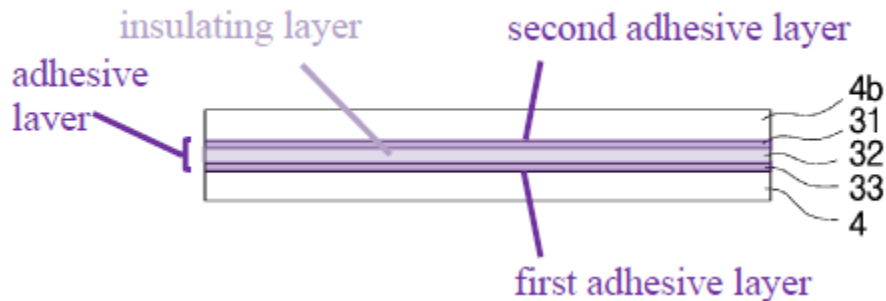
Limitation 1.5 modifies the adhesive layer of limitation 1.4 and generally reads on a double-sided adhesive tape in contact with the receiving

¹⁰ The ’962 patent also does not depict “an adhesive layer formed *between the second magnetic sheet and the receiving coil.*” *See* Ex. 1001, Figs. 4, 5, 8, 9.

¹¹ To the extent that this implicit reading of claim scope is too broad, the parties will have the opportunity to address it during trial.

coil and second magnetic sheet. *See* Pet. 38–39 (discussing Lee, Ex. 1006). In particular, limitation 1.5 recites “wherein the adhesive layer includes a first adhesive layer in contact with the second magnetic sheet, a second adhesive layer in contact with the receiving coil, and an insulating layer disposed between the first adhesive layer and the second adhesive layer.” Relying on its showing for limitation 1.4, Petitioner states that “Suzuki generally describes the use of an adhesive to connect the coil 170 to the magnetic layer 171.” *Id.* at 38 (citing Ex. 1005, 8:8–10; Ex. 1003 ¶ 73).

Petitioner turns to Lee as teaching “an example of a ‘double-sided tape’ adhesive used to connect a coil to a magnetic layer.” Pet. 38 (citing Ex. 1006, 9:29–38). Petitioner annotates Lee’s Figure 5, as follows:

