

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NXP USA, INC.,
Petitioner,

v.

IMPINJ, INC.,
Patent Owner.

PGR2022-00005
Patent 10,929,734 B1

Before KEN B. BARRETT, ROBERT J. WEINSCHENK, and
KEVIN C. TROCK, *Administrative Patent Judges*.

BARRETT, *Administrative Patent Judge*.

DECISION
Denying Institution of Post-Grant Review
35 U.S.C. § 324

I. INTRODUCTION

A. *Background and Summary*

NXP USA, Inc. (“Petitioner”)¹ filed a Petition requesting a post-grant review of U.S. Patent No. 10,929,734 B1 (“the ’734 patent,” Ex. 1001). Paper 1 (“Pet.”). The Petition challenges the patentability of claims 1–20 of the ’734 patent. Impinj, Inc. (“Patent Owner”)² filed a Preliminary Response to the Petition. Paper 15 (“Prelim. Resp.”)³.

We have authority, acting on the designation of the Director, to determine whether to institute a post-grant review. *See* 35 U.S.C. § 324 (2018); 37 C.F.R. § 42.4(a) (2021) (“The Board institutes the trial on behalf of the Director.”). A post-grant review may not be instituted “unless . . . the information presented in the petition . . . , if such information is not rebutted, would demonstrate that it is more likely than not that at least 1 of the claims challenged in the petition is unpatentable.” 35 U.S.C. § 324(a). The Board, however, has discretion to deny a petition even when a petitioner meets that threshold. *Id.*; *see, e.g., Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”).

Based on the current record and for the reasons explained below, we exercise our discretion under 35 U.S.C. § 324(a) to deny institution of a post-grant review.

¹ Petitioner identifies NXP USA, Inc., NXP Semiconductors N.V., NXP B.V., and Freescale Semiconductor Holdings V, Inc. as real parties-in-interest. Pet. 120.

² Patent Owner identifies Impinj, Inc. as the real party-in-interest. Paper 5, 2.

³ We refer to the versions of the Petition and Preliminary Response filed under seal. Redacted, public versions also were filed. Papers 2, 14.

B. Related Proceedings

The parties identify, as a matter involving the '734 patent, *Impinj, Inc. v. NXP USA f/k/a NXP Semiconductors USA, Inc.*, No. 6:21-cv-00530 (W.D. Tex.). Pet. 120; Paper 5, 3. The parties also identify, as matters related to the '734 patent, *NXP USA Inc et al v. Impinj Inc.*, No. 2:20-cv-01503 (W.D. Wash.) and *Impinj, Inc. v. NXP USA, Inc.*, No. 4:19-cv-03161 (N.D. Cal.). Pet. 120–121; Paper 5, 2–3. Additionally, Patent Owner identifies, as related matters, several Patent Trial and Appeal Board cases, none of which involve the '734 patent. *See* Paper 5, 2–3.

C. The '734 Patent

The '734 patent is titled “RFID Tag Clock Frequency Reduction During Tuning,” and issued February 23, 2021, from U.S. Application No. 16/597,866, filed October 10, 2019.⁴ Ex. 1001, codes (21), (22), (45), (54).

The '734 patent pertains to Radio-Frequency Identification (RFID) tags, and more specifically to the clock frequency to be used during tuning for power purposes. *See id.* at 1:19–23, 2:17–20. “In principle, RFID techniques entail using an RFID reader to interrogate one or more RFID tags . . . [with t]he reader transmitting a Radio Frequency (RF) wave.” *Id.* at 1:28–31. Tags may be active (having its own power source such as a battery) or passive (lacking its own power source and being powered by the interrogating RF signal). *See id.* at 3:41–43, 3:60–62.

⁴ The earliest filing date of a related application identified in the '734 patent is August 8, 2014. Ex. 1001, codes (60), (63). Because the earliest possible effective filing date for the '734 patent is after March 16, 2013 (the effective date for the first inventor to file provisions of the America Invents Act) and the Petition was filed within nine months of its issue date, the '734 patent is eligible for post-grant review. *See* 35 U.S.C. § 321(c).

“An RFID tag may include a matching network coupled between the tag IC [(integrated circuit)] and the tag antenna and configured to match the input impedance of the tag IC to the impedance of the tag antenna.” *Id.* at 1:62–65. “Matching the tag IC input impedance to the tag antenna impedance may improve power transfer from RF signals incident on the antenna to the IC.” *Id.* at 1:65–67. According to the ’734 patent, a tuning circuit for impedance matching may be operable when the RF power level is lower than that needed to operate the rest of the integrated circuit. *See id.* at 10:18–20. This tuning may “allow[] the IC to extract enough power from the incident RF wave to operate.” *Id.* at 10:33–34.

