

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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GOOGLE LLC,  
Petitioner,

v.

ECOFACOR, INC.,  
Patent Owner.

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IPR2021-01578  
Patent 8,886,488 B2

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Before WESLEY B. DERRICK, JEFFREY W. ABRAHAM and  
SCOTT B. HOWARD, *Administrative Patent Judges*.

HOWARD, *Administrative Patent Judge*.

DECISION  
Denying Institution of *Inter Partes* Review  
35 U.S.C. § 314

## INTRODUCTION

### *A. Background and Summary*

Google LLC (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting *inter partes* review of claims 1–15 of U.S. Patent No. 8,886,488 B2 (Ex. 1001, “the ’488 patent”). EcoFactor Inc. (“Patent Owner”) filed a Preliminary Response to the Petition (Paper 6, “Prelim. Resp.”).

We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2021). The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted “unless the Director determines . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” Section 314(a) does not require the Director to institute an *inter partes* review. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”). Rather, a decision whether to institute is within the Director’s discretion, and that discretion has been delegated to the Board. *See* 37 C.F.R. § 42.4(a); *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.”).

For the reasons explained below, in the exercise of the Director’s discretion, *inter partes* review is not instituted.

### *B. Real Parties in Interest*

The parties identify themselves as the real parties in interest. Pet. 7; Paper 3, 1 (Patent Owner’s Mandatory Notices).

*C. Related Matters*

The parties identify a number of proceedings in which the '488 patent is asserted, including *In re Certain Smart Thermostat Systems, Smart HVAC Systems, Smart HVAC Control Systems, and Components Thereof*, Inv. No. 337-TA-1258 (USITC) (“the ITC proceeding”) and five stayed district court proceedings. Pet. 7–8; Paper 3, 2.

*D. The '488 Patent*

The '488 patent is entitled “System and Method for Calculating the Thermal Mass of a Building” and is directed to “thermostats [that] are combined with a computer network to calculate the thermal mass of a structure.” Ex. 1001, code (54), 1:21–24. The thermal mass of the building is calculated using the following procedure:

The climate control system obtains temperature measurements from at least a first location conditioned by the climate system. One or more processors receive measurements of outside temperatures from at least one source other than the control system and compare the temperature measurements from the first location with expected temperature measurements. The expected temperature measurements are based at least in part upon past temperature measurements obtained by said HVAC control system and said outside temperature measurements. The processors then calculate one or more rates of change in temperature at said first location.

*Id.* at code (57).

*E. Illustrative Claims*

Petitioner challenges claims 1–15 of the '488 patent. Claims 1 and 9 are independent claims. Claim 1 is illustrative and reproduced below:

1. A system for calculating a value for the operational efficiency of a heating, ventilation and air conditioning (HVAC) system comprising:

at least one HVAC control system that receives inside temperature measurements from at least a first location conditioned by at least one HVAC system;

one or more databases that store at least said temperatures measured at said first location over time;

one or more processors comprising computer hardware that is configured to receive outside temperature measurements from at least one source other than said HVAC system, wherein said one or more processors are configured to calculate one or more predicted rates of change in said inside temperature measurements at said first location based on the status of the HVAC system and to relate said one or more predicted rates of change to said outside temperature measurements; and

said one or more processors further configured to compare at least one predicted temperature based on the one or more predicted rates of change, with an actual inside temperature measurement.

Ex. 1001, 13:31–51.

*F. Prior Art and Asserted Grounds*

Petitioner asserts that claims 1–15 would have been unpatentable based on the following grounds:

<b>Claim(s) Challenged</b>	<b>35 U.S.C. §<sup>1</sup></b>	<b>Reference(s)/Basis</b>
1, 5–9, 13–15	102(b)	Shah '927 <sup>2</sup>
1, 5–9, 13–15	103(a)	Shah '927, Shah '233 <sup>3</sup>
2, 3, 10, 11	103(a)	Shah '927, Rosen <sup>4</sup>

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<sup>1</sup> The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. §§ 102, 103 that became effective on March 16, 2013. Because the application that lead to the issuance of the '488 patent was filed on March 1, 2012, we apply the pre-AIA version. *See* Ex. 1001, code (21), (22).