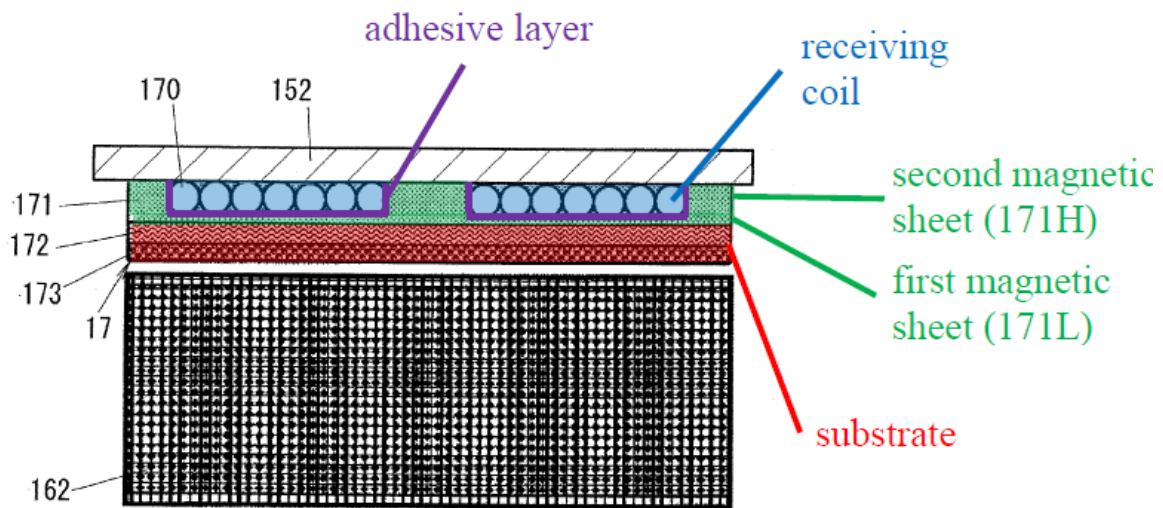


Lee’s Figure 5 as annotated by Petitioner shows insulating layer 32 sandwiched between adhesive layers 31, 33. *See* Pet. 38–39 (citing Ex. 1006, 9:29–38; Ex. 1003 ¶¶ 74–75); Ex. 1006, 9:29–33 (“[D]ouble-sided tape 3 is formed of a base member 32 made of a fluorine resin based film, for example, a PET (Polyethylene Terephthalate) film, on both sides of which second and third adhesive layers 31 and 33 are formed.”).

Petitioner relies on Lee’s teaching of using the double-sided tape to attach a coil to a magnetic sheet: “[R]eceiving-side secondary coil 6 of the wireless charger is attached on an upper portion of a protective film of a

magnetic field shield sheet 10 by using a double-sided tape 30b.” Pet. 39 (quoting Ex. 1006, 16:31–36). Petitioner asserts that a person of ordinary skill in the art “would have found it obvious to use such a double-sided tape to connect Suzuki’s magnetic layer 171 and coil 170” for several reasons. *See id.* at 39 (citing Pet. § X.C.3 (listing reasons); Ex. 1003 ¶¶ 76–77).

Based on Lee’s double-sided adhesive teachings and Suzuki’s multi-layer magnetic teachings, Petitioner provides the following modified and annotated version of Suzuki’s Figure 3:



Petitioner’s modified and annotated version of Suzuki’s Figure 3 above illustrates coil 170 embedded and attached via a double-sided adhesive tape (purple) in second magnetic sheet 171H (green) above substrate 172, 173 (red).

With respect to reasons to combine Suzuki and Lee, Petitioner asserts that “when considering the description of the adhesive in Suzuki, a POSITA would have naturally considered Lee, as it more fully describes known adhesives intended for use in adhering a power-receiving coil to a magnetic layer.” Pet. 24 (citing Ex. 1003 ¶ 43). Petitioner also contends that “Suzuki explains that in its method, the layers are stuck together ‘collectively by

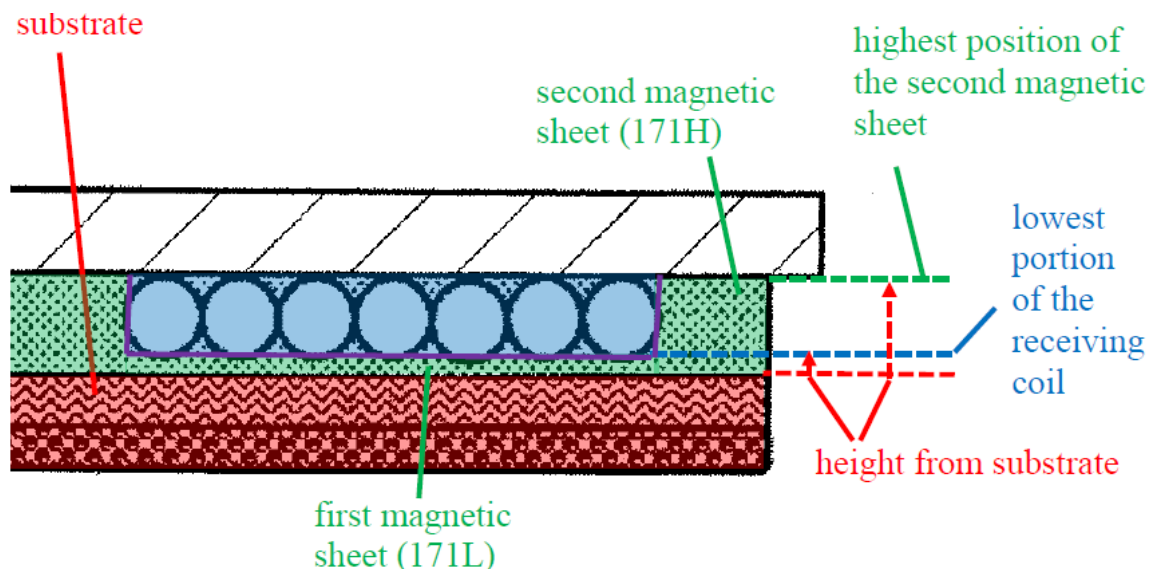
pressing,’ and that the adhesive may be a ‘pressure sensitive adhesive.’” *Id.* at 25 (citing Ex. 1005, 8:66–9:1, 8:8–10). According to Petitioner, “[i]t was known in the electronics manufacturing art that double-sided tape may be a pressure sensitive adhesive (PSA).” *Id.* at 25 (citing Ex. 1003 ¶ 46; Ex. 1009 ¶ 140). Petitioner also relies on known applications of such a PSA double-sided tape showing that “optimum thickness is dependent on the (opto)electronic construction, on the end application, on the nature of the embodiment of the PSA.” *Id.* at 25–26 (quoting Dollase (Ex. 1009 ¶ 141)). Dollase explains how to optimize the thickness, explaining that higher thicknesses for the PSA double layer tape “achieve improved adhesion to the substrate and/or a damping effect” and lower thicknesses “reduce the permeation cross section, and hence the lateral permeation and the overall thickness of the (opto)electronic construction.” *See id.* at 26 (quoting Ex. 1009 ¶ 141).¹² At the cited paragraph, Dollase explains that “there is a good compromise between a low thickness of composition and the consequent low permeation cross section, which reduces the lateral permeation, and a sufficiently thick film of composition to produce a sufficiently adhering bond.” Ex. 1009 ¶ 141.

