

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 No. IPR2023-00993

U.S. Patent No. 9,941,830

---

**PATENT OWNER'S PRELIMINARY RESPONSE**

## TABLE OF CONTENTS

|      |                                                                                                                                                                            |    |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| I.   | INTRODUCTION .....                                                                                                                                                         | 1  |
| II.  | BACKGROUND .....                                                                                                                                                           | 2  |
| A.   | Background to the '830 Patent.....                                                                                                                                         | 2  |
| B.   | Related Litigation and PTAB Proceedings .....                                                                                                                              | 2  |
| III. | LEVEL OF ORDINARY SKILL .....                                                                                                                                              | 3  |
| IV.  | CLAIM CONSTRUCTION.....                                                                                                                                                    | 3  |
| V.   | LEGAL STANDARD FOR INSTITUTION .....                                                                                                                                       | 4  |
| A.   | Voluminous or Excessive Grounds.....                                                                                                                                       | 5  |
| B.   | Parallel District Court Litigation.....                                                                                                                                    | 7  |
| VI.  | THE BOARD SHOULD EXERCISE ITS DISCRETION TO<br>DENY INSTITUTION.....                                                                                                       | 9  |
| A.   | The Petition Should Be Denied Institution for Raising Voluminous<br>and Excessive Grounds Without Justification.....                                                       | 9  |
| B.   | The Petition Should Be Denied Institution Due to Parallel District<br>Court Litigation.....                                                                                | 16 |
| 1.   | <i>Fintiv</i> Factor 1: The district court denied Petitioners' motion to<br>stay. ....                                                                                     | 16 |
| 2.   | <i>Fintiv</i> Factor 2: The district court trial will occur more than four<br>months before the deadline for a final written decision in this<br>proceeding.....           | 17 |
| 3.   | <i>Fintiv</i> Factor 3: By the time an institution decision is reached,<br>fact discovery will be nearly complete with expert reports due<br>very shortly thereafter. .... | 20 |
| 4.   | <i>Fintiv</i> Factor 4: There is substantial overlap between this IPR<br>and the district court proceeding.....                                                            | 21 |
| 5.   | <i>Fintiv</i> Factor 5: Petitioners here are the same defendants<br>involved in the parallel district court litigation.....                                                | 23 |
| 6.   | <i>Fintiv</i> Factor 6: Other circumstances weigh strongly against<br>institution. ....                                                                                    | 23 |
| VII. | CONCLUSION .....                                                                                                                                                           | 24 |

## TABLE OF AUTHORITIES

### Cases

|                                                                                                                  |               |
|------------------------------------------------------------------------------------------------------------------|---------------|
| <i>Adaptics Ltd. v. Perfect Co.</i> ,<br>IPR2018-01596, Paper 20 (PTAB Mar. 6, 2019).....                        | passim        |
| <i>Apple Inc. v. Fintiv, Inc.</i> ,<br>IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020).....                         | passim        |
| <i>Apple Inc. v. Fintiv, Inc.</i> ,<br>IPR2020-00019, Paper 15 (PTAB May 13, 2020) .....                         | 8, 19, 20, 23 |
| <i>Apple Inc. v. Uniloc Luxembourg S.A.</i> ,<br>IPR2018-00420, Paper 7 (PTAB, Aug. 6, 2018).....                | 4             |
| <i>Daiichi Sankyo, Inc. v. SeaGen Inc.</i> ,<br>PGR2021-00030, Paper No. 11 (PTAB June 24, 2021).....            | 19            |
| <i>EClinicalWorks, LLC v. Decapolis LLC</i> ,<br>IPR2022-00229, Paper No. 10 (PTAB Apr. 13, 2022) .....          | 19            |
| <i>Google LLC v. Ikorongo Tech. LLC</i> ,<br>IPR2021-00204, Paper No. 13 (PTAB June 7, 2021) .....               | 19            |
| <i>Graham v. John Deere Co.</i> ,<br>383 U.S. 1 (1966) .....                                                     | 7, 12         |
| <i>Harmonic Inc. v. Avid Technology, Inc.</i> ,<br>815 F.3d 1356 (Fed. Cir. 2016) .....                          | 4             |
| <i>Kiosoft Techs., LLC v. Payrange Inc.</i> ,<br>CBM2020-00026, Paper No. 11 (PTAB Mar. 22, 2021) .....          | 18            |
| <i>Nine Energy Serv. Inc. v. NCS Multistage Inc.</i> ,<br>IPR2020-01615, Paper No. 18 (PTAB Mar. 24, 2011) ..... | 18            |
| <i>NXP USA, Inc. v. Impinj, Inc.</i> ,<br>PGR2022-00005, Paper No. 17 (PTAB May 2, 2022).....                    | 19            |
| <i>Personal Web Technologies, LLC v. Apple, Inc.</i> ,<br>848 F.3d 987 (Fed. Cir. 2017) .....                    | 13            |
| <i>Regents of University of California v. Broad Institute, Inc.</i> ,<br>903 F.3d 1286 (Fed. Cir. 2018) .....    | 13            |
| <i>SAS Institute, Inc. v. Iancu</i> ,<br>138 S.Ct. 1348 (2018) .....                                             | 4             |

