

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HTC CORPORATION and HTC AMERICA, INC.

Petitioners

v.

UNILOC LUXEMBOURG, S.A.¹

Patent Owner

IPR2018-01589

PATENT 7,653,508

PATENT OWNER RESPONSE TO PETITION

PURSUANT TO 37 C.F.R. §42.120

¹ The owner of this patent is Uniloc 2017 LLC.

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List of Exhibits

Exhibit No.	Description
2001	Declaration of William C. Easttom

I. INTRODUCTION

Uniloc 2017 LLC (“Uniloc” or “Patent Owner”) submits this Response to Petition IPR2018-01589 for *Inter Partes* Review (“Pet.” or “Petition”) of United States Patent No. 7,653,508 (“the ’508 patent” or “EX1001”) filed by HTC Corporation and HTC America, Inc. (“Petitioner”).

The Institution Decision limits this proceeding to only those regarding claim 20. *See* Paper 9, at 10 (“Accordingly, Petitioner shall not advance any arguments regarding [claims 1–4, 6–8, 11–16, and 19] in this proceeding; all grounds raised by Petitioner regarding these claims will be addressed in the Apple IPR. The parties are limited to advancing arguments regarding claim 20 in this proceeding.”)

The Petition is defective for at least the reasons set forth herein.

II. THE ’508 PATENT

The ’508 patent is titled “Human activity monitoring device.” The ’508 patent issued January 26, 2010, from U.S. Patent Application No. 11/644,455 filed December 22, 2006.

The inventors of the ’508 patent observed that at the time, step counting devices that utilize an inertial sensor to measure motion to detect steps generally required the user to first position the device in a limited set of orientations. In some devices, the required orientations are dictated to the user by the device. In other devices, the beginning orientation is not critical, so long as this orientation can be maintained. EX1001, 1:19–26. Further, the inventors observed that devices at the time were often confused by motion noise experienced by the device throughout a user's daily routine. The noise would cause false steps to be measured and actual

steps to be missed in conventional step counting devices. Conventional step counting devices also failed to accurately measure steps for individuals who walk at a slow pace. *Id.*, 1:27–34.

According to the invention of the '508 Patent, a device to monitor human activity using an inertial sensor assigns a dominant axis after determining the orientation of an inertial sensor. The orientation of the inertial sensor is continuously determined, and the dominant axis is updated as the orientation of the inertial sensor changes. *Id.*, 2:8–15.

III. RELATED PROCEEDINGS

The following proceedings are currently pending cases concerning U.S. Pat. No. 7,653,508 (EX1001).

Case Caption	Case Number	District	Case Filed
<i>Uniloc USA, Inc. et al v. Samsung Electronics America, Inc. et al</i>	2-17-cv-00650	TXED	Sep. 15, 2017
<i>Uniloc USA, Inc. et al v. Huawei Device USA, Inc. et al</i>	2-17-cv-00737	TXED	Nov. 09, 2017
<i>Apple Inc. v. Uniloc 2017 LLC et al</i>	IPR2018-00387	PTAB	Dec. 22, 2017
<i>Uniloc USA, Inc. et al v. Apple Inc.</i>	4-18-cv-00364	CAND	Jan. 17, 2018
<i>Uniloc USA Inc et al v. LG Electronics U.S.A., Inc. et al</i>	4-18-cv-02918	CAND	May. 17, 2018
<i>Samsung Electronics America, Inc. et al v. Uniloc 2017 LLC</i>	IPR2019-00889	PTAB	Mar. 27, 2019

IV. THE LEVEL OF ORDINARY SKILL IN THE ART

The Petition alleges that “a person of ordinary skill in the art (“POSITA”) would include someone who had, at the priority date of the ’508 Patent, (i) a Bachelor’s degree in Electrical Engineering, Computer Engineering, and/or Computer Science, or equivalent training, and (ii) approximately two years of experience working in hardware and/or software design and development related to MEMS (micro-electro-mechanical) devices and body motion sensing systems.” Pet. 7. Given that Petitioner fails to meet its burden of proof when purportedly applying its own definition of a person of ordinary skill in the art, Patent Owner does not offer a competing definition for purposes of this proceeding.