<sup>2</sup> US 5,555,927, issued Sept. 17, 1996 (Ex. 1004).

<sup>3</sup> US 6,478,233 B1, issued Nov. 12, 2002 (Ex. 1006).

<sup>4</sup> US 6,789,739 B2, issued Sept. 14, 2004 (Ex. 1010).

<b>Claim(s) Challenged</b>	<b>35 U.S.C. §<sup>1</sup></b>	<b>Reference(s)/Basis</b>
2, 3, 10, 11	103(a)	Shah '927, Shah '233, Rosen
4, 12	103(a)	Shah '927, Ehlers <sup>5</sup>
4, 12	103(a)	Shah '927, Shah '233, Ehlers

Petitioner also relies on a declaration from Rajendra Shah (Ex. 1002, “the Shah Declaration”).

### ANALYSIS

Patent Owner argues that we should exercise discretion under 35 U.S.C. § 314 and deny institution because the '488 patent is the subject of a pending ITC proceeding that is at an advanced stage and involves the same parties, overlapping claims, and the same prior art. Prelim. Resp. 2–6 (citing *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) (“Fintiv”)). Petitioner argues that “validity determinations made by the ITC are not binding outside of the ITC,” the ITC proceeding only addresses a subset of claims presented in the Petition, and that “EcoFactor cannot credibly assert that it might be ‘difficult to maintain a district court proceeding’ after an adverse ITC judgment, because EcoFactor is doing exactly that with respect to related patents.” Pet. 80–81.

#### *A. Parallel ITC Investigation*

As noted above, an ITC investigation involving the '488 patent, Patent Owner, and Petitioner (as well as other Respondents) is currently pending. Patent Owner filed a complaint in the ITC alleging infringement of the '488 patent by Petitioner on February 25, 2021, and the ITC instituted the investigation on March 20, 2021. Prelim. Resp. 4–5. An evidentiary hearing in the ITC was held on December 13–17, 2021, and post-trial briefing was completed on January 28, 2022. *Id.* at 5. The “target date” for

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<sup>5</sup> US 2004/0117330 A1, published June 17, 2004 (Ex. 1008).

completion of the final determination by the ITC Commission is set for August 2, 2022. *Id.* Claims 1 and 2 of the '488 patent are at issue in the ITC investigation. Prelim. Resp. 11; Paper 8, 1 (Joint Statement Regarding Invalidity Theories in 337-TA-1258).

*B. Analysis*

In determining whether to exercise discretion on behalf of the Director, we are guided by the Board's precedential decision in *NHK Spring Co. v. Intri-Plex Techs, Inc.*, IPR2018-00752, Paper 8 (PTAB Sept. 12, 2018) (precedential). In *NHK*, the Board found that the "advanced state of the district court proceeding" was a "factor that weighs in favor of denying" the petition under § 314(a). *NHK*, Paper 8 at 20. The Board determined that "[i]nstitution of an inter partes review under these circumstances would not be consistent with 'an objective of the AIA . . . to provide an effective and efficient alternative to district court litigation.'" *Id.* (citing *Gen. Plastic Indus. Co., Ltd. v. Canon Kabushuki Kaisha*, IPR2016-01357, Paper 19, 16–17 (PTAB Sept. 6, 2017) (precedential in relevant part)). The Board's precedential decision in *Fintiv* sets forth six factors that we consider when determining whether to use our discretion to deny institution due to the advanced state of a parallel proceeding:

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.

*Fintiv*, Paper 11 at 6. “These factors relate to whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of an earlier trial date in the parallel proceeding.” *Id.* In evaluating these factors, we take “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.” *Id.* (citing Patent Trial and Appeal Board Consolidated Trial Practice Guide 58 (November 2019), <https://www.uspto.gov/TrialPracticeGuideConsolidated>). We discuss the parties' arguments in the context of considering the above factors.

*C. Factor 1: Whether a Stay Exists or Is Likely to Be Granted if a Proceeding Is Instituted*

Patent Owner argues that because the ITC has not granted a stay and “it is extremely unlikely that an ITC case will be stayed pending IPR,” this factor weighs against institution. Prelim. Resp. 6–7. Patent Owner notes that the respondents in the ITC investigation (including Petitioner) have neither requested a stay nor given any indication that they would request a stay in the ITC investigation. Prelim. Resp. 7.

