

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

RESONANT SYSTEMS, INC.,
Patent Owner.

Case No. IPR2024-00806
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	3
III.	LEVEL OF ORDINARY SKILL IN THE ART	4
IV.	LEGAL STANDARDS	5
V.	CLAIM CONSTRUCTION.....	7
VI.	ARGUMENT	15
A.	Ground 1A: Gregorio	15
B.	Ground 1B: Gregorio-Wakuda	18
C.	Ground 1C: Gregorio-Tierling	19
D.	Ground 1D: Gregorio-Ramsay	19
E.	Grounds 1E-1F: Gregorio-Ramsay	19
F.	Ground 2A: Gregorio-Ramsay-Rossi-Aldrich	19
G.	Grounds 2B-2C: Gregorio-Ramsay-Rossi-Aldrich.....	20
H.	The Board Should Exercise Its Discretion to Deny Institution on <i>Fintiv</i> Grounds	20
1.	<i>Fintiv</i> Factor 1: The district court has not granted a stay, nor is there any evidence that a stay will be granted.	22

2.	<i>Fintiv</i> Factor 2: The district court trials will occur almost three months before the deadline for a final written decision in this proceeding.....	23
3.	<i>Fintiv</i> Factor 3: By the time an institution decision is reached, both fact discovery and claim construction proceedings will be well underway.	25
4.	<i>Fintiv</i> Factor 4: There is substantial overlap between this IPR and the district court proceeding.....	27
5.	<i>Fintiv</i> Factor 5: Petitioner is the defendant in the district court litigation.	28
6.	<i>Fintiv</i> Factor 6: Other circumstances weigh strongly against institution, including the weakness of the Petition and Petitioner’s delay.....	28
I.	The Board Should Exercise Its Discretion to Deny Institution of this Parallel Petition	29
VII.	CONCLUSION	33

TABLE OF AUTHORITIES

Cases

<i>Apple Inc. v. Fintiv, Inc.</i> , IPR2020-00019, Paper No. 11 (PTAB Mar. 20, 2020).....	20, 25, 28
<i>Apple Inc. v. Fintiv, Inc.</i> , IPR2020-00019, Paper No. 15 (PTAB May 13, 2020).....	20
<i>Apple, Inc. v. Koss Corp.</i> , IPR2021-00686, Paper No. 12 (PTAB Oct. 12, 2021)	33
<i>Ariosa Diagnostics v. Verinata Health, Inc.</i> , 805 F.3d 1359 (Fed. Cir. 2015).....	5
<i>Belden Inc. v. Berk-Tek LLC</i> , 805 F.3d 1064 (Fed. Cir. 2015).....	6
<i>BOE Tech. Grp. Co. v. Element Capital Commercial Co.</i> , IPR2023-00808, Paper 9 (PTAB Nov. 15, 2023)	26
<i>EClinicalWorks, LLC v. Decapolis LLC</i> , IPR2022-00229, Paper No. 10 (PTAB Apr. 13, 2022)	24
<i>Granite Constr. Co. v. United States</i> , 962 F.2d 998 (Fed. Cir. 1992).....	6
<i>Harmonic Inc. v. Avid Tech., Inc.</i> , 815 F.3d 1356 (Fed. Cir. 2016).....	5
<i>In re Magnum Oil Tools Int’l, Ltd.</i> , 829 F.3d 1364 (Fed. Cir. 2016).....	5, 6
<i>In re Stepan Co.</i> , 868 F.3d 1342 (Fed. Cir. 2017).....	6
<i>Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.</i> , 821 F.3d 1359 (Fed. Cir. 2016).....	7

Case No. IPR2024-00806
U.S. Patent No. 9,941,830

<i>NHK Spring Co. v. Intrix-Plex Techs., Inc.</i> , IPR2018-00752, Paper No. 8 (PTAB Sept. 12, 2018)	20
<i>NXP USA, Inc. v. Impinj, Inc.</i> , PGR2022-00005, Paper No. 17 (PTAB May 2, 2022)	24
<i>SAS Inst. Inc. v. Iancu</i> , 138 S. Ct. 1348 (2018)	30
<i>SAS Inst., Inc. v. Iancu</i> , 138 S. Ct. 1348 (2018)	5
<i>Virtek Vision International ULC v. Assembly Guidance Systems, Inc.</i> , 97 F.4th 882 (Fed. Cir. 2024)	6
<i>Wasica Finance GMBH v. Continental Auto. Systems</i> , 853 F.3d 1272 (Fed. Cir. 2017)	6
<i>Williamson v. Citrix Online, LLC</i> , 792 F.3d 1339 (Fed. Cir. 2015)	7
<i>WMS Gaming, Inc. v. International Game Technology</i> , 184 F.3d 1339 (Fed. Cir. 1999)	12

Statutes and Regulations

35 U.S.C. § 112	7
35 U.S.C. § 312	5
35 U.S.C. § 314	20, 30
37 C.F.R. § 42.100	23
37 C.F.R. § 42.15	33

PATENT OWNER'S EXHIBIT LIST

<i>Exhibit No</i>	<i>Description</i>
2001	Defendant Apple Inc.'s Proposed Claim Constructions, (<i>Resonant Systems, Inc. v. Apple Inc.</i> , Case No. 23-cv-00077-ADA (W.D. Tex.))
2002	Court's Claim Construction Order (<i>Resonant Systems, Inc. v. Apple Inc.</i> , Case No. 23-cv-00077-ADA (W.D. Tex.), Dkt. 91)
2003	Defendant Apple Inc.'s Opening Claim Construction Brief (<i>Resonant Systems, Inc. v. Apple Inc.</i> , Case No. 23-cv-00077-ADA (W.D. Tex.), Dkt. 75)
2004	Order Modifying Scheduling Order (<i>Resonant Systems, Inc. v. Apple Inc.</i> , Case No. 23-cv-00077-ADA (W.D. Tex.), Dkt. 57)
2005	Federal Court Management Statistics, Western District of Texas, 2018-2023
2006	Excerpt of Plaintiff's Infringement Contentions (<i>Resonant Systems, Inc. v. Apple Inc.</i> , Case No. 23-cv-00077-ADA (W.D. Tex.))
2007	Excerpt of Defendant's Final Invalidity Contentions (<i>Resonant Systems, Inc. v. Apple Inc.</i> , Case No. 23-cv-00077-ADA (W.D. Tex.))

