Trials@uspto.gov
571-272-7822

Paper 14
Date: October 19, 2020

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FITBIT, INC.,
GARMIN INTERNATIONAL, INC., GARMIN USA, INC., AND GARMIN LTD.,
Petitioner,

v.

KONINKLIJKE PHILIPS N.V.,
Patent Owner.

IPR2020-00771
Patent 9,820,698 B2

Before PATRICK R. SCANLON, FRANCES L. IPPOLITO, and JAMES J. MAYBERRY, *Administrative Patent Judges.*

MAYBERRY, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background and Summary

Fitbit, Inc., Garmin International, Inc., Garmin USA, Inc., and Garmin Ltd. (collectively, "Petitioner"), filed a Petition ("Pet.") requesting *inter partes* review of claims 1 and 6 (the "Challenged Claims") of U.S. Patent

No. 9,820,698 B2 (Ex. 1001, the "'698 patent"). Paper 1. Patent Owner, Koninklijke Philips N.V., filed a Preliminary Response ("Prelim. Resp.") to the Petition. Paper 8. After receiving our authorization to do so (*see* Paper 9), Petitioner filed a Preliminary Reply (Paper 10, "Prelim. Reply") to the Preliminary Response to address issues related to our discretion under 35 U.S.C. § 314(a) and Patent Owner filed a Preliminary Sur-reply (Paper 12, "Prelim. Sur-reply") to the Preliminary Reply.

We have authority under 35 U.S.C. § 314 to determine whether to institute review. *See also* 37 C.F.R. § 42.4(a) (permitting the Board to institute trial on behalf of the Director). To institute an *inter partes* review, we must determine that the information presented in the Petition shows "a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314(a). For the reasons set forth below, upon considering the Petition, Preliminary Response, Preliminary Reply, Preliminary Sur-reply, and evidence of record, we exercise our discretion under 35 U.S.C. § 314(a) to deny institution.

B. Real Parties in Interest

Petitioner identifies Fitbit, Inc., Garmin International, Inc., Garmin USA, Inc., and Garmin Ltd. as the real parties-in-interest. Pet. 1. Patent Owner identifies itself as the sole real party-in-interest. Paper 6, 1.

C. Related Matters

The parties identify *Certain Wearable Monitoring Devices, Systems, and Components Thereof*, Inv. No. 337- TA-1190 (ITC), as a matter related to the '698 patent before the International Trade Commission ("ITC"). Pet. 1; Paper 6, 1. The parties identify U.S. Patent Nos. 7,845,228, 9,961,186, and 9,717,464, as also involved in the ITC proceeding. Pet. 1; Paper 6, 1.

Petitioner indicates that it is filing an *inter partes* review petition challenging U.S. Patent No. 7,845,228 and that Petitioner Fitbit, Inc. is filing an additional *inter partes* review petition challenging U.S. Patent No. 9,717,464. Pet. 1–2; *see also* Paper 6, 1–2 (identifying IPR2020-00754, challenging U.S. Patent No. 7,845,228, and IPR2020-00773 and IPR2020-00774, challenging U.S. Patent No. 9,717,464). Petitioner filed a parallel petition challenging the Challenged Claims of the '698 patent. Paper 6, 1 (identifying IPR2020-00772).

Patent Owner identifies *Fitbit, Inc. v. Koninklijke Philips N.V.*, No. 4:20-cv-02246-DMR, filed in the District Court for the Northern District of California, as involving the '698 patent, as well as U.S. Patent Nos. 7,845,228 and 9,717,464. Paper 6, 1. This case is a declaratory judgment action that does not seek a declaration of invalidity of the '698 patent "and is in the process of being transferred to a different forum."[1] Paper 10, 2; Ex. 2004. This case does not involve Garmin International, Inc., Garmin USA, Inc., or Garmin Ltd. Paper 10, 2.

[1] This declaratory judgment action was transferred to the U.S. District Court for the District of Massachusetts. In lieu of responding to the complaint, Patent Owner filed a motion to stay this case pending the ITC proceeding. Ex. 3001. Petitioner Fitbit filed a response to the motion to stay agreeing to a stay for a few weeks pending decisions that are expected in October 2020 at the ITC and decisions that are expected from the Board on this Petition and the related petitions identified above. Ex. 3002. Patent Owner filed a reply to the response, arguing that "the [c]ourt should grant [Patent Owner]'s request to stay this case until the ITC proceedings have fully played out," given recent events at the ITC. Ex. 3003, 2. These recent events include a summary determination that Fitbit does not infringe the '698 patent, a determination that "will be appealed by" Patent Owner. *Id.*

D. The '698 Patent

The '698 patent, titled "Actigraphy Methods and Apparatuses," issued November 21, 2017, from an application filed November 6, 2015, and claims priority to provisional patent applications filed November 7, 2014, and January 9, 2015. Ex. 1001, codes (54), (45), (22), (60).[2] The '698 patent "relates generally to the medical monitoring arts, actigraphy arts, sleep assessment arts, and related arts." *Id.* at 1:4–5. "Actigraphy is a relatively unobtrusive method of monitoring human rest/activity/sleep cycles." *Id.* at 1:6–7. We reproduce Figure 1 from the '698 patent below.