V. CLAIM CONSTRUCTION

The petition should be rejected as relying upon incorrect claim constructions that are unreasonable in light of the intrinsic evidence. *See Mentor Graphics Corp., v. Synopsys, Inc.*, IPR2014-00287, 2015 WL 3637569, (Paper 31) at *11 (P.T.A.B. June 11, 2015), *aff’d sub nom. Synopsys, Inc. v. Mentor Graphics Corp.*, 669 Fed. Appx. 569 (Fed. Cir. 2016) (finding Petitioner’s claim construction unreasonable in light of the specification, and therefore, denying Petition as tainted by reliance on an incorrect claim construction).

A. “cadence window”

The Petition argues that the ’508 patent specification provides but one definition for “cadence window” as follows: “[a] cadence window is a window of time since a last step was counted that is looked at to detect a new step.” Pet. 8-9. Regardless whether this statement fully captures all disclosed embodiments of

“cadence windows” disclosed in the ’508 patent (and Patent Owner does not concede that it does), its application here as a claim construction for “cadence window” only confirms that the Petition must be denied as failing to prove obviousness. This is because Petitioner relies exclusively on Fabio’s validation interval TV, which Fabio defines as necessarily starting before the last step is counted. A window of time that necessarily starts before the last step is counted is definitively not “a window of time since a last step was counted” (as required by Petitioner’s construction).

B. “dominant axis”

Because the Institution Decision limits this proceeding to Claim 20, no construction is necessary here. Neither Claim 20, nor claims 19 and 15 (from which Claim 20 ultimately depends), recites the term “dominant axis”.

C. “a dominant axis logic to continuously determine an orientation of a device, to assign a dominant axis, and to update the dominant axis as the orientation of the device changes”

Because the Institution Decision limits this proceeding to Claim 20, no construction is necessary here. Neither Claim 20, nor claims 19 and 15 (from which Claim 20 ultimately depends), recites the term “a dominant axis logic to continuously determine an orientation of a device, to assign a dominant axis, and to update the dominant axis as the orientation of the device changes”.

D. “a counting logic to count periodic human motions by monitoring accelerations relative to the dominant axis”

Because the Institution Decision limits this proceeding to Claim 20, no construction is necessary here. Neither Claim 20, nor claims 19 and 15 (from which

Claim 20 ultimately depends), recites the term “a counting logic to count periodic human motions by monitoring accelerations relative to the dominant axis”.

E. “a counting logic to identify and count periodic human motions”

No construction is necessary here for the recitation “a counting logic to identify and count periodic human motions.”

The Petition proposes a construction that substitutes the phrase “counting logic” with the phrase “hardware, software, or both.” Petitioner’s rewrite of the claim language serves no purpose, impermissibly omits limiting claim language, and unnecessarily injects ambiguity. Here, the claim language itself provides definitional context for the “counting logic” by reciting, for example, that it “identif[ies] and count[s] periodic human motions.”

To be clear, no party has requested that the Board construe this term under 35 U.S.C. § 112(6).² Accordingly, Patent Owner does not address 35 U.S.C. § 112(6) or Petitioner’s hypotheticals.

F. “a cadence logic to continuously update a dynamic cadence window”

Because the Institution Decision limits this proceeding to Claim 20, no construction is necessary here. Neither Claim 20, nor claims 19 and 15 (from which Claim 20 ultimately depends), recites the term “a cadence logic to continuously

² While the Petition repeatedly offers the statement “to the extent Patent Owner overcomes the presumption against construction under 35 U.S.C. 112, sixth paragraph...” (e.g., Pet. 12), the Petitioner provides no authority or evidence for its alleged “presumption” or its implicit shifting of its burden of proof here.

update a dynamic cadence window”.