I. INTRODUCTION

Both Patent Owner and Petitioner Apple in their district court litigation and in this IPR, agree that the proper construction of “control component” must require a processor satisfying the limitation be programmed with an algorithm disclosed in the ’830 patent, including a step of “provid[ing] a corresponding output to the power supply.”

None of the prior art cited in the Petition contains or suggests a power supply that would accept such an output or that could receive such an output as part of the “control component” performing its claimed function. To the extent that Petitioners wished to argue that their cited art could be modified to satisfy this term, under any correct construction, they were obligated to present that modification and argue for why one skilled in the art would have been motivated to make it, in their Petition. They failed to do so, and as a result their Petition must fail.

Moreover, Apple unreasonably delayed filing an IPR petition challenging the ’830 patent, waiting more than ten months after it was served with a complaint asserting the patent before doing so. As a result of this delay, the court and the parties have already invested substantial work into resolving the case in district court. The court has already issued its claim construction order, and by the time a decision on instituting this IPR petition is due, fact discovery

will be just nine days from completion. Trial in district court is scheduled to begin almost three months before a final written decision would be due in this IPR. And Petitioner is asserting exactly the same prior art in district court, in the same or similar obviousness combinations, as it asserts in this IPR petition. Petitioner provides no justification for this delay and has offered no stipulation to reduce the overlap and wasteful duplication between the district court and IPR proceedings. Accordingly, the Board should exercise its discretion to deny institution on *Fintiv* grounds.

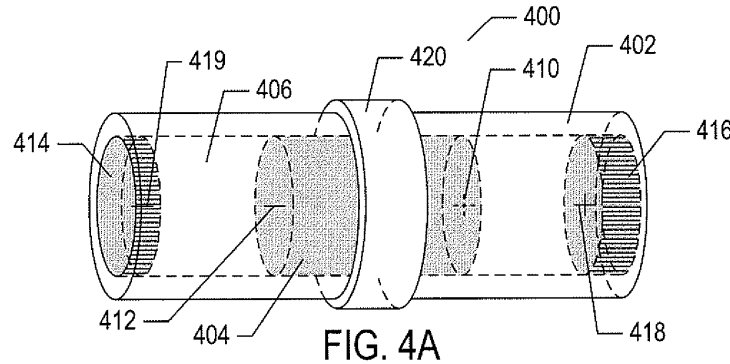
Even further multiplying waste and inefficiency, Petitioner filed two parallel IPR petitions, challenging the same 14 claims of the '830 patent. In light of Patent Owner's stipulation (set forth below) not to swear behind the Gregorio prior art reference in IPR2024-00806 if the Board denies institution of IPR2024-00808, Petitioner fails to show that this is one of the "rare" cases where the Board should institute two parallel petitions on the same patent. Therefore, even if the Board does not deny institution on *Fintiv* grounds, it should decline to institute both of the parallel IPR petitions.

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 patents are asserted in litigation against Apple and in parallel litigation against Samsung and Sony.

The '830 patent is related by continuation to U.S. Patent Nos. 8,093,767 and 8,860,337. The Petitioners have filed IPR2024-00697, IPR2024-00698, and IPR2024-00807 challenging these two patents. The IPR petition concerning the '337 patent (IPR2024-00807) raises invalidity grounds similar to those

raised in the present Petition. Patent Owner's preliminary response to that petition makes arguments similar to arguments in the present preliminary response.

The Board has instituted IPRs filed by Samsung challenging the '830 patent and the related 9,369,081 patent, IPR2023-00992 and IPR2023-00993. Patent Owner has filed its patent owner responses in those two IPRs. Samsung's IPRs present different grounds with different prior art, but there are claim construction issues that are common to Apple's and Samsung's IPRs, including the proper construction of the "control component" terms discussed below.

III. LEVEL OF ORDINARY SKILL IN THE ART

Patent Owner believes that a POSITA at the time of the invention would have had (1) a bachelor's degree in electrical engineering, mechanical engineering, or a comparable field of study, and (2) at least two years of professional experience with electro-mechanical control systems, or other similarly relevant industry experience. Additional relevant industry experience may compensate for lack of formal education or vice versa.

Petitioners offer a similar level of ordinary skill in the art. Patent Owner does not believe that any of the arguments herein would change if the Board

were to adopt Petitioners' definition for the level of ordinary skill rather than Patent Owner's.

IV. LEGAL STANDARDS

The petitioner has the burden to clearly set forth the basis for its challenges in the petition. *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) as “requiring IPR petitions to identify ‘with particularity ... the evidence that supports the grounds for the challenge to each claim’”). A petitioner may not rely on the Board to substitute its own reasoning to remedy the deficiencies in a petition. *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1355 (2018) (“Congress chose to structure a process in which it’s the petitioner, not the Director, who gets to define the contours of the proceeding.”); *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016) (rejecting the Board’s reliance on obviousness arguments that “could have been included” in the petition but were not, and holding that the Board may not “raise, address, and decide unpatentability theories never presented by the petitioner and not supported by the record evidence”); *Ariosa Diagnostics v. Verinata Health, Inc.*, 805 F.3d 1359, 1367 (Fed. Cir. 2015) (holding that “a challenge can fail even if different evidence and arguments

might have led to success”); *Wasica Finance GMBH v. Continental Auto. Systems*, 853 F.3d 1272, 1286 (Fed. Cir. 2017) (holding that new arguments in a reply brief are “foreclosed by statute, our precedent, and Board guidelines”).