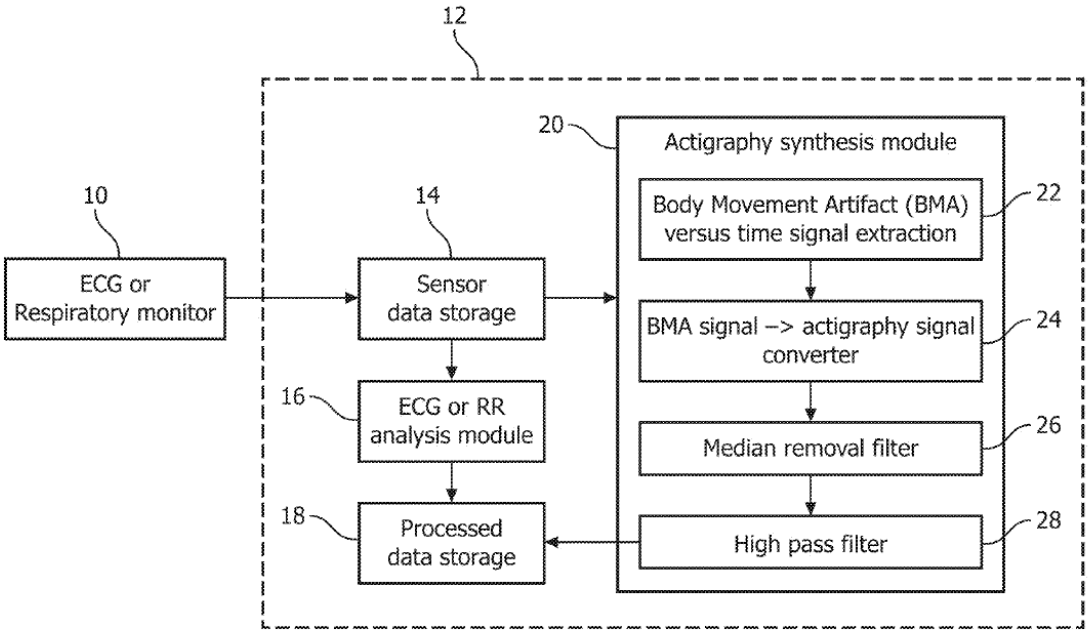


FIG. 1

Figure 1 "diagrammatically illustrates an ambulatory subject monitoring system including an actigraphy synthesis module." Ex. 1001,

[2] Because the '698 patent has an effective filing date after March 16, 2013, the patentability of its claims is governed by the America Invents Act (AIA).

2:10–12. Electronic data processing device 12 receives data from physiological sensor 10. *Id.* at 3:8–12. These data are stored in sensor storage 14 and, optionally, further processed at post-acquisition data processing 16, "i.e. digital signal processing, 'DSP.'" *Id.* at 3:12–16. This post-acquisition data processing may include "computing ECG lead signals from electrode voltages, computing heart rate (HR) from ECG data, computing respiratory rate (RR) from respiratory sensor data." *Id.* at 3:17–19. These processed data are stored in processed data storage 18. *Id.* at 3:20–21. Electronic data processing device 12 is, "for example, a microprocessor, microcontroller, or the like." *Id.* at 3:8–10.

"[E]lectronic data processing device 12 is further programmed . . . [with] software or firmware to implement an actigraphy synthesis module 20." Ex. 1001, 3:29–31. Module 20 extracts Body Movement Artifact (BMA) versus time signals from the processed data stored in processed data storage 18 (process 22) and generates an actigraphy sensor signal from the BMA versus time signal (process 24). *Id.* at 3:31–35.

A BMA is an artifact in a physiological signal that results from body movements, that is, movement other than what the physiological sensor is measuring. Ex. 1001, 4:4–11. A BMA "in a physiological signal typically ha[s] different time and frequency characteristics than the expressions of physiological processes measured by . . . sensors 10 . . . [and] these characteristics can be exploited to distinguish artifacts from the physiological signal being measured in process 22." *Id.* at 4:47–52.

We reproduce Figure 13 from the '698 patent below.

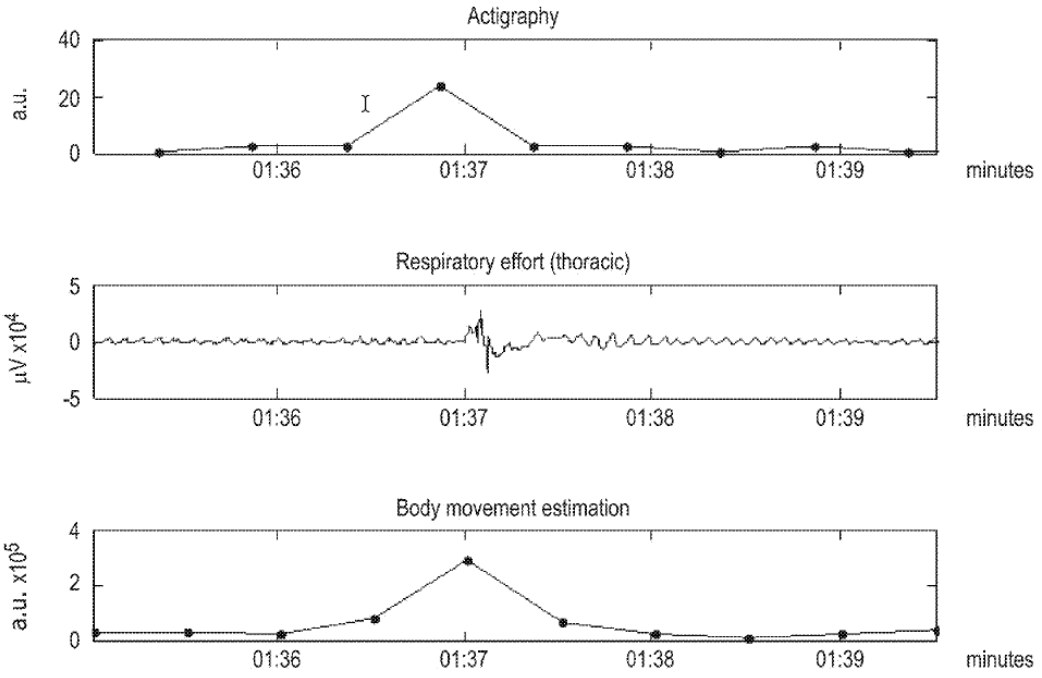


FIG. 13

Figure 13 depicts "an example of an accelerometer-based actigraphy signal (top plot), respiratory effort signal with a BMA (middle plot) and body movement estimation obtained with the Maximum [continuous wavelet transform] coefficients for each epoch (bottom plot)." Ex. 1001, 2:44–48. In this example, the body movement estimation (BME) is the actigraphy sensor signal generated by module 20. *See id.* at 9:35–40 ("Apart from some low-amplitude noise, the BME is seen in these illustrative examples to correlate well with the reference accelerometer-based actigraphy signal, not only in terms of the temporal location of activity peaks, but also in terms of their amplitude which indicates the intensity and duration of body movements."); *see generally id.* at 8:58–9:52 (describing approaches for calculating a BME).

E. Illustrative Claims

Petitioner challenges independent claim 1 and dependent claim 6 of the '698 patent, both of which we reproduce below.