G. “a mode logic, to switch the device from a non-active mode to an active mode after a number of periodic human motions are detected within appropriate cadence windows by the counting logic”

The proposed construction in the Petition should be rejected as unnecessary for analogous reasons presented above. *See* §VI.E, *supra*. To be clear, no party has requested that the Board construe this term under 35 U.S.C. § 112(6).³ Accordingly, Patent Owner does not address 35 U.S.C. § 112(6) or Petitioner’s hypotheticals.

VI. PETITIONER FAILS TO MEET ITS BURDEN OF PROVING OBVIOUSNESS

Petitioner has the burden of proof to establish entitlement to relief. 37 C.F.R. §316(e) (“[T]he burden of proof is on the petitioner to prove unpatentable those issued claims that were actually challenged in the petition for review and for which the Board instituted review”). The Petition should be denied as failing to meet this burden.

The Institution Decision (Paper 9) limits the Petition to raise only the following obviousness challenge:

Ground	Claims	Reference(s)
1	20	<i>Pasolini</i> ⁴ and <i>Fabio</i> ⁵

³ *See* n.2, *supra*.

⁴ EX1005, U.S. Patent No. 7,463,997.

⁵ EX1006, U.S. Patent No. 7,698,097.

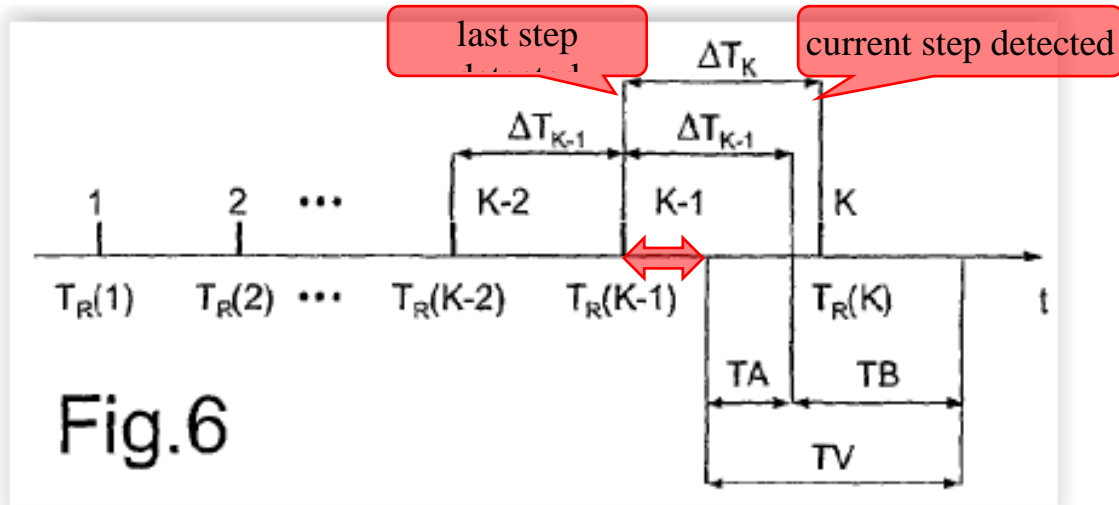
A. Petitioner fails to prove Fabio renders obvious the “cadence window” limitations of independent claim 15 (from which Claim 20 ultimately depends)

Because the Petition’s challenge of independent claim 15 expressly relies upon the arguments addressing claim 6, the challenge of independent claim 15 is tainted by the same deficiencies and should be denied for the same reasons as will be shown regarding the Petition’s challenge of claim 6. For example, in addressing the recitation “a mode logic, to switch the device from a non-active mode to an active mode after a number of periodic human motions are detected within appropriate cadence windows by the counting logic,” the Petition relies upon its analysis addressing what Petitioner refers to as limitation [6.2] of independent claim 6. Pet. 55. The referenced analysis in the Petition is deficient at least for analogous reasons to those articulated below in addressing the Petition’s challenge of claim 6.