|                                                                                                     |   |
|-----------------------------------------------------------------------------------------------------|---|
| <i>Sotera Wireless, Inc. v. Masimo Corp.</i> ,<br>IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020) ..... | 8 |
|-----------------------------------------------------------------------------------------------------|---|

|                                                                                                  |   |
|--------------------------------------------------------------------------------------------------|---|
| <i>Vivid Techs., Inc. v. Am. Sci. &amp; Eng'g, Inc.</i> ,<br>200 F.3d 795 (Fed. Cir. 1999) ..... | 4 |
|--------------------------------------------------------------------------------------------------|---|

**Statutes**

|                       |    |
|-----------------------|----|
| 35 U.S.C. § 103 ..... | 12 |
|-----------------------|----|

|                             |       |
|-----------------------------|-------|
| 35 U.S.C. § 312(a)(3) ..... | 4, 12 |
|-----------------------------|-------|

|                          |          |
|--------------------------|----------|
| 35 U.S.C. § 314(a) ..... | 4, 5, 16 |
|--------------------------|----------|

|                          |   |
|--------------------------|---|
| 35 U.S.C. § 316(b) ..... | 5 |
|--------------------------|---|

|                          |   |
|--------------------------|---|
| 35 U.S.C. § 326(b) ..... | 5 |
|--------------------------|---|

|                             |    |
|-----------------------------|----|
| 37 C.F.R. § 42.100(c) ..... | 17 |
|-----------------------------|----|

**Other Authorities**

|                                                                                                                                                     |               |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings<br>with Parallel District Court Litigation (dated June 21,<br>2022) ..... | 8, 17, 22, 23 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|---------------|

|                                                      |          |
|------------------------------------------------------|----------|
| Office Patent Trial Practice Guide (Nov. 2019) ..... | 4, 5, 15 |
|------------------------------------------------------|----------|

PATENT OWNER'S EXHIBIT LIST

| <b>Exhibit No.</b> | <b>Description</b>                                                                                                                                                                     |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 exercise its discretion to deny institution. The Petition identifies 30 grounds under which the challenged claims of the '830 patent are allegedly obvious. As explained below, the true number of obviousness theories is even greater than that. These grounds collectively are based upon 10 different prior art references, with Petitioner's expert relying upon still further references to fill gaps or as allegedly teaching claim elements.

This number of grounds and prior art references is clearly unjustified in a Petition that is challenging only 16 relatively succinct patent claims. The result of this excessive number of grounds is a Petition that fails to identify its grounds and evidence with the necessary degree of particularity and fails to provide a proper obviousness analysis for each of its grounds. While Patent Owner has substantive responses to Petitioner's grounds, addressing all of these different obviousness theories in a Preliminary Response would be impractical. Likewise, addressing all of these obviousness grounds in the trial—if instituted—would impose substantial and unjustified burdens upon Patent Owner and the Board.