> 1. A physiological monitoring device comprising:
>
> a sensor configured to generate a non-body motion physiological parameter signal as a function of time for a physiological parameter other than velocity, displacement, and acceleration; and
>
> an electronic digital signal processing (DSP) device configured to perform operations including:
>
> computing a body motion artifact (BMA) signal as a function of time from the non-body motion physiological parameter signal, and
>
> computing an actigraphy signal as a function of time from the BMA signal.
>
> 6. The physiological monitoring device of claim 1 wherein computing a BMA signal as a function of time from the non-body motion physiological parameter signal comprises computing a local signal variance signal from the non-body motion physiological parameter signal.

Ex. 1001, 11:21–32, 48–52.

F. Prior Art and Asserted Grounds

Petitioner asserts that the Challenged Claims are unpatentable based on two grounds:

Claims Challenged	35 U.S.C. §	References/Basis
1, 6	103	Todros,[3] Belalcazar[4]
1, 6	102	Todros

[3] Todros et al., WO 2006/054306 A2, published May 26, 2006 (Ex. 1012, "Todros").

[4] Belalcazar et al., US 8,180,442 B2, issued May 15, 2012 (Ex. 1005, "Belalcazar").

Petitioner relies on declaration testimony of Dr. Gregory D. Abowd. Ex. 1002; Ex. 1003 (providing Dr. Abowd's curriculum vitae).

The following subsections provide a brief description of the asserted prior art references.

1. Todros

Todros, titled "Sleep Staging Based on Cardio-Respiratory Signals," published May 8, 2006. Ex. 1012, codes (54), (43). Todros is directed "to physiological monitoring and diagnosis, and specifically to sleep recording and analysis." *Id.* at 1:10–11. We reproduce Todros's Figure 1, below.

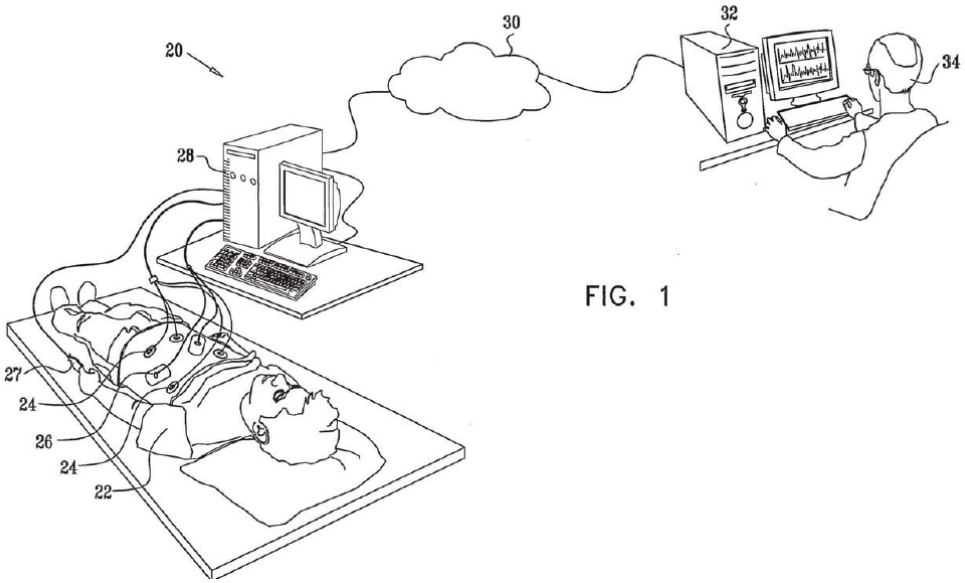


FIG. 1

Figure 1 depicts "a schematic, pictorial illustration of a system for sleep monitoring." Ex. 1012, 11:10. System 20 receives physiological signals from skin electrodes 24 (used to measure an electrocardiogram (ECG) signal) and respiration sensor 26. *Id.* at 12:24–26. Console 28 "collect[s], amplifie[s,] and digitize[s]" the received signals. *Id.* at 12:28–29. Console 28 may process the signals locally or communicate the signals over network 30 to diagnostic processor 32. *Id.* at 13:24–27.

Todros discloses using ECG measurements to detect a patient's movement. Ex. 1012, 14:9–10; *see also id.* at 14:8–20:8 (providing details on the movement detection method). We reproduce Todros's Figure 3, below.

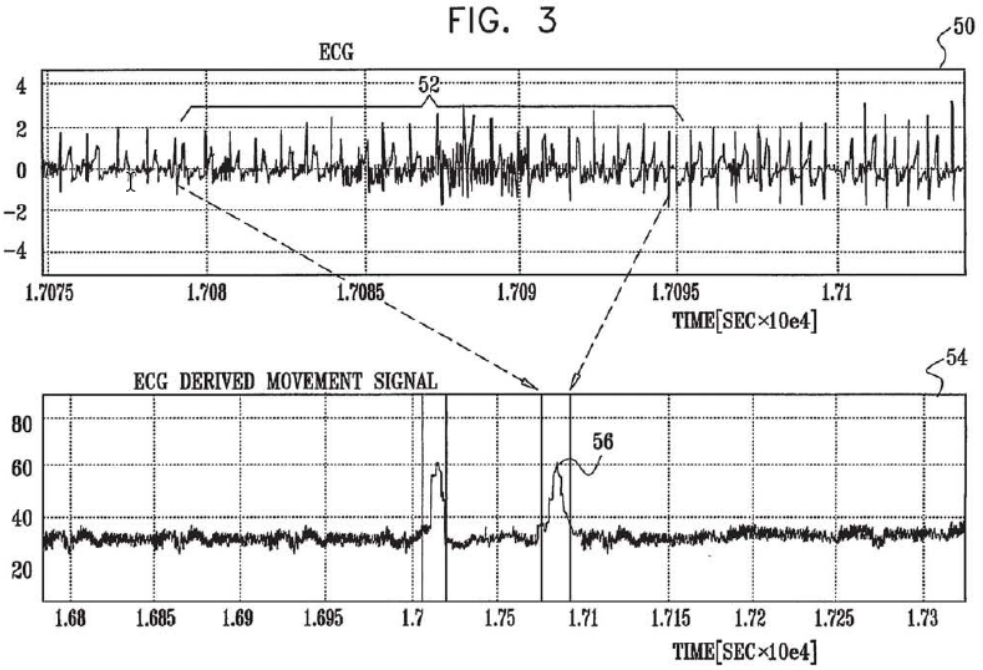


Figure 3 depicts "a schematic plot of an ECG signal and of a movement signal derived therefrom." Ex. 1012, 11:14–15. Plot 50 provides a patient's ECG, which includes segment 52. *Id.* at 16:28–17:1. Plot 54 shows peak 56, which reflects a patient's movement during the time slice corresponding to segment 52. *Id.* at 17:2–3. Todros further discloses determining the start and end of a movement event and plotting, as a function of time, an averaged movement event. We reproduce Figures 7A and 7B, below.

