

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO., LTD.;
SAMSUNG ELECTRONICS AMERICA, INC.; GARMIN LTD.;
ZEPP HEALTH CORPORATION

Petitioners,

v.

SLYDE ANALYTICS, LLC,

Patent Owner.

Patent No. 8,588,033

Filing Date: September 28, 2012

Issue Date: November 19, 2013

Inventors: Pascal Pozzo Di Borgo and Jorg Hysek
Title: WRISTWATCH WITH ELECTRONIC DISPLAY

PATENT OWNER'S SUR-REPLY

Case No. IPR2024-00006¹

¹ GARMIN LTD. filed a petition in IPR2024-00765 and was joined as a petitioner to this proceeding. ZEPP HEALTH CORPORATION filed a petition in IPR2024-00833 and was joined as a petitioner to this proceeding.

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EXHIBIT LIST

Exhibit No.	Description of Document
2001	Second Amended Docket Control Order, Dkt. 33, <i>Slyde Analytics LLC v. Samsung Elecs. Co.</i> , No. 2:23-cv-00083-RWS-RSP (E.D. Tex. October 5, 2023)
2002	Defendants’ Joint Patent L.R. 3-3 Invalidity Contentions and Subject Matter Ineligibility Contentions, <i>Slyde Analytics LLC v. Samsung Elecs. Co.</i> , No. 2:23-cv-00083-RWS-RSP, served November 14, 2023
2003	Deposition of Benjamin B. Bederson, Ph.D., taken in <i>Samsung Elecs. Co. et al. v. Slyde Analytics LLC</i> , IPR2024-00006 on May 31, 2024 (“Bederson Depo.”)
2004	Declaration of Thomas Blackadar (“Blackadar Decl.”), dated June 28, 2024 and Exhibit A, Curriculum Vitae of Thomas Blackadar
2005	“TinyOS,” available at http://www.tinyos.net
2006	“TinyOS – Wikipedia,” available at https://en.wikipedia.org/wiki/TinyOS
2007	Philip Levis, “Experiences from a Decade of TinyOS Development,” available at https://www.usenix.org/system/files/conference/osdi12/osdi12-final-183.pdf
2008	“Timex Datalink,” available at https://en.wikipedia.org/wiki/Timex_Datalink
2009	“Seiko Data-2000,” available at https://en.wikipedia.org/wiki/File:Seiko_Data-2000,_The_First_Computer_Watch,_Circa_1983-1984,_LCD_Watch_with_Docking_Station_(8515983575).jpg
2010	“Wear OS,” available at https://en.wikipedia.org/wiki/Wear_OS
2011	“Tizen,” available at https://en.wikipedia.org/wiki/Tizen
2012	“WatchOS,” available at https://en.wikipedia.org/wiki/WatchOS

I. INTRODUCTION

Petitioner's Reply (Paper No. 30, "Reply") confirms patentability for at least the following reasons:

First, Petitioner fails to articulate a proper motivation to combine Mooring, which at least possesses certain watch embodiments, and Satoshi, which describes simulations of gears on a mobile device. Petitioner's motivation to combine was contingent upon standard microprocessors interchangeable between mobile devices and wristwatches during 2010, the time of the invention of the '033 Patent. However, the Reply continues to provide no factual basis for that alleged interchangeability due to at least the power and memory differential in microcontrollers between mobile devices and wristwatches. Relatedly, because of this difference, and the fact that the '033 Patent is clearly directed to a "wristwatch with electronic display," Petitioner proposed an incorrect definition of a POSITA including experience with "mobile devices" instead of wristwatches, which are categorically different.

To backfill its deficient motivation to combine Mooring and Satoshi based on the start of the art around 2020 and its expert's lack of skill in the pertinent art at that time, Petitioner included a brand new expert declaration among 18 new exhibits, which comprise new arguments not responsive to Patent Owner's ("PO") Response ("POR"), were not present in its Petition (Pet.), and should be rejected.