1. Petitioner fails to prove Fabio’s validation interval (TV) maps onto the distinct definition Petitioner offers for “cadence window”

The Petition relies exclusively on Fabio’s validation interval (sometimes abbreviated as “TV”) as allegedly mapping onto the claimed “cadence window” limitations. Pet. 43. Several independently fatal deficiencies arise from Petitioner’s exclusive reliance on Fabio’s TV, particularly under the construction for “cadence window” relied upon in the Petition (i.e., “a window of time since a last step was counted that is looked at to detect a new step”).

Fabio describes its TV with reference to its Figure 6, which is copied and annotated below. *See, e.g.*, EX1006, Fig. 6 and accompanying description including, for example, 4:28–49.



Fabio's TV is *retrospective* at least in that it is used to validate only the immediately preceding step (shown in Fig. 6 as K-1), as opposed to the current step detected (shown in Fig. 6 as K): “[m]ore precisely, the **last step** recognized is validated if the instant of recognition of the **current step** $T_R(K)$ falls within a validation interval TV[.]” *Id.* Unless and until the **last step** is validated by the **current step** in the manner disclosed, the last step is not counted. *Id.* 5:10–39. The current step (K), in turn, is dependent upon the next step (K+1) for validation and counting. *Id.* The final step detected will not be counted because it cannot be validated. *Id.* As made clear by Fabio itself, Fabio expressly distinguishes between the **current step** and the previous, or **last step** recognized. In other words, while it is the case that the system of Fabio executes a step validation step after a step recognition test, the step validation step is validating the *previous* step recognized, there is no validation of the *current* step in any given instant cycle.

Accordingly, Fabio's validation interval TV is not “a window of time since a last step was counted” (as required by Petitioner's construction) at least because

Fabio defines its TV as necessarily starting ***before the last step is counted***. *Id.*; see also EX2001 ¶¶ 32–35. Indeed, Fabio’s TV is used in determining *whether* to count the last step. *Id.* In other words, Fabio’s validation interval TV is not “a window of time since a last step was counted” (as required by Petitioner’s construction) at least because Fabio’s TV starts before the last step is counted and is used to determine whether to count the last step. The Petition should therefore be denied because Fabio’s TV does not satisfy the construction for “cadence window” relied upon in the Petition. This deficiency is independently fatal to the challenge of independent claim 15 and therefore also fatal to the challenge of dependent claim 20.

2. Petitioner has not and cannot cure Fabio’s deficiencies by offering a new, undefended, and inconsistent definition for “cadence window”

Evidently recognizing this deficiency, the Petition appears to abandon its own construction for “cadence window” by inconsistently arguing, instead, that “the ’508 patent’s ‘cadence window’ and Fabio’s ‘validation interval’ are both defined with respect to the time that an immediately preceding step *was recognized*.” Pet. 46 (emphasis added); *cf. id.* at 8. This inconsistent theory is itself independently fatal.

Petitioner cannot have it both ways. The “cadence window” cannot be defined by alleged lexicography in the specification in terms of “since a last step ***was counted***” and yet be applied, inconsistently, in terms of when “an immediately preceding step ***was recognized***.” As explained above (in §VI.A.1, *supra*), Fabio’s retrospective validation process expressly distinguishes the moment when the last step is detected/recognized from when that step is later ultimately counted (if at all). *See, e.g.,* EX1006, 5:10–39. This explicit distinction in terms of timing cannot be glossed

over by simply rewriting the alleged lexicography in the '508 patent specification that Petitioner identifies and relies upon for the “cadence window” term.

Even if the Board were to apply Petitioner’s inconsistent and undefended rewrite of the alleged lexicography the Petition identifies, this too would fail to prove obviousness. Fabio further defines its TV as necessarily excluding at least the time interval (indicated by a red block-arrow annotation to Fig. 6 copied above) commencing since detection of the last step (K-1) but before commencement of TV. Although this interval is excluded by Fabio’s design, it nevertheless would satisfy a modified construction that redefines the timing aspect in terms of “since the last step [K-1] *was recognized*.” *See, e.g.,* EX1006, Fig. 6 and accompanying description including, for example, 4:28–49.