The Board “may reject even uncontroverted expert testimony when it is intrinsically unpersuasive.” *Granite Constr. Co. v. United States*, 962 F.2d 998, 1006 (Fed. Cir. 1992). The petitioner cannot satisfy its burden of proving obviousness by employing “mere conclusory statements.” *Magnum*, 829 F.3d at 1380.

An obviousness determination requires finding that a POSITA would have been motivated to modify or combine teachings in the prior art. *In re Stepan Co.*, 868 F.3d 1342, 1345–46 (Fed. Cir. 2017). Obviousness concerns “whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.” *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015). The “mere fact that these possible arrangements existed in the prior art” does not provide a motivation to substitute the arrangement in one prior art embodiment with the arrangement in another.” *Virtek Vision International ULC v. Assembly Guidance Systems, Inc.*, 97 F.4th 882, 887 (Fed. Cir. 2024). Because a motivation to modify or combine is part of the *prima facie* case for obviousness that must be set forth in the petition, a petitioner should not be

permitted to present “an entirely new rationale to explain why one of skill in the art would have been motivated to combine” in its reply. *Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1370 (Fed. Cir. 2016).

“An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” 35 U.S.C. § 112 ¶ 6. Even were a claim does not utilize the word “means,” § 112 ¶ 6 will apply if “the claim term fails to recite sufficiently definite structure or else recites function without reciting sufficient structure for performing that function.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1349 (Fed. Cir. 2015).

V. CLAIM CONSTRUCTION

Petitioners contend that several phrases involving the terms “driving component” and “control component” are means-plus-function limitations subject to 35 U.S.C. section 112, paragraph 6, under *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2014). (Paper 3 at 2–7.) Patent Owner agrees that the “driving component...” and “control component...” terms are subject to § 112 ¶ 6.

Patent Owner does not believe that the phrase involving a “driving component” needs to be construed in order to decide whether to institute this IPR. However, as discussed further below, a proper construction of the “control component” terms should lead the Board to deny institution.

A. “control component...”

For the “control component...” term of independent claims 1 and 19, Petitioners identify the corresponding structure as “one of the switches shown in Figures 5A-6 and described at 5:52-6:5, 6:9-16, and the processor (also referred to as microprocessor, microcontroller, or CPU) that performs the algorithm shown in Figures 7A-7C and described at 6:52-8:40.” (Paper 3 at 4.) For independent claim 20, Petitioners add to the algorithm the teachings at 13:20–59. (Paper 3 at 4–5.)

In the district court case between Patent Owner and Apple, the court has adopted a claim construction that is similar to Apple’s IPR (and district court) construction, but with some differences:

a microcontroller, a processor, a microprocessor, or a CPU

that performs the algorithm shown in Steps 706 through 716 in Figure 7A, with reference to all steps shown in Figure 7B other than Step 734 and all steps show in Figure 7C,

or the algorithm described in the corresponding text, See, e.g.
7:20–7:34, 7:42–7:52, 7:60–8:40 and/or equivalents thereof.

(Ex. 2002 at 6–7.) Importantly, the district court’s construction requires at least “a microcontroller, a processor, a microprocessor, or a CPU” and requires one of the algorithm shown in Figure 7A–7C or the algorithm described in the “corresponding” specification text, 7:20–7:34, 7:42–7:52, 7:60–8:40.

For the alternative in the court’s construction based upon the figures, Figure 7C provides steps that are a part of the larger algorithm depicted in Figure 7A. (Ex. 1001 at 8:20–21 (“FIG. 7C provides a control-flow diagram for the routine ‘control,’ called in step **716** in FIG. 7A.”) In particular, Figure 7C includes step 762: “compute output p to power supply; output p to power supply”:

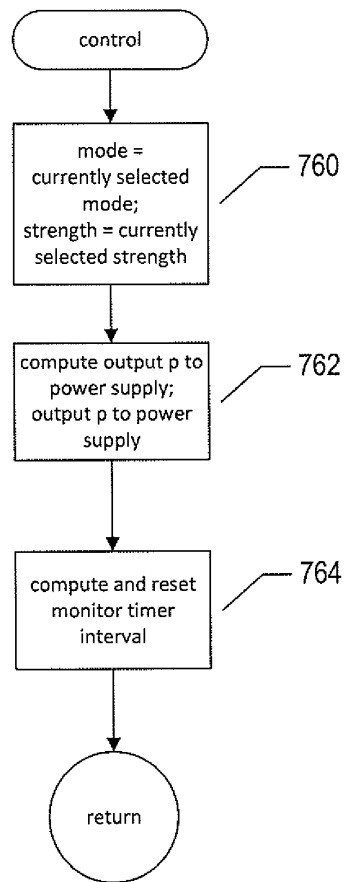


FIG. 7C

Ex. 1001, Fig. 7C.

Likewise for the alternative in the court’s construction based upon the specification, “the routine ‘control’ computes an output value *p* corresponding to the currently selected strength, stored in the variable strength, and outputs

the value p to the power supply so that the power supply outputs an appropriate current to the coil.” (Ex. 1001 at 8:26–30.)

Thus, under either alternative in the court’s construction, the processor must compute an output value p and “output[] p to the power supply.” Since Apple’s construction requires an algorithm based on both the figures and the specification, Apple’s construction requires the same.

