

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NINTENDO CO., LTD., and NINTENDO OF AMERICA INC,
Petitioner,

v.

RESONANT SYSTEMS, INC.,
Patent Owner.

IPR2025-00680
Patent 8,860,337 B2

Before KARL D. EASTHOM, NORMAN H. BEAMER, and
BRIAN D. RANGE, *Administrative Patent Judges*.

EASTHOM, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314
Granting Motion for Joinder
35 U.S.C. § 315(c); 37 C.F.R. § 42.122

I. INTRODUCTION

Petitioner, Nintendo Co., Ltd., and Nintendo of America Inc. (Petitioner”) filed a Petition (Paper 1, “Pet.”) seeking *inter partes* review of claims 1–4 of 8,860,337 B2 (Ex. 1001, the “’337 patent”). With the Petition, Petitioner filed a Motion for Joinder (Paper 4, “Motion” or “Mot.”), seeking to join as a party to *Apple Inc. v. Resonant Systems, Inc*, IPR2024-00807 (the “Apple IPR”). Prior to the institution decision in the Apple IPR, Patent Owner, Resonant Systems, Inc, statutorily disclaimed claims 1, 4, and 5 of the ’337 patent. *See* IPR2024-00807, Ex. 2008; Mot. 1. Therefore, claims 2 and 3 of the ’337 patent (the “challenged claims”) are the sole claims at issue here and in the Apple IPR. *See* Pet. 1; Mot. 1. Patent Owner did not file a preliminary response to the Petition or an opposition to the Motion.

The Board has authority to determine whether to institute an *inter partes* review. *See* 35 U.S.C. § 314(b); 37 C.F.R. § 42.4(a) (2020). Under 35 U.S.C. § 314(a), an *inter partes* review may not be authorized unless the information in the Petition and any preliminary response “shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.”

For the reasons that follow, we institute an *inter partes* review as to the challenged claims of the ’337 patent on all grounds of unpatentability presented. We also *grant* Petitioner’s Motion.

A. Real Party in Interest

Petitioner identifies “Nintendo Co., Ltd. and its subsidiaries (e.g., Nintendo Technology Development Inc.) and Nintendo of America Inc.” as real parties-in-interest. Pet. 86. Patent Owner identifies Resonant Systems, Inc. as the real party-in-interest. Paper 6, 1.

B. Related Matters

The parties collectively identify the following district three court proceedings as related matters: *Resonant Systems, Inc. v. Nintendo Co., Ltd.*, No. 2:25-cv-00090-RSG (E.D. Tex., filed January 31, 2025); *Resonant Systems, Inc. v. Meta Platforms, Inc.*, No. 7:25-cv-00035-DC (W.D. Tex., filed January 31, 2025); *Resonant Systems, Inc. v. Apple, Inc.*, No. 7:23-cv-00077-ADA (W.D. Tex., filed June 1, 2023); *Resonant Systems, Inc. v. Samsung Electronics Co. Ltd.*, No. 2:22-cv-00423-JRG (E.D. Tex., filed October 26, 2022); *Resonant Systems, Inc. v. Sony Group Corporation*, No. 2:22-cv-00424-JRG (E.D. Tex., filed October 26, 2022). Mot. 2–3; Paper 6, 1.

Other PTAB proceedings challenging related patents that may involve similar issues include the following: IPR2023-00992, IPR2023-00993, IPR2023-01025, IPR2024-00568, IPR2024-00569, IPR2024-00697, IPR2024-00698, IPR2024-00806, IPR2024-00808, and IPR2024-00983. Mot. 3; Paper 6, 1–2.