Second, Petitioner's Reply does not resolve its failure to render obvious Claim 1 through the purported combination of Mooring and Satoshi. Specifically, Petitioner's Reply confirms that Mooring is not directed to the claimed "simulation of a mechanical watch movement" but rather only discloses analog hands tied to its quartz movement embodiment. Moreover, Petitioner's Reply also confirms that Satoshi does not disclose the claimed "microcontroller being further arranged for synchronizing the displayed time" '033 Patent, Claim 1. Specifically, there is no basis for Petitioner's tortured reading of Satoshi, in which a user enters Satoshi's editing mode for the sole purpose of requesting an auto-synchronization to the current time. Instead, Satoshi's disclosure outrightly explains the possibility of a long time in editing mode preventing an accurate time due to the user involvement in that editing mode.

Fourth, Petitioner completely ignores all PO's arguments related to Claims 4-5 and 15-16, thereby admitting that such claims are not unpatentable.

Fifth, Petitioner's Reply fails to adequately grapple with its lack of motivation to combine in Grounds 4-6 of its Petition. Petitioner merely asserts that the presence of certain mechanical watch components in Inoue and Ruchonnet and the ability to simulate internal watch components in Tam automatically results in the purported motivations to combine for Grounds 4-6. Petitioner fails to consider both the

technical capacity to implement the disclosed mechanical components of Inoue and Ruchonnet with Tam or Mooring-Satoshi, let alone implement external mechanical watch components such that user operation of those external components results in corresponding simulations of the affected internal components on the watch display.

Accordingly, the Board should issue a Final Written Decision finding all the Challenged Claims of the '033 Patent not unpatentable.

II. CLAIM CONSTRUCTION

The constructions of the two “means for” terms in Claims 10 and 12 are not required to resolve the parties’ controversy, and, as PO explained, the Board need not construe the terms. Paper No. 19 (“POR”), 14; *see Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

III. PETITIONER’S NEW ARGUMENTS REGARDING THE STATE OF THE ART ARE INCORRECT

Petitioner all but admits that it failed to consider the proper state of the art at around 2010,² the effective filing date of the '033 Patent. Petitioner now seeks to

² Petitioner continues to rely upon its incorrect state of the art in ascertaining its expert’s qualifications, as well as in proposing its flawed motivation to combine at least Mooring and Satoshi. Reply, 6-18.

rectify that deficiency by creating a strawman of PO's understanding of the state of the art of wristwatches. Specifically, Petitioner mischaracterizes PO's expert opinion as alleging that watches in 2010 had no operating system and that the invention of the '033 Patent requires bare-metal-embedded code. *See* Reply, 2-5. On its face, this characterization is incorrect. Mr. Blackadar, PO's expert, explicitly opined that "wearable devices in 2010 (the priority date of the '033 Patent) were programmed *primarily* [, not exclusively] using bare-metal-embedded code" and "[a]t the time of the invention of the '033 Patent, developers only had several small footprint real time operating systems available to them" and then mentioned TinyOS as an example of a basic OS in wearables. Ex. 2004, ¶ 45 (emphasis added) (citations omitted). There is nothing inconsistent in Mr. Blackadar's deposition testimony cited by Petitioner, rendering Petitioner's strawman inapposite. Reply, 2-5.

The relevant point that Mr. Blackadar made in his expert declaration is that, while basic operating systems existed on small wearables (*e.g.*, TinyOS), basic bare metal embedded code systems or mobile device operating systems generally could not be utilized in wristwatches. Ex. 2004, ¶¶ 45, 49-52. That is why, as Mr. Blackadar opined, "industry leaders Google (Android), Samsung, and Apple, [had to] develop[] separate wearable operating systems from its mobile device operating systems" because "[c]ompressing data structures, the use of RAM, flash

memory, and static memory are all considerations for wristwatches but were not large concerns of the mobile device development environments of the time.” *Id.* ¶ 45; *see also* Ex. 1070, 23:23-27:8.

