

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMAZON.COM, INC. and AMAZON.COM SERVICES LLC,
Petitioner,

v.

NOKIA TECHNOLOGIES OY,
Patent Owner.

Case No. IPR2024-00799
Patent. No. 9,473,602

PATENT OWNER'S PRELIMINARY RESPONSE

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LIST OF EXHIBITS

Ex. Number	Title
2001	Declaration of Franco Lodato
2002	<i>Curriculum Vitae</i> of Franco Lodato
2003	U.S. Patent Publication No. 2004/0252220 (“Oda US Pub”)

I. INTRODUCTION

Amazon.com, Inc. and Amazon.com Services LLC, (“Petitioner” or “Amazon”) petitioned for *inter partes* review of claims 1-36 (“Challenged Claims”) of U.S. Patent No. 9,473,602 (“’602 Patent”), which is owned by Nokia Technologies Oy (“Patent Owner” or “Nokia”). Petitioner asserts three grounds of unpatentability, but not a single ground contains a cited reference that discloses or even suggests the claimed configuration of the components of the ’602 Patent.

The ’602 Patent claims a specific relationship between the user input section, an engine section, and a battery. Specifically, the independent claims recite “a user input section located *above* the engine section and a battery,” and “the user input section is located *adjacent* the battery and the engine section.” However, each of the cited references disclose an inapposite configuration, a stacked configuration of an engine and a battery, that is contrary to the claims of the ’602 Patent. As is demonstrated herein and confirmed by the prosecution history, a stacked configuration (e.g., engine located above the battery) results in a configuration whereby the user input section is not located *adjacent* the battery and the engine section.

In Petitioner’s first ground, Nguyen fails to disclose or suggest any particular arrangement of components, let alone the claimed configuration, because Nguyen discloses a block diagram that functions as a listing of the internal components

without any guidance as to their ultimate arrangement. Worse still, neither Petitioner nor its expert provide any explanation as to how those components would be arranged other than relying on conclusory statements, such as the components are in “close proximity.” But “close proximity,” is not what is claimed. Given the shortcomings of Nguyen, Nguyen fails to teach or suggest “a user input section located *above* the engine section and a battery, wherein the user input section is located *adjacent* the battery and the engine section.”

In its second and third grounds, Petitioner still relies on Nguyen but introduces Zadesky, Oda, and Gettemy. Petitioner relies on Zadesky and Gettemy to allegedly *reinforce* Nguyen. But each of Zadesky, Oda, and Gettemy explicitly discloses a stacked configuration of components. Instead of reinforcing Petitioner’s alleged rejection, Zadesky, Oda, and Gettemy confirm what a POSITA would have understood, that conventional devices prior to the ’602 Patent included a stacked configuration, which does not render the claimed limitations unpatentable.

The Board should deny institution because the Petitioner has failed to meet its burden of showing a reasonable likelihood of unpatentability for any challenged claims of the ’602 Patent.

II. BACKGROUND

A. Overview of the ’602 Patent

The ’602 Patent, titled “Portable Electronic Device,” relates generally to “form factor configuration of a portable electronic device.” Ex. 1001, Cover, 1:18-

21. Ex. 2001, ¶48. The '602 Patent recognized a desire at the time for “[u]ltra thin telephone products,” and an emphasis on “mechanical thickness, allowing the feature set and industrial design to be adjusted to suit this goal.” Ex. 1001, 1:23-34. The '602 Patent also recognized a desire for “maintain[ing] aesthetic balance in proportions.” Ex. 1001, 1:35-39; Ex. 2001, ¶49.

The '602 Patent addressed the technological limitations associated with devices by presenting several embodiments of a “portable electronic device” in which different configurations provide for a reduction in thickness of the portable electronic device. Ex. 2001, ¶50.

The '602 Patent presents solutions to the problem of reducing thickness in a portable electronic device by providing for unique configurations of an engine section, a battery, and a user input section. Ex. 2001, ¶51. One example device in the '602 Patent is a “flip-phone type of telephone comprising a first section 12 connected to a second section 14,” however the '602 Patent explains that “features of the invention could be used in other types of portable electronic devices, such as a PDA or a hand-held gaming device.” Ex. 1001, 2:60-67; Ex. 2001, ¶51. The '602 Patent also discloses that “[t]he configurations shown in FIGS. 11-13 could be used in candy-bar style telephone handsets as well as flip-phone style handsets.” Ex. 1001, 5:58-60; Ex. 2001, ¶51.

The '602 Patent also notes that “the invention can be embodied in many alternate forms of embodiments,” and “[i]n addition, any suitable size, shape or type of elements or materials could be used.” Ex. 1001, 2:52-59; Ex. 2001, ¶52.

The '602 Patent discloses a “first housing member 28,” an “engine 30,” a “batter 32,” and a “user input section 34.” Ex. 1001, 3:27-32. The “first housing member 28 generally comprises a one-piece tubular member,” which “could be formed from an extruded member with holes punched into it after it is extruded.” Ex. 1001, 3:30-36; Ex. 2001, ¶53. The '602 Patent also discloses that the “user input section [34] generally comprises keymats 50, an EL backlight foil 52, a keymat dome sheet 54 and a keymat stiffener 56,” and “in alternate embodiments, any suitable user input section could be provided.” Ex. 1001, 3:54-62; Ex. 2001, ¶54.

The “engine 30 generally comprises a printed circuit board, a transceiver, a processor, and a memory, among other components,” where a “width of the engine 30 is only about less than half the width 22 of the telephone.” Ex. 1001, 3:65-67; Ex. 2001, ¶55.

The '602 Patent depicts a “battery 32 [] located adjacent the lateral side of the engine 30 and is also about less than half the width 22 of the telephone.” Ex. 1001, 3:67-4:2; Ex. 2001, ¶55. The '602 Patent underscores the benefits of this unique configuration, including, “[u]nlike conventional telephones which have the engine located above the battery, the configuration of the side-by-side engine/battery allows

the battery and the engine to have a practical design thickness and still provide a reduced thickness 24 as compared to conventional flip-phones.” Ex. 1001, 4:2-7; Ex. 2001, ¶56.

Underscoring its focus on solving the problem of device thickness by way of providing a unique configuration of the battery, engine, and user input section, the ’602 Patent depicts, in FIG. 13, a configuration where the “battery 130 is about half the width of the tubular housing member 132,” and the “engine 134 comprises a portion 136 located at the lateral side of the battery 130 and another portion 138 located between the battery and the keypad 140.” Ex. 1001, 5:53-58. Ex. 2001, ¶¶57-58. This configuration is consistent with a goal of the ’602 Patent - a “split side-by-side configuration is provided” in which “the user input section is located directly opposite the battery without a substantial portion of the engine section therebetween.” Ex. 1001, 5:34-39; Ex. 2001, ¶58.

The ’602 Patent describes, with reference to FIGS. 11-13, a “one-piece metal tubular housing member 118” housing “components 112 [battery], 114 [engine], and 116 [keypad].” Ex. 1001, 5:42-48; Ex. 2001, ¶59.

The ’602 Patent also provides that its disclosed configurations “could be used in candy-bar style telephone handsets as well as flip-phone style handsets.” Ex. 1001, 5:58-60; Ex. 2001, ¶59. The ’602 Patent provides an example of a candy-bar style telephone handset, stating that “[c]andy-bar shaped mobile phones can have

smaller thicknesses, such as the Motorola SLIVR...” Ex. 1001, 1:31-33; Ex. 2001, ¶59.

The ’602 Patent emphasizes that “the side-by-side positioning of the battery/engine can further allow a reduction in thickness of the handset versus conventional stacked battery/engine handsets.” Ex. 1001, 6:1-4; Ex. 2001, ¶60. Therefore, the ’602 Patent disclosed a novel and thinner structure than previously known or used, resulting in improved thickness reduction over prior systems. Ex. 2001, ¶60.

B. Prosecution History

U.S. Patent Application No. 14/612,712 (“the ’712 application”) was filed February 3, 2015, as a continuation in a family of U.S. Patent Application No. 14/067,249 (“the ’249 application,” now U.S. Patent No. 8,953,780) filed October 30, 2013, U.S. Patent Application No. 13/741,781 (“the ’781 application,” now U.S. Patent No. 8,615,077) filed January 15, 2013, U.S. Patent Application No. 12/860,234 (“the ’234 application,” now U.S. Patent No 8,363,824) filed August 20, 2010, and U.S. Patent Application No. 11/393,510 (“the ’510 application,” now U.S. Patent No. 7,787,618) filed March 29, 2006. Ex. 1002, pp. 2-67; Ex. 2001, ¶61.

Claim 15 of the ’510 application was not limited to a flip-phone configuration, as it recited:

A mobile telephone, comprising:

an engine section comprising a printed circuit board, a transceiver, a processor and a memory;
a battery located adjacent the engine section; and
a user input section comprising a keypad located above the engine section and the battery, wherein the user input section is located directly opposite the battery without a portion of the engine section therebetween.

Ex. 1010, p. 23; Ex. 2001, ¶62.

