

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD. and
SAMSUNG ELECTRONICS AMERICA, INC.,

Petitioners,

v.

RESONANT SYSTEMS, INC.

Patent Owner

Case IPR2023-01025

Patent 9,941,830

PATENT OWNER'S PRELIMINARY RESPONSE

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Patent Owner's Exhibit List for IPR2023-01025

Pursuant to 37 C.F.R. § 42.63(e), Patent Owner Resonant Systems, Inc. hereby submits its exhibit list associated with the above-captioned *inter partes* review of U.S. Patent No. 9,941,830.

Exhibit No.	Description
2001	Order Denying Motion to Stay Proceedings Pending <i>Inter Partes</i> Review in <i>Resonant Systems, Inc. v. Samsung Elecs. Co., Ltd.</i> , No. 2:22-cv-00423 (E.D. Tex. Aug. 10, 2023)
2002	Federal Court Management Statistics for the Eastern District of Texas (June 2023)
2003	Plaintiff's Infringement Contentions in <i>Resonant Systems, Inc. v. Samsung Elecs. Co., Ltd.</i> , No. 2:22-cv-00423 (E.D. Tex. Mar. 7, 2023)
2004	Defendants' Invalidity Contentions in <i>Resonant Systems, Inc. v. Samsung Elecs. Co., Ltd.</i> , No. 2:22-cv-00423 (E.D. Tex. June 16, 2023)

I. INTRODUCTION

The Board should deny institution of the requested *inter partes* review of U.S. Patent No. 9,941,830 (the “’830 patent”) for multiple independent reasons. *First*, the Petition argues that the ’830 patent is anticipated because it claims a genus of “vibration module” while only disclosing a “linear vibration module” species of that genus, but Petitioners fail to consider that the claims do not encompass all vibration modules—only those that meet all requirements of a given claim. For example, the Petition ignores the fact that each independent claim requires the recited “moveable component to oscillate within the housing.” The Petition tellingly fails to identify any species of the asserted genus falling within the scope of the claims that is not disclosed. The only thing that Petitioners even arguably identify as an undisclosed species is a prior art unbalanced electric motor that is explicitly distinguished in the specification and that has no moveable component that oscillates within the housing—placing it outside the scope of the claims.

Second, even if the Board were to overlook the Petition’s failure to identify any undisclosed species of the purported claimed genus, the law is clear that a patent need not disclose every species of a claimed genus. This is especially true for patents that (like the ’830 patent) fall within the so-called “predictable arts.” The Petition fails to consider whether the specification describes a representative number of

species, which would make it sufficient to show possession of the genus. This is another dispositive legal flaw that warrants denial of institution.

Third, institution should also be denied as a discretionary matter for multiple reasons, including because of the Petition’s weak merits and in light of the *Fintiv* factors and the parties’ parallel district court litigation that will conclude long before this proceeding if IPR is instituted.

Accordingly, for each of these independent reasons and as further explained herein, the Board should deny institution of the requested IPR.¹

II. BACKGROUND

A. The ’830 Patent and Its Prosecution History

As the Petition acknowledges, the specification distinguishes the claimed inventions from prior art unbalanced electric motors. *See, e.g.*, Pet. at 3 (citing Ex. 1001 at 4:21-36).

While the Petition describes portions of the ’830 patent’s prosecution history (*see* Pet. at 22-25), it conveniently leaves out important details. For example, in its

¹ As a threshold matter, IPR petitions are only allowed to include challenges “on a ground that could be raised under section 102 or 103 and only on the basis of prior art consisting of patents or printed publications.” 35 U.S.C. § 311(b). The Petition here includes no such challenge, only a written description argument that Petitioner presents as a priority challenge in order to circumvent the statute limiting what arguments may be raised in IPRs. Patent Owner respectfully disagrees that such arguments should be acceptable to present in an IPR proceeding under these circumstances but nonetheless responds herein to the merits of Petitioners’ arguments.

Office Action initially rejecting the claims, the Examiner considered “linear vibrating module” and “vibrating module” to be “*essentially the same*,” applying the parent of the ’830 patent (i.e., U.S. Patent No. 9,369,081) in combination with another reference, Guney, to reject ’830 patent claims 1-18. Ex. 1002 at 105.² In rejecting claims 19 and 20, the Examiner applied the grandparent of the ’830 patent (i.e., U.S. Patent No. 8,860,337) in combination with the same Guney reference. Ex. 1002 at 106. Notably, the ’337 and ’830 specifications are identical and the ’337 claims recite “linear vibration module[s],” yet the Examiner still relied upon that disclosure to reject the “vibration module” claims of the ’830 patent. Ex. 1002 at 106 (“It would have been obvious to one of ordinary skill in the art to combine the **vibrating module** of 8860337 with stored value of Guney et al for improved control.” Ex. 1002 at 106. Notably, the Examiner did not raise any written description concerns with respect to the “vibration module” preamble language, or any other parts of the ’830 patent claims.