In contrast, Petitioner and Dr. Bederson routinely relied upon the fabricated concepts of “standard microprocessors” and “standard LCD screens” that “are interchangeable” between wristwatches and mobile devices precisely so that it could rely improperly on prior art references only dealing with mobile devices rather than the ’033 Patent’s claimed wristwatches. Pet. at 25 (citing Ex. 1002, ¶¶ 57-63, 64-68, 130). Notably, Petitioner’s new cites to IBM, Microsoft, LG, Apple, and Sony Ericsson’s implementations of operating systems for small wearables fail to address (i) how such operating systems are relevant; (ii) or whether such operating systems support Dr. Bederson’s “standard microprocessors.” Reply, 2-3.

The strawman in Petitioner’s Reply therefore does not rebut Mr. Blackadar’s opinion regarding the state of the art and does not support Petitioner’s proposition that microprocessors or microcontrollers were interchangeable between mobile devices and wristwatches.

IV. DR. BEDERSON IS NOT A PERSON OF SKILL IN THE ART

As the POR and PO’s expert explained, the state of the art surrounding wristwatches and small wearables around 2010 was substantially different than that of mobile devices. *See* POR, 14-17. Because of the rapid pace of change

surrounding microcontrollers for wristwatches over the course of a period of time, in part due to Moore's Law, "Patent Owner propose[d] that a person of ordinary skill in the art ("POSITA") would have had a bachelor's degree in electrical engineering, computer science, computer engineering, or a related field, and 5-6 years of experience in the research, design, development, or testing of touchscreen applications and graphical user interfaces for small wearables, with additional education substituting for experience and vice-versa." POR, 15; Ex. 1070, 26:23-27:8.

Regardless of PO's proposed relevant work experience period of 5-6 years or Petitioner's proposed 2-3 years, Dr. Bederson does not have the sufficient level of experience in the research, design, development, or testing of touchscreen applications and graphical user interfaces for *small wearables*.³ See POR, 17-19. In fact, Petitioner admits that "Dr. Bederson has not specifically worked on projects whose application was exclusively limited to wristwatches." Reply, 8.

³ Petitioner assumes, without any proof, that PO alleges that an Apple iPhone is a small wearable or the claimed "wristwatch." It does not. The Apple iPhone is listed as an Accused Product in Slyde's Complaint insofar as "Defendant permits the sale and download of digital watch faces for the Apple Watch Ultra 2 through mobile apps through the Apple Store. One example of the third-party application available on the Apple Store is Facer. Through the Facer mobile application, Apple Watch Ultra 2 users can download watch faces that simulated mechanical watch movements." Ex. 1066, ¶ 63 (footnote omitted).

Nowhere in Dr. Bederson's initial declaration do his qualifications even mention the words "watch" or "wearable." *See* Ex. 1002, ¶¶ 4-20. And Dr. Bederson's supplemental declaration fares no better because Dr. Bederson's examples of working on a high school mini-computer, custom image processing computer, automated tour guide system, Microsoft PocketPC platform, Apple iPhones, Google's Android phones, or mobile software for multiple platforms are not relevant to small wearables like the claimed wristwatch of the '033 Patent. Ex. 1052, ¶¶ 3-37. A disclosure of any such experience would be predictable given the title of the '033 Patent, "Wristwatch with Electronic Display." '033 Patent, Cover. As noted below, there is no excuse to sandbag PO on Reply with Dr. Bederson's newly-found experience (and several new supporting exhibits) that should have been present at the Petition stage.

V. PETITIONER'S NEW EXPERT DECLARATION AND CORRESPONDING ARGUMENTS IN PETITIONER'S REPLY SHOULD BE REJECTED

Petitioner had the ability to both fulsomely address the state of the art that it blatantly relies on for its purported motivation to combine Mooring and Satoshi in its Petition⁴ and lay out all its expert's credentials as they pertain to a person of