The '712 application was filed with original claims 1-24, along with a preliminary amendment canceling claims 1-24 and presenting new claims 25-42. Ex. 1002, 20-23, 52-57; Ex. 2001, ¶63. Claim 25 recited “a user input section located above the engine section and a battery, wherein the user input section is located adjacent the battery and the engine section.” *Id.*

A Non-Final Office Action dated September 24, 2015, indicated that the “application [was] being examined under the pre-AIA first to invent provisions,” evidencing that the Examiner afforded the '712 application its original priority date of March 29, 2006. Ex. 1002, pp. 80-85; Ex. 2001, ¶65. The Non-Final Office Action included double patenting rejections over the parent U.S. Patent No. 8,953,780 and antecedent basis rejections. Ex. 1002, pp. 80-85; Ex. 2001, ¶65. In response, the Applicant amended the claims to replace “apparatus” in the preamble with “portable electronic device,” and to replace “a hole through a front side of the housing” with “an opening between said exterior lateral sides of said one piece housing of the

portable electronic device.” Ex. 1002, pp. 103-112; Ex. 2001, ¶66. The Applicant also added claims 43-60, including additional “portable electronic device” dependent claims and a set of claims directed to a “mobile phone.” *Id.* The Applicant asserted that the amendments overcame the double patenting rejections over U.S. Patent No. 8,953,780 and the indefiniteness rejections. *Id.*

A Final Office Action dated March 31, 2016, also indicated that the application was being examined under the pre-AIA first to invent provisions, further evidencing that the Examiner afforded the ’712 application its original priority date of March 29, 2006. Ex. 1002, pp. 667-676; Ex. 2001, ¶67. The Final Office Action included double patenting rejections over U.S. Patent No. 8,953,780. Ex. 1002, 667-676. The Examiner also rejected claims 36, 37, and 40 under pre-AIA 35 U.S.C. § 102(b) over “applicant’s cited reference US 2004/0252220 (Oda et al hereinafter Oda)” (“Oda US Pub”). *Id.* The Examiner also rejected claims 36, 37, 40 and 41 under pre-AIA 35 U.S.C. § 102(b) over “applicant’s cited reference JP 2002-125031 (Hiroshi).” *Id.* The Examiner also rejected claims 38, 39 and 42 as unpatentable under pre-AIA 35 U.S.C. § 103(a) over Oda US Pub or Hiroshi. *Id.* These references have publication dates in 2002 and 2004, further evidencing that the Examiner afforded the ’712 application its original priority date of March 29, 2006. Ex. 2001, ¶67.

The Applicant responded with a terminal disclaimer over U.S. Patent 8,953,780 (*see* Ex. 1002, 703), and amended claim 36 to include:

wherein the battery and engine section are configured to be housed in the housing section such that the user input section is located above the engine section and the battery, and wherein the user input section is located adjacent the battery and the engine section.

Ex. 1002, p. 694. The Applicant pointed to paragraph [0028] of the originally-filed specification as well as Figs. 7-8 for support for the amendment. Ex. 1002, p. 700; Ex. 2001, ¶68. Paragraph [0028] of the originally-filed Specification, which corresponds to column 4 lines 2-7 of the issued patent, states:

Unlike conventional telephones which have the engine located above the battery, the configuration of the side-by-side engine/battery allows the battery and the engine to have a practical design thickness and still provide a reduced thickness 24 as compared to conventional flip-phones.

Ex. 1002, p. 46, ¶[0028]. The Applicant distinguished over the references by relying on the amended claim language, arguing that “there is no teaching or disclosure in [Oda US Pub] to provide the battery and engine section to be housed in the housing such that the user input section is located *above the engine section and the battery*, and wherein the user input section is located *adjacent the battery and the engine section*.” Ex. 1002, p. 700 (emphasis added); Ex. 2001, ¶68. The Applicant also

argued that Hiroshi failed to provide such a teaching or disclosure. Ex. 1002, 701. Ex. 2001, ¶68. In light of the amendment and argument, a Notice of Allowance was mailed June 15, 2016. Ex. 1002, 710-734; Ex. 2001, ¶69.

III. CITED REFERENCES

A. Nguyen (Ex. 1004)

Nguyen, is generally directed to “a handheld computer having a housing configuration that orients a surface feature.” Ex. 1004, ¶[0001].

B. Zadesky (Ex. 1005)

Zadesky is generally directed to “enclosures of portable computing devices and methods of assembling portable computing devices.” Ex. 1005, 1:24-27.

C. Oda (Ex. 1006)

Oda is generally directed to an “image pick-up device provided with a display portion displaying taken pictures.” Ex. 1006, ¶[0001].

D. Gettemy (Ex. 1007)

Gettemy is generally directed to “a relocatable and universal interface module for a display device that can be installed in different portable computer system designs.” Ex. 1007, 1:9-13.

IV. PERSON OF ORDINARY SKILL IN THE ART (POSITA)

Patent Owner contends that a person of ordinary skill in the art (“POSITA”) for the '602 Patent would have had either (1) a bachelor of science in industrial design or mechanical engineering and three years of experience designing mobile

phones or (2) a master of science degree in industrial design or mechanical engineering and two years of experience designing mobile phones. Ex. 2001, ¶21. A person with a different degree but with additional relevant experience could still qualify if the additional experience compensates for the different educational background. *Id.* A person with less experience designing mobile phones could still qualify if the person has additional education that compensates for their lesser experience. *Id.*

While Petitioner provides a different definition of a POSITA for the '602 Patent, Patent Owner does not believe the ultimate definition of a POSITA impacts the issues presented herein for the purposes of Institution. *See* Petition, p. 11. As such, while Patent Owner reserves all rights to challenge Petitioner's definition of the POSITA in this proceeding, for the purposes of Institution, Patent Owner does not dispute Petitioner's definition.

V. CLAIM CONSTRUCTION

Petitioner contends that claims should be construed according to the ordinary and customary meaning as understood by a POSITA. Petition, p. 11. While Patent Owner agrees that the claims should be construed according to the ordinary and customary meaning as understood by a POSITA, Patent Owner also reserves the right to address construction of any terms if this proceeding is instituted and/or in any other action involving the '602 Patent. Ex. 2001, ¶76.

Petitioner also proposed constructions for the “housing...” limitations. Petition, p. 12. The Board need not resolve the proper construction of the “housing...” limitations for the purposes of institution because Patent Owner demonstrates that institution should be denied regardless of any construction of the “housing...” limitations. Ex. 2001, ¶77. Patent Owner also reserves the right to address construction of the “housing...” limitations if this proceeding is instituted and/or in any other action involving the ’602 Patent. Ex. 2001, ¶77.

VI. THE BOARD SHOULD NOT INSTITUTE *INTER PARTES* REVIEW

A. Petitioner Has Failed to Establish a Reasonable Likelihood that Any Challenged Claim Is Unpatentable under 37 C.F.R. § 42.108(c).

Independent claims 1, 15, and 22 of the ’602 Patent recite both “a user input section located *above* the engine section and a battery,” and “the user input section is located *adjacent* the battery and the engine section.” In this way, the claims of the ’602 Patent enable a novel structure that is thinner than previously known or used, due to the unique configuration of the battery, engine section, and user input section, resulting in improved thickness reduction. Ex. 2001, ¶60. The ’602 Patent emphasizes the benefits of such a configuration, stating that, “[u]nlike conventional telephones which have the engine located above the battery, the configuration of the side-by-side engine/battery allows the battery and the engine to have a practical design thickness and still provide a reduced thickness 24 as compared to

conventional flip-phones.” Ex. 1001, 4:2-7. It was this specific design that overcame the conventional devices cited during prosecution. Ex. 1002, p. 700 (amendment and argument stating that “there is no teaching or disclosure in Oda to provide the battery and engine section to be housed in the housing such that the user input section is located above the engine section and the battery, and wherein the user input section is located adjacent the battery and the engine section,” and arguing the same over Hiroshi); *see also* Section VII.A, *supra* (explaining how the Applicant overcame the references that disclosed stacked configurations).

In contrast to the claims, the cited references, at best¹, disclose a stacked configuration (e.g., engine located above the battery). As is demonstrated herein, a stacked configuration (e.g., engine located above the battery) results in a configuration whereby the user input section is not located *adjacent* the battery and the engine section. Worse still, the references confirm the state of the art, locating the engine located above the battery, which is inapposite to and teaches away from the claims, undercutting any theory of obviousness presented herein.

Petitioner has failed to meet its obligations with respect to the challenged claims in the Petition. Pursuant to 37 C.F.R. § 42.108(c), Petitioner must demonstrate a reasonable likelihood “at least one of the claims challenged in the

¹ Nguyen is silent as to the configuration of its internal components.

petition is unpatentable” to warrant institution of an *inter partes* review for that claim. Petitioner has not done so.

1) Ground 1 - Nguyen does not render obvious “a user input section located above the engine section and a battery, wherein the user input section is located adjacent the battery and the engine section.”

Petitioner alleges that Nguyen alone teaches or renders obvious claims 1, 11, 12, and 15 of the ’602 Patent (of which claims 1 and 15 are independent). *See* Petition, p. 12. Petitioner’s allegations fail as does Ground 1 for several reasons.

First, and in contrast to the claims and the ’602 Patent specification, Nguyen does not disclose “a user input section located above the engine section and a battery,” and “the user input section is located adjacent the battery and the engine section,” nor does the disclosure of Nguyen suggest such a configuration to a POSITA. Ex. 2001, ¶78. Instead, Nguyen merely discloses a block diagram that effectively lists the various components of Nguyen to include exterior components, such as the display, but is silent as to their actual arrangement. Ex. 2001, ¶79.

Second, based on the teachings of Nguyen, it also would not have been obvious to the POSITA that Nguyen’s internal components would have been configured in the manner claimed by the ’602 Patent because Nguyen emphasized optimizing display size (i.e., length and width), which would have led to a stacked configuration of a battery and an engine. Ex. 2001, ¶92. And, at least in view of well-known technological limitations at the time, such as heat dissipation and component

sensitivity, the POSITA would not have been motivated to modify the Nguyen stacked configuration. Ex. 2001, ¶¶96-97.