Patent Owner further argues that “the fact that the parallel district court case [against Petitioner] is stayed in the context of concurrent ITC litigation is unremarkable” and that “*Fintiv* suggests that the PTAB should deny institution when district court cases are stayed in light of an ITC investigation” because “instituting this IPR will not promote efficiency by causing any currently pending cases to be stayed.” Prelim. Resp. 7–8.

Petitioner argues that because the district court proceedings have been stayed, this factor weighs against exercising discretion in this case. Pet. 80.

We disagree with Petitioner that the status of the district court proceedings is the sole appropriate benchmark to consider for purposes of analyzing the *Fintiv* factors in this case, such that the ITC investigation can, in effect, be ignored. As noted by Patent Owner, *Fintiv* expressly addresses ITC investigations and the Board has considered ITC investigations in weighing whether to exercise its discretion under 35 U.S.C. § 314. *Fintiv*, Paper 11 at 8 (“[E]ven though the Office and the district court would not be bound by the ITC’s decision, an earlier ITC trial date may favor exercising authority to deny institution under *NHK* if the ITC is going to decide the same or substantially similar issues to those presented in the petition.”); *Google LLC v. EcoFactor Inc.*, IPR2020-00946, Paper 11 (PTAB Nov. 18, 2020); *Garmin International, Inc. v. Koninklijke Philips N.V.*, IPR2020-00754, Paper 11 (PTAB Oct. 27, 2020); *Comcast Cable Communications, LLC v. Rovi Guides, Inc.*, IPR2020-00800, Paper 10 (PTAB Oct. 22, 2020). Accordingly, for all of the *Fintiv* factors, we focus exclusively on the ITC investigation.<sup>6</sup>

With regard to Factor 1, there is no evidence that Petitioner has requested a stay of the ITC investigation, and we agree with Patent Owner that a stay of the ITC investigation is unlikely given that post-trial briefing is completed. Accordingly, this factor weighs in favor of not instituting this proceeding.

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<sup>6</sup> Petitioner relies exclusively on the stayed district court proceedings in arguing that Factors 1–4 weight against denying institution.

*D. Factor 2: Proximity of the Court’s Trial Date to the Board’s Projected Statutory Deadline*

Patent Owner argues this factor weighs strongly against institution based on the December 2021 hearing and the August 2, 2022 “target date” in the ITC. Prelim. Resp. 8.

Because the hearing has already taken place and the “target date” is set to pre-date the Board’s final written decision by more than half a year, this factor weighs in favor of not instituting this proceeding.

*E. Factor 3: Investment in the Parallel Proceeding by the Court and Parties*

Patent Owner argues that the parties have already invested, and will continue to invest, an enormous amount of effort and resources in the ITC proceeding. Prelim. Resp. 9–10. Specifically, Patent Owner argues that “[t]he parties in the [ITC proceeding] have concluded the evidentiary hearing and final post-trial briefing will be completed on January 28, 2022.” *Id.* at 9 (citing Ex. 2001).

There is no dispute that the parties and the ITC have invested heavily in the ITC investigation and Patent Owner has provided evidence of the specific resources the parties have expended therein. Accordingly, this factor weighs in favor of not instituting this proceeding.

*F. Factor 4: Overlap Between Issues Raised in the Petition and in the Parallel Proceeding*

Patent Owner argues that this factor weighs against institution because of overlapping claims, prior art, and invalidity theories in the ITC investigation and the Petition. Prelim. Resp. 10–12. Specifically, Patent Owner argues that Petitioner and the other respondents “asserted many of the same prior art and invalidity theories in the [ITC proceeding], where its expert witness testified at the evidentiary hearing that Shah ’927, Shah ’233,

and Rosen invalidate claims 1 and 2 of the ‘488 patent.” *Id.* at 11. (citing Ex. 2002 (transcript of hearing in ITC proceeding)); *see also* Paper 8, 1 (identifying Shah ’233 and Rosen as references used in the ITC proceeding).