⁴ *See* Pet. at 25 ("A POSITA would have understood that different electronic watch displays (analog or digital in Mooring; analog with gears in Satoshi) are programmable on standard microprocessors and displayable on standard LCD

ordinary skill in the art but failed to do so. *Compare* Pet. at 23-35 with Reply at 9-18 (2 versus 9 pages describing Petitioner’s motivation to combine Mooring with Satoshi) and Ex. 1002, ¶¶ 4-20, 54-68 with Ex. 1052, ¶¶ 3-37. Petitioner instead added an entirely new expert declaration among 18 new exhibits. *See* Exs. 1052-1070. In so doing, Petitioner blatantly circumvents the Board’s Trial Practice Guide that states that a reply “may only respond to arguments raised in the preceding brief,” which means that it does not “proceed in a new direction with a new approach as compared to the positions taken in a prior filing” “in the context of 37 C.F.R. § 42.23(b).” Patent Trial and Appeal Board Consolidated Trial Practice Guide (“Trial Practice Guide”) (Nov. 2019), at 74, available at <https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf>. However, that is exactly what Petitioner does in its Reply by introducing a new expert declaration (*i.e.*, introducing new evidence). *See generally* Ex. 1052. Instead of merely rebutting the arguments in the POR, Petitioner improperly utilizes an additional expert declaration to add new arguments regarding the state of the art related to its motivation to combine Mooring and Satoshi. *Id.*; Trial Practice Guide, at 74 (“While replies and sur-replies can help crystalize issues for decision, a reply or sur-reply

screens and are interchangeable.”). The concepts of “standard microprocessors” are requisite to Petitioner’s purported motivation to combine and are directly relevant to the state of the art.

that raises a new issue or belatedly presents evidence may not be considered.”).

Specifically, buffering Petitioner’s understanding of the state of the art at the time of the invention of the ’033 Patent rises to the level of a “newly raised rationale to combine the prior art references that was not expressed in the petition” that is barred by the Board. *See* Trial Practice Guide, at 74 (citing *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369–70 (Fed. Cir. 2016)). As a result, the Petitioner’s introduction of new evidence and arguments by way of a new expert declaration should not be considered by the Board. Because “[i]t is of the utmost importance that petitioners in the IPR proceedings adhere to the requirement that the initial petition identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim.’” (citing 35 U.S.C. § 312(a)(3)) and that a “reply may only respond to arguments raised in the corresponding opposition or patent owner response,” these late identifications, which could have been presented in the Petition and which are not responsive to the POR, should be rejected by the Board as untimely and improper. *Intelligent Bio-Systems*, 821 F.3d at 1369 (“Once the Board identifies new issues presented for the first time in reply, neither this court nor the Board must parse the reply brief to determine which, if any, parts of that brief are responsive and which are improper. As the Board noted, ‘it will not attempt to sort proper from improper portions of the reply.’”). The Board should refuse the

Supplemental Reply Declaration and relevant portions of the Reply brief as untimely and improper. PO recognizes that the Board will address whether Petitioner's Reply exceeds the proper scope of a reply and that a reply that raises new issues or belatedly introduces new evidence will not be considered. *See Cyanotech Corp. v. The Bd. of Trs. of the Univ. of Ill.*, IPR2013-00401, Paper 44 (P.T.A.B. June 6, 2014).

VI. THERE IS NO MOTIVATION TO COMBINE MOORING AND SATOSHI

While incorrect, the Petition is unequivocal that Petitioner's motivation to combine rests upon the proposition that "[a] POSITA would have understood that different electronic watch displays (analog or digital in Mooring; analog with gears in Satoshi) are programmable on standard microprocessors and displayable on standard LCD screens and are interchangeable." Pet. at 25 (citations omitted).

Apparently failing to provide any proof that such standard, interchangeable processors exist between mobile devices and wristwatches at the time of the invention of the '033 Patent, Petitioner resorts to unsupported attorney argument. Specifically, Petitioner extrapolates, from a broad disclosure from the '033 Patent that microcontroller technology exists that is "compatible with a watchmaking application," its own conclusion pulled from thin air that "[i]n other words, the '033 Patent embraces the fact that display and microcontroller technology used in other pertinent areas (e.g., mobile devices) was readily applicable to use in watches. No