Third, conventional devices, such as those disclosed in Zadesky, Oda, and Gettemy confirm what a POSITA would have understood, that conventional devices included a stacked configuration that does not satisfy the claimed limitations and is distinguished by the '602 Patent. Ex. 2001, ¶95. As such, for this additional reason, the POSITA would have understood that Nguyen disclosed a stacked configuration and the POSITA would not have been motivated to modify the Nguyen stacked configuration. Ex. 2001, ¶98.

Fourth, Petitioner points to FIG. 4 of Nguyen and alleges that because certain elements are included in the Nguyen block diagram, they are all included in the engine section. However, Petitioner and its expert fail to reconcile the disclosure in Nguyen that its transceiver, which is made up of “a wireless communication transmitter” and “a wireless communication receiver,” is located on the rear side of the device and at least partially on the exterior surface. Ex. 2001, ¶104. That is, Petitioner and its expert provide no explanation as to why the POSITA would have considered Nguyen’s transceiver to be part of an engine section that is located in the manner required by the claims. As such, Petitioner fails to demonstrate that Nguyen teaches or suggests the claimed engine section comprising a transceiver.

For these reasons and the reasons below, Petitioner fails to show that Nguyen teaches or suggests claims 1, 11-12, and 15 of the '602 Patent. As such, Ground 1 fails.

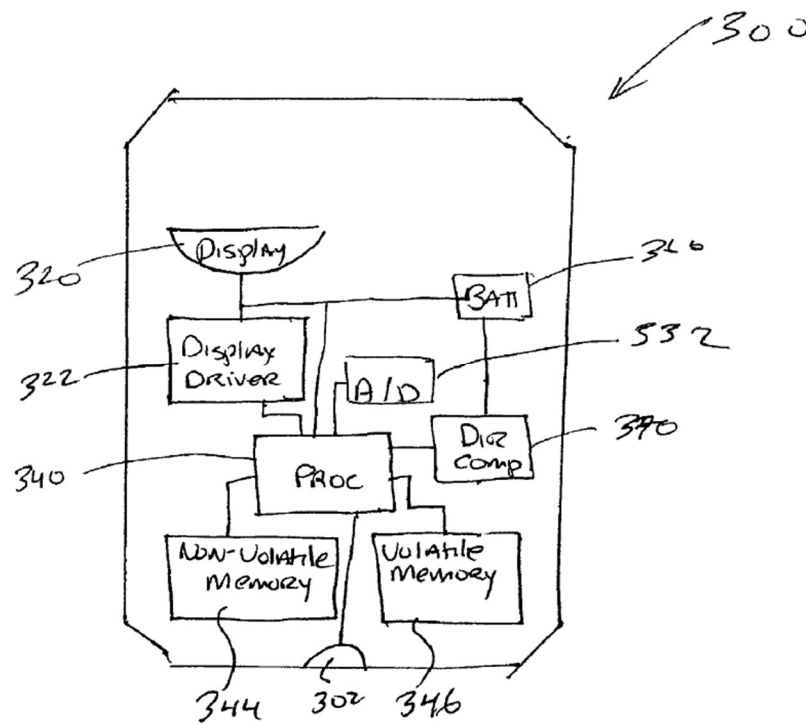
a) Nguyen does not disclose or render obvious the configuration of its internal components.

Petitioner asserts that “Nguyen teaches that the user input section, including the touchscreen, alphanumeric input area, and buttons, are located on the front face” “above and adjacent to the internal components of the device, which include the engine section and battery.” Petition, p. 23. Petitioner also asserts that “it would have been obvious for the input section to be located above and adjacent to the engine section and battery because Nguyen teaches a compact form factor for its handheld device, where the internal components such as the engine and battery would have been in close proximity to the user input section on the front face.” Petition, pp. 23-24. Petitioner’s generic assertions that rely on “close proximity” fail in view of the explicit claim language.

Petitioner never identifies any specific arrangement of components in Nguyen opting instead for an argument that these components must be in “close proximity.” Petitioner cannot provide a specific arrangement of components because Nguyen does not disclose one. At best, Nguyen discloses a conceptual block diagram in FIG. 4. Ex. 2001, ¶81. Nguyen’s conceptual block diagram is not intended to and does not depict the exact placement of components. Ex. 2001, ¶81.

In FIG. 4, Nguyen depicts “a block diagram of a handheld computer,” where the “handheld computer 300 includes a processor 340 coupled to a first memory 344 (non-volatile),” “a second memory 346 (volatile),” and a “display driver 322,” and “[a] battery 360 [that] may power multiple components with handheld computer 300.” Ex. 1004, ¶¶[0034-0035]; Ex. 2001, ¶81.

Ex. 1004, FIG. 4



A POSITA would have understood that FIG. 4 was a conceptual drawing of various components that may be included as part of Nguyen’s device and would not have considered FIG. 4 to be demonstrating actual placement of components within a housing or even placement of a given component relative to another component. Ex. 2001, ¶82. Indeed, FIG. 4 is so conceptual that the display is depicted “inside”

the device. Ex. 2001, ¶82. At best, the block diagram of FIG. 4 shows electrical communication between the various components but does not provide any further detail regarding the arrangement of components to the POSITA. Ex. 2001, ¶82.

Any interpretation of FIG. 4 in which the components are placed exactly as depicted would not make sense because a POSITA would not have thought that the display 320 was limited to an internal part of the device. Ex. 2001, ¶83. Likewise, Nguyen's directional component 370, which is placed on the top slanted surface 140 of Nguyen, is not accurately depicted in its actual location in Figure 4. Ex. 1004, ¶[0036]; Ex. 2001, ¶83. As such, a POSITA would not have understood FIG. 4 to be anything more than a generic block diagram. Ex. 2001, ¶¶82-83.

The remaining disclosure of Nguyen underscores that FIG. 4 was intentionally conceptual. Nguyen explicitly describes the other three figures of its disclosure as a "frontal view," "side view," and "back view" of the device while describing FIG. 4 as a "block diagram" and not as any particular view of the device. Ex. 2001, ¶84. A "block diagram" is simply a functional diagram to, at best, show connections and is not intended to depict exact placement of components. Ex. 2001, ¶80.

Regardless, even if FIG. 4 were not conceptual, it does not disclose that any "user input section" is located *above* and *adjacent* a battery and an engine section. Ex. 2001, ¶85. That is, even if FIG. 4 did depict exact placement of components,

which it does not, the alleged user input section is not located *above* and *adjacent* a battery and an engine section. *Id.*

Neither Dr. Visser nor Petitioner provides any explanation as to how or why the POSITA would have considered FIG. 4 to be an indication of specific placement of internal components in Nguyen, nor how or why the POSITA would have concluded from FIG. 4 that Nguyen's internal components were configured in the manner claimed in the '602 Patent. Ex. 2001, ¶86.

Nguyen is thus silent as to the configuration of its components. That is, in comparison to the '602 Patent shown below, Nguyen provides no explicit teaching of where its battery, engine section, and any alleged user input section are configured relative to one another. Ex. 2001, ¶93. As such, the Nguyen drawing is blank in the below comparison.

Ex. 2001, ¶93

'602 Patent	Nguyen
User Input Section	
EngineBattery	

Thus, Petitioner has failed to demonstrate that Nguyen teaches or renders obvious the claimed configuration of components.

b) It would not have been obvious to place Nguyen’s internal components in the claimed configuration.

Petitioner asserts that, because “Nguyen teaches a compact form factor for its handheld device,” “the internal components such as the engine and battery would have been in close proximity to the user input section on the front face,” and, therefore, “it would have been obvious for the input section to be located above and adjacent to the engine section and battery.” Petition, pp. 23-24. Petitioner is thus equating “close proximity” with the language of the claims—“above” and “adjacent.” This assertion is wrong and unsupported for several reasons. Ex. 2001, ¶¶87-88.

First, Petitioner appears to assert that all components of a device are in “close proximity” to a front face of the device merely because they are all part of the device. Such a statement overlooks the specific claim language. The claim language does not broadly recite “close proximity,” but instead the claim language requires a “user input section” that is located both *above* and *adjacent* both an engine section and a battery. Even if it is correct that the components of the Nguyen device are in “close proximity,” which Petitioner has not shown, components in “close proximity” does not teach or suggest to a POSITA that a “user input section” that is located both *above* and *adjacent* both an engine section and a battery. Ex. 2001, ¶89.

Further, the erroneous assertion by Petitioner and Dr. Visser that Nguyen’s teaching of a “compact form factor” made it obvious that any alleged “user input

section” is “located *above* and *adjacent* to” both a battery and any engine section overlooks the focus of Nguyen’s disclosure regarding size constraints. Ex. 2001, ¶89. In discussing size constraints, Nguyen focuses on balancing display size (e.g., width and length) and mechanical actuators that are typically placed on a same surface as the display with the need for accommodating additional hardware required for additional functionalities. Ex. 2001, ¶89. Nguyen’s focus on size constraints indicates to a POSITA that the Nguyen engine and battery would be in a stacked configuration. Ex. 2001, ¶92.

According to Nguyen, “[m]ost handheld computers require a minimum size display,” and the “minimum display size is set by balancing considerations such as mobility with the need for the user to view data, such as personal management information, pictures, and text pages.” Ex. 1004, ¶[0003]; Ex. 2001, ¶90. Nguyen goes on, “[f]or some handheld computers, the size of the display may also need to be large enough to provide character input mechanisms for the user.” *Id.* And “[t]he size of the handheld computer typically must also accommodate mechanical actuators, such as buttons or pivot switches,” where those components “are typically placed on the same surface where the display is viewable to enable users to coordinate button actions with what is shown on the display.” Ex. 1004, ¶[0004]; Ex. 2001, ¶90.