Patent Owner agreed in district court that this step was required, at least for a processor, CPU, or microprocessor is the corresponding structure:

Where the corresponding structure is a processor, CPU, or microprocessor, the processor / CPU / microprocessor is programmed with an algorithm comprising the following steps: . . .
(b) *provide a corresponding output to the power supply* so that the power supply provides a corresponding output to the driving component.

(Ex. 2002 at 6–7 (emphasis added).)

The construction of this term is also at issue in IPR2023-00993 between Patent Owner and Samsung. The same term in the ’337 patent is also at issue in IPR2024-00807 between Patent Owner and Apple and in IPR2024-00569 and in related district court litigation between Patent Owner and Sony. The parties’ positions in the various district court and IPR cases differ in some details, but as Patent Owner explains in its preliminary response in IPR2024-

00569, Patent Owner, Samsung, and Sony each agreed in their briefing in their respective district court cases that where the corresponding structure for “control component” in either the ’830 patent or the ’337 patent was a processor, CPU, or microprocessor, that device must be programmed with an algorithm step to “provide a corresponding output to the power supply.” IPR2024-00569, Paper 8 at 8–18.

The Board should likewise require that a processor, CPU, or microprocessor that satisfies the “control component” limitation be programmed with an algorithm that includes the set of providing a corresponding output to the power supply. Most importantly, the processor, CPU, or microprocessor structure must be construed to include a disclosed algorithm. *WMS Gaming, Inc. v. International Game Technology*, 184 F.3d 1339, 1349 (Fed. Cir. 1999) (“In a means-plus-function claim in which the disclosed structure is a computer, or microprocessor, programmed to carry out an algorithm, the disclosed structure is not the general purpose computer, but rather the special purpose computer programmed to perform the disclosed algorithm.”)

Both Apple and Patent Owner base their algorithms for the “control component” in part on the following text from the ’830 patent specification:

FIG. 7C provides a control-flow diagram for the routine “control,” called in step **716** in FIG. 7A. This routine is invoked when

a change in the user controls has occurred. In step **760**, the variables mode and strength are set to the currently selected mode and vibrational strength, represented by the current states of control features in the user interface. Next, in step **762**, the routine “control” computes an output value p corresponding to the currently selected strength, stored in the variable strength, and outputs the value p to the power supply so that the power supply outputs an appropriate current to the coil.

Ex. 1001 at 8:20–30. This text relates to the following figure:

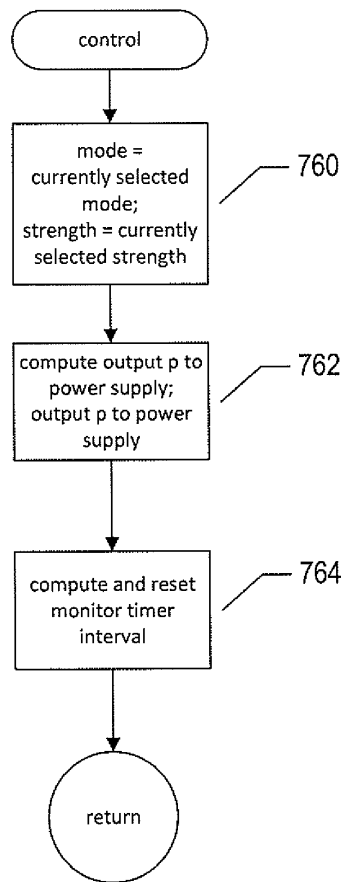


FIG. 7C

Ex. 1001, Fig. 7C. A proper construction of the “control component” limitation should require that a processor, CPU, or microprocessor satisfying the limitation include steps corresponding to steps 760 and 762, including in particular a step to “provide a corresponding output to the power supply.”

VI. ARGUMENT

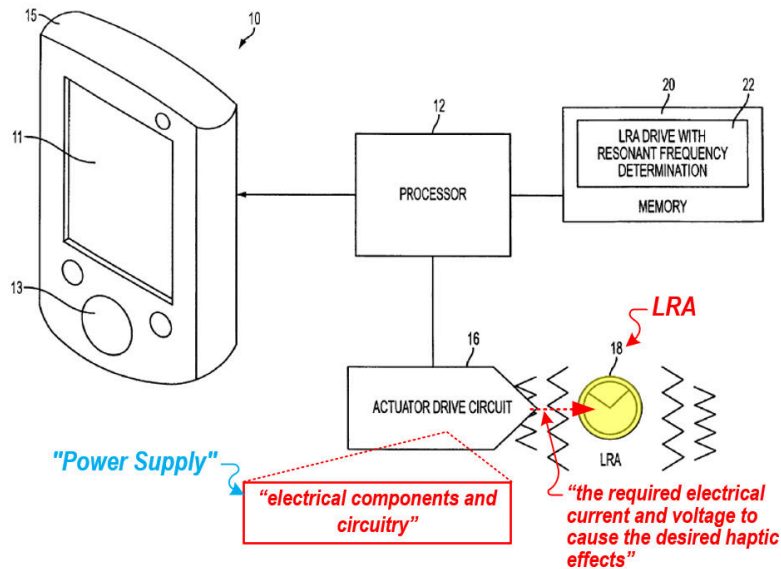
A. Ground 1A: Gregorio

The Petition fails to show that Gregorio discloses or renders obvious the claimed “power supply” and “control component” to satisfy limitations 1[c] and 1[f], under a proper construction of the term “control component.”

As discussed above, the term “control component” in claims 1, 19, and 20 of the ’830 patent is properly construed as a means-plus-function term governed by 35 U.S.C. § 112 ¶ 6. Both Petitioner and Patent Owner agree on this point.

For the corresponding structures involving a processor, CPU, or micro-processor, both Petitioner and Patent Owner agree in their district court briefing and in this IPR that these structures must include an algorithm and that this algorithm must include at least the step of “provide a corresponding output to the power supply.” In other words, the “power supply” of limitation 1[c] (and 19[c] and 20[c]) must be capable of being provided an output, and the “control component” of limitation 1[f] (and 19[f] and 20[f]) must be capable of providing such an output to the power supply.