While overlooking such relevant portions of the prosecution history, the Petition discusses at length how Patent Owner checked a box in the Application Data Sheet for the ’830 patent indicating that the application should be examined under the first inventor to file provisions of the AIA. *See, e.g.*, Pet. at 22-23 (citing Ex. 1002 at 8). Petitioners act as though the checking of this box proves, *ipso facto*, that

² All emphasis in quoted material has been added unless otherwise noted.

all claims of the '830 patent are anticipated. It does not. The '830 patent and the same Application Data Sheet include an explicit priority claim, as a continuation with an identical specification, to an application pre-dating March 16, 2013. *See, e.g.,* Ex. 1001 at cover, 1:7-12; Ex. 1002 at 7. Given these explicit priority claims, it is unreasonable for Petitioners to assume that checking the AIA box somehow eliminates any such priority claim.

B. Petitioners' Other IPR Petition Against the '830 Patent

A second petition challenging the '830 Patent was filed by Samsung in IPR2023-00993, raising 30 purported grounds of obviousness. The issues raised in that petition are addressed in Patent Owner's Preliminary Response to that petition, which is also being filed on the same date as this Preliminary Response. As shown in the Preliminary Response to the -00993 Petition, that Petition contains an exceptional and unjustified number of obviousness combinations, in substance far exceeding the 30 nominal grounds because numerous "grounds" each actually present two different theories and because Petitioners' expert further relies on additional prior art for gap-filling. *See* IPR2023-00993, Paper No. 11 (Oct. 16, 2023)

III. LEVEL OF ORDINARY SKILL

The Petition proposes a level of ordinary skill that a POSITA would have had at the time of the invention. Pet. at 25. While Patent Owner reserves the right to disagree with this definition offered by the Petition, Patent Owner's analysis herein

has been made under the Petition's proposed definition and would not change if minor variations were made to it.

IV. CLAIM CONSTRUCTION

Patent Owner does not dispute, in the context of this proceeding, that the claim preambles at issue here are limiting.

Petitioners' remaining claim construction discussions relate to issues not relevant to the parties' validity disputes in this proceeding, such that there is no need for the Board to make claim construction determinations about Section 112, Paragraph 6 or dependent claims 4-6. *See* Pet. at 27-30; *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999); *Apple Inc. v. Uniloc Luxembourg S.A.*, IPR2018-00420, Paper No. 7 at 8 (PTAB Aug. 6, 2018).

V. INSTITUTION SHOULD BE DENIED ON THE MERITS BECAUSE THE PETITION MISCHARACTERIZES THE CLAIMED GENUS AND IDENTIFIES NO UNDISCLOSED SPECIES

The entirety of the Petition is built upon two flawed premises: (1) that each independent claim of the '830 patent is directed to a genus that contains all possible species of vibration modules, and (2) that the specification only discloses one of those species. To the extent that the '830 patent claims cover a genus of any kind, it is abundantly clear that they do not encompass all possible vibration modules, as would be apparent to anyone who reads beyond the preamble of each independent claim. And the Petition fails to identify what, if any, species falling within the

purported genus are not disclosed. These are critical flaws that warrant denial of institution.

Specifically, the Petition argues that each independent claim of the '830 patent is “directed to the ‘vibration module’ genus.” Pet. at 31. In mapping each claim element to the specification and arguing anticipation, the Petition effectively concedes that there would be adequate written description support for the claims if they were limited to the purported species of a linear vibration module—the Petition’s only argument is that there is no written description support for other, unspecified species within the genus. *See* Pet. at 36 (specification “discloses a species (i.e., a linear vibration module) that anticipates the genus ‘vibration module’ to which every challenged claim is directed”). Critically, though, the Petition does not identify any such species for which written description is lacking (i.e., a species that (1) falls within the scope of the “vibration module” genus, (2) falls outside the scope of the described “linear vibration module” species, and (3) is not described in the specification).

The closest the Petition comes to identifying a purportedly undisclosed species is the following single sentence: “The '830 patent specification discloses that “oscillation” is not necessarily linear. EX1002, 1:44–48 (‘As shown in FIGS. 2A-B, the asymmetrically-mounted weight creates an *elliptical oscillation* of the end of the shaft’).” Pet. at 32 (emphasis in original). Here, the Petition is apparently suggesting

that the '830 patent claims are intended to encompass what is depicted in Figures 2A-B. This makes no sense for multiple reasons. *First*, the '830 patent clearly identifies Figures 2A-B as depicting prior art that is distinguished from the claimed inventions. *See, e.g.*, Ex. 1001 at 1:34-3:7, Figs. 2A-B. *Second*, if the '830 patent claims were intended to cover Figures 2A-B (i.e., if that were a species falling within the scope of the purported genus), then that specification disclosure would constitute written description support for the genus—which would only further undermine the Petition's argument that written description is lacking.