Nguyen states that, “[a]s battery and printed circuit board technology becomes more advanced, the display size and mechanical actuators are increasingly becoming the primary factors that determine the size of the handheld computer,” noting that “[r]educing the length of the handheld computer requires sacrificing features of the display and/or buttons.” Ex. 1004, ¶[0005]; Ex. 2001, ¶91. Nguyen emphasizes that the display size (e.g., length and width) and mechanical actuators drive the size of a handheld computer and makes no mention of device thickness or component placement. Ex. 2001, ¶91.

A POSITA would not have understood and Petitioner does not allege that Nguyen’s disclosure regarding size constraints to mean that any alleged user input section of Nguyen was necessarily adjacent any and all internal components, let alone both the battery and any engine section. Ex. 2001, ¶92. Instead, the POSITA would have understood that Nguyen sought to provide the longest front face possible while also accommodating the additional hardware Nguyen disclosed for additional functionalities, which would have led the POSITA to instead understand that the internal components were stacked to provide for more space behind the long display and the mechanical actuators. Ex. 2001, ¶92.

Neither Dr. Visser nor Petitioner addresses the known technological limitations at the time that would not have led the POSITA to understand that Nguyen’s internal components were stacked. For example, the POSITA was well

aware of the possibility of damage to components if they were not placed in the appropriate configuration – including damage to a display device if placed too close to components that have high heat dissipation (e.g., a processor or a battery), or damage to circuit components if not insulated from drop-related damage. Ex. 2001, ¶¶96-97. A POSITA would have known that hot spots or warping could occur in a display device as a result of high heat dissipation. *Id.* A POSITA would also have known that circuit components were susceptible to damage if they were not insulated from the exterior of a device during a drop event. Ex. 2001, ¶96. The '602 Patent recognized this problem and provided housing members that “provide an increased strength” so that a “side-by-side positioning of the battery/engine” was possible, leading to a “reduction in thickness of the handset versus conventional stacked battery/engine handsets.” Ex. 1001, 5:61-6:4; Ex. 2001, ¶97.

Moreover, as is demonstrated in the sections below regarding Grounds 2 and 3, the art cited by Petitioner demonstrates that the Nguyen reference would have arranged its engine and battery in a stacked configuration in the same way as the references in Grounds 2 and 3. In fact, conventional devices, such as those disclosed in Zadesky, Oda, and Gettemy, confirm what a POSITA would have understood—that the battery and engine should be in a stacked configuration. Ex. 2001, ¶¶94-95. The fact that each of these references teaches such a configuration buttresses Patent Owner’s assertions that Nguyen likewise discloses a stacked configuration.

What's more, Petitioner points out that Nguyen and Gettemy are both directed to Palm devices. Petition, pp. 13, 90. Given Gettemy discloses a stacked configuration as discussed below, and based on Petitioner's own assertions, a POSITA would have concluded the Palm device of Nguyen also had a stacked configuration. Ex. 2001, ¶¶95, 129. Thus, according to Petitioner's assertions, Nguyen, at best, would have had a stacked configuration as shown in Gettemy, as shown in the comparison below. Ex. 2001, ¶129.

Ex. 2001, ¶129

As such, for this additional reason, the POSITA would have understood that Nguyen disclosed a stacked configuration and the POSITA would not have been motivated to modify the Nguyen stacked configuration due to the risk of damaging Nguyen's components. Ex. 2001, ¶98.

Neither Dr. Visser nor Petitioner addresses the knowledge of the POSITA nor the aforementioned disclosures of Nguyen, nor why a POSITA would have found the claimed configuration obvious specifically in view of the knowledge of the POSITA, the aforementioned disclosures of Nguyen, and the state of the art as evidenced by Petitioner's own cited references. Thus, Petitioner has failed to

demonstrate that Nguyen teaches or renders obvious the claimed configuration of components.

c) Nguyen's transmitter and receiver are exterior to the device.

Petitioner asserts that “Nguyen teaches that an engine section comprises a transceiver, for example, through its teaching that the handheld computer includes ‘a wireless communication transmitter’ and ‘a wireless communication receiver,’” yet fails to account in its analysis of the placement of the alleged “engine section” relative to the alleged “user input section” and “battery,” for the fact that Nguyen discloses that the transmitter and receiver are specifically located on the exterior of the device. Petition, pp. 20-21; Ex. 2001, ¶¶99-100.

Nguyen discloses that any “wireless communication transmitter” or “wireless communication receiver” is located on one of the slanted surfaces of the device, and the slanted surfaces are on the exterior of the Nguyen device. *See* Ex. 1004, ¶39, Cls. 1, 3; Ex. 2001, ¶101. In FIG. 2, Nguyen depicts a back view of a handheld computer or device 100 in which a “top slanted surface 140 may extend from back face 120 towards front face 110,” where “the top slanted surface 140 may be unitarily formed as part of the housing that includes back face 120.” Ex. 1004, ¶[0026]; Ex. 2001, ¶102. A “directional surface feature” “may be provided on the top slanted surface 140,” and in FIG. 2, the example “surface feature corresponds to a lens 135.” Ex. 1004, ¶[0027]; Ex. 2001, ¶102.

Nguyen then defines a wireless communication transmitter and a wireless communication receiver as surface features. Nguyen explains that, while the embodiments described the use of “lens 135 as a surface feature on one of the slanted surfaces of handheld computer 100, other embodiments may use other components that are operationally affected by a direction in which that component is oriented,” including “examples of surface features that are affected by directional placement,” which are “a microphone, a light-beam projecting device, *a wireless communication transmitter, and a wireless communication receiver.*” Ex. 1004, ¶[0039] (emphasis added); Ex. 2001, ¶104.

Neither Petitioner nor Dr. Visser explains why a person of ordinary skill in the art would have concluded that the wireless communication transmitter or wireless communication receiver, which would be disposed at least partially on an exterior surface of the device, would be part of any alleged “engine section,” let alone how or why the POSITA would have concluded that such an alleged engine section would have been positioned relative to any alleged user input section and battery as claimed in the ’602 Patent. Ex. 2001, ¶¶105-106. Petitioner, thus, fails to carry its burden.

d) Dependent claims 10-11.

Dependent claims 10 and 11 depend from independent claim 1. As discussed above, Nguyen fails to disclose or render obvious independent claim 1. For at least

this reason, Nguyen also fails to disclose or render obvious dependent claims 10 and 11.

2) Ground 2 –The combination of Nguyen, Zadesky, and Oda does not render obvious “a user input section located above the engine section and a battery, wherein the user input section is located adjacent the battery and the engine section.”

Petitioner alleges that the combination of Nguyen, Zadesky, and Oda renders obvious claims 1-7, 9-13, 15-28, 30-34, and 36 of the '602 Patent (of which claims 1, 15, and 22 are independent). *See* Petition, pp. 12, 33-35. Petitioner is wrong and Ground 2 fails.

Ground 2 suffers from the same shortcomings of Ground 1 because Petitioner again relies on Nguyen for a majority of the limitations of the independent claims to include a “user input section” that is “located *above* and *adjacent* to” both a battery and any engine section. Petitioner, does however rely on Zadesky² to allegedly reinforce Nguyen’s alleged teaching of a “user input section located above the engine section and a battery, wherein the user input section is located adjacent the battery and the engine section.” Petition, pp. 49-50. But Zadesky also discloses a stacked configuration of its battery and engine and, thus, does not make up for the

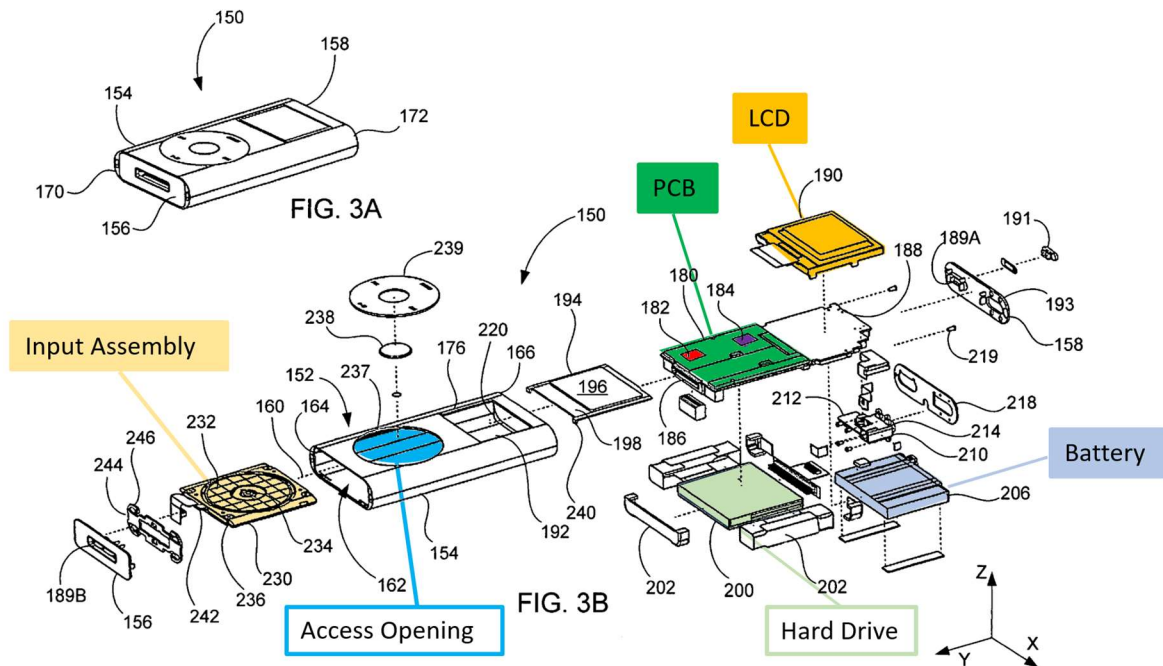
² Zadesky was cited and considered during prosecution of the '602 Patent. Ex. 1002, pp. 8-17, 86-95.

shortcoming of Nguyen. Ex. 2001, ¶108. For at least this reason, Ground 2 fails to render obvious claims 1-7, 9-13, 15-28, 30-34, and 36.

a) Zadesky does not teach or suggest a “user input section located above the engine section and a battery,” and “wherein the user input section is located adjacent the battery and the engine section.”