separate engineering talent and expertise would be necessary given this widespread use in other areas.” Reply, at 11 (citing ’033 Patent, 2:46-58). Such unsupported attorney argument should be rejected as it is no substitute for evidence. *Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 424 F.3d 1276, 1284, (Fed. Cir. 2005) (“Attorney argument is no substitute for evidence.”); *Wasica Fin. GmbH v. Cont’l Auto. Sys., Inc.*, 853 F.3d 1272, 1284-85 (Fed. Cir. 2017) (holding that “a party’s ‘unsworn attorney argument . . . is not evidence’ and thus cannot rebut record evidence.”). Moreover, the actual cited disclosure of the ’033 Patent describes that the microcontrollers compatible with the present invention are “current watch microcontrollers” (not mobile device microcontrollers) subject to the power consumption limitations compatible with a watchmaking application but nonetheless capable of the simulated mechanical movements required by the claims. ’033 Patent, 2:53-58 (“[t]he invention is also based on the observation that the computational power of the current watch microcontrollers (i.e., of microcontrollers of a size and with a power consumption compatible with a watchmaking application) enables a realistic simulation of a complex mechanical movement to be calculated and displayed in real time.”). Petitioner’s Reply even admits that “the words ‘mobile device’ and ‘phone’ do not appear anywhere in the ’033 patent.” Reply, 14.

Apart from addressing whether microprocessors were interchangeable

between wristwatches and mobile devices (they are not), such that a POSITA would be motivated to combine a mobile device reference to create a wristwatch, Petitioner ignores that Satoshi's Java implementation for its disclosed simulation of watch components is too large to combine with Mooring's disclosure of a watch with a display, and therefore, a POSITA would have not found a motivation to combine. POR, 25-26. Petitioner alleges that Satoshi is designed to work "even in an environment where arithmetic processing capability is limited" (Ex. 1007, [0009]) but fails to appreciate that, because the arithmetic processing capability is limited, Satoshi utilizes an Internet connection for moving components of its Java applet to the internet when Satoshi's Java Applet needs more memory. *See* Ex. 2004, ¶ 57; Reply, 16-17. Petitioner then disputes this fact about Satoshi in two ways: (i) alleging that Mooring also discloses an Internet connection; and (ii) disagreeing with the enormity of Satoshi's Java implementation with no proof.

First, Mooring only describes an Internet connection in the context of Mooring's "modular movement 12b stream[ing] stocks, weather and the like for the user via an Internet connection made using the RF communications interface 610. When it is time to leave for work, the user removes the modular movement 12b from the receptacle 22 and inserts the modular movement 12b into his or her watch." Ex. 1005, [0070]. Petitioner's first argument ignores the categorical difference in

streaming certain information to a detached modular movement, as in Mooring, and the claimed “synchronizing the displayed time by said displayed mechanical movement with that of said quartz oscillator,” which relies upon a ***physical component***, a quartz oscillator, to dictate simulated movements of a gear train on a wristwatch rather than being “dictated” the movements from the Internet.

Second, Petitioner ignores the disclosure of Satoshi, (Ex. 1007, [0008]), which Mr. Blackadar testified about, and which discloses that “Java applets are downloaded from content, for example, a server connected to a mobile phone, phone storage, so unused Java applets can be deleted and must be re-downloaded when a deleted Java applet is used.” *See* Ex. 1070, 39:12-40:24; 46:3-19. Because there is such high content in the simulation of mechanical components, the applets are constantly deleted and re-downloaded, an action that is not supported by wristwatch microcontrollers. *Id.* The sole basis for Petitioner’s assertion that the code size of Satoshi’s Java implementation would not be enormous is its conclusory expert declaration which merely states, without support, that “In light of these express disclosures of Satoshi,⁵ I specifically disagree with Mr. Blackadar’s assumption that ‘the code size’ of Satoshi’s ‘Java implementation would be enormous.’” *See* Ex.

⁵ Dr. Bederson refers to the disclosures that Satoshi is designed for “extremely limited image data storage capacity” and “extremely limited program stores capacity[.]” Ex. 1007, [0080].

1052, ¶ 55. Yet, as noted above, it is precisely because of “extremely limited image data storage capacity,” even in a mobile device, that Satoshi utilized an Internet connection for moving components of its Java applet to the internet when Satoshi’s Java Applet needs more memory.