Fabio also recognizes that in certain instances its system might detect a “false positive” step. *Id.* 1:39–44. This might occur, for example, where the system detects an irregularity resulting, for example, from the user tripping or otherwise making a quick stutter step. *See, e.g., id.* at 1:47–51; 5:56–61; 6:9–11; 7:16. If such a “false positive” detection occurs since detection of the last step (K-1) but before TV commences, *then the last step would not be counted*. This is true even if the last step was in fact a “true positive” detection that had occurred sometime within the TV used to detect that step. This retrospective aspect of Fabio’s system, which results in excluding certain “true positive” detections, bears no resemblance to any of the inconsistent constructions of “cadence window” offered by Petitioner, much less to the description of that term and its associated real-time counting offered in the specification and reflected in the claims.

Thus, even under the inconsistent and undefended construction “a window of time since a last step was [recognized] that is looked at to detect a new step,” there is no proof of obviousness by Fabio’s VT at least because certain “true positive” steps occurring within VT would not be counted. This would further run afoul of the recited “counting” step, which also references and limits the “cadence window” term.

3. Petitioner has not proven obviousness for the “switching” step introducing the “cadence window” term

The Petition relies solely on Fabio’s alleged transitioning from the “first counting procedure” to the “second counting procedure” for the “switching” step recited in independent claim 6 (and by extension claim 15). Pet. 43; *see also* Pet. 55. In doing so, Petitioner fails to prove that the alleged transitioning involves “switching the device from the *non-active* mode to an *active mode*,” much less that such a step must occur after “identifying a number of human motions within appropriate cadence windows.”

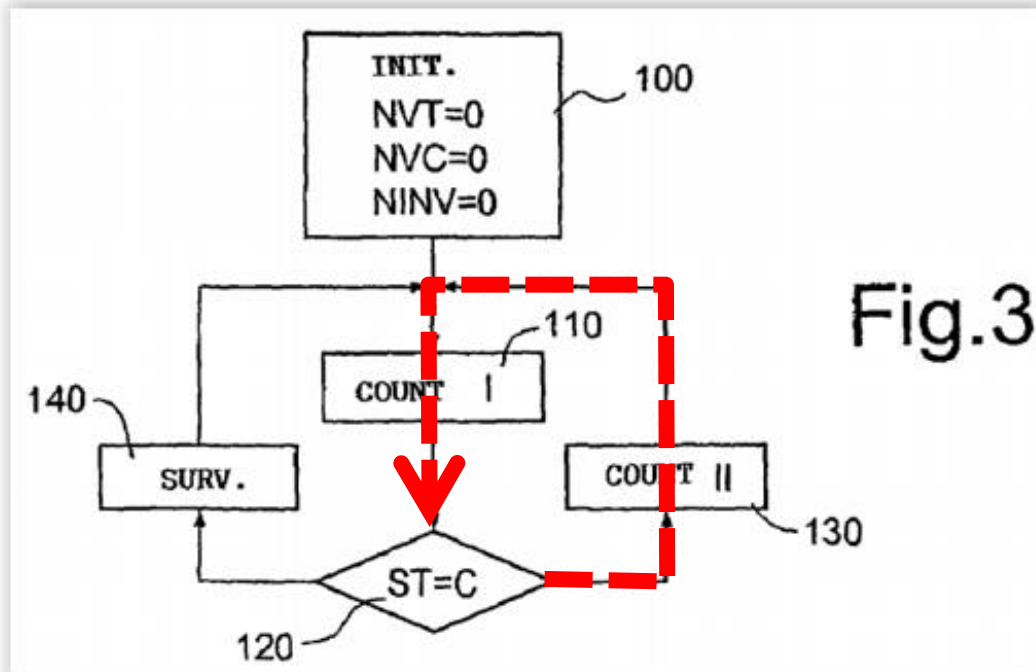
First, Petitioner fails to prove that Fabio’s first counting procedure is a “non-active mode” as claimed. The only attempted defense the Petition offers for its mapping is that Fabio allegedly describes its first counting procedure as “motion is detected but the steps are buffered not counted.” Pet 40.⁶ If the claimed “non-active mode” requires buffering but not counting steps, as Petitioner alleges, then

⁶ In addressing the “switching” step, as the sole alleged support for the mapping of Fabio’s first counting procedure onto is the claimed “non-active mode,” Petition cites to the discussion at Section 6.1 of the Petition. Pet. 43.