Petitioner asserts that “Zadesky reinforces Nguyen’s teachings” because “Zadesky also teaches user input devices that include ‘touch screens’ and buttons,” and the “user input section is located on the front surface of the portable electronic device.” Petition, pp. 49-50; Ex. 2001, ¶109. Petitioner overlooks Zadesky’s explicit disclosure to the contrary. Ex. 2001, ¶110.

Zadesky specifically discloses, in FIG. 3B, an exploded view of its handheld device. Ex. 1005, 11:36-43; FIG. 3B; Ex. 2001, ¶111.

Ex. 1005, FIGs. 3A, 3B (annotated)

In FIG. 3B, an input assembly (depicted above in peach), is positioned in a lower half of the device so that the input assembly can be accessed through an access opening (depicted above in turquoise). Ex. 1005, 15:14-27, 15:37-40; Ex. 2001, ¶111. A printed circuit board or PCB, shown above in green, is positioned behind or underneath the input assembly (shown in peach), and the PCB is shown positioned behind the LCD (shown in orange). Ex. 2001, ¶111. Zadesky explains that its hard drive 200 (shown in light green) is “located at the rear of the printed circuit board.” Ex. 1005, 13:17-36. Zadesky also discloses that the “battery 206” (shown in light blue) is “attached to the backside of the PCB.” Ex. 1005, 13:37-49; Ex. 2001, ¶112.

While Petitioner did not allege that Zadesky discloses an engine section, merely broadly stating that Zadesky's housing "encloses and supports various electrical components," the configuration depicted in Zadesky explicitly places any alleged "engine section" in a stacked configuration with Zadesky's battery. Ex. 2001, ¶113.

As explained by Franco Lodato, and depicted in the example comparison below, the "stacked battery/engine" configuration that was distinguished by the '602 Patent is what is disclosed in Zadesky. Ex. 2001, ¶114; *see* Ex. 1005, FIG. 3B. Instead, the '602 Patent claims a user input section that is located both *above* and *adjacent* both a battery and an engine section. Ex. 2001, ¶114. Zadesky makes no such disclosure or suggestion. Ex. 2001, ¶114.

Ex. 2001, ¶114

Accordingly, Zadesky's configuration would not have resulted in any alleged user input section being located above the engine section and a battery, and located adjacent the battery and the engine section, and would not have suggested such a configuration to the POSITA. Ex. 2001, ¶115.

Neither Dr. Visser nor Petitioner addresses the explicit disclosure of Zadesky with a different configuration than what is claimed, nor why a POSITA would have found the claimed configuration obvious specifically in view of Zadesky's contrary disclosure. Thus, Petitioner has failed to demonstrate that Zadesky provides any cure for Nguyen's failure to teach or render obvious "a user input section located above the engine section and a battery," and "wherein the user input section is located adjacent the battery and the engine section."

Petitioner did not rely on Oda for any alleged teaching or suggestion of such a feature and Oda provides no such teaching or suggestion. Indeed, like Zadesky, Oda discloses a stacked configuration, as shown below and explained by Franco Lodato. Ex. 2001, ¶122; *see, e.g.*, Ex. 1006, FIGs. 13A-13C, 21A-21C.

Ex. 2001, ¶122

Because neither Zadesky nor Oda provides a cure for the defects of Nguyen at least with respect to the claimed "user input section is located above the engine section and a battery," and "wherein the user input section is located adjacent the battery and the engine section," Petitioner has failed to demonstrate that the

combination of Nguyen, Zadesky, and Oda renders obvious the independent claims of the '602 Patent.

b) Dependent claims 2-7, 9-13, 16-21, 23-28, 30-34, and 36

Dependent claims 2-7, 9-13, 16-21, 23-28, 30-34, and 36 depend from independent claims 1, 15, and 22, respectively. As discussed above, the combination of Nguyen, Zadesky, and Oda fails to disclose or render obvious independent claims 1, 15, and 22. For at least this reason, the combination of Nguyen, Zadesky, and Oda also fails to disclose or render obvious dependent claims 2-7, 9-13, 16-21, 23-28, 30-34, and 36.

3) Ground 3 – The combination of Nguyen, Zadesky, Oda, and Gettemy does not render obvious a “user input section located above the engine section and a battery,” and “wherein the user input section is located adjacent the battery and the engine section.”

Petitioner alleges that the combination of Nguyen, Zadesky, Oda, and Gettemy renders obvious claims 1-36 of the '602 Patent (of which claims 1, 15, and 22 are independent). Petition, p. 12. Petitioner is wrong and Ground 3 fails.

Independent claims 1, 15, and 22 of the '602 Patent recite, *inter alia*: a “user input section located above the engine section and a battery,” and “wherein the user input section is located adjacent the battery and the engine section.” As established above, Nguyen, Zadesky, and Oda fail to provide such a teaching or suggestion. Gettemy is relied upon for a purported teaching of this same limitation, however Gettemy similarly teaches a stacked configuration. Ex. 2001, ¶¶125-126. Again, a

stacked configuration fails to teach or suggest the elements of the claims. For at least this reason, the combination of Nguyen, Zadesky, Oda, and Gettemy fails to disclose or render obvious claims 1-36.

a) Gettemy does not teach or suggest a “user input section located above the engine section and a battery,” and “wherein the user input section is located adjacent the battery and the engine section.”

Petitioner asserts that Gettemy teaches a user input section located adjacent to an engine section and a user input section that is adjacent the battery. Petition, pp. 96-97. Petitioner’s assertion fails because Gettemy, at best, teaches a stacked configuration of engine and battery. Ex. 2001, ¶126.

Gettemy depicts an exploded view of the portable computer system, in which the “flat panel display device 105” “fits into front cover 210,” a “battery 215 provides electrical power,” and the system includes a “flexible circuit 230” and a “printed circuit (PC) board 225 containing electronics and logic (e.g., memory, communication bus, processor, etc.). Ex. 1007, 5:37-54. Petitioner annotated Figure 4 of Gettemy to select “touch screen display device 105” as the alleged “user input section,” to highlight battery 215, as well as “PCB 225” as the alleged “engine section.” Petition, pp. 96-97; Ex. 2001, ¶127. Figure 4 as annotated by Petitioner is included below.

Ex. 1007, Figure 4 (annotated in Petition, pp. 96-97)

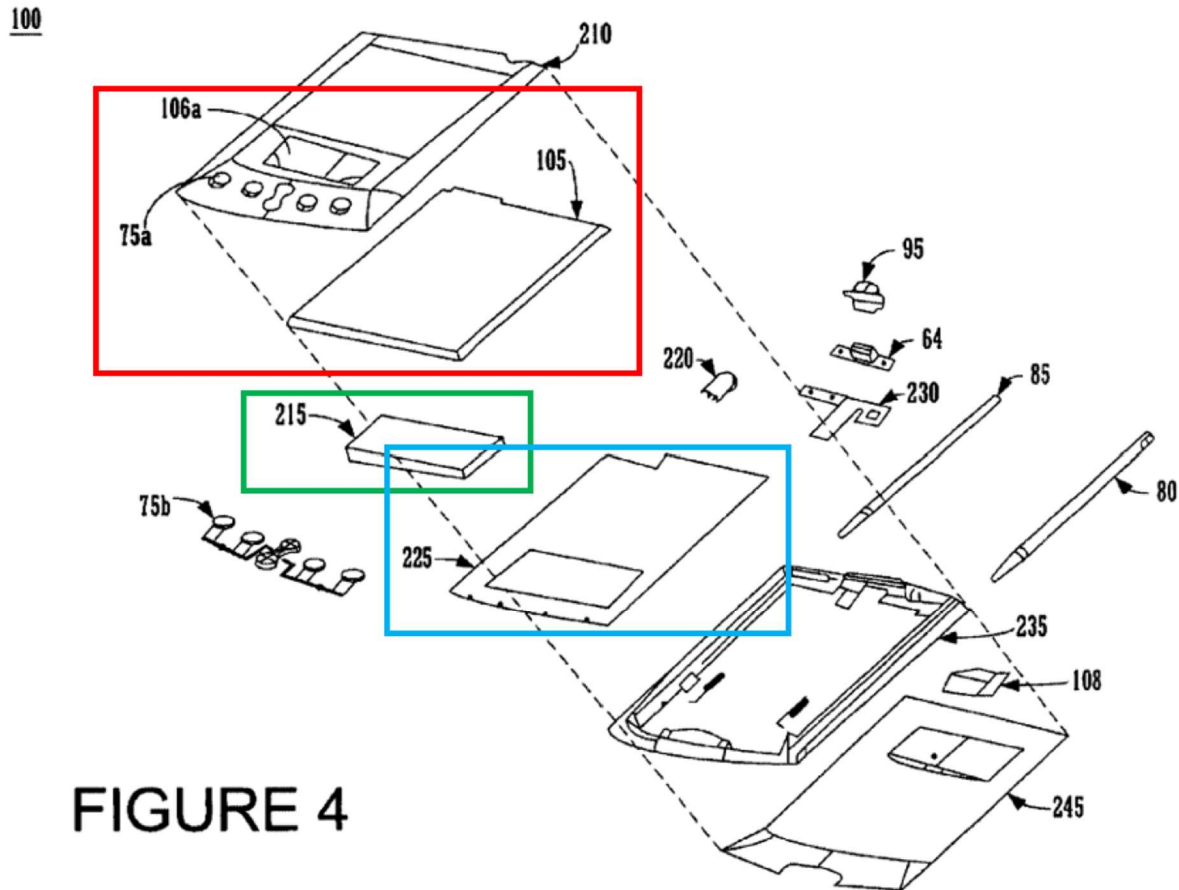


FIGURE 4

In the embodiment shown in Figure 4 of Gettemy, the “touch screen display device 105” (red) is positioned onto PC board 225 (blue), with battery 215 (green) also positioned on the PC board 225 next to display device 105. Ex. 2001, ¶127. Thus, the display device 105 is not located *above* the battery 215. Ex. 2001, ¶128.