Failing to articulate why a POSITA would combine an incompatible particular mobile device prior art of Satoshi with the watch embodiments of Mooring to form the claimed wristwatch, Petitioner’s Reply confirms there is no motivation to combine.

VII. MOORING DOES NOT DISCLOSE A SIMULATION OF MECHANICAL WATCH MOVEMENT

Petitioner’s Reply confirms its ignorance of Mooring’s own distinctions between (i) two types of electronic movements: a quartz movement and a computer-based movement; and (ii) two types of quartz movements: analog and digital time displays. *See* Ex. 1005, [0039]. Claim 1 of the ’033 Patent requires a quartz movement (i.e., “a quartz oscillator”), and is thus not a computer-based movement. ’033 Patent, Claim 1. The only types of quartz movements disclosed in Mooring are not simulations. As Petitioner seems to agree, a digital time display is merely a time read-out. *See* POR, 27 (citing Ex. 1005, [0003]). Aside from conflating the computer-based movement with the analog time display of Mooring’s quartz movement embodiment, Petitioner’s understanding flouts the plain and ordinary

meaning of the term, “simulation of a mechanical watch movement,” by alleging that displaying analog watch hands is somehow a simulation. Reply, 18-19. A POSITA would not have that understanding. *See* POR, 27-28 (citing Ex. 2004, ¶ 64). Therefore, Mooring does not disclose the claimed “simulation of a mechanical watch movement” of Claim 1 of the ’033 Patent.

**VIII. SATOSHI DOES NOT DISCLOSE THE CLAIMED
“MICROCONTROLLER FURTHER ARRANGED FOR
SYNCHRONIZING THE DISPLAYED TIME...”**

As a preliminary matter, Petitioner conflates the disclosure of the ’033 Patent that a “synchronization can be performed...at the user’s request through an appropriate command,” with a user directly performing the synchronization with delay error, which is what is described in Satoshi. Reply, 19 (citing ’033 Patent, 4:3-6). Under Petitioner’s tortured reading of Paras. [0087]-[0088] of Satoshi, Satoshi’s editing mode is entirely redundant because Petitioner seems to understand that a user enters a request in the editing mode and the time auto-adjusts to the current time in execution mode. Reply, 20-21. Such an understanding conflicts with the disclosure of Satoshi, where “there may be a big difference between a time when the editing mode is opened and a time on the clock when the hands are adjusted.” Ex. 1007, [0088]. There would be no reason for a “big difference” in time if all that was required in editing mode was a perfunctory request to auto-synchronize to the current time. POR, 30. Satoshi even notes that, because a long time may pass in editing

mode, “the time cannot be set accurately.” *Id.* at 30-31 (citing Ex. 1007, [0088]). The following sentence of Satoshi clarifies that “by making it possible to adjust...*in the short time* described above, an accurate time can be set.” Ex. 1007, [0088] (emphasis added). In other words, only if the user takes a short time in editing mode, will an accurate time be set. Notably, Satoshi does not use the phrase “current time” in the context of this disclosure of a short time in editing mode, because, ostensibly, even “*an* accurate time” is not the precise “current time” “read from the clock function of the mobile phone,” as Petitioner attempts to forcibly read into Satoshi’s disclosure. Reply, at 20-21.

Petitioner’s Reply also confirms that Satoshi does not disclose a microcontroller performing the synchronization. *See id.*, 20. In fact, to supplement the lack of Satoshi’s disclosure, Petitioner relies on its own convenient understanding of what “a POSITA would have understood.” Petitioner is improperly applying hindsight and applying a “POSITA’s understanding,” where none exists, as a stop gap in the evident absence of Satoshi’s disclosure of a microprocessor executing code to perform any synchronization. *In re McLaughlin*, 443 F.2d 1392, 1395 (C.C.P.A. 1971) (“Any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill [in the art] at the time

the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper.”).