FIG. 7A

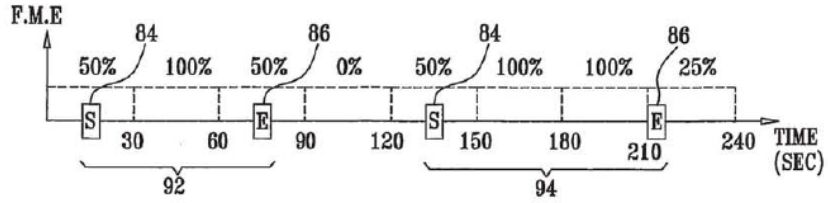
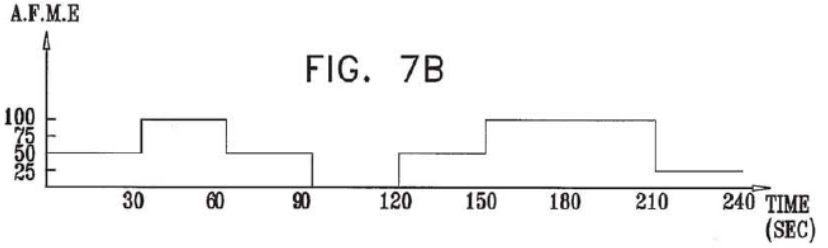


FIG. 7B



Todros's Figure 7A depicts "a time plot that schematically illustrates start and end points of movement events over a succession of epochs," and Figure 7B depicts "a time plot showing averaged movement event scoring based on the movement events of Fig[ure] 7A." Ex. 1012, 11:23–27. For time epochs in which a patient's movement event starts or ends, Todros's process assigns a value of 50 percent. For time epochs in which a patient's movement event spans the entire epoch, Todros's process assigns a value of 100 percent. For time epochs in which no patient movement is detected, Todros's process assigns a value of 0 percent. *See* Ex. 1012, 19:26–20:8.

2. Belalcazar

Belalcazar, titled "Deriving Patient Activity Information from Sensed Body Electrical Information," issued May 15, 2012. Ex. 1005, codes (54), (45). Belalcazar is directed "to monitoring a patient's physical activity based on body electrical information sensed by electrodes within a body of the patient." *Id.* at 1:7–9. We reproduce Belalcazar's Figures 3A and 3B, below.