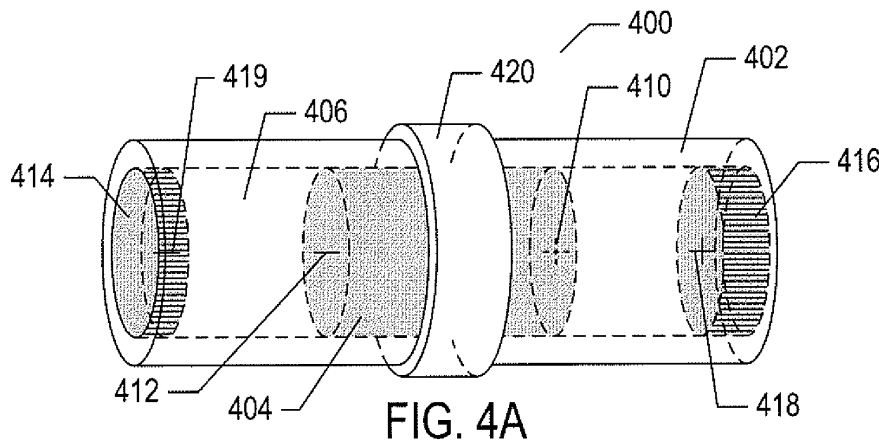
The burden necessary to address all of these grounds is made all the more unreasonable by the fact that trial in the parallel district court litigation concerning this patent is likely to be held several months before a final written decision would issue in this IPR. For these reasons and the reasons set forth in further detail below, the

Board should exercise its discretion to deny institution, following both the analysis set forth in the *Adaptics* case and the factors set forth in *Fintiv*.

## II. BACKGROUND

### A. Background to the '830 Patent

Many electronic devices such as mobile phones and game controllers make use of components that produce vibrational forces. The '830 patent teaches and claims improved vibration modules with features suitable for such applications:



(Ex. 1001 at 6.) Compared to prior art solutions, the inventions of the '830 patent offer greater durability, greater efficiency, an ability to generate useful vibrations over a range of frequencies, and more desirable patterns of vibration.

### B. Related Litigation and PTAB Proceedings

The '830 patent and related patent 9,369,081 are both asserted in litigation, including litigation against Samsung. As stated in the Petition, claims 1–8 and 17 of the '830 patent are asserted against Samsung.

Samsung has challenged the related '081 patent in IPR2023-00992. Samsung's grounds and arguments in that IPR are substantially the same as the arguments in the present IPR. Patent Owner's Preliminary Response in that IPR is being filed on the same date as this Preliminary Response and raises substantially similar arguments.

A second petition challenging the '830 patent was filed by Samsung in IPR2023-01025, raising a purported ground of anticipation. 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.

### **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 6. While Patent Owner reserves the right to disagree with this definition offered by the Petition, Patent Owner's analysis herein—to the extent it depends on the level of ordinary skill in the art—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 arguments made in this Preliminary Response, such that there is no need for the Board to make claim construction

determinations about Section 112, Paragraph 6 or dependent claims 4-6 to decide institution. *See* Pet. at 7–9; *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. LEGAL STANDARD FOR INSTITUTION**

The IPR petition must identify “with particularity” the grounds on which the challenge to each claim is based. 35 U.S.C. § 312(a)(3). The *Trial Practice Guide* advises parties to avoid “presentation of an overwhelming number of issues” and to “avoid submitting a repository of all the information that a judge could possibly consider.” Office Patent Trial Practice Guide (Nov. 2019) at 39.

Under 35 U.S.C. § 314(a), the Board faces “a binary choice—either institute review [on all asserted grounds] or don’t.” *SAS Institute, Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018). However, that does not mean that the Board must institute simply because a petition demonstrates a reasonable likelihood as to even a single claim. *SAS*, 138 S. Ct. at 1355 (“§ 314(a) invests the Director with discretion on the question whether to institute review”); *Harmonic Inc. v. Avid Technology, Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“First of all, the PTO is permitted, but never compelled, to institute an IPR proceeding.”).

### **A. Voluminous or Excessive Grounds**

The Board’s discretion whether to institute “is informed by 35 U.S.C. §§ 316(b) and 326(b), which require the Director to ‘consider the effect of any such regulation . . . on the economy, the integrity of the patent system, the efficient administration of the Office, and the ability of the Office to timely complete proceedings instituted under this chapter.’” Office Patent Trial Practice Guide (Nov. 2019) at 56; *Adaptics Ltd. v. Perfect Co.*, IPR2018-01596, Paper 20 at 17 (PTAB Mar. 6, 2019) (informative). Patent Office guidance indicates that in the case of petitions with “voluminous or excessive grounds,” the panel “will evaluate the challenges and determine whether, in the interests of efficient administration of the Office and integrity of the patent system (see 35 USC § 316(b)), the entire petition should be denied under 35 USC § 314(a).” *SAS Q&As* (June 5, 2018) at D2.<sup>1</sup>

The *Adaptics* case has been designated as informative regarding discretionary denial of institution. *Adaptics*, IPR2018-01596, Paper 20. In *Adaptics*, the entire petition was denied institution on the basis that it presented “voluminous and excessive grounds.” *Id.* at 24. The petition in that case identified five asserted grounds, challenging nine claims. *Id.* at 4, 8–9. Two of the grounds were anticipation grounds,

---

<sup>1</sup> Available at:  
[https://www.uspto.gov/sites/default/files/documents/sas\\_qas\\_20180605.pdf](https://www.uspto.gov/sites/default/files/documents/sas_qas_20180605.pdf)

and the remaining three were obviousness. *Id.* at 8–9. The grounds relied on a total of ten prior art references. *Id.* at 6.