Petitioner's mapping must fail because Fabio's first *counting* procedure clearly involves counting steps, which is not surprising given the name of that procedure.

Petitioner's theory is further undermined by the declaration it cites. The declaration offers an alleged summary of Fabio's first counting procedure that includes the following statement: "if steps meet regularity threshold, add buffered steps to total steps and move to the second counting procedure." EX1003, p. 55; *see also id.* at p. 30 (same). The summary also provides annotations to Figure 4 of Fabio emphasizing that N_{VT} is a count variable that is updated *during the first counting procedure*. *Id.*; *see also* EX1006, 5:32–36. The Petition repeats this summary verbatim. Pet. 42 (citing EX1003, p. 55). The Petition and its attached declaration, therefore, admit that steps are indeed counted as part of the first counting procedure, and that this occurs *before* moving to the second counting procedure. This defeats the contrary assertion in the Petition—*identified as the underlying basis for the mapping*—that Fabio's describes its first counting procedure as "motion is detected but the steps are buffered not counted." Pet 40.

Second, the Petition is deficient because it fails to prove that Fabio discloses "switching" from the first counting procedure to the second counting procedure, much less "switching the device from the non-active mode to an active mode," as claimed. Fabio does not disclose such a device switch. Rather, as shown in Figure 3 of Fabio (copied and annotated below), the *first* counting procedure is included as a part of every process flow, while the *second* counting procedure is simply included as a secondary process in certain instances.



EX1006, Fig. 3 (red-arrow annotation added); *see also id.* at 4:24–26 and 6:21–23; EX2001 ¶¶ 30–31. Merely adding a secondary counting procedure in certain instances is distinguishable from “switching the device from the non-active mode to an active mode,” as recited in claim 6.

The failure in the Petition to prove Fabio discloses “switching [of] the device” is further confirmed when one compares the similar descriptions in Fabio of the first and second counting procedures. For example, Fabio describes the second counting procedure as including “a step-recognition test is carried out (block 315) [that is] identical to the step-recognition test of block 225 of FIG [4]”—i.e., a block describing the first counting procedure.⁷ *See, e.g.*, EX1006, Figure 4, 4:24–26 and

⁷ Given that block 225 is shown only in Figure 4, it is presumed that the statement “block 225 of FIG 3” was a clerical error.

6:21–23. The largely overlapping nature of the processes carried out in the first and second counting procedures in Fabio is distinguishable from the “switching” step, as disclosed in the ’508 patent and recited in claim 6.

Third, the Petition fails to prove that the alleged “switching” is “after identifying a number of periodic human motions within appropriate cadence windows.” The Petition alleges that Fabio “teaches switching the pedometer from the first counting procedure 110 (e.g., a non-active mode) to a second counting procedure 130 (e.g., an active mode) after a condition of stepping regularity has been met” and that “[t]he condition of regularity is determined based on the detected steps falling within a validation interval TV (i.e., a cadence window).” Pet. 43. As explained above, however, the Petition fails to prove that Fabio’s validation interval TV satisfies the “cadence window” term recited in claim 15. *See* §§VI.A.1–2, *supra*.

For each one of the foregoing reasons, the Petition should be denied as failing to prove that Fabio alone and unmodified discloses “mode logic to switch the device from the active mode to the non-active mode when a number of expected periodic human motions are not identified in the appropriate cadence windows,” as recited in independent claim 15.

B. Petitioner fails to prove Fabio renders obvious the “cadence window” limitations recited in dependent claims 19 and 20

The Petition is also deficient in its exclusive reliance on Fabio’s validation interval TV for the “cadence window” terms recited in dependent claims 20 and 19 (from which claim 20 depends).