The '830 patent claims clearly do not encompass all vibration modules of any kind. Instead, a vibration module must meet each and every recited limitation of the claim body as well—not just the preamble. The Petition does not identify *any* such vibration module that would meet all elements of a given claim and yet lacks written description support in the specification. The Petition's apparent suggestion that the prior art depicted in Figures 2A-B constitutes such an undisclosed species illustrates the flaws in the Petition's logic. This is because every vibration module within the scope of an '830 patent claim must, among other things, include a **moveable component that oscillates within the housing** of the vibration module. *See* Ex. 1001 at 15:61-62, 18:14-15, 18:28-29. Even if the example of Figures 2A-B is a “vibration module,” it would nonetheless fall outside the scope of every '830 patent

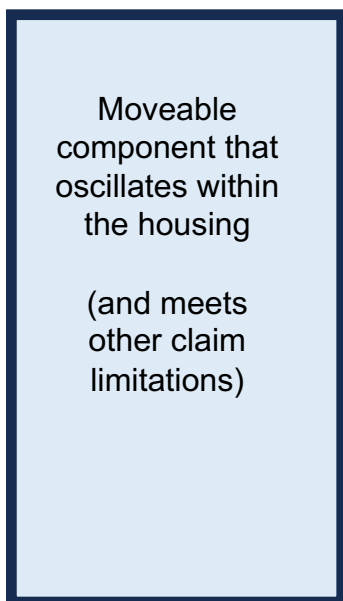
claim because, for example, it has no moveable component that oscillates *within* the housing.

As the patent explains, the weight 106 shown in Figures 2A-B is “asymmetrically mounted to the shaft” of the electric motor, making it an “unbalanced electric motor.” Ex. 1001 at 1:34-41. This imbalance “creates an elliptical oscillation of the end of the shaft ... when the shaft is rotated at relatively high speed.” Ex. 1001 at 1:44-48. But this weight 106 is not a moveable component that oscillates within the housing. Instead, it is fixed to the shaft and merely rotates. As the specification explains, this unbalanced rotation “creates an elliptical oscillation,” but because the weight 106 is fixed to the shaft, it is the overall device that oscillates, in contrast to the claims’ requirement that the moveable component oscillate *within the housing*. Prior art unbalanced electric motors such as that of Figures 2A-B rely upon rotation of a shaft that has a weight fixed to it to create vibration (i.e., the “elliptical oscillation of the end of the shaft”). They do not use a moveable component that oscillates within the housing to create vibration.

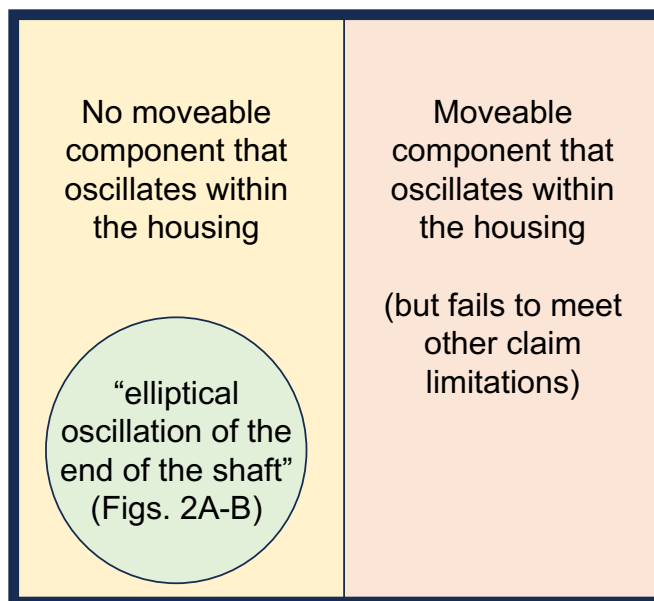
Put another way, prior art unbalanced electric motors use *rotation* to create oscillation of the overall device, whereas the claimed inventions use *oscillation* of a moveable component to create oscillation of the overall device—thus placing prior art unbalanced electric motors outside the scope of the ’830 patent claims. Ex. 1001 at 4:21-27, 5:34-41, 9:41-49, 10:26-34, and Figs. 4, 12, and 15.

The diagram below illustrates this visually. The blue box on the left represents the scope of the claims, which encompass only vibration modules that meet all limitations of a given claim—including having a moveable component that oscillates within the housing. The larger square on the right represents the universe of vibration modules that fall outside the scope of the claims. Such unclaimed vibration modules include, for example, vibration modules that lack a moveable component that oscillates within the housing (represented by the orange box), since that is a limitation of every '830 patent claim. An example of such a vibration module that lacks this oscillating moveable component is the unbalanced electric motor of Figures 2A-B, represented by the green circle falling within the scope of the orange box. Of course, a vibration module could also fall outside the scope of the claims even if it has a moveable component that oscillates within the housing, particularly if it fails to meet some other limitation of a given claim. Such additional unclaimed vibration modules are represented in the diagram by the red box at right.

Claimed Vibration Modules



Unclaimed Vibration Modules



See Ex. 1001 at cls. 1, 19, 20.

Despite Petitioners bearing the burden, the Petition does not identify *any* vibration module that would fall within the scope of the claims (i.e., something in the blue box above) that is not described in the specification. This is telling and demonstrates that institution should be denied.