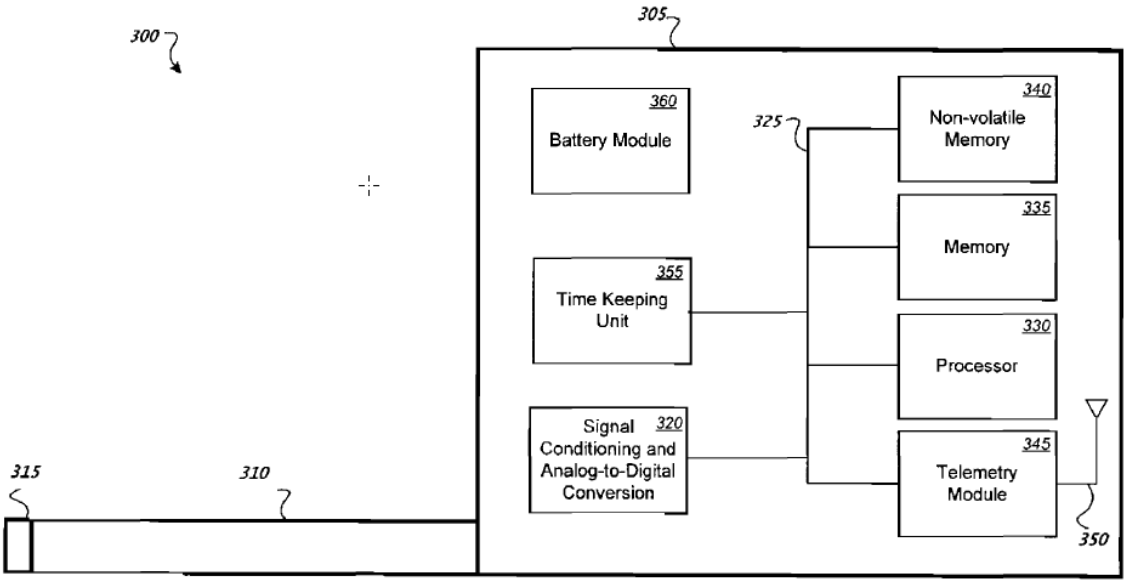


FIG. 3A

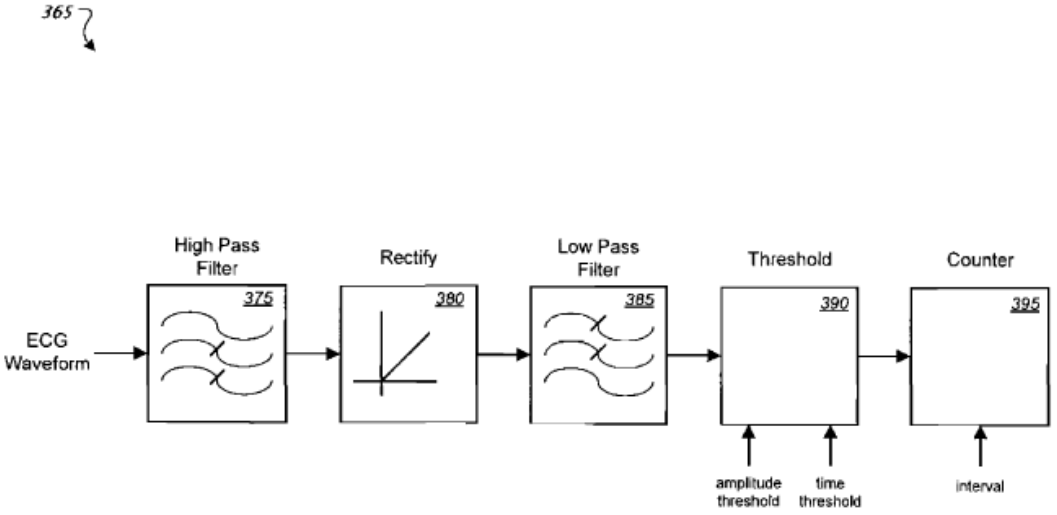


FIG. 3B

Figure 3A depicts a "medical device configured for subcutaneous cardiac rhythm monitoring that includes receiving ECG waveforms." Ex. 1005, 3:11–13. Medical device 300 includes housing 305, lead 310, and

electrode 315 to collect ECG signals. *Id.* at 8:49–51. These signals are communicated to conversion module 320, which includes circuitry to "limit, filter, amplify, attenuate, rectify, and/or sample the received ECG waveform as a continuous-time analog signal." *Id.* at 9:8–13. Module 320 may be supplemented or replaced by digital signal processing. *Id.* at 9:33–35. Processor 330 supervises waveform data collection and waveform measurement operations. *Id.* at 10:4–6, 25–29.

Figure 3B depicts a "signal processing chain to detect and measure non-cardiac muscle activity episodes in an ECG waveform." Ex. 1005, 3:14–16. Signal processing chain 365 includes high pass filter module 375, rectification module 380, low pass filter module 385, threshold module 390, and counter module 395. *Id.* at 10:64–67.

Module 375 removes low frequency components of the processed signals associated with the heart. Ex. 1005, 11:3–6. Rectification module 380 and low pass filter module 385 "convert[] the high frequency signal components associated with non-cardiac muscle activity into a unidirectional voltage signal that is suitable for comparison to a threshold," which is done by threshold module 390, to detect non-cardiac muscle activity. *Id.* at 11:11–26. Counter module counts each detected non-cardiac muscle activity event. *Id.* at 11:39–40.

Belalcazar's Figures 4A and 4B illustrate the results of Belalcazar's disclosed method for identifying non-cardiac muscle movement. Ex. 1005, 12:8–25. We reproduce these two figures, below.

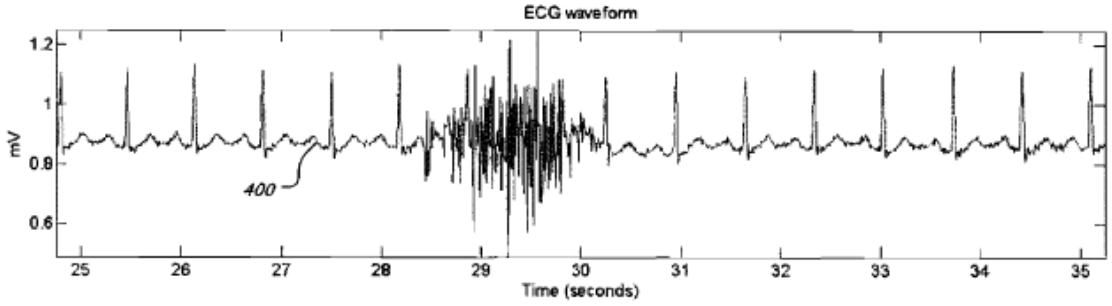


FIG. 4A

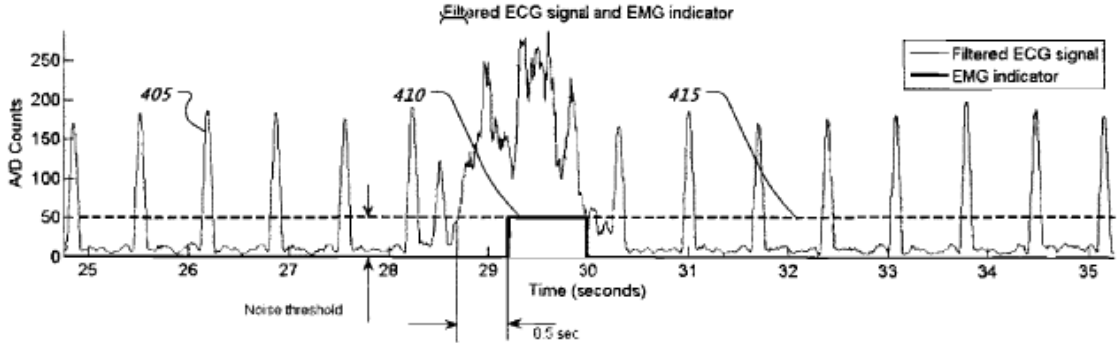


FIG. 4B

Figure 4A depicts "a typical ECG waveform plot[]" and Figure 4B depicts "an example of a processed ECG waveform, which represents a version of the ECG waveform of F[igure] 4A after processing to identify non-cardiac muscle activity events." Ex. 1005, 3:17–23. "[W]aveform 405 is a high-pass filtered, rectified, and smoothed version of . . . ECG waveform 400. Non-cardiac muscle activity events are indicated by a rectangular area 410." *Id.* at 12:16–16.

II. OUR DISCRETION UNDER § 314(A)

The Board has discretion not to institute an *inter partes* review. *See* 35 U.S.C. § 314(a) (authorizing institution of an *inter partes* review under particular circumstances, but not requiring institution under any circumstances); 37 C.F.R. § 42.108(a) (stating "the Board *may* authorize the review to proceed") (emphasis added); *Harmonic Inc. v. Avid Tech, Inc.*, 815

F.3d 1356, 1367 (Fed. Cir. 2016) (explaining that under § 314(a), "the PTO is permitted, but never compelled, to institute an IPR proceeding").