C. The '337 Patent (Ex. 1001)

The '337 patent relates to “vibration-generating devices and, in particular, to vibration modules that can be incorporated into a wide variety of different types of electromechanical devices and systems to produce vibrations of selected amplitudes and frequencies over a wide range of amplitude/frequency space.” Ex. 1001, 1:14–19. The vibration generating devices include linear vibration modules (LVMs) and linear-resonant vibration modules (LRVMs). *Id.* at 4:13–19, code (57). LVMs and LRVMs “are linear in the sense that the vibrational forces are produced by a linear

oscillation of a weight or component within the LVM or LRVM.” *Id.* at 4:19–21.

Figure 4A follows:

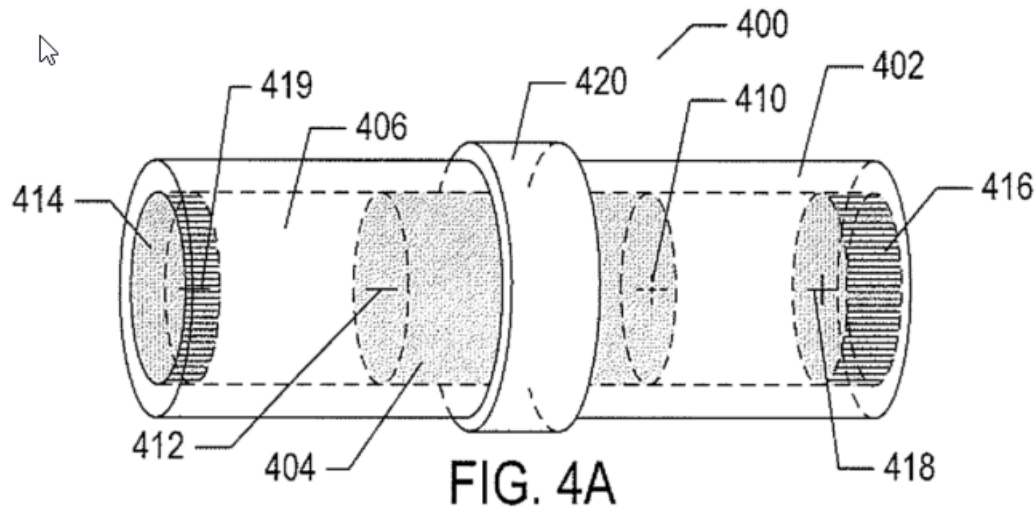


Figure 4A depicts LVRM 400, which includes cylindrical housing or tube 402 forming cylindrical chamber 406, disk-like magnets 414 (left) and 416 (right) with negative and positive polarity, respectively, and conductive coil 420 encircling tube 402. Ex. 1001, 4:44–5:4, Fig. 4A.

Disk-like magnets 414 and 416 repel magnet 404 when it moves to the extreme right or left according to a current supplied to coil 420 from a power source. Ex. 1001, 4:59–5:7. This current oscillates with an amplitude and frequency to create a changing magnetic field via coil 420, which in turn causes magnet 404 to change its direction and length of travel according to a user-specified amplitude and frequency of movement. *See id.* at 4:59–5:4, 6:13–39, Figs. 4B–4G.

Figure 6, a block diagram of the LRVM, follows:

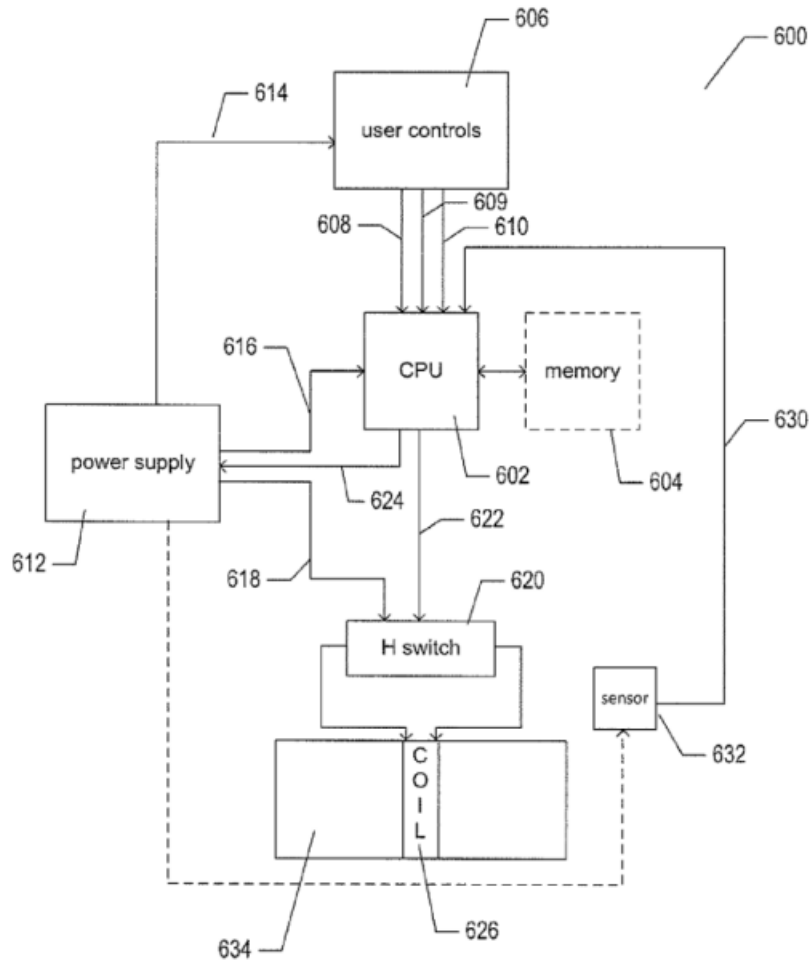


FIG. 6

Figure 6 illustrates LRVM 600, which includes the following: microprocessor (CPU) 602 executing a control program; memory chip 604 storing the control program; user controls 606 that may include “any of various dials, pushbuttons, switches, or other electromechanical-control devices,” such as “a dial to select a strength of vibration, which corresponds to the current applied to the coil,” “a switch to select one of various different operational modes,” and “a power button”; power supply 612; coil 626; magnet 634; H-bridge switch 620 that “receives a control-signal input” from

microprocessor (CPU) 602, which together control the direction and frequency of current supplied to coil 626. *See* Ex. 1001, 6:19–61, Fig. 6.

The H-bridge switch “change[s] the direction of current applied to the coil that drives linear oscillation within” the LRVM. Ex. 1001, 5:47–49; *see also id.* at Figs. 5A–5B. The H-bridge switch “is but one example of various different types of electrical and electromechanical switches that can be used to rapidly alternate the direction of current within the coil of an LRVM.” *Id.* at 5:62–65.

D.. Asserted Grounds of Unpatentability

Petitioner contends that claims 2 and 3 are unpatentable as follows:¹

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
2, 3	103(a)	Wakuda, ² Ramsay, ³
2, 3	103(a)	Wakuda, Ramsay, Rossi, ⁴ Aldrich ⁵
2	103(a)	Gregorio, ⁶ Ramsay, Wakuda
2, 3	103(a)	Gregorio, Ramsay, Tierling ⁷

¹ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. §§ 102, 103 effective March 16, 2013, which is after the ’337 patent’s effective filing date. *See* Ex. 1001, code (63). Therefore, the pre-AIA version of § 103 applies.

² Wakuda et al., US 7,005,811 B2, issued Feb. 28, 2006. Ex. 1005.

³ Ramsay et al., US 2008/0294984 A1, published Nov. 27, 2008. Ex. 1006.

⁴ Rossi et al., US 4,879,641, issued Nov. 7, 1989. Ex. 1020.

⁵ Aldrich et al, *Controller for Driving a Piezoelectric Actuator at Resonance*, NASA Tech Briefs, April 2008. Ex. 1021.

⁶ Gregorio et al., US 7,843,277 B2, issued Nov. 30, 2010. Ex. 1004.