The Board in *Adaptics* did not purport to apply a bright line rule concerning the number of grounds, but it pointed to a number of issues that independently rendered the number of grounds excessive. For example, the Board focused on the third of the three obviousness grounds, which it identified as the “worst offender.” *Id.* at 18. While there were a number of ways that this ground could be interpreted and that the number of combinations of references presented by the ground could be computed, the Board found the number of combinations excessive even under the most conservative interpretation:

Even if we were to disregard the order of references and consider only the two-reference combinations encompassed by Petitioner’s asserted ground, Petitioner’s contention encompasses nine combinations with Bendel and another eight distinct combinations with Sartorius, ***for a total of seventeen possible combinations***. Even that conservative interpretation of Petitioner’s contention yields ***an unduly burdensome number of combinations***.

*Adaptics*, IPR2018-01596, Paper 20 at 18–19 (emphasis added).

Another flaw that the Board identified in the *Adaptics* petition was that as a result of the “catch-all” structure of the third obviousness ground, it failed to perform a legally proper obviousness analysis:

Critically, however, the Petition fails to specify what Petitioner regards as the difference(s) between Bendel or Sartorius and the challenged claims. *See Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966) (requiring that the differences between the prior art and the claims at issue be ascertained as part of an obviousness analysis).

*Id.* at 20. Still another flaw in the *Adaptics* petition was the reliance on an expert declaration that added even more references, either as teaching claim limitations or as filling in gaps in the references named in the grounds. *Id.* at 21–22.

#### **B. Parallel District Court Litigation**

The *Fintiv* factors are a set of nonexclusive factors that the PTAB considers in determining whether to institute an IPR where, as here, there is parallel district court litigation:

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.

*Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5–6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv I*”); *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 7–17 (PTAB May 13, 2020) (informative) (“*Fintiv II*”); Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation (dated June 21, 2022) (“Interim Discretionary Denial Memo”). Patent Office guidance indicates that denial of institution under the *Fintiv* factors should not occur where there is “compelling evidence” of unpatentability. Interim Discretionary Denial Memo at 3–5. This guidance also indicates that denial of institution under the *Fintiv* factors should not occur where a *Sotero* stipulation has been provided. *Id.* at 7–8; *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020) (precedential). Both *Sotera* and the Patent Office’s guidance indicate that the stipulation must cover “the same grounds as in the petition ***or any grounds that could have reasonably been raised in the petition.***” Interim Discretionary Denial Memo at 7–8; *Sotera*, IPR2020-01019, Paper 12 at 18–19.

## **VI. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION**

### **A. The Petition Should Be Denied Institution for Raising Voluminous and Excessive Grounds Without Justification**

The Petition presents an exceptionally large number of grounds that are not justified by issues that are particular to the challenged claims or to the prior art. These voluminous and excessive grounds will impose an unreasonable burden both on the patent owner and on the Board to address, should this IPR be instituted.

The Petition identifies 30 total grounds of obviousness: 21 grounds with Fukumoto as the primary reference (1A–1U), and 9 grounds with Ogusu as the primary reference (2A–2I). Pet. at 3–4.<sup>2</sup> This number of grounds is not explainable as a result of the number of claims that are challenged (*i.e.*, 16, Pet. at 1). Even the simplest challenged claim, claim 1, has six different grounds of obviousness asserted against it (1A–1C and 2A–2C). Pet. at 3–4. Claims 7 and 8 each have twelve different grounds asserted against them (1A–1C, 1G–1I, 2A–2C, and 2G–2I for claim 7, and 1A–1C, 1G–1L, and 2G–2I, for claim 8). Pet. at 3–4.