For this ground, Petitioner provides the following annotated version of Gregorio Figure 1:



(Paper 3 at 14.) The petition identifies the “processor” 12 as part of the claimed “control component” and unspecified “electrical components and circuitry” within the “actuator drive circuit 16” as the claimed “power supply.” (Paper 3 at 13, 16.) This is based on the statement in the specification of Gregorio that this actuator drive circuit supplies the LRA 18 “with the required electrical current and voltage.” (Paper 3 at 13.)

As an apparent alternative, Petitioner also identifies “current generator 422” as a “power supply.” (Paper 3 at 14.) But this alternative demonstrates that Gregorio Figure 1 alone does not teach or render obvious the required outputting from the processor to a power supply. In Gregorio Figure 4, the current generator 422 supplies a current to the LRA 18:

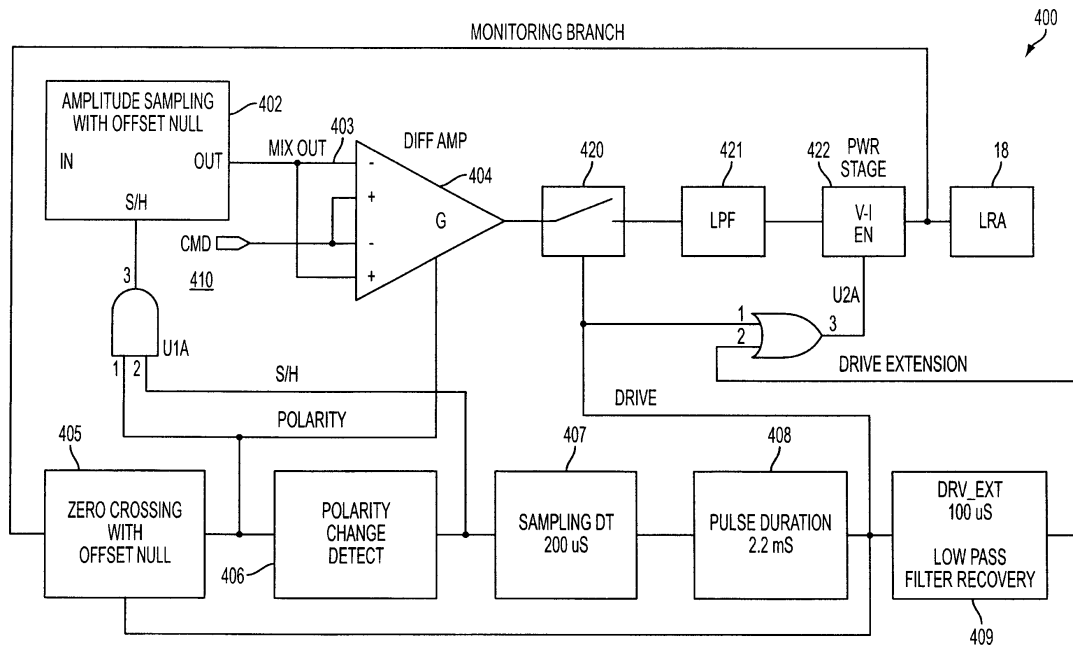


FIG. 4

(Ex. 1004, Figure 4.) But the only inputs to 422 are from a low-pass filter 421 and the signal U2A from an or-gate. (*Id.*) Nothing in Gregorio shows the processor outputting a signal to current generator 422, and Petitioner offers no explanation for how it would have been obvious to modify Gregorio Figure 4 to do so.

Gregorio Figure 4 is its only detailed description of “electrical components and circuitry” that supplies electrical current or voltage to the LRA 18. Petitioner fails to explain why a POSITA would have been motivated to use some circuitry other than what is shown in Figure 4 to supply current to the LRA and fails to show how an alternative “power supply” to that in Gregorio

Figure 4 would receive the required output from the “control component.” Instead, Petitioner offers the bare, unsupported, and conclusory opinion of its expert that “[a]ccording to the control signals from the processor, *the ‘electronic components and circuitry’* of the actuator drive circuit 16, *which corresponds to, or are coupled to, the power supply*, supplies the “required electrical current and voltage” (power) to the coil 28 (driving component) of LRA 18.” (Paper 3 at 17; Ex. 1003, ¶ [104] (emphasis added).) Such unsupported speculation is not sufficient to support obviousness of the challenged claims.

Because the petition fails to explain how the prior art disclosed a “power supply” that can receive an output from the “control component” or the actual outputting of such an output to the “power supply,” and further fails to explain how a POSITA would have been motivated to modify the prior art to satisfy these requirements of the claims, Ground 1A fails.

B. Ground 1B: Gregorio-Wakuda

For the challenged claims under Ground 1B, Petitioner relies on the same disclosures as for the power supply of limitation [1c] and the processor and algorithm of the control component of limitation [1f] in Ground 1A. (Paper 3 at 29, 36.) Therefore, Ground 1B fails for the same reasons as Ground 1A.

C. Ground 1C: Gregorio-Tierling

For the challenged claims under Ground 1C, Petitioner relies on the same disclosures as for the power supply of limitation [1c] and the processor and algorithm of the control component of limitation [1f] in Ground 1A. (Paper 3 at 40, 45.) Therefore, Ground 1B fails for the same reasons as Ground 1A.

D. Ground 1D: Gregorio-Ramsay

For the challenged claims under Ground 1D, Petitioner relies on the same disclosures as for the power supply of limitation [1c] and the processor and algorithm of the control component of limitation [1f] in Ground 1A. (Paper 3 at 50–51, 53.) Therefore, Ground 1B fails for the same reasons as Ground 1A.