According further to Petitioner, “it was well known that ‘by adjusting the height of the double-sided tape,’ it was possible to form a gap of predetermined height between adjacent elements.” *Id.* (quoting Ex. 1012, 4:47–48; citing *id.* at 4:42–54). In other words, in addition to Lee, as

¹² Dr. Phinney, on whose testimony Petitioner relies, also refers to paragraph 141 of Dollase to support his opinion that it was known to one with ordinary skill in the art that pressure sensitive and double sided tape may be configured to have a desired thickness depending on the particular application. Ex. 1003 ¶ 46.

indicated above, Petitioner relies on and cites other prior art references of record that show using double-sided tape for attaching coils was common at the time of the invention. *See* Pet. 23–26 (citing Ex. 1012, 4:42–54; Ex. 1013, 22:19–26; Ex. 1014, 5:44–48; Ex. 1017, 25:21–25, 26:15–26, Fig. 13; Ex. 1003 ¶¶ 44–47). Based on these references, Petitioner contends that the record evidence shows a reasonable expectation of success and also shows a predictable and advantageous application of adhering of a coil to a substrate with no change in function to Suzuki’s device or Lee’s adhesive. *See id.* Petitioner summarizes by stating that “the combination of Suzuki and Lee simply represents the combination of a known element (Lee’s double-sided tape) with Suzuki’s known contactless power transmission apparatus according to known methods to yield a predictable result (the adhesion of Suzuki’s coil to its magnetic layer).” *Id.* at 26–27(citing Ex. 1003 ¶ 47).

Finally, limitation 1.6 recites “wherein a height of a highest position of the second magnetic sheet from the substrate is higher than a height of a lowest position of the receiving coil from the substrate.” Petitioner modifies and annotates Suzuki’s Figure 3 as follows (Pet. 40):



Petitioner's modified and annotated version of Suzuki's Figure 3 above illustrates Suzuki's coil (blue) embedded in second magnetic sheet 171H (green), with the lowest portion of the coil relative to the substrate (red) illustrated as lower than the highest position of the second magnetic sheet relative to the substrate. *See* Pet. 40–41 (citing Ex. 1003 ¶¶ 180–181). In essence, limitation 1.6 requires the coil to be at least partially embedded in the second magnetic sheet.