The Petition’s flawed characterizations also help illustrate at least one reason why Patent Owner chose to recite “vibration module” rather than “linear vibration module” in the ’830 claim preambles. The specification makes clear that a linear vibration module can include a module with a moveable component that oscillates in an arcuate path, rather than a straight line. *See, e.g.*, Ex. 1001 at Fig. 15 (illustrating “motion of magnet” as an arc); Ex. 1001 at 10:26-34 (describing Fig. 15

as depicting a “linear-resonant vibration module”). Nonetheless, an adverse party attempting to manufacture arguments might attempt to suggest that an arcuate path of such an embodiment would place it outside the scope of a “linear” vibration module by characterizing “linear” as being limited solely to a straight line. Rather than have to argue against such potential characterizations of “linear,” removing that word from the claim language helped to avoid such disputes while still maintaining a focused claim scope via other limitations (e.g., “moveable component to oscillate within the housing”).

Indeed, Petitioners cannot even argue that the removal of “linear” must have changed the claims’ overall scope because they otherwise would be coterminous with the claims of the ’830 patent’s priority applications. As Petitioners’ own redlining and the ’830 patent shows, each independent claim of the ’830 patent also recites “one or more stored values” limitation that does not appear in the claims of the priority applications/patents and a “. *See, e.g.,* Pet. at 16-21; Ex. 1001 at cls. 1, 19, 20; *see also* claims of ’081, ’337, and ’767 priority patents (Exs. 1023, 1025, 1027). In other words, while the Petition suggests that the removal of “linear” dramatically broadened the scope of the claims to encompass a genus of all vibration modules, that is not only plainly wrong, but Petitioners also cannot even identify how the removal of “linear” broadened the claims at all, given the claims’ other limitations.

It also bears noting that the Examiner of the '830 patent never raised any written description issue, let alone one specific to the recitation of “vibration module.” Indeed, the Examiner explicitly noted the discrepancy between the '830 patent’s recitation of “vibration module” and the parent '081 patent’s use of “linear vibration module,” stating that they are “*essentially the same*.” Ex. 1002 at 105; *see also* Ex. 1002 at 106 (“It would have been obvious to one of ordinary skill in the art to combine the vibrating module of [’830 grandparent] 8860337 with stored value of Guney et al for improved control.”). And while the Petition makes much of a box checked in the Application Data Sheet for the '830 patent (*see* Pet. at 22-23), this provides no basis for Petitioners’ unfounded assumptions. Specifically, Patent Owner checked a box in the Application Data Sheet indicating that the application should be examined under the first inventor to file provisions of the AIA. Ex. 1002 at 8.

Petitioners suggest that this proves all claims of the '830 patent are anticipated because it is supposedly an admission that the '830 patent’s priority chain is broken. That is wrong. At most, the checking of this box was a harmless administrative oversight that does not prove anything about the merits of the Petition. Both the '830 patent and the same Application Data Sheet explicitly claim priority (as a continuation with an identical specification) to an application pre-dating March 16, 2013. *See, e.g.*, Ex. 1001 at cover, 1:7-12; Ex. 1002 at 7. It therefore makes no sense

to assume that Patent Owner's checking of the AIA box would mean that the '830 patent is entitled to no such priority claim. Far more relevant than a discrepancy between the AIA box checking and the multiple clear priority claims made by Patent Owner is that the Examiner never raised any written description issue and viewed "vibration module" and "linear vibration module" as "essentially the same." *See* Ex. 1002 at 105. Such evidence shows that Petitioners' characterizations of the '830 patent are incorrect.

The claim language, specification, and prosecution history all demonstrate that Petitioners' written description argument is meritless. The Petition fails to consider limitations that narrow the scope of each independent claim and fails to identify any allegedly undisclosed species falling within the scope of the purported claimed genus. Institution should therefore be denied on the merits.

VI. INSTITUTION SHOULD BE DENIED ON THE MERITS BECAUSE THE PETITION FAILS TO CONSIDER WHETHER THE SPECIFICATION DISCLOSES A REPRESENTATIVE NUMBER OF SPECIES FALLING WITHIN THE CLAIMED GENUS

Even if the Board accepts Petitioners' proposed genus-species framework and declines to deny institution despite the Petition not identifying any supposedly undisclosed species, there is another independent reason for denying institution on the merits. Federal Circuit precedent makes clear that a patent need not disclose every species within a claimed genus, especially where (like here) the patent at issue falls within the "predictable arts." Instead, only a representative number needs to be

disclosed in order to satisfy the written description requirement. The Petition ignores this entirely, warranting denial of institution on the merits.