E. Grounds 1E-1F: Gregorio-Ramsay

For the challenged claims under Grounds 1E and 1F, Petitioner relies on the same disclosures as for the power supply of limitation [1c] and the processor and algorithm of the control component of limitation [1f] in Grounds 1B and 1C. (Paper 3 at 29, 36.) Therefore, Grounds 1E and 1F fail for the same reasons as Ground 1A.

F. Ground 2A: Gregorio-Ramsay-Rossi-Aldrich

For the challenged claims under Ground 2A, Petitioner relies on the same disclosures as for the power supply of limitation [1c] and the processor and algorithm of the control component of limitation [1f] in Ground 1A. (Paper 3

at 63–64, 72, 74.) Therefore, Ground 2A fails for the same reasons as Ground 1A.

G. Grounds 2B-2C: Gregorio-Ramsay-Rossi-Aldrich

For the challenged claims under Grounds 2B and 2C, Petitioner relies on the same disclosures as for the power supply of limitation [1c] and the processor and algorithm of the control component of limitation [1f] in Grounds 1E and 1F. (Paper 3 at 75.) Therefore, Grounds 2B and 2C fail for the same reasons as Ground 1A.

H. The Board Should Exercise Its Discretion to Deny Institution on *Fintiv* Grounds

35 U.S.C. § 314(a) gives the Board discretion to deny institution of IPR due to the advanced state of parallel district court litigation regarding the same issues. *See NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 19-21 (PTAB Sept. 12, 2018) (precedential) (“*NHK*”). The Board has set forth six factors for determining whether discretionary denial in light of such parallel litigation is appropriate, and in analyzing them, “takes a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5-6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv I*”); *see also 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”).

Each of these six *Fintiv* factors weigh in favor of the Board exercising its discretion to deny institution here. For Factor 1, no stay of the parallel district court litigation has been granted, and a stay is unlikely given the advanced stage of the case. For Factor 2, the district court trials will occur almost three months before the deadline for a final written decision in this proceeding. For Factor 3, largely due to Petitioner’s delay in filing the Petition, there will be much investment by the parties and the district court—the district court has already issued its claim construction order, and by the time the Board issues its institution decision, fact discovery will also be near completion. For Factor 4, there is substantial overlap in both the claims and art at issue in this proceeding and in the district court; Petitioner had not made a *Sotera* stipulation to address the concerns of inefficiency and inconsistent rulings. For Factor 5, Petitioners are defendants in the parallel litigation. And for Factor 6, not only did Petitioners unduly delay in filing the Petition, but the Petition also fails to present a compelling challenge on the merits. Each of these factors is addressed in more detail below.

1. *Fintiv* Factor 1: The district court has not granted a stay, nor is there any evidence that a stay will be granted.

In the parallel district court proceeding (*Resonant Systems, Inc. v. Apple Inc.*, Case No. 23-cv-00077-ADA (W.D. Tex.)) involving the same challenged claims of the '830 Patent and the Petitioner, the district court has not granted a stay pending IPR. Further, there is no evidence that a stay will be granted. Moreover, the motion to transfer to the Northern District of California that Petitioner refers to has been denied. (*Resonant Systems, Inc. v. Apple Inc.*, Case No. 23-cv-00077-ADA (W.D. Tex.), Dkt. 83.)

Moreover, the facts here indicate that it is unlikely that the district court would grant a stay pending IPR even if this IPR were instituted, given the late stage of litigation. The parties have already exchanged final infringement and invalidity contentions (Ex. 2004 at 2), the fact discovery period is more than half completed (Ex. 2004 at 1–2), and the court has entered its claim construction order (Ex. 2002). And by the time the Board's institution decision is due in this proceeding (October 29, 2024), just nine days will remain in fact discovery, and trial will be just over nine months away. (Ex. 2004 at 2–3.) Trial is currently set for August 4, 2025—almost three months before the earliest deadline for a final written decision in this IPR. (Ex. 2004 at 3.)

Where the district court litigation has not been stayed, and any stay is speculative and 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 trials will occur almost three months before the deadline for a final written decision in this proceeding.

“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*.” *Fintiv I* at 9.

Here, the deadline for a final written decision in this IPR is October 29, 2025, which may be extended to April 29, 2026, for good cause or in the case of joinder. 37 C.F.R. § 42.100(c). Meanwhile, the district court litigation is set for trial on August 4, 2025. (Ex. 2004 at 3.) The timeframe set by the district court is consistent with the Federal Court Management Statistics for the Western 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 six years, a civil case in the district was brought to trial 25 months after filing. Ex. 2005 (indicating median times to trial for civil cases for the twelve-month period ending in December for 2018-2023 as 20.4, 27.9, 18.5, 25.5, 29.5, and 28.3). Here, the trial is set approximately 26 months

after June 1, 2023, the date the case was filed. (Ex. 2004 at 3; *Resonant Systems, Inc. v. Apple Inc.*, Case No. 23-cv-00077-ADA (W.D. Tex.), Dkt. 1.)

Thus, the district court trial is set to occur ***about three months*** before the deadline for a final written decision, and possibly nine months before the deadline if extended. This weighs heavily against institution. 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 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 17 at 9 (PTAB May 2, 2022) (“*NXP*”) (same), *reh’g denied*, Paper 20 (PTAB Aug. 25, 2022).

Petitioner implies that the Board should ignore these set trial dates because it is “uncertain and subject to change due to a number of factors.” Paper 3 at 81. But the Petition presents no evidence that the trials will not proceed

on the set date, which, as noted above, is consistent with the most current time-to-trial statistics for the Eastern District of Texas. *See* Interim Discretionary Denial Memo at 3 & n.4. “[B]ased on the evidence of record, there is no evidence to suggest that trial will be delayed.” *Nine Energy* at 9; *see also NXP* at 9 (“We generally take courts’ trial schedules at face value absent some strong evidence to the contrary.”) (quoting *Fintiv II* at 13).