⁷ Tierling et al., US 2005/0134561 A1, published June 23, 2005. Ex. 1008.

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
2	103(a)	Gregorio, Ramsay, Wakuda, Rossi, Aldrich
2, 3	103(a)	Gregorio, Ramsay, Tierling, Rossi, Aldrich

Pet. 2.

Petitioner filed a Declaration of Dr. Blake Hannaford (Ex. 1003) with its Petition,

II. ANALYSIS

A. Institution of Inter Partes Review

We instituted an *inter partes* review in the Apple IPR on all challenged claims and all asserted grounds of unpatentability. Apple IPR, Paper 10 (institution decision); *see also* Apple IPR, Paper 2 (the “Apple Petition”). Petitioner here challenges the same claims and asserts the same grounds of unpatentability as those on which we instituted the Apple IPR. *Compare* Pet. 2, *with* Apple Petition 1; *see also* Mot. 1 (asserting the instant “Petition is substantively identical to Apple Inc.’s petition (‘Apple Petition’) in the Apple IPR, including that it relies on the same expert declaration,” and asserting “the same grounds presented in the Apple IPR”). As indicated, Petitioner also relies on the same declarant as did the petition in the Apple IPR. Mot. 1; *compare* Ex. 1003 (Hannaford Declaration), *with* Apple IPR, Ex. 1003 (same).

Because the grounds of unpatentability in the instant Petition are identical to those in the Apple IPR and for the same reasons stated in our Decision to Institute in the Apple IPR, we institute *inter partes* review in this

proceeding on the grounds presented in the Petition. *See* Apple IPR, Paper 10 (analyzing challenges in the Apple Petition).

B. Motion for Joinder

Joinder in an *inter partes* review is subject to the provisions of 35 U.S.C. § 315(c):

(c) JOINDER.—If the Director institutes an inter partes review, the Director, in his or her discretion, may join as a party to that inter partes review any person who properly files a petition under section 311 that the Director, after receiving a preliminary response under section 313 or the expiration of the time for filing such a response, determines warrants the institution of an inter partes review under section 314.

To join Petitioner to the instituted Apple IPR, the Board first determines whether the Petition “warrants” institution under § 314, which we determined above. *See Facebook, Inc. v. Windy City Innovations, LLC*, 973 F.3d 1321, 1332 (Fed. Cir. 2020). The Board next determines whether to exercise “discretion to decide whether to ‘join as a party’ the joinder applicant,” who is the Petitioner in this proceeding. *Id.*

Petitioner did not timely file its Motion for Joinder per 37 C.F.R. § 42.122(b) (setting time as “no later than one month after the institution date of any *inter partes* review for which joinder is requested”). Rather, Petitioner filed the Motion on March 10, 2025, which was not within one month after the institution in the Apple IPR on October 15, 2024. *See* Mot.; Apple IPR, Paper 10; 37 C.F.R. § 42.122(b). However, Petitioner contends that “Resonant filed a suit against Nintendo Co., Ltd., in the Eastern District of Texas (‘the EDTX Action’) on January 31, 2025, more than three months after the Apple IPR was instituted.” Mot 4. That is, Petitioner explains it filed the Petition and Motion on March 10, 2025, “after the one-month date

on which the Apple IPR was instituted,” where “Patent Owner chose to sue Nintendo Co., Ltd., well after that one-month date.” *Id.* at 2.

Petitioner further explains as follows:

Patent Owner su[ed] the wrong Nintendo entity in . . . the EDTX Action . . . and despite the substantial case history and materials to review (e.g., related litigations materials, related IPRs, and prior art), Nintendo moved swiftly; it retained counsel, proactively agreed to waive service, and prepared and filed its petition and this joinder motion just 38 days after Patent Owner filed the EDTX Action.

Id. at 2.