The Federal Circuit has explained that “there is no categorical rule that a species cannot suffice to claim the genus” because ““a sufficient description of a genus instead requires the disclosure of either a *representative number of species* falling within the scope of the genus or *structural features common to the members of the genus* so that one of skill in the art can “visualize or recognize” the members of the genus.”” *Hynix Semiconductor Inc. v. Rambus Inc.*, 645 F.3d 1336, 1352 (Fed. Cir. 2011) (quoting *Ariad Pharms., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1350 (Fed. Cir. 2010) (en banc)). Indeed, the Federal Circuit has stated that disclosure of a single species is sufficient as a “general rule,” albeit with exceptions that do not apply here because, for example, the art at issue is a predictable one. *See Bilstad v. Wakalopulos*, 386 F.3d 1116, 1125-26 (Fed. Cir. 2004) (“There are, however, exceptions to the general rule that disclosure of a species provides sufficient written description support for a later filed claim directed to the genus. ... If the difference between members of the group is such that the person skilled in the art would not readily discern that other members of the genus would perform similarly to the disclosed members, *i.e., if the art is unpredictable*, then disclosure of more species is necessary to adequately show possession of the entire genus.”); ; *see also Hologic, Inc. v. Smith & Nephew, Inc.*, 884 F.3d 1357, 1361-64 (Fed. Cir. 2018) (affirming

IPR finding that priority PCT application sufficiently showed the inventor was in possession of using the genus of light guides even though the specification only disclosed a species of fiber optic bundles, with the court noting that because the claim was directed to a “predictable art,” “a lower level of detail is required to satisfy the written description requirement”). As the Federal Circuit has further explained, “[w]hether the genus is supported *vel non depends upon the state of the art and the nature and breadth of the genus.*” *Hynix Semiconductor*, 645 F.3d at 1352.

The Petition considers none of this. For example, the Petition’s written description arguments ignore the fact that the ’830 patent is directed to a predictable art, and Petitioners do not consider the state of the art at all. Moreover, the Petition does not identify even a single species falling within the scope of the purported claimed genus that Petitioners believe is not disclosed in the specification. As further discussed in the preceding section of this Response, Petitioners suggest that the claims are directed to a broad genus encompassing even vibration modules that are expressly distinguished in the specification and plainly do not meet limitations common to every independent claim (e.g., “moveable component to oscillate within the housing”). Certainly, there is no basis for concluding that the specification fails to disclose at least a representative number of species (thus meeting the written description requirement), given that the Petition does not even identify a single undisclosed species.

The specification also describes structural elements common to numerous embodiments of the claimed inventions but also structural elements of prior art systems that are distinguished in the specification (e.g., the rotating shaft and asymmetrically fixed weight 106 of the unbalanced electric motor of Figures 2A-B)—to the extent the Petition suggests that such a prior art system would constitute an undisclosed species. The Petition identifies no structural element of a supposedly undisclosed species that the '830 patent fails to describe.

Rather than provide the substantive analysis required under the law governing genus/species written description arguments, the Petition merely alleges that the claims recite a genus encompassing an unspecified number of species that the Petition does not describe. This is not sufficient and does not establish a likelihood of success supporting institution. In the *Hynix* case, “the supposed genus consist[ed] of only two species, a multiplexed and a non-multiplexed bus,” and the party challenging validity did not argue “that the disclosure of the multiplexed bus was not representative of the genus of buses that encompasses both the narrow multiplexed bus and the non-multiplexed bus”—all of which supported the conclusion that the written description requirement was met. *Hynix Semiconductor*, 645 F.3d at 1352. Here, it is not even clear what or even how many species Petitioners believe fall within the scope of the purported genus. And as in *Hynix*,

Petitioners presented no argument that the admittedly disclosed species (i.e., a linear vibration module) is not representative of the purported genus.

Given these facts and the Petition's failure to consider and apply the proper legal standards for genus/species written description (e.g., predictable art, representative number, common structural features), the Petition should be denied on the merits.

VII. DISCRETIONARY DENIAL OF INSTITUTION IS WARRANTED

In addition to the Petition failing on the merits, the Board should exercise its discretion under 35 U.S.C. §§ 314(a) and 325(d) to deny institution for multiple reasons.

A. Multiple Petitions and Excessive Grounds

First, Petitioners have brought multiple petitions against the '830 patent that collectively present an excessive number of alleged grounds of invalidity and support denial of institution. *See General Plastic Indus. Co. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper No. 19 (PTAB Sept. 6, 2017) (precedential); *Adaptics Ltd. v. Perfect Co.*, IPR2018-01596, Paper No. 20 (PTAB Mar. 6, 2019) (informative). On the same day the Petition here was filed, Petitioners also filed a petition for IPR of the '830 patent in IPR2023-00993 (-993 Petition). In its ranking of the two petitions filed against the '830 patent, Petitioners have prioritized the -993 Petition over the one in this proceeding. *See* IPR2023-00993, Paper No. 4 (June

14, 2023). The -993 Petition identifies 30 grounds of alleged invalidity based upon various combinations of 10 different references. As detailed in its concurrently filed Patent Owner's Preliminary Response in IPR2023-00993, the true number of obviousness theories is even greater than that, and IPR2023-00993 presents an excessive number of grounds that warrants institution denial in that proceeding. The Petition here presents yet another ground of alleged invalidity, providing further reason to deny institution of IPR here.