The ’734 patent explains that:

Embodiments are directed to an RFID IC operating at a relatively low clock frequency while impedance matching to an antenna is being tuned to vary the amount of power that the IC can extract from an incident RF wave. A tuning circuit tunes the impedance matching by adjusting a variable impedance coupling the IC and the antenna. The IC may power-up with a low clock frequency or reduce its current clock frequency to a lower clock frequency prior to tuning or during the tuning process, and may increase its clock frequency upon completion of tuning or during the tuning process.

Id. at 2:17–27.

The ’734 patent further explains that:

In some embodiments, the IC may reduce its current clock frequency by adjusting an IC oscillator In other embodiments, the IC may include at least two oscillators, one of which provides a clock signal with relatively low (“reduced”) frequency and one of which provides a relatively-high-frequency clock signal, and may “reduce” its current clock frequency by using the relatively-low-frequency clock signal.

Id. at 17:36–47.

D. Illustrative Claim

Of the challenged claims of the '734 patent, claims 1, 8, and 15 are independent claims. Claim 1, reproduced below, is illustrative.

1. A Radio Frequency Identification (RFID) integrated circuit (IC) comprising:
 - an antenna port configured to be coupled to an antenna and a variable impedance;
 - a first oscillator configured to provide a first clock frequency;
 - a second oscillator configured to provide a second clock frequency; and
 - a tuning circuit coupled to and configured to tune the variable impedance, wherein the IC is configured to:
 - determine that tuning of the variable impedance is to occur;
 - select the first oscillator to use for the tuning;
 - extract a first power from an RF wave incident on the antenna insufficient for the IC to fully operate;
 - cause the tuning circuit to tune, using the first clock frequency from the first oscillator, the variable impedance to increase the power extracted from the RF wave; and
 - after the tuning circuit tunes the variable impedance:
 - extract a second power from the RF wave sufficient for the IC to fully operate;
 - select the second oscillator to use for IC operation;
 - and
 - operate using the second clock frequency from the second oscillator.

Ex. 1001, 20:55–21:13.

E. Evidence

Petitioner relies on the following references:

Reference	Exhibit No.
Impinj Monza R6 Tag Chip Datasheet, copyright 2017 (“R6 Datasheet”)	1009

Reference	Exhibit No.
Science Vision Circuit Analysis Report – Monza R6 Tag Chip (“R6 Circuit Report”)	1010
Magnus RFID Tag Chip Datasheet	1014
Magnus Tune Block Documentation	1015
Magnus Circuit Schematics	1016
Magnus Testing Documentation	1017
US 8,242,911 B2; Filed Feb. 26, 2009; Issued Aug. 14, 2012 (“Moore”)	1018
US 6,104,290; Filed Sept. 17, 1998; Issued Aug. 15, 2000 (“Naguleswaran”)	1019

Petitioner also relies on the declaration of Dr. Daniel van der Weide (Ex. 1003), the declaration of Mr. Martin Weinberger (Ex. 1006), and the declaration of Dr. Shahriar Rokhsaz (Ex. 1013) in support of its arguments. Patent Owner relies on the declaration of Dr. Joshua R. Smith (Ex. 2001) in support of its arguments. The parties also rely on other exhibits as discussed below.

F. Asserted Grounds of Unpatentability

Petitioner asserts that the challenged claims are unpatentable on the following grounds:

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 2, 4–7, 13, 20	103	Monza R6 ⁵

⁵ Petitioner, for the structure and operation of the Monza R6 RFID tag chip, relies on Monza R6 (Ex. 1009) and R6 Circuit Report (Ex. 1010). *See* Pet. 7.

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1, 2, 4–9, 11–16, 18–20	103	Magnus ⁶
1–20	103	Moore, Naguleswaran
3	103	Monza R6, Moore
3, 10, 17	103	Magnus, Moore

II. ANALYSIS

Discretionary Denial under 35 U.S.C. § 324(a)

Patent Owner argues that we should exercise our discretion to deny institution under 35 U.S.C. § 324(a). *See* Prelim. Resp. 41–52 (citing *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”); *Supercell Oy v. Gree, Inc.*, PGR2020-00039, Paper 14, 7 (PTAB Sept. 14, 2020) (applying *Fintiv* and *NHK Spring Co., Ltd. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 (PTAB Sept. 12, 2018) (precedential) (“*NHK*”) in the context of a post-grant review.)).