Patent Owner contends that our precedential decisions in *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 (PTAB Sept. 12, 2018) (precedential) ("*NHK Spring*") and *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020) (precedential) ("*Fintiv I*"), support our exercising discretion to not institute the current proceeding, given the advanced state of the parallel ITC proceeding. Prelim. Resp. 23–24. Patent Owner argues that, in the Board's decision in *Bio-Rad Laboratories, Inc. v. 10X Genomics, Inc.*, IPR2019-00568, Paper 22 (PTAB Aug. 8, 2019) ("*Bio-Rad*"), the panel denied institution because the ITC had already issued an initial determination, demonstrating that "[t]he fact that the advanced parallel proceeding involves an ITC investigation rather than a district court proceeding, should not affect the analysis." *Id.* at 24.

NHK Spring addressed whether the Board should exercise its discretion under 35 U.S.C. § 314(a) to not institute an *inter partes* review proceeding because of a parallel district court proceeding involving the challenged patent. *NHK Spring*, Paper 8 at 19–20. The Board expanded *NHK Spring* to identify factors we consider in applying *NHK Spring*. *See Fintiv I*. Our precedential and informative decisions make clear that the Board may exercise discretion to not institute an *inter partes* proceeding in light of the advanced stage of ongoing, parallel litigation. *See Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 (PTAB May 13, 2020) (denying institution in light of an ongoing, parallel district court proceeding) (informative) ("*Fintiv II*"); *Sand Revolution II, LLC v. Continental Intermodal Group – Trucking LLC*, IPR2019-01393, Paper 24 (PTAB June 16, 2020) (applying *Fintiv I* factors in light of ongoing, parallel district court

litigation and instituting trial) (informative). These decisions promote efficient use of resources and the integrity of the patent system by avoiding potentially conflicting decisions. *See, e.g.*, *Fintiv I*, Paper 11 at 6 ("[T]he Board takes a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review.").

Fintiv I provides a non-exclusive list of six factors we may consider in determining if we should exercise our discretion to not institute an *inter partes* review in light of a parallel proceeding. *Fintiv I*, Paper 11 at 5–6. We address each factor in turn.

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

The '698 patent is involved in two pending parallel proceedings—the ITC proceeding and the district court proceeding, now pending in Massachusetts. Patent Owner argues that Petitioner did not seek a stay of the co-pending ITC proceeding, that it is unlikely that the Administrative Law Judge (ALJ) would have granted a stay if one was requested, and, given the current stage of that proceeding, it is unlikely that a stay would be granted now. Prelim. Resp. 26; Prelim. Sur-reply 4. The parties do not discuss the district court proceeding in their arguments. Patent Owner has not yet responded to Fitbit's complaint for declaratory judgment of non-infringement in the district court proceeding; instead, it filed a motion to stay that case pending the ITC proceeding. Ex. 3001.

Petitioner argues that "it is doubtful that this factor is even applicable to discretionary denial based solely on a co-pending ITC investigation." Prelim. Reply 5. Petitioner argues that *NHK* and *Fintiv I* do not apply to the situation where, as here, there is no parallel district court proceeding. *Id.* at 1–3 (indicating that the declaratory judgment case does not seek a

declaration that the '698 patent is invalid). Petitioner explains that both *NHK* and *Fintiv I* concerned parallel proceedings in the district court. *Id.* at 1–2. Petitioner adds that *Fintiv I*'s language about an ITC proceeding was in the context of how a district court would treat an ITC decision. *Id.* at 2. Petitioner distinguishes Patent Owner's reliance on *Bio-Rad* from the current case, as *Bio-Rad* included a parallel district court case. *Id.*

Patent Owner replies that *Fintiv I* contemplates considering an ITC investigation. Sur-reply 2.

We agree with Patent Owner that *Fintiv I* applies here. First, we disagree with Petitioner's characterization of this proceeding as not involving a parallel district court case. The possibility for validity of the '698 patent to be an issue in the parallel district court case exists. *See* Prelim. Sur-reply 1–2. As is often the case in such declaratory judgment actions, a declaratory judgment plaintiff can raise the issue of validity of the patent in response to the defendant's counterclaim for infringement. *Id.* Patent Owner has yet to file an answer to the complaint in the district court case, so we do not know yet whether validity will be an issue. *Id.* Nonetheless, the challenged patent remains in dispute between Petitioner Fitbit and Patent Owner in that district court case.

The Board has considered ITC proceedings in weighing if exercising discretion is warranted. *See, e.g.*, *Samsung Elecs. Co., Ltd. v. Dynamics, Inc.*, IPR2020-00502, Paper 34, 7–14 (PTAB Aug. 12, 2020) (evaluating *Fintiv I* factors in light of stayed district court case, with a primary focus on an advanced-stage ITC proceeding); *Comcast Cable Commc'ns, LLC v. Rovi Guides, Inc.*, IPR2019-00231, Paper 14, 7–12 (PTAB. May 20, 2019) (evaluating *NHK* precedent for related ITC proceeding). Thus, this factor

and the remaining *Fintiv* factors are applicable to the parallel proceedings here.

Petitioner has not requested a stay of the ITC proceeding and, we agree with Patent Owner that a stay of the ITC proceeding is unlikely at this stage given the ITC's projected Initial Determination date in February, 2021. Ex. 2009, 6.

A motion for a stay pending the ITC proceeding is pending in the district court case in Massachusetts. Exs. 3001–3003. On balance, the unlikelihood of a stay of the ITC proceeding weighs in favor of not instituting this proceeding, while the pending motion for a stay of the district court proceeding does not change the fact that the ITC case addressing validity of the challenged patent is likely to proceed as scheduled.

Factor 2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision

A hearing before the ALJ in the ITC is scheduled for October 21–23, 2020. Prelim. Resp. 26; Ex. 3003, 2. Patent Owner adds that the ALJ's Initial Determination is due by February 4, 2021, and the ITC investigation is scheduled to conclude by June 4, 2021. *Id.* Patent Owner argues that these dates are all before a final written decision would issue in this *inter partes* review proceeding.

Petitioner argues that "nearly all ITC investigations would conclude before any parallel IPR proceeding can reach final written decision." Prelim. Reply 5. Petitioner argues that it acted diligently, filing the Petition "within three months of the ITC notice of institution." *Id.* Petitioner concludes that "[d]enying institution based solely on the related ITC investigation here would motivate litigious patent owners like Philips to use

ITC investigations to circumvent IPR proceedings, and would rob ITC respondents of their statutory right to seek *inter partes* review." *Id.* at 5–6.