Patent Owner argues that “Suzuki does not disclose first and second magnetic sheets (171H and 171L) in the embodiment of Figure 3,” because Figure 3 discloses a single “magnetic layer 171.” Prelim. Resp. 22. This argument attacks the embodiment associated with Figure 3 separately instead of addressing Petitioner's showing that relies on combining Suzuki's embodiments as discussed above in connection with limitation 1.2. Patent Owner also argues that “Petitioner fails to provide any justification or motivation to combine these entirely separate embodiments.” *Id.* at 23. Patent Owner adds other arguments that are the same as or similar to the arguments addressed above in connection with limitation 1.2. *Id.* at 23–24. These arguments fail for the same reasons as discussed in connection with limitation 1.2.

Patent Owner also argues that “none of [Suzuki's] Figures teach the coil disposed on a magnetic sheet, whereby the highest position of the magnetic sheet is higher than a lowest position of the receiving coil as required by this claim limitation.” Prelim. Resp. 25. Patent Owner similarly argues that “Suzuki's disclosure of magnetic layers 171L and 171H does not support Petitioner's annotated diagram where the receiving coil is embedded in magnetic layer 171H.” *Id.* at 26.

These arguments do not address the combination that Petitioner proposes. Petitioner proposes embedding the coil in the top portion of layer 171H. *See* Pet. 35, 41. For example, Petitioner notes that “Suzuki’s coil 170 . . . is embedded in the upper portion of magnetic layer 171” rendering it obvious to embed it in “the upper portion of magnetic layer 171H in the multi-layer example,” based on Suzuki’s teachings. *See id.* at 41 (arguing that “because Suzuki teaches that the coil is embedded in the magnetic layer, Suzuki renders obvious ‘wherein a height of a highest position of the second magnetic sheet from the substrate is higher than a height of a lowest position of the receiving coil from the substrate’” as claimed). Suzuki supports Petitioner by stating that “the magnetic layer (first magnetic layer) 171H is laminated on the one side of the primary [sic: secondary] coil 170, and the magnetic layer (second magnetic layer) 171L is laminated on the magnetic layer 171H.” *Id.* at 35 (second alteration by Petitioner (quoting Ex. 1005, 11:14–17); citing Ex. 1003 ¶ 66). In other words, Suzuki does not describe, and Petitioner does not propose, laminating second magnetic layer 171L on magnetic layer 171H *and* coil 170.

Relying further on Suzuki, Petitioner states that “[t]he coil 170 [is] embedded in the magnetic layer 171, as shown in Fig. 3, after each of the manufactured layers are pressed together.” *Id.* at 19 (“In each of the manufacturing methods, preferably sticking several thin layers together as stated above is treated collectively by pressing”) (quoting Ex. 1005, 10:8–10). The Petition also states that Suzuki explains that, in its method, the layers are stuck together “collectively by pressing.” *Id.* at 35 (citing Ex. 1005, 8:66–9:1, 8:8–10). Suzuki’s method of pressing the layers together further supports Petitioner’s showing of suggesting embedding the coil at least partially in the top layer of 171H, just as it is for layer 171, where

Petitioner proposes substituting the two layers 171L and 171H for layer 171 as discussed above in connection with limitation 1.2.

As summarized above, Petitioner's showing is sufficient for purposes of institution.

b) Clams 18 and 19

Independent claims 1 and 18 are materially similar with the only difference appearing in the respective preambles. To the extent the preamble of claim 18 is limiting, Petitioner relies on Suzuki to teach it. *See* Pet. 41–42 (annotating Ex. 1005, Fig. 2). Petitioner relies on its showing with respect to claim 1 for the remaining limitations of claim 18. *See id.* at 43–44.

Claim 19 depends from claim 18 and recites “[t]he wireless power receiving apparatus of claim 18, further comprising a NFC [near field communications] coil disposed to surround a side portion of the receiving coil.” Petitioner explains that “NFC is a protocol designed for data transmission.” Pet. 25 (citing Ex. 1003, ¶ 48; Ex. 1010, 2:11–15). Petitioner relies partly on Suzuki's “coil for data transmission 154,” which is “used to send and receive a signal (information) representing charging start, charging completion or the like.” *Id.* (quoting Ex. 1005, 12:51–64).