As depicted in the example comparison below, the “stacked battery/engine” configuration that was distinguished by the ’602 Patent is what is disclosed in Figure 4 of Gettemy. Ex. 2001, ¶129; *see* Ex. 1007, Figure 4. Instead, the ’602 Patent claims

a user input section that is located both *above* and *adjacent* both a battery and an engine section. Ex. 2001, ¶129. Gettemy makes no such disclosure or suggestion. Ex. 2001, ¶129.

Ex. 2001, ¶129



Accordingly, the POSITA would have concluded that the alleged user input section is not located *above* the battery. Ex. 2001, ¶130. Also, because battery 215 is positioned *on* the alleged engine section, the POSITA would have understood Gettemy’s device to have a stacked configuration regardless of what in Gettemy is identified as the user input section. Ex. 2001, ¶130.

Petitioner also points to Figure 8A of Gettemy for an alleged engine section including “a flexible circuit 630 and an interface module 620,” to allege that “Gettemy also teaches that the user input section is located directly adjacent the battery and the engine section.” Petition, pp. 97-98. In Figure 8A, Gettemy discloses that the “interface module 620 is positioned in a location behind (below) display device 105 and coupled to interface module 620 using first flexible circuit 630.” Ex. 1007, 9:17-27; Ex. ¶131. This makes space available “adjacent to display device 105, and thus a component 820 (e.g. a battery) can be installed in the available

space.” *Id.*; Ex. 2001, ¶131. Figure 8A as depicted by Petitioner is reproduced below.

Petition, p. 98; Ex. 2001, ¶132.

Petition, p. 98 (Petitioner’s annotation of Ex. 1007, Figure 8A)

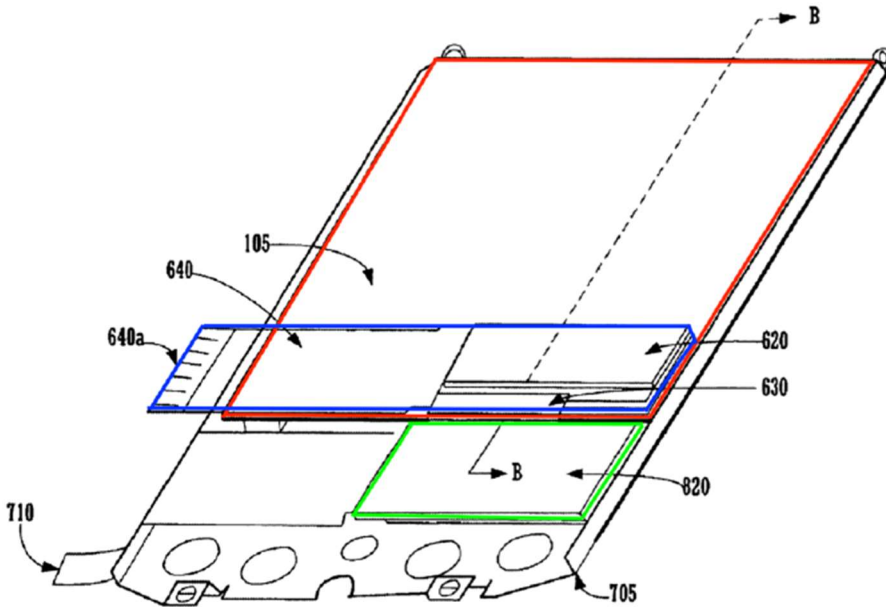


FIGURE 8A

As in Figure 4, the example in Figure 8A does not show the alleged user input section (touch screen 105, highlighted in red by Petitioner in Figure 8A above), to be located both *above* and *adjacent* both a battery (highlighted in green by Petitioner in Figure 8A above) and any alleged engine section (highlighted in blue by Petitioner in Figure 8A above). Ex. 2001, ¶133. Instead, Figure 8A depicts that the alleged user input section 105 is not located both *above* and *adjacent* the battery 820. Ex. 2001,

¶133. Indeed, Petitioner’s annotation of Figure 8A clearly shows that the alleged user input section (red) is not both *above* and *adjacent* the battery (green). *Id.*

As explained by Franco Lodato, and depicted in the example comparison below, Figure 8A of Gettemy does not disclose what is claimed in the ’602 Patent—a user input section that is located both *above* and *adjacent* both a battery and an engine section. Ex. 2001, ¶134. That is, the alleged user input section (the display device or touch screen 105 according to Petitioner) is not located both *above* and *adjacent* both the battery and the alleged engine section (flexible circuit in Figure 8A, according to Petitioner). Ex. 2001, ¶134.

Ex. 2001, ¶134



A POSITA thus would not have concluded that Gettemy’s display device 105 is located both *above* and *adjacent* the battery 820 as well as any alleged engine section. Ex. 2001, ¶135.

Neither Dr. Visser nor Petitioner addresses the depicted configurations in Gettemy, nor why a POSITA would have found the claimed configuration obvious specifically in view of disclosed configuration of Gettemy. Thus, Petitioner has failed to demonstrate that Gettemy provides any cure for the defects of Nguyen,

Zadesky and Oda with respect to “user input section is located above the engine section and a battery, wherein the user input section is located adjacent the battery and the engine section,” as is required by the independent claims.

b) Dependent claims 2-14, 16-21, and 23-36.

Dependent claims 2-14, 16-21, and 23-36 depend from independent claims 1, 15, and 22, respectively. As discussed above, the combination of Nguyen, Zadesky, Oda, and Gettemy fails to disclose or render obvious independent claims 1, 15, and 22. For at least this reason, the combination of Nguyen, Zadesky, Oda, and Gettemy also fails to disclose or render obvious dependent claims 2-14, 16-21, and 23-36.

VII. THE PETITION SHOULD BE DENIED UNDER *ADVANCED BIONICS* BECAUSE CUMULATIVE REFERENCES HAVE BEEN ARGUED TO THE PATENT OFFICE AND PETITIONER HAS NOT DEMONSTRATED THAT THE PATENT OFFICE ERRED.

The '602 Patent has overcome references teaching portable devices with cameras and, at best, stacked configurations of battery and engine. Ex. 2001, ¶136. The Grounds raised by the Petitioner are cumulative of art and arguments considered during the prosecution activity associated with the Challenged Claims. There is a strong presumption, then, that the Patent Office considered and approved the Challenged Claims over the art and arguments raised in the Petition, and in the absence of some showing of error in that process institution should be denied. Under § 325(d), the Board uses a two-part analysis, considering: (1) whether the same or substantially the same art or arguments were presented to the PTO during the original

prosecution; and (2) whether the Petitioner has demonstrated that the PTO erred in a manner material to the patentability of Challenged Claims. *Advanced Bionics, LLC v. Med-El Elektromedizinische Geräte GMBH*, IPR2019-01469, Paper 8, 10 (P.T.A.B. Feb. 13, 2020) (“*Advanced Bionics*”) (precedential). Once the Board determines that the same or substantially the same art or arguments were previously presented to the PTO, it then considers whether the Petitioner has demonstrated error. *Advanced Bionics* at 8-10. “If a condition in the first part of the framework is satisfied and the petitioner fails to make a showing of material error, the Director generally will exercise discretion not to institute *inter partes* review. If reasonable minds can disagree regarding the purported treatment of the art and arguments, it cannot be said that the Office erred in a manner material to patentability. At bottom, this framework reflects a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown.” *Id.*

Here, Petitioner has asserted three grounds. Petition, p. 12. Petitioner’s primary reference for all three grounds, Nguyen (Ex. 1004), is substantially similar to the art that was considered during the prosecution of the ’602 Patent, as is Gettemy (Ex. 1007). Petition, p. 16; Ex. 2001, ¶136. While Petitioner states that both Nguyen and Gettemy are directed to Palm devices, Petitioner fails to acknowledge that Palm-related art was considered by the Examiner during prosecution. Ex. 1001, p. 3; Ex. 1002, pp. 11-13, 89-91; Petition, pp. 13, 90-91; Ex. 2001, ¶142. For its second and

third grounds, the Petition acknowledges that Zadesky (Ex. 1005) was considered in prosecution of the parent patent to the '602 Patent, but does not acknowledge that Zadesky was also considered in the prosecution of the Challenged Claims. Petition, p. 10. For its second and third grounds, the Petition also relies on Oda (Ex. 1006), which is similar to the Oda US Pub reference considered and distinguished in prosecution of the Challenged Claims. Ex. 2001, ¶138.