The Petition’s count of 30 grounds is in fact an undercount. For example, grounds 2A-2C argue that limitation 1[d] is satisfied by “Ogusu alone or in combination with Fukumoto.” Pet. at 80. The Petition actually presents two theories of

---

<sup>2</sup> Not satisfied with 30 obviousness grounds, Petitioner submitted a second petition with a purported anticipation ground. IPR2023-01025, Paper 3.

combining these references, one where the combination utilizes “the user’s selection” from Ogusu and the other where the combination uses the “touch panel and push button keys” from Fukumoto. Pet. at 80. Since grounds 2D-2I rely on the combinations of 2A-2C with the addition of still further references, those six combinations each also incorporates two different ways of combining references to address limitation 1[d].

The declaration of Petitioner’s expert invokes yet additional prior art references beyond the ten cited in the obviousness combinations of the Petition. For example, Dr. Wolfe points to the Nagara reference as purportedly showing how a POSITA would understand certain features of Fukumoto would work, thus filling in gaps in Fukumoto itself. Ex. 1003, ¶¶ 167, 173. However, Nagara has a different inventor and assignee than Fukumoto, and Dr. Wolfe provides no explanation for why a POSITA would see them as connected. As another example, Dr. Wolfe points to the Yoon ’554 reference as purportedly showing that a technique he describes as being taught by Fukumoto was “well known.” Ex. 1003, ¶ 172. At least under Dr. Wolfe’s analysis, each ground involving Fukumoto is to be understood as involving Fukumoto and/or a combination of Fukumoto with Nagara and/or Yoon ’554. This use by the expert of additional references to teach limitations or fill in gaps further multiplies and complicates the grounds of the petition and imposes still further burden on Patent Owner and the Board. *See Adaptics*, IPR2018-01596, Paper 20 at 21–22

(such reliance on additional secondary references by expert caused a lack of particularity and indefinite scope for the petition).

Even accepting the Petition’s counting of grounds, Petitioner was indiscriminate in multiplying the number of grounds. The grounds for challenging claim 7, for example, involve Fukumoto, alone or in combination with one or more of Grant, Barton, Erixon, and Ogusu. Pet. at 3–4. If the Petition had instead alleged obviousness based upon “Fukumoto alone or in combination with Grant, Barton, Erixon, and/or Ogusu,” that would amount to 16 possible combinations.<sup>3</sup> The Petition actually presents 12 of these 16 possible combinations.<sup>4</sup> For three of these combinations, each addressing two claims and involving three or four references, the Petition collectively offers only a single paragraph of analysis, consisting mostly of cross-references to the analyses of different proposed combinations. Pet. at 93. In substance, these grounds are little more than a catch-all invitation to the reader to mix and match references to fix any gaps that the reader themselves might identify to be present in the other combinations.

In gross numerical terms, the Petition’s grounds are just as excessive and voluminous as grounds found to be improper in *Adaptics*. In both *Adaptics* and the present Petition, the grounds utilize ten prior art references. Pet. at 2; *Adaptics*,

---

<sup>3</sup> The number of possible subsets of the four combining references is  $2^4=16$ .

<sup>4</sup> The omitted combinations are those involving both Grant *and* Barton.

IPR2018-01596, Paper 20 at 6. The Board in *Adaptics* found that a ground with 17 possible combinations involving two different primary references was “an unduly burdensome number of combinations.” *Id.* at 19. The present Petition recites 30 possible combinations involving two different primary references. Pet. at 3–4. The “catch-all” ground of *Adaptics* contained a list of five references joined by “and/or.” *Adaptics*, Case IPR2018-01596, Paper 20 at 9 (“each other, Mettler, Digi-Star, Yuyama, and/or Wright”). As explained above, the grounds challenging claim 7 in the present Petition are nearly equivalent to a list of four references joined by “and/or.”

The large number of grounds and very brief discussion devoted to many of them means that the Petition fails to meet the requirement to identify the grounds and supporting evidence “with particularity.” 35 U.S.C. § 312(a)(3). For example, a necessary step in the obviousness analysis is to ascertain “the differences between the claimed invention and the prior art.” 35 U.S.C. § 103; *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966); see *Adaptics*, IPR2018-01596, Paper 20 at 20 (“Critically, however, the Petition fails to specify what Petitioner regards as the difference(s) between [the prior art] and the challenged claims.” (citing *Graham*)).