B. 35 U.S.C. § 325(d) and the *Becton, Dickinson* Factors

Second, institution should be denied under 35 U.S.C. § 325(d) and the *Becton, Dickinson* factors. *See Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper No. 8 at 17-18 (PTAB Dec. 15, 2017) (precedential) (“(a) the similarities and material differences between the asserted art and the prior art involved during examination; (b) the cumulative nature of the asserted art and the prior art evaluated during examination; (c) the extent to which the asserted art was evaluated during examination, including whether the prior art was the basis for rejection; (d) the extent of the overlap between the arguments made during examination and the manner in which Petitioner relies on the prior art or Patent Owner distinguishes the prior art; (e) whether Petitioner has pointed out sufficiently how the Examiner erred in its evaluation of the asserted prior art; and (f) the extent

to which additional evidence and facts presented in the Petition warrant reconsideration of the prior art or arguments”).

Factors (a), (b), (c), and (d) all support discretionary denial here because the art relied upon in the Petition is identical to art evaluated during examination. *See* Ex. 1002 at 105 (applying the parent ’081 patent in rejection of claims 1-18 of the ’830 patent, which shares the same specification as the ’081 patent); Ex. 1002 at 106 (applying the grandparent ’337 patent in rejection of claims 19 and 20 of the ’830 patent, which shares the same specification as the ’337 patent). The Examiner noted the discrepancy between the ’830 patent’s recitation of “vibration module” and the parent ’081 patent’s use of “linear vibration module,” and concluded that they are “essentially the same.” Ex. 1002 at 105; *see also* Ex. 1002 at 106 (“It would have been obvious to one of ordinary skill in the art to combine the vibrating module of [’830 grandparent] 8860337 with stored value of Guney et al for improved control.”).

With respect to Factor (e), the Examiner did not err in evaluating the prior art. Again, the Examiner specifically considered the parent ’081 patent and grandparent ’337 patent in making claim rejections, and took note of the ’830 patent claims reciting “vibration module” rather than “linear vibration module.” *Id.* As detailed above in Sections V and VI, the ’830 patent properly claims priority as a continuation of the ’081 patent and, in turn, the ’081 patent. It was not erroneous for

the Examiner to credit the '830 patent's priority claim, especially given that despite submitting such a voluminous Petition, Petitioners were not even able to articulate what or even how many species are encompassed by the purported claimed genus but not disclosed in the specification.

With respect to Factor (f), the Petition offers no additional evidence or facts that warrant reconsideration—only vague conjecture that overlooks limitations imposed by the body of each claim and fails to identify any allegedly undisclosed species that would fall within the scope of any claim.

C. 35 U.S.C. § 314(a) and the *Fintiv* Factors

Third, the Board should exercise its discretion to deny institution under § 314(a) in accordance with the *Fintiv* factors.³ Such denial is warranted because

³ *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper No. 11 at 5-6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv I*”); *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper No. 15 at 7-17 (PTAB May 13, 2020) (informative) (“*Fintiv II*”) (decision denying institution of IPR); *see also NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper No. 8 at 19-21 (PTAB Sept. 12, 2018) (precedential) (“*NHK*”); Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (dated June 21, 2022) (“Interim Discretionary Denial Memo”).

Petitioners are pursuing the same invalidity theory in a district court litigation between the parties that began nearly a year ago and is set for trial 4.5 months before the final written decision deadline, and Petitioners' narrowly worded stipulation is effectively meaningless. Discretionary denial is also appropriate here because the Petition is weak on the merits and is based upon purported prior art already considered by the Examiner during prosecution.

1. *Fintiv* Factor 1: The district court denied Petitioners' motion to stay.

In the parallel district court proceeding involving Petitioner and the '830 patent, Petitioners moved the court for a stay pending IPR. The court denied Petitioners' motion, without prejudice to refile it later after an institution decision. Ex. 2001 (Aug. 10, 2023 order denying motion to stay). Even if this proceeding were instituted and Petitioners were to refile its motion, it would be unlikely to be granted given, among other things, the stage of the litigation. The district court case has been pending for nearly a year, with the parties now engaged in fact discovery and claim construction. It is unlikely that any renewed motion stay would even be fully briefed before the February 15, 2024 Markman Hearing in the co-pending litigation. *See* Ex. 1018. At that stage, the parties will be less than six months out from the August 5, 2024 trial date. Ex. 1018.

Because the parties' district court litigation has not been stayed and any stay is unlikely, allowing this IPR to proceed in parallel would be wasteful and inefficient. Factor 1 weighs against institution.

2. *Fintiv* Factor 2: The district court trial will occur more than four months before the deadline for a final written decision in this proceeding.

The deadline for a final written decision in this IPR is January 16, 2025, which may be extended to July 16, 2025, for good cause or in the case of joinder.⁴ 37 C.F.R. § 42.100(c). Meanwhile, the district court litigation is set for trial on August 5, 2024. *See* Ex. 1018; Pet. at 89. The timeframe set by the district court is consistent with the Federal Court Management Statistics for the Eastern District of Texas. *See* Interim Discretionary Denial Memo at 3 & n.4 (encouraging use of these statistics in evaluating this factor). Those statistics indicate that, over the past year, a civil case in the district was brought to trial approximately 16.7 months after filing (and approximately 19.3 months after filing over the past six years). Ex. 2002 (indicating median times to trial for civil cases for the twelve-month period ending in June for 2018-2023 as 19.2, 17.7, 17.7, 20.4, 24.5, and 16.7). Here, trial is set for

⁴ Joinder seems at least quite possible, if not likely, given that Petitioner has multiple co-defendants accused of infringing this patent.

approximately 21 months after the case was filed. *See* Ex. 1018 (trial set for August 5, 2024); Ex. 1017 (case filed October 26, 2022).