A. Petitioner's art is substantially the same as the art cited in the prosecution of the '602 Patent.

The Grounds presented in the Petition present a common argument: (1) that Nguyen teaches or renders obvious a user input section that is located *above* and *adjacent* a battery and an engine section (Ground 1), (2) that Zadesky “reinforces” Nguyen’s teaching of such (Ground 2), and (3) that Gettemy teaches or renders obvious the same (Ground 3). *See generally* Petition, §V. However, the prosecution history of the '602 Patent shows that Examiner was aware of and considered these concepts when he allowed the Challenged Claims. *See, e.g.*, Ex. 1002, p. 715. The art considered during the prosecution of the Challenged Claims includes several references teaching the same stacked configuration of battery and engine relied upon in the Petition. *See* Ex. 2003, Ex. 1002, pp. 377-400; Ex. 2001, ¶136. The Board should find these references are the same or substantially the same as the references the Patent Office has previously reviewed and deny institution. *See e.g., Evapco Dry Cooling, Inc., v. SPG Dry Cooling USA*, IPR2021-00687, Paper 11, 24-25 (P.T.A.B.

Sept. 24, 2021) (finding a newly asserted reference not cited during prosecution as being substantially the same as the references that were before the Examiner during prosecution); *see Gardner Denver v. Utex Industries, Inc.*, IPR2020-00333, Paper 12, 13-14 (P.T.A.B. Aug. 5, 2020) (denying institution upon finding that newly asserted references are no more relevant than references that were presented during prosecution); *Roku, Inc. v. Universal Elecs., Inc.*, IPR2019-01619, Paper 11, 16-17 (P.T.A.B. April 2, 2020) (denying institution upon finding that newly applied Zetts was cumulative to previously presented Kim, even though Kim was not considered for the same limitation in reexamination).

1) Petitioner has failed to show that the Nguyen and Gettemy references in the Petition differ in any material way from the references cited in prosecution and on the face of the '602 Patent.

Petitioner relies on Nguyen (Ex. 1004) as its primary reference for Grounds 1-3, as well as Gettemy (Ex. 1007) in Ground 3, for an alleged teaching of a user input section that is located *above* and *adjacent* a battery and an engine section. Petition, pp. 12, 22-24, 96-98. Even though Nguyen and Gettemy were not cited during prosecution of the application that resulted in the '602 Patent, Nguyen and Gettemy are cumulative of the Palm-related art cited and considered during prosecution, as well as the stacked configurations taught by Hiroshi and Oda US Pub. *See* Ex. 2003, Ex. 1002, pp. 377-400. Both Nguyen and Gettemy are, according to Petitioner, directed to Palm devices, and Palm-related art was cited in Information

Disclosure Statements by the Applicant and considered by the Examiner during prosecution of the '602 Patent. Ex. 1002, pp. 11-13, 89-91; Petition, pp. 13, 90; Ex. 2001, ¶142.

Moreover, both Nguyen and Gettemy, at best, teach a stacked configuration of engine and battery, and art teaching a stacked configuration of engine and battery was considered and specifically distinguished during prosecution of the '602 Patent, and are thus even further cumulative of the considered art. Ex. 2001, ¶136. For example, U.S. Pub. No. 2004/0252220 (“Oda US Pub”) (Ex. 2003) and JP 2002-125031 (“Hiroshi”) (Ex. 1002, pp. 377-386 (Japanese), 387-400 (English)) were cited by the Applicant in an IDS and subsequently relied on by the Examiner in a March 31, 2016, Final Office Action. Ex. 1002, pp. 670-674; Ex. 2001, ¶137. Oda US Pub, which bears substantial similarity to the Oda reference relied upon in Petitioner’s second and third grounds, discloses a “foldable portable instrument with camera,” where a “plurality of input buttons 4” is arranged on one side of the device, while the “battery cover 5” is arranged on the other side of the device. Ex. 2003, ¶¶[0026], [0033]; Ex. 2001, ¶138. In this way, Oda US Pub teaches a stacked configuration of battery and engine such that the input buttons are not above and adjacent the battery as well as the engine. Ex. 2001, ¶138.

Ex. 2003, FIGs. 1, 4

FIG.1

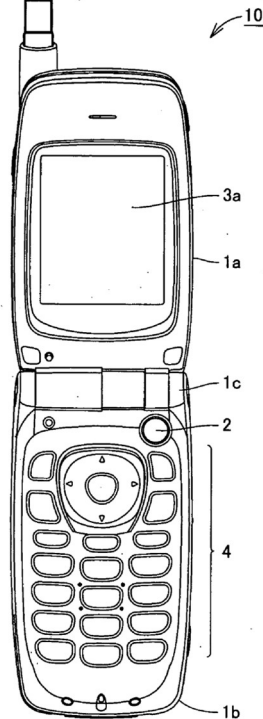
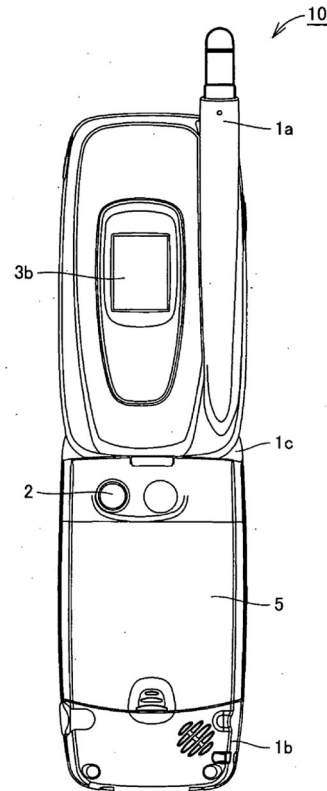


FIG.4

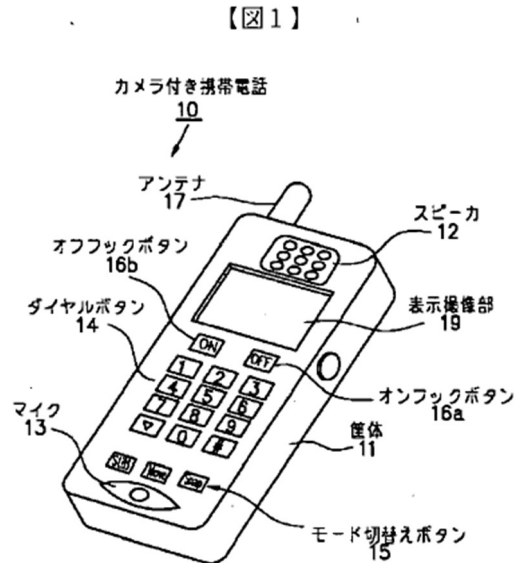


Indeed, the Applicant distinguished Oda US Pub in its response to the March 31, 2016 Final Office Action, stating that “there is no teaching or disclosure in Oda to provide the battery and engine section to be housed in the housing such that the user input section is located above the engine section and the battery, and wherein the user input section is located adjacent the battery and the engine section.” Ex. 1002, p. 700. As a result of the amendment and arguments, the Examiner allowed the application. Ex. 1002, pp. 710-734. Ex. 2001, ¶139.

Hiroshi also teaches a stacked configuration of battery and engine such that the input buttons are not *above* and *adjacent* the battery as well as the engine. Ex. 2001, ¶139.

Hiroshi teaches a “camera cell phone 5” with a “display part 6c” and a “numeric keypad 6d,” where the “numeric keypad 6d” is arranged on a front of the device. Ex. 1002, p. 389 (Hiroshi, ¶[0005])’ Ex. 2001, ¶140.

Ex. 1002, p. 384 (Hiroshi, Fig. 1)



The Applicant also distinguished Hiroshi in its response to the March 31, 2016 Final Office Action, arguing that “there is no teaching or disclosure in Hiroshi to provide the battery and engine section to be housed in the housing such that the user input section is located above the engine section and the battery, and wherein the user input section is located adjacent the battery and the engine section.” Ex. 1002,

p. 701. As a result of the amendment and arguments, the Examiner allowed the application. Ex. 1002, pp. 710-734. Ex. 2001, ¶141.

Thus, the Examiner was aware of and carefully considered the configuration taught by Oda US Pub as well as Nguyen, Zadesky, Oda, and Gettemy during prosecution and allowed the claims over this configuration.

The Board has found that substantially the same prior art was previously presented to the Office when the asserted references are cumulative of references provided to the Examiner in an IDS. *NXP USA, Inc. v. Impinj, Inc.*, IPR2020-00519, Paper 7, at 8 (P.T.A.B. Aug. 17, 2020); *Gardner Denver* at 8-14 (P.T.A.B. Aug. 5, 2020). As discussed above, Gettemy and Nguyen are cumulative of the art before the Patent Office during prosecution of the '602 Patent, which provides further support for a discretionary denial. See, e.g., *Glaxosmithkline Consumer Healthcare Holdings (US) v. Cipla Ltd.*, IPR2020-00370, Paper 7, 9-12 (P.T.A.B. July 31, 2020) (petition relying on reference “not before the Examiner during prosecution” for two grounds still raised “substantially the same prior art,” as it did not “differ ‘in any material way from the art and arguments already considered and overcome during prosecution.’” (quoting preliminary response)).

2) Zadesky was cited and considered during prosecution.

Petitioner relies on Zadesky, as an additional reference in Grounds 2 and 3, to allegedly “reinforce” Nguyen’s alleged teachings of a user input section that is

located *above* and *adjacent* a battery and engine section. Petition, pp. 33, 49. However, not only does Zadesky teach the same stacked engine/battery configuration as considered and distinguished in prosecution as discussed above, Zadesky was cited in an IDS and considered by the Examiner during the prosecution of the '602 Patent. Ex. 1002, p. 680; Ex. 2001, ¶143.

Under § 325(d), “[p]reviously presented art includes art made of record by the Examiner, and art provided to the Office by an applicant, such as on an Information Disclosure Statement (IDS), in the prosecution history of the challenged patent.” *Advanced Bionics* at 7-8. If the “same or substantially the same prior art or arguments previously were presented to the Office,” then the Board’s decisions generally have required a showing that the Office erred in evaluating the art or arguments. *See, e.g., Becton, Dickinson & Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8 at 24 (Dec. 15, 2017) (considering whether the petitioner has pointed out sufficiently how the examiner erred in its evaluation of the asserted prior art). If the petitioner fails to show that the Office erred, the Director may exercise his discretion not to institute *inter partes* review. *Id.* (exercising discretion where “Petitioner has not pointed to error by the Examiner”).