Patent Owner did not file a timely opposition to the Motion (i.e., within one month after service of the Motion). *See* C.F.R. 37 § 42.25 (Default filing times). In any event, the panel granted the parties leave to file supplemental briefing to address joinder issues and the parties filed same. *See* Paper 8 (Panel Order); Paper 9 (Petitioner’s Supplemental Brief Supporting Joinder); Paper 12 (Patent Owner’s Reply to the Supplemental Brief). Patent Owner does not contest the circumstances and timing as outlined by Petitioner and summarized above. *See* Paper 12. On this record, notwithstanding Patent Owner’s arguments otherwise (Paper 12), Petitioner shows good cause to extend the date for filing the Motion where it filed it with the Petition promptly (38 days) after being sued in the EDTX Action. *See* 37 C.F.R. § 42.5(c)(3) (allowing the Board to excuse “[a] late action. . . on a showing of good cause or upon a Board decision that consideration on the merits would be in the interests of justice”).

In addition to the above-noted supplemental briefing, in the PTO’s bifurcated process addressing Patent Owner’s Request for Discretionary Denial of Institution (“Request,” Paper 10) and Petitioner’s Opposition

thereto (Paper 15), the Director denied Patent Owner's Request. Paper 18 (Director Discretionary Decision, "Decision"). In its Decision, the Director noted that "discretionary considerations are first reviewed for the Petition on its own, and then reviewed if joinder were to be granted," and found that "review of the facts *as if joinder were to be granted . . . counsels against discretionary denial.*" Decision 2 (emphasis added). The Director also referred "the Petition . . . to the Board to handle the case in the normal course, including by issuing a decision on institution addressing the merits and other nondiscretionary considerations, as appropriate." *Id.* at 2–3 ("This determination is based on the totality of the evidence and arguments the parties have presented.").

As moving party, Petitioner bears the burden of proving that it is entitled to the requested relief. 37 C.F.R. § 42.20(c). A motion for joinder should (1) set forth the reasons joinder is appropriate; (2) identify any new grounds of unpatentability asserted in the petition; and (3) explain what impact (if any) joinder would have on the trial schedule for the existing review. *See Kyocera Corp. v. SoftView, LLC*, IPR2013-00004, Paper 15 at 4 (PTAB Apr. 24, 2013).

We determine that Petitioner has met its burden of showing that joinder is appropriate because, as set forth above, the Petition (1) is substantially identical to the Apple Petition, (2) contains the same grounds based on the same evidence, and (3) relies on the same declaration, the Hannaford Declaration (Ex. 1003). Mot. 1, 4. Petitioner represents that "joinder will not negatively impact the Apple IPR trial schedule" and "expressly consents to the existing trial schedule." *Id.* at 10; *see also id.* at 7 ("Proceeding with a consolidated *inter partes* review

would avoid potential inconsistency, promote efficient review of the same claims for the same patent under the same grounds, and would result in a final written decision without delay.”). Petitioner also represents that as “long as Apple remains in the joined IPR, Nintendo remains in a limited ‘silent understudy’ role that does not actively participate in the IPR.” *Id.* at 8.

The record supports Petitioner. In addition, the final written decision in the Apple IPR is due to issue on or before October 15, 2025, with the Oral Hearing complete and no further briefing due. *See* IPR 2024-00807, Paper 15 (Oral Hearing Transcript); Paper 18, 2–3. Therefore, as Petitioner argues, joinder by Petitioner will have little or no impact on the trial schedule in the Apple IPR. On the other hand, if the Board denies joinder, Petitioner submits that it “intends to file a separate petition for IPR (‘Second Petition’) that includes grounds in addition to some (or all) of the grounds in the Apple IPR.” Mot. 14.