Because the district court trial is currently set to occur about three months before the earliest deadline for a final written decision in this IPR, the set date is consistent with current time-to-trial statistics, and there is no evidence that the date may change, this factor weighs heavily against institution. *Fintiv II* at 13.

3. *Fintiv* Factor 3: By the time an institution decision is reached, both fact discovery and claim construction proceedings will be well underway.

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 (emphasis added). Here, claim construction before the district court is complete. (Ex. 2002.) Fact discovery is likewise already well underway. The parties have collectively served and responded to dozens of interrogatories and dozens of requests for production, as well as served 15

third-party subpoenas. Extensive document production has also already occurred. And by the time the institution decision issues, the deadline to complete discovery will be just nine days away. (Ex. 2004 at 2–3.) Those investments weigh strongly against institution because they ensure that this IPR cannot be an efficient alternative to district court litigation. This favors discretionary denial, and panels have found this factor to favor denial when the parallel litigation was at a similarly advanced stage as here. *See, e.g., BOE Tech. Grp. Co. v. Element Capital Commercial Co.*, IPR2023-00808, Paper 9 at 23-24 (PTAB Nov. 15, 2023) (denying institution in part because “[s]ignificant discovery has been completed, including the exchange of infringement and invalidity contentions, document requests and interrogatories, and proposed claim terms for construction, and ... close of fact discovery is near”).

Of course, the reason that the district court litigation will be so far along at the time of institution is because Petitioner unduly delayed in filing the Petition, filing on April 12, 2024, over ten months after being served with the first district court complaint on June 7, 2023. (*Resonant Systems, Inc. v. Apple Inc.*, Case No. 23-cv-00077-ADA (W.D. Tex.), Dkt. 15.) The Petition offers no explanation for Petitioner’s delay.

Because there has been substantial investment in the parallel proceedings, and Petitioner delayed in filing the Petition, Factor 3 weighs heavily against institution.

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

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, there is complete overlap between the challenged and asserted claims, and the same prior art applied in the Petition is also relied upon at the district court.

First, the Petition challenges the same claims that are currently asserted in the litigation. (*Compare* Paper 3 (challenging claims 1–8, 14–17, 19, and 20) *with* Ex. 2006 at 1 (asserting claims 1–8, 14–17, 19, and 20)). Second, Petitioner asserts each of the references relied upon in this Petition as a prior art reference in its district court invalidity contentions. (Ex. 2007 at 111 (identifying Gregorio and Rossi as disclosing elements of ’830 patent), 126–127 (identifying Wakuda, Ramsay, and Gregorio as anticipating ’830 patent), 158–159 (identifying Gregorio in view of Wakuda, Tierling, Ramsay, and Aldrich as rendering ’830 patent obvious).)

In short, the Petition challenges the same claims asserted in the parallel litigation, and Petitioner relies on each of its IPR references at the district court. This raises substantial “concerns of inefficiency and the possibility of conflicting decisions,” weighing against institution. *See Fintiv I* at 12.

5. *Fintiv* Factor 5: Petitioner is the defendant in the district court litigation.

Petitioner are defendant in the parallel litigation. “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, including the weakness of the Petition and Petitioner’s delay.

This factor looks at “other circumstances that impact the Board’s exercise of discretion, including the merits.” *Fintiv I* at 9. This factor weighs heavily against institution for two reasons. First, contrary to Petitioner’s assertion, the Petition fails to present a “compelling unpatentability challenge” (*see Interim Discretionary Denial Memo* at 2-5). As explained above, Petitioner has failed to present prior art or combinations of prior art that satisfy the “control component . . .” term under any of the potential constructions of that term. Even setting that fatal failure aside, Petitioner failed to identify a single reference that anticipates or renders obvious even one of the challenged claims, so

each ground relies on combinations of references from multiple fields of endeavor. The various grounds depend on different constructions of a term “control component . . .” disputed in the district court. If Petitioner had truly believed it had a “compelling” challenge, it would not have resorted to a combination of four different prior art references to invalidate claim 1 under the claim construction that Petitioner itself advances. (Paper 3, ground 2A.) Such complicated and contingent grounds are not the makings of a “compelling” challenge.

Second, there is evidence that Petitioner unduly delayed in filing the Petition, as discussed above for Factor 3, and Petitioner offers no explanation for its delay.

* * *

Each of the six *Fintiv* factors weigh in favor of the Board exercising its discretion to deny institution.

I. The Board Should Exercise Its Discretion to Deny Institution of this Parallel Petition

The Board should deny institution of *inter partes* review because the instant Petition is one of two parallel petitions that Petitioner filed challenging claims of the '830 patent. Patent Owner stipulates that if IPR2024-00806 is instituted and IPR2024-00808 is denied institution, it will not dispute that Gregorio qualifies as prior art to the '830 patent under Pre-AIA § 102(e), for

the purposes of IPR2024-00806. Patent Owner offers this stipulation in the hope that it may streamline the parties' disputes before the PTAB and not as a substantive admission as to when the inventions claimed in the '830 patent or in related patents may have been invented.

Under 35 U.S.C. § 314(a), the Board has discretion to deny institution of IPR. *See, e.g., SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018). When a petitioner opts to file two parallel petitions on the same patent, as Petitioner as done here, the Board considers the following guidance in the November 2019 Consolidated Trial Practice Guide ("CTPG"):

Based on the Board's experience, *one petition should be sufficient* to challenge the claims of a patent in most situations. *Two or more petitions filed against the same patent* at or about the same time (e.g., before the first preliminary response by the patent owner) may place a *substantial and unnecessary burden* on the Board and the patent owner and could raise *fairness, timing, and efficiency concerns*. In addition, multiple petitions by a petitioner are not necessary in the vast majority of cases. To date, a substantial majority of patents have been challenged with a single petition.