Petitioner's attempt to phrase PO's arguments regarding Claim 11's recited “periodically” and “an automatic manner” as a claim construction dispute is misguided. Absent any claim construction dispute, the plain and ordinary meaning of the terms governs and, as with the Petition, Petitioner fails to disclose how any synchronization in Satoshi is performed periodically or automatically. *See* POR, 34-35. Similarly, for Claim 12, as noted above, Petitioner conflates a user actually performing the claimed synchronization with the claimed “entering and executing a request for said synchronization by the user.” Reply, 21-22. Petitioner admits that it can point to no disclosure in Satoshi of commands entered or executed (indicating the claimed “enter[ed] and execut[ed] request[s]”). *Id.* Satoshi only discloses an editing mode where the user performs the synchronization without any request. *See* POR, 35-36.

Therefore, contrary to Petitioner's assertion, Satoshi does not disclose a microcontroller synchronizing time beyond a user's direct adjustment of the simulated hands in an editing mode, and the combination of Mooring and Satoshi cannot render obvious Claims 1, 11, and 12 of the '033 Patent.

**IX. PETITIONER’S PURPORTED COMBINATIONS OF
MOORING, SATOSHI, AND LOUCH FAILS TO RENDER
OBVIOUS CLAIM 13**

PO’s argument that Claim 13 is not rendered obvious for the same reasons as Claim 1 is not an implicit admission that “Louch expressly teaches ‘displaying said mechanical movement on the whole surface of the electronic display’” at least because there is no underlying motivation to combine Mooring and Satoshi, Mooring and Satoshi do not describe the position and dimensions of any purported simulation, and, even if Louch described a world clock widget that “can consume the entire display area,” Claim 13 also recites that the claimed “mechanical movement” “occup[ies] the position and the dimensions of a real mechanical movement.” ’033 Patent, Claim 13. Both the Petition and Petitioner’s Reply are silent regarding that claim limitation. Pet. at 53-54; Reply, at 22.

**X. PETITIONER’S REPLY CONFIRMS THAT CLAIMS 4-5
AND 15-16 ARE NOT UNPATENTABLE**

Petitioner’s Reply fails to rebut PO’s arguments that the combination of Mooring, Satoshi, and Louch does not render obvious “the microcontroller being specifically arranged for interpreting signals from the touch sensor, for selecting one screen from among several available screens depending on these signals, and for displaying this screen on the entirety of said display, said microcontroller being further specifically arranged so as to cause screens to scroll by in order to replace

durably the screen displayed initially by another screen,” as required by Claim 15, or “said microcontroller being further arranged for interpreting signals from the touch sensor, for selecting one screen from among several available screens depending on these signals, and for displaying this screen on the entirety of said display, said microcontroller being further specifically arranged so as to cause screens to scroll by in order to replace durably the screen displayed initially by another screen,” as required by Claim 16. *See* POR, 40-42. Therefore, in the absence of any counterargument, Petitioner’s Reply confirms that Claims 15-16 are not unpatentable.

Similarly, Petitioner’s Reply fails to rebut PO’s arguments that the combination of Mooring, Satoshi, Inoue, and Tam does not render obvious “a crown stem being displayed on said display opposite said crown, the position of said displayed crown stem being modified by said microcontroller when said microcontroller detects that said crown has been actuated, so as to simulate a direct action by said crown on said displayed crown stem,” as required by Claim 4, or “an element displayed on said display opposite said push-button, the position of said element being modifiable by said microcontroller when said microcontroller detects that said push-button has been actuated, so as to simulate a direct action by said push-button on said displayed element,” as required by Claim 5. *See* POR, 46-51.

Therefore, in the absence of any counterargument, Petitioner's Reply confirms that Claims 4 and 5 are not unpatentable.

XI. PETITIONER'S REPLY CONFIRMS THAT PETITIONER FAILED TO ARTICULATE PROPER MOTIVATIONS TO COMBINE FOR GROUNDS 4-6

A. No Motivation to Combine Mooring-Satoshi with Tam⁶

Petitioner confirms that "Tam teaches simulating the movements of internal watch components in a wristwatch." Reply at 23. Petitioner misunderstands PO's use of Ex. 1015 to illustrate that basic point of what Tam actually discloses and how the simulations and physical models of Ex. 1012 are carried out, which is applicable to whether there is a motivation to combine. *See* POR at 44-46. Petitioner's Reply ignores each of the reasons that PO provided for why there would be no motivation to combine Tam with Mooring, Satoshi, and Inoue: (i) Tam describes only simulating actual components rather than combining physical components, like a crown, with simulated mechanical components; and (ii) Tam's physical models are created through CAD models, not suitable for wristwatches. POR, 46. Petitioner