Thus, the district court trial is set to occur *over five months* before the deadline for a final written decision, and possibly up to a year before the deadline if it is extended. This weighs heavily against institution. *See Fintiv I* at 9 (“If the court’s trial date is earlier than the projected statutory deadline, the Board generally has weighed this fact in favor of exercising authority to deny institution under *NHK*.”); *Kiosoft Techs., LLC v. Payrange Inc.*, CBM2020-00026, Paper No. 11 at 11-12 (PTAB Mar. 22, 2021) (denying institution when trial was *five months* before the final written decision); *Nine Energy Serv. Inc. v. NCS Multistage Inc.*, IPR2020-01615, Paper No. 18 at 8-9 (PTAB Mar. 24, 2011) (finding this factor favored denial of institution when trial was *five months* before the final written decision, even though there were pending motions to consolidate and transfer that could have affected the trial date if granted).

Indeed, the Board has denied institution on account of even smaller gaps between the final written decision and trial. *See, e.g., EClinicalWorks, LLC v. Decapolis LLC*, IPR2022-00229, Paper No. 10 at 9 (PTAB Apr. 13, 2022) (“*EClinicalWorks*”) (finding this factor weighed in favor of discretionary denial and denying institution where “the beginning of the jury trial in the WDTX Cases is roughly *one or two months* before any final decision would have been due had *inter*

partes review been instituted”); *Fintiv II* at 13 (finding this factor weighed in favor of discretionary denial and denying institution where the district court trial was scheduled to occur ***two months*** before the deadline for the Board to reach a final written decision); *NXP USA, Inc. v. Impinj, Inc.*, PGR2022-00005, Paper No. 17 at 9 (PTAB May 2, 2022) (“*NXP*”) (same); *Google LLC v. Ikorongo Tech. LLC*, IPR2021-00204, Paper No. 13 at 7 (PTAB June 7, 2021) (denying institution of IPR and finding this factor weighed in favor of denial when “the [district court] trial is now scheduled for ***approximately three months*** prior to the final determination date”); *Daiichi Sankyo, Inc. v. SeaGen Inc.*, PGR2021-00030, Paper No. 11 at 15 (PTAB June 24, 2021) (“where trial in the parallel proceeding is scheduled to occur ***nearly four months*** prior to our Final Written Decision, we determine that the facts underlying this factor weigh toward denying institution”).

Because the district court trial is currently set to occur over five months before the earliest deadline for a final written decision in this IPR, this factor weighs heavily against institution. *Fintiv II* at 13.

3. *Fintiv* Factor 3: By the time an institution decision is reached, fact discovery will be nearly complete with expert reports due very shortly thereafter.

The parties and the Court have already invested substantially into the district court case, conducting substantial fact discovery between the parties and with third parties. Further, factor 3 relates to the “amount and type of work already completed

in the parallel litigation by the court and the parties *at the time of the institution decision.*” *Fintiv I* at 9. For example, “if, at the time of the institution decision, the district court has issued substantive orders related to the patent at issue in the petition,” this factor favors denial. *Id.* at 9-10. By the time an institution decision is reached here, the parties will have nearly completed claim construction and have less than two months to complete remaining fact discovery and serve opening expert reports. *See* Ex. 1018.

Thus, the parties and the district court will have invested significant time and resources in the district court litigation by the time the Board reaches an institution decision in this matter. This favors discretionary denial, and various panels have found this factor to favor denial when the parallel litigation was at a similarly advanced stage (or even less advanced) as here. *See, e.g., Fintiv I* at 10; *Fintiv II* at 13-14 (finding that “the level of investment and effort already expended on claim construction and invalidity contentions” favored denial where a *Markman* hearing was held and discovery had begun).

The district court litigation will be so far along at the time of the institution decision is because Petitioners unduly delayed in filing their Petition, filing approximately eight months after the district court case was filed. *Compare* Pet. at 94 (dated June 14, 2023) *with* Ex. 1017 (complaint filed October 26, 2022). Petitioners have identified no explanation for this delay, particularly where this

Petition—unlike most IPR proceedings—did not require Petitioners to search for any prior art. Petitioners needed to look no further than the '830 patent itself, which Petitioners have plainly been aware of since the October 2022 complaint, at the latest.

Because there has and will have been substantial investment in the parallel proceedings by both the parties and the district court, and because Petitioners substantially delayed in filing this Petition for no good reason, factor 3 weighs heavily against institution.

4. *Fintiv* Factor 4: There is substantial overlap between this IPR and the district court proceeding.