Petitioner does not address *Fintiv* or our discretion to deny institution under 35 U.S.C. § 324(a) in the Petition. *See* Pet. *passim*. We also note for the record that Petitioner did not request leave to file a reply brief to address Patent Owner’s *Fintiv* arguments in the Preliminary Response. *See* 37 C.F.R. § 42.208(c) (“A petitioner may seek leave to file a reply to the preliminary response in accordance with §§ 42.23 and 42.24(c).”).

In *Fintiv*, the Board discussed various factors that “relate to whether efficiency, fairness, and the merits support the exercise of authority to deny

⁶ Petitioner, for the structure and operation of the Magnus product, relies on Magnus RFID Tag Chip Datasheet (Ex. 1014), Tune Block Documentation (Ex. 1015), Magnus Circuit Schematics (Ex. 1016), and Magnus Testing Documentation (Ex. 1017). *See* Pet. 51.

institution.” *Fintiv*, Paper 11 at 6. The Board may exercise this discretion if instituting a post-grant review would lead to “inefficient use of Board resources.” *See NHK*, Paper 8 at 20.

We discuss the *Fintiv* factors below. We agree with Patent Owner that the circumstances of this case warrant denial of institution under § 324(a).

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

Patent Owner advises that “[t]here is no stay in the parallel litigation in the Western District of Texas litigation,” arguing that “there is no reason to believe that a stay will be granted.” Prelim. Resp. 45. Patent Owner asserts that “Petitioner has not even moved for a stay in the Texas case,” and argues that “there is no evidence that the Western District of Texas would enter a stay, even if review were instituted.” *Id.* at 45–46.

Petitioner does not contest Patent Owner’s position. *See Pet. passim.*

In this circumstance, where neither party has requested a stay from the district court, we view this factor as neutral.

B. Factor 2: Proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision

According to Patent Owner, “[t]he December 28, 2021 schedule in Western District of Texas case sets a trial date for February 21, 2023, almost three months before the projected statutory deadline [for a final written decision in this post-grant review].” Prelim. Resp. 47 (citing Ex. 2003; Ex. 2004, 5). Patent Owner continues:

Although the precise trial date could move based on the Court’s recent direction at the *Markman* hearing, during which the Court directed the parties to break the asserted patents into three trial groupings and to propose a schedule with case events,

including discovery, to be completed for all asserted patents prior to the first trial. Even though the parties have not yet agreed to a prioritization of which patents will be asserted in which of the three trials or to a specific schedule in light of the Court's recent direction, the current schedule (*see* Ex. 2003 and Ex. 2004) projects a trial date well before the Board's projected deadline. A rescheduled trial, at least the first of them, may occur prior to the projected deadline.

Id. at 47. Patent Owner further argues that “[r]egardless of the precise trial date of the ’734 Patent, the parties will very likely have completed everything up to trial before the projected statutory deadline.” *Id.* at 48 (citing Ex. 2004, 3–5).

Petitioner does not address the issue of the trial date. *See* Pet. *passim*.

The projected statutory deadline for the Board to issue a final written decision in this proceeding, if institution were granted, would be May 2023, over two months after the currently scheduled trial date.

“We generally take courts’ trial schedules at face value absent some strong evidence to the contrary.” *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15, 13 (PTAB May 13, 2020) (informative) (“*Fintiv II*”). “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.” *Fintiv*, Paper 11 at 9. Because the currently scheduled trial in the parallel proceeding is scheduled to begin over two months before our deadline to reach a final decision, this factor weighs somewhat in favor of discretionary denial. *See Fintiv II*, Paper 15 at 13.

C. Factor 3: Investment in the parallel proceeding by the court and the parties

Patent Owner asserts that, “by the time that an institution decision is due in this proceeding, in May 2022, the parallel proceedings will have

advanced significantly,” noting that the parties “have already completed the *Markman* process, and the Court has issued its claim construction order . . . [and the parties] will also have served final contentions and will be significantly into fact discovery period.” Prelim. Resp. 48–49 (citing Ex. 2004, 2–3). Patent Owner argues that “the parties already have expended significant effort in the parallel proceeding, and will have expended significantly more time, effort and money in the parallel proceeding by the time of the Board’s decision regarding institution.” *Id.* at 49.

Petitioner does not address the issue of the parties’ investment in the parallel proceeding, nor the issue of Petitioner’s timeliness in filing the petition. *See Pet. passim.*

Here, the record supports Patent Owner’s position. A *Markman* hearing was scheduled for February 10, 2022 (Ex. 2005), and the district court issued a claim construction order that same day. *See Ex. 3001.* The district court’s scheduling order also indicates that the parties were to serve final infringement and invalidity contentions by March 29, 2022. Ex. 2004, 3.