⁶ Petitioner's Reply improperly splits the combinations that it actually relies upon for its Grounds 4, 5, and 6. Ground 4, for example, is the combination of "Mooring and Satoshi in further view of Inoue and Tam." Petitioner's Reply implies three separate motivations to combine (Mooring-Satoshi with Tam, Mooring-Satoshi with Inoue, and Mooring-Satoshi with Ruchonnet) in contradiction with its obligation to provide a motivation to combine (i) Mooring, Satoshi, Inoue, *and* Tam for Ground 4; (ii) Mooring, Satoshi, Tam, *and* Ruchonnet; and (iii) Mooring, Satoshi, Lee, Tam, Inoue, *and* Ruchonnet.

confirms that its sole articulated motivation to combine is that “a POSITA would have been motivated to consider Tam’s realistic simulations.” Reply, 23. Aside from the technical impossibility of combining the teachings of Tam with wristwatch references (which Petitioner fails to address), a mere desire for Tam’s “realistic simulations” does not provide a motivation to combination because Tam’s disclosed simulations possess no inkling of being put into motion by physical stimuli on the user end.

B. No Motivation to Combine Mooring-Satoshi with Inoue⁷

Petitioner confirms that “Inoue is relied on for its disclosure of a crown on a watch” and nothing more. Reply at 23. Petitioner’s gross simplification that the mere presence of a physical crown on a watch combined with Mooring or Satoshi is sufficient to develop a watch where a user can use the physical crown to correspondingly create simulations of mechanical components on a watch’s display is not reasonable or technically possible. POR, 42-43 (citations omitted).

It is true that Inoue is prior art for all that it discloses (Reply at 24) but, as Petitioner admits, all that Inoue discloses is a physical crown. PO’s explanation that Seiko’s (the applicant of the Inoue reference) watches, at the time of the Inoue reference, “did not contemplate incorporating simulations on a display based on user

⁷ See *supra* n.6

interaction with external components” does not propose a commercialization requirement. Rather the explanation indicates that the scope of disclosure of the Inoue reference is not commensurate with Petitioner’s understanding that Inoue’s basic mechanical crown is compatible to initialize simulations on a watch face.

C. No Motivation to Combine Mooring-Satoshi with Ruchonnet⁸

Petitioner’s Reply confirms that its alleged motivation to combine Ruchonnet with Mooring-Satoshi fails for the same reasons as described above for Mooring-Satoshi with Inoue. Petitioner merely states that “the watch components for which the Petition relies on Ruchonnet are well- known in mechanical watches.” Petitioner ignores the basis for PO’s argument that “knowledge of various mechanical watch components that Petitioner admits Ruchonnet provides is not enough to use the simulations of Tam on a wristwatch,” particularly where Tam discloses a limit on the complexity of mechanical movements it simulates. *See* POR, 51-53.

**XII. THE PRIOR ART DOES NOT RENDER OBVIOUS CLAIMS
2-3, 6-10, AND 17-19**

Patent Owner stands on the arguments made in its POR with respect to Claims 2-3, 6-10, and 17-19. *See* POR, 38-39, 51-53.

⁸ *See supra* n.6

XIV. CONCLUSION

For at least the foregoing reasons, Petitioner's combinations fail to render obvious any Challenged Claim. The Board should issue a Final Written Decision finding the Challenged Claims not unpatentable.

Respectfully submitted,

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CERTIFICATE OF WORD COUNT

The undersigned hereby certifies that the portions of the above-captioned PATENT OWNER'S SUR-REPLY specified in 37 C.F.R. § 42.24 has 4,714 words in compliance with the 5,600 word limit set forth in 37 C.F.R. § 42.24. This word count was prepared using Microsoft Word for Office 365.

Respectfully submitted,

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