Dependent claim 19, for example, recites “a cadence logic, to set the appropriate cadence windows.”

Dependent claim 20, for example, recites “wherein the cadence logic adjusts the cadence windows based on a measured cadence associated with the periodic human motion.”

For each of the above limitations, the Petition purports to rely on the challenge of independent claim 6 that maps Fabio’s TV onto the “cadence window” term. *See, e.g.*, Pet. 59 (claim 19), 72 (claim 20). The referenced analysis in the Petition is deficient at least for analogous reasons to those articulated above in addressing the challenge of claim 6. *See* §§VI.A.1–3, *supra*.

C. The Petition fails to prove obviousness of “wherein the cadence logic adjusts the cadence windows based on a measured cadence associated with the periodic human motion” as recited in claim 20

In addressing the claim language “wherein the cadence logic adjusts the cadence windows based on a measured cadence associated with the periodic human motion,” the Petition expressly relies on its analysis of what the Petition refers to as limitations [19.0-19.1] of claim 19. Pet. 72. The Petition’s [19.0-19.1] analysis in turn expressly relies on its analysis of what the Petition refers to as limitation [6.2] of claim 6. Pet. 59. The Petition further expressly relies on its analysis of what the Petition refers to as limitation [3.1] of claim 3. Pet. 72. The Petition’s [3.1] analysis in turn also expressly relies on its analysis of what the Petition refers to as limitation

[6.2] of claim 6. Pet. 64.⁸ The above analysis is deficient at least for the reasons articulated above in addressing claim 15 (which the Petition refers back to its challenge of claim 6). *See* §§VI.A.1–3, *supra*.

Moreover, the Petition merely alleges in conclusory fashion, and without any evidence or analysis, that: “Because the validation interval for each step is updated based on the timing and duration of the immediately preceding step, a POSITA would have understood that the validation interval (i.e., the cadence window) is adjusted based on a measured cadence associated with the periodic human motion.” Pet. 72. And for alleged support, the Petition cites to its expert, however, its expert’s declaration merely parrots the conclusory allegation stated above. *Compare* Pet. 72 *with* EX1003, p. 94-95.

But the law is clear that Petitioner may not rely on conclusory testimony of a declarant as to what would have been common knowledge at the time. 37 C.F.R. § 42.65(a) (explaining that experts are required to provide supporting facts or data for their opinions); *Verlander v. Garner*, 348 F.3d 1359, 1371 (Fed. Cir. 2003) (Board has discretion to accord little weight to broad conclusory statements from expert witness). *K/S HIMPP v. Hear-Wear Techs., LLC*, 751 F.3d 1362, 1365-66 (Fed. Cir. 2014) (finding the P.T.A.B. correctly rejected conclusory assertions of what would

⁸ The Petition merely states that its challenge of Claim 20 is based on a combination of Pasolini and Fabio (Pet. 72). However, the Petition does not explain its reliance on Pasolini, nor does the Petition cite to Pasolini. The Petition relies solely on Fabio for its challenge to claims 15 and 19 (*see* Pet. 16, Grounds for Challenges), and as already mentioned, there is no discussion of Pasolini in the Petition’s challenge of Claim 20.

have been common knowledge in the art). Petitioner cannot justify its impermissible hindsight reconstruction merely by offering conclusory statements concerning what would have been obvious based on alleged extraneous knowledge of a POSITA. *Alza Corp. v. Mylan Labs., Inc.*, 464 F.3d 1286, 1290 (Fed. Cir. 2006) (“[L]egal determinations of obviousness, as with such determinations generally, should be based on evidence rather than on mere speculation or conjecture.”).

Regardless, for at least the additional reasons below, the Petition fails to prove the obviousness of “wherein the cadence logic adjusts the cadence windows based on a measured cadence associated with the periodic human motion” as recited in claim 20.