We recognize that work still remains in this case as it relates to invalidity: fact discovery is ongoing, expert reports are not yet due, and substantive motion practice is yet to come. *See Ex. 2004.* Although the parties and the district court have invested some effort in the parallel proceeding to date, further effort remains to be expended before trial. Based on the level of investment and effort already expended on claim construction and invalidity contentions in the parallel proceeding, this factor weighs somewhat in favor of discretionary denial. *See Fintiv II*, Paper 15 at 13–14.

D. Factor 4: Overlap between issues raised in the petition and in the parallel proceeding

Patent Owner asserts that “Petitioner challenges all claims of the ’734 Patent . . . asserted . . . in the Western District of Texas litigation.” Prelim. Resp. 49. Patent Owner also notes that “the Petitioner asserts the same prior art in the Western District of Texas parallel litigation that it asserts here.” *Id.* Patent Owner concedes, however, that “the Petition here challenges additional claims (*e.g.*, claims 2, 7, 9, 14, and 16) than the ones that are directly implicated in the parallel litigation.” *Id.* at 50. Patent Owner argues that

The same claims at issue in the Texas case are challenged here and there is further significant overlap in subject matter because claims 8 and 15 are the only other independent claims and, just like claim 1, both recite an RFID circuit that uses two clock frequencies, one during tuning and another during operation, and the dependent claims merely add minor limitations. Petitioner also asserts the same prior art in the parallel case. This is certainly a case where it would be inefficient for the parties to proceed in parallel forums.

Id. at 51.

Petitioner does not address the issue of overlap of the issues. *See Pet. passim.* Notably, Petitioner does not offer a stipulation, such as the one considered in *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020) (precedential) (instituting review where Petitioner offered a stipulation that it would not pursue in the district court litigation any ground raised or that could have been reasonably raised in an IPR), or *Sand Revolution II, LLC v. Continental Intermodal Group – Trucking LLC*, IPR2019-01393, Paper 24 (PTAB June 16, 2020) (informative) (instituting review where Petitioner offered a stipulation that it would not pursue the same grounds in the district court litigation).

This factor evaluates “concerns of inefficiency and the possibility of conflicting decisions” when substantially identical prior art is submitted in both the district court and the post-grant review proceedings. *See Fintiv*, Paper 11 at 12. Because the Petition challenges all of the ’734 patent claims asserted in the parallel proceeding, and also asserts the same prior art in both proceedings, this factor weighs in favor of discretionary denial. *See Fintiv II*, Paper 15 at 15.

E. Factor 5: Whether the petitioner and the defendant in the parallel proceeding are the same party

Patent Owner asserts that “[t]he parties are the same in both this proceeding and the Western District of Texas case, weighing in favor of discretionary denial.” Prelim. Resp. 51 (citing *Supercell Oy v. Gree, Inc.*, PGR2020-00039, Paper 14 at 18).

Petitioner does not dispute this assertion. *See Pet. passim*.

Because the petitioner and the defendant in the parallel proceeding are the same party, this factor weighs in favor of discretionary denial. *See Fintiv II*, Paper 15 at 15.

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

We need not decide whether the merits of Petitioner’s asserted grounds are particularly strong because it would not impact our ultimate determination under § 324(a). Thus, we determine that the sixth *Fintiv* factor is neutral.

G. Conclusion Regarding the Factors

We consider “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Fintiv*, Paper 11 at 6. In our view, the facts weighing in favor of exercising discretion to

deny institution collectively outweigh those weighing against exercising discretion. For these reasons, we exercise our discretion under 35 U.S.C. § 324(a) to deny a post-grant review of the '734 patent.

III. CONCLUSION

For the foregoing reasons, we exercise our discretion to deny institution of a post-grant review under 35 U.S.C. § 324(a).

IV. ORDER

In consideration of the foregoing, it is
ORDERED that the Petition is *denied* and no post-grant review is instituted.

PETITIONER:

Matthew W. Johnson
Joshua R. Nightingale
Thomas W. Ritchie
Gurneet Singh
David B. Cochran
JONES DAY
mwjohnson@jonesday.com
jrnightingale@jonesday.com
twritchie@jonesday.com
gsingh@jonesday.com
dcochran@jonesday.com

PATENT OWNER:

Daniel Keese
Ruben Kendrick
Brianna Kadjo
PERKINS COIE LLP
Keese-ptab@perkinscoie.com
Kendrick-ptab@perkinscoie.com
Kadjo-ptab@perkinscoie.co