Patent Owner replies that *Fintiv I* rejected forum-shopping concerns. Prelim. Sur-reply 4–5.

The current ITC schedule has an evidentiary hearing scheduled to occur October 21–23, 2020, with a non-final Initial Determination scheduled for February 4, 2021, and a final ITC determination set to pre-date the Board's final written decision by four months. Ex. 3003, 2; Ex. 2009, 6. These facts weigh against institution of this proceeding.

Factor 3. investment in the parallel proceeding by the court and the parties.

Patent Owner argues that "[t]he parties and the ALJ have already performed, and will continue to perform, a considerable amount of work in the ITC Investigation." Prelim. Resp. 27.

Petitioner responds that the pace of an ITC investigation requires the "rapid investment of resources" and that Patent Owner was aware of the required investment when it chose to pursue a proceeding at the ITC. Prelim. Reply 6. Petitioner also argues that the ALJ's Initial Determination is not due until more than three months after this institution decision and that, under similar circumstances, the Board has refused to exercise its discretion. *Id.*

Patent Owner replies that *Fintiv I* compared a scheduled trial date to the deadline for a final written decision, not an institution decision. Prelim. Sur-reply 6. Patent Owner repeats that "the entire ITC investigation, including any review by the Commission, will be completed prior to any final written decision." *Id.*

We weigh this factor somewhat against institution. The parties and the ALJ and staff of the ITC have expended considerable resources to date on the investigation. Much of discovery has concluded and the ALJ has issued a claim construction ruling. *See* Prelim. Resp. 27–28; Prelim. Sur-reply 5–6; Ex. 2009. Hearing preparations are ongoing. *See* Ex. 2009. Petitioner does not dispute these facts. We credit, however, Petitioner's diligence in filing this Petition within a short time after the ITC proceeding was instituted, thus, mitigating somewhat the investments made in the ITC proceeding.

Factor 4. overlap between issues raised in the petition and in the parallel proceeding.

Patent Owner argues that "there is substantial overlap" between the grounds in this proceeding and at the ITC. Prelim. Resp. 28. Patent Owner argues that Petitioner relies on Todros and Belalcazar in challenging claims 1 and 6 of the '698 patent at the ITC. *Id.*

Petitioner argues that some overlap is "inevitable," but that the issues at the ITC "do not necessarily pertain to the issues raised in an *inter partes* review [proceeding] because of the difference in evidentiary standards and burdens." Prelim. Reply 6–7 (quoting *Wirtgen Am., Inc. v. Caterpillar Paving Prods., Inc.*, IPR2018-01202, Paper 10, 11–12 (PTAB Jan. 8, 2019)).

Patent Owner replies that different evidentiary standards and burdens exist between an *inter partes* review proceeding and a district court proceeding as well, so these differences should not weigh against exercising discretion. Prelim. Sur-reply 7.

We weigh this factor against institution. As stated in *Fintiv I*, concerns of inefficiency and the possibility of conflicting decisions weighs in favor of discretionary denial. *Fintiv I* at 12. Patent Owner asserts, and

Petitioner does not deny, that the same grounds and claims are at issue in both proceedings.

Factor 5. whether the petitioner and the defendant in the parallel proceeding are the same party.

Neither party disputes that the same parties are involved at the ITC and in this proceeding. Prelim. Resp. 28; Prelim. Reply 6–7 (not addressing Factor 5). This factor weighs against institution.

Factor 6. other circumstances that impact the Board's exercise of discretion, including the merits.

Patent Owner argues that the Petition "should . . . be denied on its merits." Prelim. Resp. 28. Patent Owner also argues that we should consider Petitioner's "lack of candor and gamesmanship" with respect to claim construction in weighing the factors. *Id.* at 28–29.

Petitioner responds that the strength of the merits supports not exercising our discretion. Prelim. Reply 7. Petitioner adds that the current Petition (and the parallel petition in IPR2020-00772) represent the sole challenges to the '698 patent in an *inter partes* review. *Id.* Petitioner also argues that the Supreme Court explained that "there is a significant public interest against 'leaving bad patents enforceable.'" Prelim. Reply 7 (quoting *Thryv, Inc. v. Click-To-Call Techs., LP*, 140 S. Ct. 1367, 1374 (2020)). Petitioner argues that Patent Owner's "litigious behavior . . . strengthens the public interest in ensuring that the [patentability] of the '698 patent is reviewed." *Id.* at 7.

Patent Owner replies that Petitioner does not acknowledge that the ALJ construed an element of claim 1 of the '698 patent as a means-plus-function element, which Petitioner does not address in the Petition. Prelim. Sur-reply 7. Patent Owner argues that a petitioner is "not permitted to leave

it to the Patent Owner to advise the Board of the inconsistent position, particularly as to means-plus-function elements." *Id.*

We weigh this factor somewhat against institution. First, we note that the Challenged Claims broadly recite a device that includes a sensor that generates a physiological parameter as a function of time and a digital signal processor that computes a body motion artifact and computes an actigraph signal from the body motion artifact. *See* Ex. 1001, 11:21–32, 48–52. The current record demonstrates that the prior art discloses these broad concepts. *See* Pet. 18–82; Ex. 1012, code (57) ("The method includes receiving physiological signals from sensors (24, 26, 27) coupled to the lower body of the patient, and analyzing the physiological signals, . . . in order to identify sleep stages of the patient."); Ex. 1005, code (57) ("Exemplary systems and methods that detect non-cardiac muscle activity information in sensed body electrical waveforms may provide a diagnostic tool for monitoring physical activity level over time in patients that have subcutaneous monitoring systems."); *see, e.g.*, *Thryv, Inc.*, 140 S. Ct. 1367, 1374 ("By providing for inter partes review, Congress, concerned about overpatenting and its diminishment of competition, sought to weed out bad patent claims efficiently.").

Second, we also note, however, an issue with Petitioner's claim construction. In *inter partes* reviews, we interpret a claim "using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b)." *See* 37 C.F.R. § 42.100(b) (2019). This is the same standard applied at the ITC as well. *See* Ex. 1021, 2–5.