First, Fabio does not disclose the required cadence window(s), because, as discussed in VI.A.1, *supra*, Fabio defines its validation interval (TV) as necessarily starting ***before the last step is counted***. EX1006, 5:10–39; see also EX2001 ¶¶ 32–35. Indeed, Fabio’s validation interval is used in determining *whether* to count the last step. In other words, Fabio’s validation interval TV is not “a window of time since a last step was counted” (as required by Petitioner’s construction for a “cadence window”), at least because Fabio’s TV starts before the last step is counted and is used to determine whether or not to count the last step.

Second, Fabio does not disclose adjusting a cadence window based on a measured cadence, as required by the claim language. Petitioner does not dispute that Fabio (EX1006)’s TV only looks at the single prior step (and uses the current step to validate the single prior step). And Petitioner does not explain how Fabio’s use of a ***single*** prior step can approximate “a measured cadence” as required by the

claim language.

Third, as expressly recited by Fabio itself, in the system of Fabio, for the previous step to be validated, its duration must be *substantially homogenous* with the duration of the current step. EX1006, 4:28-31 (“the validation occurs when the duration ΔT_K of a current step K is **substantially homogeneous** with respect to the duration ΔT_{K-1} of an immediately preceding step K-1.”) (emphasis added). In other words, Fabio does not disclose any “adjust[ing] based on a measured cadence” because steps in the system of Fabio are only validated if the previous step is *substantially homogenous* with the current step. This is further confirmed by Fabio where Fabio discusses irregular steps: “Possible isolated irregularities are ignored and do not interrupt or suspend updating of the count”. EX1006, 7:16-17. Therefore, Fabio’s validation interval is not “adjusted based on a measured cadence associated with the periodic human motion”, as the Petition merely argues in conclusory fashion.

For at least each of the reasons above, the Petition fails to prove the obviousness of “wherein the cadence logic adjusts the cadence windows based on a measured cadence associated with the periodic human motion” as recited in claim 20.

VII. THE CONSTITUTIONALITY OF *INTER PARTES* REVIEW IS THE SUBJECT OF A PENDING APPEAL

In a pending appeal to the Federal Circuit, *Polaris Innovations Ltd. v. Kingston Technology*, No. 18-01768, Dkt. No. 27, the patent owner Polaris argued that the Board’s appointments of administrative patent judges violate the

Appointments Clause of Article II, and that their decisions must be set aside, because administrative patent judges are “appointed by the Secretary of Commerce, in consultation with the Director” of the USPTO, but without appointment by the President and confirmation by the Senate in violation of Article II, Section 2, Clause 2 of the Constitution. Out of an abundance of caution, Patent Owner hereby adopts this constitutional challenge now to ensure the issue is preserved pending the appeal.

VIII. CONCLUSION

For at least the reasons set forth above, Uniloc respectfully requests that the Board deny all challenges in the instant Petition.⁹

Date: May 28, 2019

Respectfully submitted,

By: /s/ Brett A. Mangrum
Brett A. Mangrum; Reg. No. 64,783
Attorney for Patent Owner

⁹ Patent Owner does not concede, and specifically denies, that there is any legitimacy to any arguments in the instant Petition that are not specifically addressed herein.

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that this Response to Petition complies with the type-volume limitation of 37 C.F.R. § 42.24(b)(1) because it contains fewer than the limit of 14,000 words, as determined by the word-processing program used to prepare the brief, excluding the parts of the brief exempted by 37 C.F.R. § 42.24(a)(1).

Date: May 28, 2019

Respectfully submitted,

By: /s/ Brett A. Mangrum

Brett A. Mangrum; Reg. No. 64,783

Attorney for Patent Owner

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §§ 42.6(e), the undersigned certifies that an electronic copy of the foregoing PATENT OWNER’S RESPONSE was served, along with any accompanying exhibits not previously served, via the Patent Review Processing System (PRPS) and/or via email to Petitioner’s counsel at the following addresses identified in the Petition’s consent to electronic service:

Lead Counsel:

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Date: May 28, 2019

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