Petitioner represents that in its understudy role, it agrees that the following conditions will apply:

1. Nintendo will not be making any substantive filings, and Nintendo agrees that Apple alone will be responsible for all substantive petitioner filings in the joined proceeding;
2. Nintendo agrees to be bound by all filings by Apple in the joined proceeding, except for filings regarding termination and settlement;
3. Nintendo must obtain prior Board authorization to file any paper or to take any action on its own in the joined proceeding;
4. Nintendo shall not be permitted to raise any new grounds not already instituted by the Board in the Apple IPR, or

introduce any argument or discovery not already introduced by Apple;

5. Nintendo shall be bound by any agreement between Patent Owner and Apple concerning discovery and depositions;

6. Nintendo will not cross-examine or defend any witness at deposition;

7. Apple will be responsible for any oral hearing presentation, including the preparation of demonstrative exhibits.

Only if Apple ceases participation in the proceeding:

8. Nintendo would assume a primary role, meaning it would take over the role previously filled by Apple.

Mot. 11–12.

Petitioner further represents that Apple (currently the lead petitioner) does not oppose Petitioner’s Motion. Mot. 1.

We determine above that the Petition warrants the institution of an *inter partes* review. Under the circumstances outlined above, we agree with Petitioner that joinder is appropriate and will not unduly impact the ongoing trial in the Apple IPR. We limit Petitioner’s participation in the Apple IPR as follows: (1) the lead petitioner is responsible for all petitioner filings in the proceeding until such time that it is no longer an entity in the proceeding, and (2) Petitioner is bound by all filings by the lead petitioner in the proceeding, except for (a) filings regarding termination or settlement, and (b) filings where Petitioner receives permission to file an independent paper. Petitioner must obtain prior Board authorization to file any paper or take any action on its own in the proceeding, so long as the Apple remains as lead petitioner in the proceeding. In the event the Board terminates Apple as a

party in the Apple IPR, Petitioner shall take on an understudy role as Petitioner describes it and as summarized above. *See* Mot. 11–12.

This arrangement promotes the just and efficient administration of the ongoing trial in the Apple IPR, and protects the interests of Apple as original petitioner in IPR2024-00807 and of Patent Owner.

III. CONCLUSION

For the foregoing reasons, we institute *inter partes* review of the challenged claims of the '337 patent based on the grounds of unpatentability set forth in the Petition. We grant Petitioner's Motion for Joinder and join Petitioner as a party to IPR2024-00807, with the limitations set forth herein.

IV. ORDER

Accordingly, it is

ORDERED that pursuant to 35 U.S.C. § 314(a), an *inter partes* review is hereby instituted as to claims 2 and 3 of the '337 patent on all the grounds set forth in the Petition;

FURTHER ORDERED that, pursuant to 35 U.S.C. § 315(c) and 37 C.F.R. § 42.122, Petitioner's Motion for Joinder is granted, and Petitioner is joined as a petitioner in IPR2024-00807, subject to the above-described limitations on Petitioner's participation in that proceeding;

FURTHER ORDERED that the asserted grounds of unpatentability on which the Board instituted *inter partes* review in IPR2024-00807 are unchanged and remain the only instituted grounds;

FURTHER ORDERED that the Scheduling Order in IPR2024-00807, and any modifications thereto, shall govern the schedule of the proceeding;

FURTHER ORDERED that all further filings are to be made in IPR2024-00807;

FURTHER ORDERED that the case caption in IPR2024-00807 for all further submissions shall be modified to add Petitioner, Nintendo Co., Ltd., and Nintendo of America Inc. as a named Petitioner via footnote indicating the joinder of Petitioner as a party to that proceeding, as indicated in the attached sample case caption;⁸ and

FURTHER ORDERED that a copy of this Decision shall be entered into the record in IPR2023-00807.

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⁸ The parties shall modify the caption as appropriate in the event the Board terminates Apple Inc.

Sample Case Caption

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,⁹

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RESONANT SYSTEMS, INC.,

Patent Owner.

IPR2024-00807

Patent 8,860,337 B2

⁹ The Board joined Petitioner, Nintendo Co., Ltd., and Nintendo of America Inc. (collectively) as a (Petitioner) party to this proceeding.