Petitioner argues that the ITC proceeding only involves a subset of the claims challenged in the Petition. Pet. 80. Specifically, only claims 1 and 2 were asserted during ITC evidentiary hearing. *Id.*; Paper 8, 1. Petitioner also notes that there is not an exact overlap between the prior art used to challenge the claims in this proceeding and the ITC proceeding. *Id.*

Because the ITC proceeding involves only claims 1 and 2 of the ’488 patent, whereas Petitioner’s challenges in this proceeding involve claims 1–15, resolution of the ITC proceeding will not directly resolve the parties’ dispute concerning patentability of claims 3–15 of the ’488 patent. Our review of dependent claims 3–15 indicates that these claims address limitations not present in the ITC proceeding. *See* Ex. 1001, 13:55–56 and 14:39–42 (claims 3 and 11 requiring use of the internet), 14:1–3 and 14:43–45 (claims 4 and 12 requiring the use of an electricity meter), 14:4–7, 46–48 (claims 5 and 13 requiring the use of a programable thermostat), 14:8–10 (claim 6 requiring that inside temperature measurements occur only at one physical location), 4:11–14, 4:49–52 (claims 7 and 14 requiring the predicted rates of change to be the predicted speed with which an internal temperate changes based on changes in the outside temperature), 4:15–18, 4:53–55 (claims 8 and 15 requiring that the processors calculate the predicted rate of change for a given time on a given day). This weighs in favor of institution. We also find that the challenges to claims 1 and 2 in this proceeding rely, in part, on different prior art combinations than those used in the ITC proceeding. Paper 8, 1.

On balance, based on the fact that the Petition is directed to some substantively different claims than those before the ITC, we determine this factor weighs slightly in favor of institution.

*G. Factor 5: Whether the Petitioner and the Defendant in the Parallel Proceeding Are the Same Party*

The parties in the ITC proceeding and this proceeding are the same. Petitioner does not dispute this fact. Accordingly, this factor weighs somewhat in favor of denying institution. *Fintiv*, Paper 11 at 6.

*H. Factor 6: Other Circumstances that Impact the Board's Exercise of Discretion, Including the Merits*

Patent Owner argues that “there are no other circumstance[s] that favors institution.” Prelim. Resp. 12.

Petitioner directs our attention to Patent Owner continuing to assert patents in a district court proceeding after the ITC found claims of those patents invalid. Pet. 80–81 (citing Ex. 1019; Ex. 1026). Therefore, according to Petitioner, “[Patent Owner] cannot credibly assert that it might be ‘difficult to maintain a district court proceeding’ after an adverse ITC judgment, because [Patent Owner] is doing exactly that with respect to related patents.” *Id.* at 81.

We do not find Petitioner’s argument persuasive. First, we note the statement in *Fintiv* that “as a practical matter, it is difficult to maintain a district court proceeding on patent claims determined to be invalid at the ITC.” *Fintiv*, Paper 11 at 9.<sup>7</sup> Second, Petitioner’s argument fails to account

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<sup>7</sup> To the extent Petitioner believes that *Fintiv* is incorrect in its consideration of ITC proceedings, Petitioner may wish to file a request for review by the Precedential Opinion Panel. See PTAB Standard Operating Procedure 2, 5–6 (Rev. 10), available at <https://www.uspto.gov/sites/default/files/documents/SOP2%20R10%20FINAL.pdf>.

for the difference between bringing an action and successfully maintaining an action following an ITC determination. The mere fact that Patent Owner has brought a patent infringement suit following an adverse determination at the ITC does not mean that it will be successfully maintained.

Accordingly, we find this factor neutral.

*I. Balancing the Factors*

We have considered the circumstances and facts before us in view of the *Fintiv* factors. Our analysis is fact driven and no single factor is determinative of whether we exercise our discretion to deny institution under § 314(a). Based on the arguments and evidence of record, and in the exercise of the Director's discretion under 35 U.S.C. § 314(a), *inter partes* review is not instituted.

ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, the Petition is *denied*, and no trial is instituted.

IPR2021-01578  
Patent 8,886,488 B2

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