For nine of the challenged claims, the Petition contends that Fukumoto alone renders the claims obvious. Pet. at 3. For all but claim 9, the Petition asserts that Fukumoto by itself “discloses or suggests” the limitations. Pet. at 12–35. Other

grounds that combine Fukumoto with two or three other references presumably assume that Fukumoto fails to “disclose or suggest” one or more limitations. While it may be permissible for a petition to present alternative arguments for what elements of the claimed invention are missing from the prior art, some actual analysis of what Fukumoto (and the other references) is missing under these alternative arguments must be provided, and the Petition fails to adequately do so.

Another necessary step in the obviousness analysis is to determine whether a POSITA would have been motivated to combine or modify the references. *Regents of University of California v. Broad Institute, Inc.*, 903 F.3d 1286, 1291 (Fed. Cir. 2018) (“An obviousness determination requires finding that a person of ordinary skill in the art would have been motivated to combine or modify the teachings in the prior art and would have had a reasonable expectation of success in doing so.”). The cursory discussion of motivation to combine for many of the asserted grounds is not sufficient to determine a motivation to combine. For example, for the catch-all grounds 2G-I, the extremely brief arguments presented at most show that certain subsets of the references *could* be combined, which by itself is not sufficient to show motivation to combine. Pet. at 93; *Personal Web Technologies, LLC v. Apple, Inc.*, 848 F.3d 987 (Fed. Cir. 2017) (Not sufficient to show “that a skilled artisan, once presented with the two references, would have understood that they *could be* combined”).

It is worth noting that the discussion of grounds 2G–I argues that “[a] POSITA would have been motivated to combine Ogusu-Fukumoto, Ogusu-Fukumoto-Grant, and Ogusu-Fukumoto-Barton with Erixon for the same reasons discussed in Section VII.E.” Pet. at 93. The motivation to combine discussed in Section VII.E involves substituting Erixon’s coil configuration into Fukumoto. Pet. at 59–60. But, to the extent that the Petition identifies what the ground 2G-I combinations actually are, they appear to utilize the coils of Ogusu. Pet. at 81–82, 93. The discussion in Section VII.E concerning substituting Erixon’s coil into Fukumoto does not address what motivation there would be to combine Erixon as part of a combination based upon Ogusu.

The large number of combinations, lack of clarity, and lack of adequate analysis of obviousness in the Petition puts the burden on patent owner to address whether each combination teaches the required claim limitations, as well as the *Graham* analysis and the motivation-to-combine analysis, for each of these many combinations. The result is “unduly burdensome for both Patent Owner and the Board to address.” *See Adaptics*, IPR2018-01596, Paper 20 at 21.

There is nothing in the challenged patent or its claims to justify the number or complexity of the asserted grounds. Claim 1 of the ’830 patent contains a mere 64 words:

1. A vibration module comprising:  
a housing;  
a moveable component;  
a power supply;  
user-input features;  
a driving component that drives the moveable component  
to oscillate within the housing; and  
a control component that controls supply of power from  
the power supply to the driving component to cause the  
moveable component to oscillate at a frequency and an  
amplitude specified by one or more stored values.

Ex. 1001, '830 patent at 15:57–67. By comparison, claim 1 of the 9,772,217 patent at issue in *Adaptics* was 251 words, nearly four times as long. *Adaptics*, IPR2018-01596, Paper 20 at 4–5.

This Petition does not face any of the complicating factors that the Board has recognized would require making numerous arguments, such that multiple IPR petitions might be required. *See* Office Patent Trial Practice Guide (Nov. 2019) at 59. For example, the number of grounds is not driven by a dispute about priority date, because none of the grounds in the Petition is intended to address a different possible priority date for a claim than any of the other grounds.

Likewise, the number of grounds is not driven by the number of claims asserted against Samsung in litigation. As the Petition notes, claims 1–8 and 17 are asserted against Samsung. Pet. at 95. Of these claims, all but claim 4 are allegedly rendered obvious under ground 1A (i.e., under Fukumoto alone). Pet. at 3. Nine entire grounds are devoted to claims that have not been asserted against Samsung (grounds 1M–

1U). Pet at 3. Three of these grounds are devoted to claims that not only are not asserted against Samsung, but that are also covered by six other grounds (grounds 1P–1R; grounds 1A–1C and 2A–2C). While there is nothing improper *per se* about challenging claims that have not been asserted against the Petitioner, devoting nine entire grounds to such claims is excessive.