Factor 4 also weighs heavily against institution. This factor looks at “whether all or some of the claims challenged in the petition are also at issue in district court” and whether the “petition includes the same or substantially the same claims, grounds, arguments, and evidence” as the parallel district court case. *Fintiv I* at 12-13. Here, the Petition challenges all of the claims that are currently asserted in the litigation. *Compare* Pet. at 2 (challenging claims 1-20) *with* Ex. 2003 at 2 (infringement contentions identifying asserted claims 1-8 and 17). And Petitioners’ invalidity contentions demonstrate that Petitioners are presenting the same invalidity theory in the litigation as in the Petition. *See, e.g.,* Ex. 2004 at 9, 37-38.

While the Petition includes a narrowly crafted non-overlap stipulation, its limited scope renders it meaningless—and obviously far short of a *Sotera* stipulation

confirming that Petitioner will not raise any grounds in the district court that it reasonably could have raised in the Petition. *See* Pet. at 90; Interim Discretionary Denial Memo at 3. Here, Petitioner seeks to circumvent the statutory prohibition against raising invalidity theories under 35 U.S.C. § 112 in an IPR petition by presenting its written description argument as a priority issue. Petitioners’ stipulation here merely states that Petitioners will not follow this same convoluted path in the litigation. Pet. at 90. Petitioners do not stipulate, for example, that it will not argue invalidity based on a lack of written description for “vibration module,” which is the same argument Petitioners make here—just repackaged as a priority argument to end-run the statutory limits on permissible IPR grounds. This is a gaping hole that renders the stipulation completely meaningless. And of course, the stipulation language also does not include grounds that reasonably could have been raised in the Petition, so the stipulation falls far short of the *Sotera* standard in any event.

These facts raise substantial “concerns of inefficiency and the possibility of conflicting decisions,” weighing against institution. *See Fintiv I* at 12.

5. *Fintiv* Factor 5: Petitioners here are the same defendants involved in the parallel district court litigation.

Petitioners here are Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. These same two entities are the defendants in the parties’ parallel litigation. *See* Ex. 1017 at 1. “Because the petitioner and the defendant in the parallel

proceeding are the same party, this factor weighs in favor of discretionary denial.” *Fintiv II* at 15.

6. *Fintiv* Factor 6: Other circumstances weigh strongly against institution.

This factor looks at “other circumstances that impact the Board’s exercise of discretion, including the merits.” *Fintiv I* at 9. This factor weighs against institution for multiple reasons.

First, contrary to Petitioners’ assertion, the merits of this Petition suffer from weaknesses, as discussed above. For example, the Petition fails to identify any supposedly undisclosed species falling within the scope of the purported claimed genus. As another example, the Petition fails to apply the legal standards applicable to the genus-species written description arguments that form the basis of the Petition. Such problems with the merits of the Petition are described in further detail above in Sections V and VI. Thus, the Petition fails to establish a reasonable likelihood of success.

Second, there is evidence that Petitioners unduly delayed in filing the Petition without explanation, especially given that the invalidity theory herein required no prior art search. *See supra* § VII.C.3 (discussing this with respect to Factor 3).

Third, the Examiner already considered the parent ’081 patent and grandparent ’337 patent during prosecution, and the Petition fails to show that the Examiner materially erred in evaluating the patentability of the challenged claims.

Thus, even if these facts do not independently support discretionary denial under the *Advanced Bionics* framework, they are nevertheless “other circumstances that impact the Board’s exercise of discretion” under *Fintiv* Factor 6.

Fourth, while Petitioners are not expressly prohibited from presenting their written description invalidity theory as a priority claim issue that can fall within the purview of an IPR proceeding, the nature of Petitioners’ request should, if anything, weigh against institution. By law, IPR petitions cannot include invalidity theories based on lack of written description, and Petitioners’ circumvention via this Petition should be appropriately scrutinized. Particularly when the nature of the Petition’s invalidity theory is considered together with other facts above (including Petitioners’ delay and merits issues with the Petition), it is especially appropriate under these circumstances for the Board to deny institution.

VIII. CONCLUSION

For the foregoing reasons, the Board should deny institution of the Petition both on the merits and as a matter of the Board’s discretion.

Case No. IPR2023-01025
U.S. Patent No. 9,941,830

Dated: October 16, 2023

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CERTIFICATION REGARDING WORD COUNT

Pursuant to 37 C.F.R. §42.24(d), Patent Owner hereby certifies, in accordance with and reliance on the word count provided by the word-processing system used to prepare this **PATENT OWNER'S PRELIMINARY RESPONSE**, that the number of words in this paper is 6,732. Pursuant to 37 C.F.R. § 42.24, this word count is in compliance with the word limit set forth in 37 C.F.R. § 42.24(b)(1) excluding the portions exempted under 37 C.F.R. § 42.24(a)(1).

Date: October 16, 2023

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CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e)(1))

The undersigned hereby certifies that the above document was served on October 16, 2023, by filing this document through the Patent Trial and Appeal Board End to End System as well as delivering a copy via electronic mail upon the following attorneys of record for the Petitioners:

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