CTPG at 59 (emphasis added). If a petitioner opts to file two or more parallel petitions concerning the same patent:

[That] petitioner should ... identify: (1) a ranking of the petitions in the order in which it wishes the Board to consider the merits, if the Board uses its discretion to institute any of the petitions, and (2) a succinct explanation of the differences between the petitions, why the issues addressed by the differences are material, and why the Board should exercise its discretion to institute additional petitions if it identifies one petition that satisfies petitioner's burden under 35 U.S.C. § 314(a).

Id. at 59-60. However, the CTPG emphasizes that, although there may be “cases [in which] *two petitions* by a petitioner may be needed, ... this *should be rare*.” *Id.* at 59 (emphases added).

Here, Petitioner filed two petitions, IPR2024-00806 and IPR2024-00808 that each challenge the same 14 claims, with the only material difference being that IPR2024-00806 presents grounds based upon combinations with the primary reference Gregorio, and IPR2024-00808 presents grounds based upon combinations with the primary references Wakuda and Ramsay.

Petitioner filed the same Petitioner's Notice Ranking and Explaining Material Differences Between Petitions (“Ranking Notice”) as Paper 2 each IPR, ranking IPR2024-00806 above IPR2024-00808. To the extent that the Board institutes review of IPR2024-00808, institution of IPR2024-00806 should be denied as an unnecessary parallel petition.

Petitioner justifies its parallel petitions on the ground that Patent Owner has identified the priority date of the '830 patent as “at least as early as May 18, 2009,” permitting at least the theoretical possibility that Patent Owner could demonstrate the claimed inventions were invented prior to the December 16, 2008 filing date of Gregorio. This justification is now moot. As stated above, Patent Owner stipulates that if IPR2024-00806 is instituted and IPR2024-00808 is denied institution, it will not dispute that Gregorio qualifies as prior art to the '830 patent under Pre-AIA § 102(e), for the purposes of IPR2024-00806.

In light of this stipulation, these IPRs do not present either of the circumstances that the CTPG gives as examples of when more than one petition might be necessary: “when the patent owner has asserted a large number of claims in litigation or when there is a dispute about priority date requiring arguments under multiple prior art references.” CTPG at 59. There is no actual dispute in these IPRs about the Gregorio prior art date requiring arguments under multiple prior art references.

As to the number of claims, in both the district court litigation and these IPRs, only 14 claims of the '830 patent are at issue. The Board has previously held that a “Petitioner’s contention that 20 claims is a quantum of claims that could not be addressed in a single petition strains credulity.” *Apple, Inc. v. Koss*

Corp., IPR2021-00686, Paper 12 at 13 (PTAB Oct. 12, 2021). Indeed, “[t]he Board routinely receives petitions challenging more than 18 claims,” and “the basic filing fee for an *inter partes* review contemplates challenging up to 20 claims.” *Id.* (citing 37 C.F.R. § 42.15(a)(2)-(3)).

Petitioner also points to the existence of two alternative interpretations of a particular claim term and to the purported “strong showing of unpatentability” for each petition as justifications for the parallel petitions. There is nothing extraordinary about having to address two possible claim constructions for a single claim term. And the purported “strength” of each petition is not a basis for permitting multiple petitions. If anything, the strength of one petition should make it less justified—not more justified—to burden the Board and the parties with other petitions challenging the same claims.

Because the IPR2024-00806 and IPR2024-00808 petitions do not present one of the “rare” circumstances where multiple petitions challenging the same patent are justified, the Board should decline to institute both petitions.

VII. CONCLUSION

For the reasons set forth above, the petition fails to establish a reasonable likelihood that Petitioner would succeed in showing that the prior art discloses or renders obvious the properly construed claims, and the Board should deny institution on that basis. Alternatively, the Board should exercise its discretion

Case No. IPR2024-00806
U.S. Patent No. 9,941,830

to deny institution of this IPR, either on *Fintiv* grounds or on the ground that it is an unjustified parallel petition.

Dated: July 29, 2024

/Neil A. Rubin/

Reza Mirzaie (Reg. No. 69,138)
Kristopher Davis (Reg. No. 62,063)
Neil A. Rubin (Reg. No. 67,030)
Paul A. Kroeger (*Pro Hac Vice*)
Christian W. Conkle (*Pro Hac Vice*)
RUSS AUGUST & KABAT
12424 Wilshire Boulevard, 12th Floor
Los Angeles, CA 90025
Telephone: 310-826-7474
Email: rmirzaie@raklaw.com
Email: kdavis@raklaw.com
Email: nrubin@raklaw.com
Email: pkroeger@raklaw.com
Email: cconkle@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

Attorneys for Patent Owner,
RESONANT SYSTEMS, INC.

CERTIFICATE OF WORD COUNT

I certify that there are 6,364 words in this paper, excluding the portions exempted under 37 C.F.R. § 42.24(a)(1), according to the word count tool in Microsoft Word.

/Neil A. Rubin/
Neil A. Rubin (Reg. No. 67,030)

Case No. IPR2024-00806
U.S. Patent No. 9,941,830

CERTIFICATE OF SERVICE

I hereby certify that “Patent Owner’s Preliminary Response” was served on
July 29, 2024 by email sent to:

W. Karl Renner
Thomas Rozylowicz
Sangki Park
FISH & RICHARDSON P.C.
60 South Sixth Street
Minneapolis, MN 55402
Telephone: 202-783-5070
Email: IPR50095-0177IP1@fr.com

/Neil A. Rubin/