**B. The Petition Should Be Denied Institution Due to Parallel District Court Litigation**

The Board should exercise its discretion to deny institution under § 314(a) in accordance with the *Fintiv* factors. Such denial is warranted because Petitioners are challenging the validity of the same patent 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.

**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 that 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.<sup>5</sup> 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 94. 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

---

<sup>5</sup> Joinder seems at least quite possible, if not likely, given that Petitioner has multiple co-defendants accused of infringing this patent.

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 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. Decap-olis LLC*, IPR2022-00229, Paper No. 10 at 9 (PTAB Apr. 13, 2022) (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 because Petitioners unduly delayed in filing their Petition, filing approximately eight months after the district court case was filed. *Compare* Pet. at 97 (dated June 14, 2023) *with* Ex. 1017 (complaint filed October 26, 2022). Petitioners have identified no explanation for this delay.

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 1–9, 11, 14–17, and 19–20) *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 theories in the litigation as in the Petition. *See, e.g.*, Ex. 2004 at 13–16, 37-38. Of the 30 grounds in the petition, 21 are primarily directed to claims that are asserted in the litigation (1A–1L, 2A–2I). Pet. at 3–4. As discussed above, the remaining 9 grounds (1M–1U) make the grounds more excessive and the IPR as a whole more unwieldy and burdensome.

While the Petition includes a narrowly crafted non-overlap stipulation, it is limited in scope to the grounds in the Petition and other “grounds including Fukumoto and Ogusu.” But the Petition already raises 30 grounds of obviousness including Fukumoto and/or Ogusu, under Petitioner’s counting of the grounds. Pet. at 3–4. Presumably these were enough grounds to effectively exhaust the range of invalidity arguments that can be made using these two references, rendering Petitioner’s narrow stipulation meaningless in practice. It certainly falls 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 95; Interim Discretionary Denial Memo at 3.

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. As explained above, the grounds in the Petition are unjustifiably voluminous and excessive, providing a basis for discretionary denial of institution independent of the *Fintiv* analysis. The failures of the Petition to identify the grounds and supporting evidence with particularity and to provide adequate analysis of the differences between the prior art and the claimed invention or of the motivation to combine further weigh against institution. Petitioner's bare assertion that "the merits are compelling," without any explanation of why, is insufficient to meet the "compelling evidence" standard. Pet. at 95; Interim Discretionary Denial Memo at 3–5.

## VII. CONCLUSION

For the foregoing reasons, the Board should exercise its discretion to deny institution of the Petition.

Dated: October 16, 2023

/Reza Mirzaie/  
Reza Mirzaie (Reg. No. 69,138)  
Kristopher Davis (Reg. No. 62,063)  
RUSS AUGUST & KABAT  
12424 Wilshire Boulevard, 12th Floor  
Los Angeles, CA 90025  
Telephone: 310-826-7474  
Email: [rmirzaie@raklaw.com](mailto:rmirzaie@raklaw.com)  
Email: [kdavis@raklaw.com](mailto:kdavis@raklaw.com)

Qi Tong (Reg. No. 74,292)  
RUSS AUGUST & KABAT  
4925 Greenville Ave, Suite 200  
Dallas, TX 75206  
Telephone: 310-826-7474  
Email: [ptong@raklaw.com](mailto:ptong@raklaw.com)

Attorneys for Patent Owner,  
RESONANT SYSTEMS, INC.

## CERTIFICATE OF 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 5,182. 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).

/Reza Mirzaie/

CERTIFICATE OF SERVICE

I hereby certify that “Patent Owner’s Preliminary Response” was served on October 16, 2023 by email sent to:

Jessica Kaiser, Reg. No. 58,937  
jessica.kaiser@arnoldporter.com  
Jin-Suk Park, Reg. No. 50,678  
jin.park@arnoldporter.com  
Christopher Marando, Reg. No. 67,898  
chris.marando@arnoldporter.com  
ARNOLD & PORTER KAYE SCHOLER LLP  
601 Massachusetts Ave., NW  
Washington, DC 20001-3743  
Telephone: 202-942-5000  
Email: ali.sharifahmadian@arnoldporter.com  
Email: jin.park@arnoldporter.com  
Email: chris.marando@arnoldporter.com

Tyler Knox  
tyler.knox@arnoldporter.com  
ARNOLD & PORTER KAYE SCHOLER LLP  
1144 Fifteenth Street, Ste. 3100  
Denver, CO 80202-2848  
Telephone: 303-863-2379

/Reza Mirzaie/