Petitioner asserts that "given the close correlation and substantial identity between the references and the '698 patent and its claims, the Board need not construe any terms of the challenged claims to resolve the

underlying controversy, as any reasonable construction of those terms consistent with their plain meaning reads on the prior art." Pet. 15–16.

Patent Owner argues that "the Petition fails to acknowledge, much less apply the claim construction positions that Petitioner[] asserted in the ITC Investigation." Prelim. Resp. 14. Patent Owner reproduced the parties' claim construction positions in summary form and states, again, that Petitioner "made no attempt . . . to apply" the constructions. *Id.* at 14–19.[5]

Although our rules do not require a Petitioner to adopt the same claim constructions as those asserted in a parallel proceeding, we do require, "[w]here the claim to be construed contains a means-plus-function or step-plus-function limitation as permitted under 35 U.S.C. 112(f), [the petitioner to] . . . identify the specific portions of the specification that describe the structure, material, or acts corresponding to each claimed function." 37 C.F.R. § 42.104(b)(3); *Accord FedEx Corp. v. Intellectual Ventures II LLC*, IPR2017-02043, Paper 9, 8 ("Our rule governing the content of petitions specifies that a petitioner must set forth constructions of means-plus-function limitations, including their corresponding structure."). Petitioner asserted that the "electronic digital signal processing (DSP) device" limitation of claim 1 should be construed as a means-plus-function term at

[5] To the extent that Patent Owner argues that the Petition fails to adopt Petitioner's claim construction positions asserted before the ITC and that this failure renders the Petition deficient, we do not agree. Our rules (e.g., 37 C.F.R. § 42.104(b)(3) (2020)) do not require that, for every term for which Petitioner has proposed an express construction in a related proceeding, Petitioner propose the same construction in the Petition. A petitioner is permitted to change its positions and any proposed constructions in a parallel proceeding, such as the ITC, need not be adopted in a petition for the petitioner to comply with our rules.

the ITC, and we address the implication of that construction, here. *See* Ex. 1021, 21–31.

Claim 1 recites, in relevant part, an electronic digital signal processing (DSP) device configured to perform operations including: computing a body motion artifact (BMA) signal as a function of time from the non-body motion physiological parameter signal, and computing an actigraphy signal as a function of time from the BMA signal." Ex. 1001, 11:26–32 (the "DSP" limitation). Patent Owner argues that Petitioner contends, at the ITC, that the "DSP" limitation is a means-plus-function term governed by the requirements of 35 U.S.C § 112(f). Prelim. Resp. 14–15. The ITC adopted Petitioner's construction. Ex. 1021, 21–27. In this *inter partes* review proceeding, neither Petitioner nor Patent Owner argues that the term is governed by § 112(f).

This issue is complex. As we stated above, Petitioner contends that the terms of the Challenged Claims should be given their "plain meaning." Pet. 15–16. A term written in means-plus-function format, however, does not have a plain meaning. That is because the term does not recite any structure, as it only recites functions performed by a "means." Instead, the term is "construed to cover the corresponding structure . . . described in the specification and equivalents thereof." 35 U.S.C. § 112(f) (2011). Because Petitioner does not contend in the Petition that the term is governed by 112(f), Petitioner does not identify the recited function for the term or any corresponding structure disclosed in the Specification. *See* Pet. 15–17; *cf.* Ex. 1021, 21 (providing, for the ITC proceeding, Petitioner's assertions as to the recited functions and the corresponding structure for the "DSP" limitation). Complicating the issue is that the "DSP" limitation does not recite the word "means," triggering a rebuttable presumption that the term is

not a means-plus-function term. *See Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir. 2015) (en banc in relevant part). If we institute trial and then determine, on the complete record, that the DSP limitation is governed by 112(f) (as the ITC ALJ did), then the Petition would not explain how the prior art discloses the subject matter of the DSP limitation under that construction. Because the Petition does not identify the recited functions for the term or any corresponding structure disclosed in the Specification, we would not be able to determine if the prior art reads on the DSP limitation.

Accordingly, the lack of any treatment of the DSP limitation under 112(f) weakens Petitioner's position that the strength of the merits overcomes the concerns posed by the looming ITC decisions.

Determination

In weighing the *Fintiv I* factors, we do not merely treat them as a scorecard, totaling up the individual outcomes. Instead, we take a holistic view of the factors. *See, e.g.*, *Fintiv II* at 17 ("On balance, these facts, when viewed holistically, lead us to determine that efficiency is best served by denying institution."). After weighing all of the factors and taking a holistic view of the relevant circumstances of this proceeding, we determine that we should exercise our discretion to deny institution under 35 U.S.C. § 314(a) because of the parallel ITC proceeding.

We weigh heavily the fact that in the ITC proceeding, both the Initial Determination and final commission determination will pre-date a final written decision in this proceeding. Although we credit the fact that Petitioner filed the Petition less than three months after the ITC proceeding was instituted and credit the apparent strength of the prior art, Petitioner's failure to address the "DSP" limitation as a potential means-plus-function

term weakens the overall merits of the Petition. Also, the overlap of issues and parties presents a risk of inconsistent rulings between the Commission and the Board and the duplication of some efforts in addressing Petitioner's patentability positions.

So, in light of our holistic view of the current record, efficient use of resources and the integrity of the patent system are best served by denying institution in this case.

III. CONCLUSION

After considering all the evidence and arguments presently before us, we determine that exercising our discretion under 35 U.S.C. § 314(a) to not institute trial is warranted. Accordingly, we do not institute an *inter partes* review.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), the Petition is *denied*.

FOR PETITIONER:

Naveen Modi (lead counsel)
Joseph E. Palys
PAUL HASTINGS, LLP
naveenmodi@paulhastings.com
josephpalys@paulhastings.com
ITCPhilips-Fitbit_IPRs@paulhastings.com

Kirk T. Bradley
M. Scott Stevens
ALSTON & BIRD LLP
kirk.bradley@alston.com
scott.stevens@alston.com

FOR PATENT OWNER:

George C. Beck
Eley O. Thompson
FOLEY & LARDNER LLP
gbeck@foley.com
ethompson@foley.com