Here, Zadesky was cited in an IDS during the prosecution history of the '602 Patent and the Examiner indicated Zadesky was considered during prosecution. Ex.

1002, p. 88; Ex. 2001, ¶143. And Petitioner has not pointed to any error by the Examiner, further supporting discretionary denial.

3) Petitioner has not established that the Patent Office erred during prosecution.

Given that the same or substantially the same art as Petitioner relies on was previously presented to the Patent Office, the burden shifts to Petitioner to show that the Office erred in a manner material to the patentability of the challenged claims. *Advanced Bionics*, Paper 6 at 8. Despite presenting an *Advanced Bionics* argument, the Petitioner advances no argument to demonstrate that the Patent Office erred. The entirety of Petitioner’s analysis regarding denial under §325(d) is that “Nguyen, Gettemy, and Oda were not cited or considered during prosecution,” and, “[t]herefore, the combinations presented here were not considered previously.” Petition, p. 111. These conclusory statements cannot satisfy Petitioner’s burden to establish material error by the Examiner. *Autel Intelligent Tech. Corp., Ltd. v. Orange Elec. Co., Ltd.*, IPR2021-01545, Paper 8, 27 (P.T.A.B. April 8, 2022) (denying institution under 325(d) and noting that “Petitioner’s conclusory argument ... also fails to demonstrate that the Office erred.”); *Panduit Corp. v. Corning Optical Commc’ns LLC*, IPR2021-01562, Paper 20, 17 (P.T.A.B. April 6, 2022) (denying institution under 325(d) and finding “Petitioner’s assertion of Examiner error in the Reply to be conclusory and non-persuasive” where “Petitioner cite[d] no evidence in support of its contention that the Examiner erred[.]”); *see also Universal*

Imaging, LLC v. Lexmark Int'l, Inc., IPR2019-01387, Paper 7, 15 (P.T.A.B. Feb. 27, 2020) (“Although Petitioner is correct that the Examiner did not reject any claims of the ’921 patent based on [the asserted reference], that is not the end of our analysis.”); *see also Sony Interactive Ent. LLC v. Terminal Reality, Inc.*, IPR2020-00711, Paper 15, 12 (P.T.A.B. Oct. 13, 2020) (Petitioner’s argument that asserted references were not substantively evaluated or applied in a rejection failed to sufficiently identify Examiner error). The absence of an argument suggesting error on the part of the Patent Office is in and of itself fatal to Petitioner’s arguments under *Advanced Bionics*. Here, the Patent Office was presented with the same or similar, cumulative disclosures to those raised in the Petition during prosecution of the ’602 Patent. The Examiner applied these and similar references in rejections of the claims of the ’602 Patent, and undoubtedly reviewed the Information Disclosure Statements filed by the Applicant. Ex. 1002, pp. 86-95, 677-681. The Applicant demonstrated to the Examiner that the art was lacking and failed to disclose the patented invention, and the claims of the ’602 Patent issued over substantially identical art to that presented in the Petition Grounds. Ex. 1002. Even if Petitioner shows some disagreement about the treatment of the art, it will not be enough to overcome the “reasonable mind” standard this Board has established. *Advanced Bionics* at 8-10 (“If reasonable minds can disagree regarding the purported treatment of the art or arguments, it cannot be said that the Office erred in a manner material to

patentability. At bottom, this framework reflects a commitment to defer to previous Office evaluations of the evidence of record unless material error is shown.”). Accordingly, the Board should defer to the previous Office evaluations and deny institution.

VIII. PETITIONER FAILS TO DEMONSTRATE WHY MORE THAN ONE PETITION IS WARRANTED

Institution of review is discretionary. 35 U.S.C. § 314(a); *SAS Inst. Inc. v. Ianco*, 138 S. Ct. 1348, 1356 (2018) (“[Section] 314(a) invests the Director with discretion on the question whether to institute review” (emphasis omitted)); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”); *see also* 37 C.F.R. § 42.4(a) (“The Board institutes the trial on behalf of the Director.”). “[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016). If the Board institutes review at all, it is required to institute review on all challenged claims on all challenged grounds. *SAS Inst.*, 138 S. Ct. at 1359–60; Trial Practice Guide Update (July 2019), <https://www.uspto.gov/TrialPracticeGuide3> (“In instituting a trial, the Board will either (1) institute as to all claims challenged in the petition and on all grounds in the petition, or (2) institute on no claims and deny institution.”).

Petitioner's explanations fail to demonstrate a genuine need to file two petitions against the same claims of the same patent. According to the Trial Practice Guide, "if a petitioner files two or more petitions challenging the same patent, then the petitioner should" identify "a succinct explanation of the differences between the petitions, why the issues addressed by the differences are material, and why the Board should exercise its discretion to institute additional petitions if it identifies one petition that satisfies petitioner's burden under 35 U.S.C. § 314(a)." Consolidated Trial Practice Guide ("CTPG"), pp. 59-60. Petitioner has not satisfied this burden.

The CTPG states that when there is a dispute about priority date, "two petitions by a petitioner may be needed, although this should be rare." CTPG, p. 59. The statement does not convey that whenever a priority issue is involved, Petitioner is entitled to file two petitions against the same claims of the same patent. Indeed, the operative phrase is "may be needed, although this should be rare." *Id.* In this particular instance and based on the fact that Petitioner failed to meet its requirements, Petitioner has failed to demonstrate that this is one of the rare circumstances requiring the filing of two petitions.

Petitioner contends that two petitions are necessary due to its concerns relating to potential arguments Patent Owner may raise regarding the priority date of the '602 Patent. Petitioner's Statement Regarding Multiple Petitions ("SRMP"), p. 4 ("Nokia

will, inevitably, attempt to dispute the priority date.”). That is, the only difference Petitioner identifies between the two petitions is that Patent Owner may dispute whether the references in IPR2024-00798 qualify as prior art based on the priority date of the ’602 Patent. SRMP, p. 4.

However, Petitioner has not demonstrated anything unique in this case that differentiates Petitioner’s strategic choices from strategic choices faced by all petitioners. A petitioner must always weigh the pros and cons of using art reliant upon a priority challenge, and Patent Owner has a right to challenge prior art. *See, e.g., Pfenex, Inc. v. GlaxoSmithKline Biologicals SA*, IPR2019-01027, Paper 12 at 13–14 (PTAB Nov. 13, 2019) (“[T]he mere fact that Petitioner may have had additional art to assert, including a different statutory basis for asserting that art, does not, on these facts, justify the additional burden of a second petition directed to the same claims.”).

The Board considers whether a petitioner could have asserted *at least one* ground of unpatentability for each challenged claim, not whether it could assert *all* potential grounds in one petition. *Fantasia Trading LLC v. Cognipower LLC*, IPR2021-00070 Paper 21 at 10-11 (P.T.A.B. May 20, 2021); *see also Samsung Elecs. Co., Ltd. v. Lynk Labs, Inc.*, No. IPR2022-00150, Paper 15 at 10 (P.T.A.B. July 5, 2022).

Indeed, the Board routinely declines to institute multiple petitions, even where there is a priority date dispute. *See, e.g., Comcast Cable Commc'ns., LLC v. Rovi 2 Guides, Inc.*, IPR2019-01354, Paper 10 at 6 (PTAB Jan. 27, 2020) (denying institution of two of three petitions where a potential priority dispute existed); *Dropbox, Inc. v. Whitserve LLC*, IPR2019-01018, Paper 13 at 8–9 (PTAB Nov. 1, 2019) (denying institution of a second petition where parties disputed the priority date of multiple prior art references); *Comcast Cable Comm'ns, LLC v. Rovi Guides, Inc.*, IPR2019-00279, Paper 10 at 6–7 (PTAB July 1, 2019) (declining to institute four of five filed petitions where a potential priority dispute existed).

Here, the Board should fault the Petitioner based on what it failed to do. Petitioner provides no meaningful explanation as to why the number of challenged claims justifies the Board's review of both petitions. Petitioner asserts that “two petitions are necessary because of the large number of challenged claims (36).” SRMP, p. 5. Petitioner's only justification is that, “[e]ven accounting for similar claims, the number of distinctive claim limitations still exceeds twenty.” *Id.* However, Petitioner provides no additional explanation or analysis regarding the “number of distinctive claim limitations,” nor why the alleged “number of distinctive claim limitations” could not have been addressed in a single petition. Petitioner's justification is merely an unsupported conclusion and should be rejected.

IX. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION

The Petition fails to demonstrate a likelihood of success with respect to a single claim. Indeed, Patent Owner has demonstrated that the grounds are facially deficient. As a result, Petitioner fails to demonstrate that any of the challenged claims are likely found to be unpatentable. For at least these reasons, the Board should exercise its discretion and deny institution.

X. CONCLUSION

For the above-stated reasons, Patent Owner requests that the Board deny institution of the Petition.

Dated: October 30, 2024

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CERTIFICATE OF WORD COUNT

Under the provisions of 37 C.F.R. § 42.24, the undersigned hereby certifies that the word count for the foregoing Patent Owner Preliminary Response totals 11,188 words, which is less than the 14,000 allowed words under 37 C.F.R. § 42.24(a)(1)(i),(b)(1).

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing **PATENT OWNER'S PRELIMINARY RESPONSE** was served electronically via e-mail on October 30, 2024, in its entirety on the following counsel of record for Petitioner:

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