Petitioner also contends that “Lee describes ‘a dual antenna structure in which an antenna for near field communications (NFC) and an antenna for a wireless charger are integrally formed by using a flexible printed circuit board (FPCB).’” Pet. 27 (citing Ex. 1006, 17:32–35). Petitioner contends that it would have been obvious to implement Lee's data transmission data coil as a well-known NFC protocol coil, because, for example “NFC technology provides an advantage of fast communication setup between communication devices.” *Id.* at 28 (quoting Ex. 1007, 1:33–

36). Petitioner provides other sufficient reasons and evidence to support the combination on this preliminary record, including that NFC technology would “allow Suzuki’s contactless power transmission apparatus to be easily used by consumers in a variety of commercial applications.” *Id.* at 29 (citing Ex. 1003 ¶ 50), 28 (arguing that “familiar applications of NFC protocol technology [were] electronic pass keys used in building security systems, mass transit fare card systems, and Smart credit cards which need only to be brought close to a point of sale reader to complete a transaction” (quoting Ex. 1011, 4:7–11)).

Patent Owner argues claims 1, 18, and 19 together. Prelim. Resp. 12–26. The arguments do not undermine Petitioner’s showing for the reasons noted in the previous section.

On this record and as summarized above, Petitioner’s showing is sufficient for purposes of institution.

c) Summary of Claims 1, 18, and 19

Based on the record, we determine that Petitioner shows a reasonable likelihood of prevailing in its assertion that claims 1, 18, and 19 would have been obvious over Suzuki and Lee.

F. Ground 2: Asserted Obviousness Based on Suzuki, Lee, and Sawa

Petitioner contends that Suzuki, Lee, and Sawa would have rendered dependent claims 2–4 and 7 obvious. Pet. 46–54. In support, Petitioner relies on the testimony of Dr. Phinney. *Id.* On this preliminary record, Petitioner sufficiently maps the limitations of claims 2–4 and 7 to the prior art with reasons supported by a rationale underpinning to combine the reference teachings with a reasonable expectation of success. *See id.*

On the current record, we determine that Petitioner shows a reasonable likelihood that it would prevail with respect to its contention that

claims 2–4 and 7 would have been obvious over the combined teachings of Suzuki, Lee, and Sawa. Patent Owner does not separately address Petitioner’s showing with respect to claims 2–4 and 7. Prelim. Resp. 27.

G. Ground 3: Asserted Obviousness Based on Suzuki, Lee, Sawa, and Park

Petitioner contends that Suzuki, Lee, Sawa, and Park would have rendered dependent claim 8 obvious. Pet. 54–61. In support, Petitioner relies on the testimony of Dr. Phinney. *Id.* On this preliminary record, Petitioner sufficiently maps the limitations of claim 8 to the prior art with reasons supported by a rationale underpinning to combine the reference teachings with a reasonable expectation of success. *See id.*

On the current record, we determine that Petitioner shows a reasonable likelihood that it would prevail with respect to its contention that claims 8 would have been obvious over the combined teachings of Suzuki, Lee, Sawa, and Park. Patent Owner does not separately address Petitioner’s showing with respect to claim 8. Prelim. Resp. 27–28.

IV. CONCLUSION

After considering the evidence and arguments of record, we determine that Petitioner has demonstrated a reasonable likelihood of success with respect to at least one of the challenged claims. Accordingly, an *inter partes* review of all of the claims and all of the grounds presented in the Petition is hereby instituted. *See* 37 C.F.R. § 42.108(a); *SAS*, 138 S. Ct. at 1354, 1359–60.

At this stage of the proceeding, the Board has not made a final determination as to the patentability of any challenged claims or any underlying factual or legal issues. The final determination will be based on the record as developed during the *inter partes* review.

V. ORDER

In consideration of the foregoing, it is hereby

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of the challenged claims of the '962 patent is instituted with respect to all grounds set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the '962 patent shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

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