

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LENOVO (UNITED STATES) INC.,
Petitioner,

v.

BLACKBIRD TECH LLC d/b/a BLACKBIRD TECHNOLOGIES,
Patent Owner.

Case IPR2017-01381
Patent 7,129,931

**PATENT OWNER BLACKBIRD TECHNOLOGIES'
PRELIMINARY RESPONSE**

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| 2002 | May 17, 2005, Revised Amendment and Response to Office Action |
| 2003 | June 30, 2003, Office Action |
| 2004 | December 27, 2005, Office Action |
| 2005 | November 14, 2005, Request for Continued Examination and Response |

I. INTRODUCTION

The Petition for *inter partes* review of US Patent No. 7,129,931 (“the ‘931 Patent”) should be denied because Petitioner Lenovo (United States) Inc. has failed to demonstrate that there is a “reasonable likelihood” that it would prevail with respect to at least one of the challenged claims. 35 U.S.C. § 314(a).

Petitioner proposes grounds of challenge that were previously presented to the Office. Using five references, Petitioner purports to set forth six separate obviousness grounds challenging the validity of just seven claims in the ‘931 Patent. (Pet. at 5-6). Yet all grounds of challenge rely on a single primary reference that the Office already considered during prosecution of the ‘931 Patent in the exact same way that Petitioner proposes here. And all grounds rely entirely on either secondary references that the Office likewise already considered during prosecution or on substantially similar secondary references paired with the exact same arguments made in prosecution. For this reason, the Board should exercise its discretion under 35 U.S.C. § 325(d) to deny the Petition. (*See infra* Pt. III).

Petitioner offers no new reason to believe that the challenged claims of the ‘931 Patent are invalid. Indeed, for all grounds, Petitioner fails to articulate sufficient motivations to combine the references in question. (*See infra* Pts. IV.A-B, IV.D). And at least for some grounds, Petitioner fails to explain how those references could even be combined. (*See infra* Pt. IV.E). And even if those

references could have been and would have been combined, Petitioner still cannot show they disclose all elements recited in claim 1, the only challenged independent claim in the ‘931 Patent. Those elements include the claimed “mounting assembly” (*see infra* Pt. IV.C.1-2) and the claimed “communication conduit” (*see infra* Pt. IV.C.3). For at least these reasons, no trial should be instituted.

II. BACKGROUND

A. About the ‘931 Patent

The application leading to the ‘931 Patent was filed on September 14, 2001. (‘931 Patent, p. 1). At the time of invention,¹ desktop computers most commonly employed bulky cathode ray tube (CRT) monitors. (*See id.* at 1:51-65). Although thinner and lighter flat-panel displays were available, they were at the time substantially more expensive than CRT monitors. (*Id.* at 1:63-65). Users wanting to employ a flat-panel display with a desktop computer had one choice, to purchase a separate flat-panel display at additional expense. (*Id.* at 2:34-39).

By contrast, at the time of invention, laptop computers generally employed flat-panel displays despite the extra cost, in order to be small and light enough to remain portable. (*Id.* at 1:60-63). The inventor of the ‘931 Patent, realizing that some users would own both desktop and laptop computers, conceived of an

¹ The named inventor established during prosecution that he conceived of the claimed inventions before August 27, 1999. (Ex. 2001).

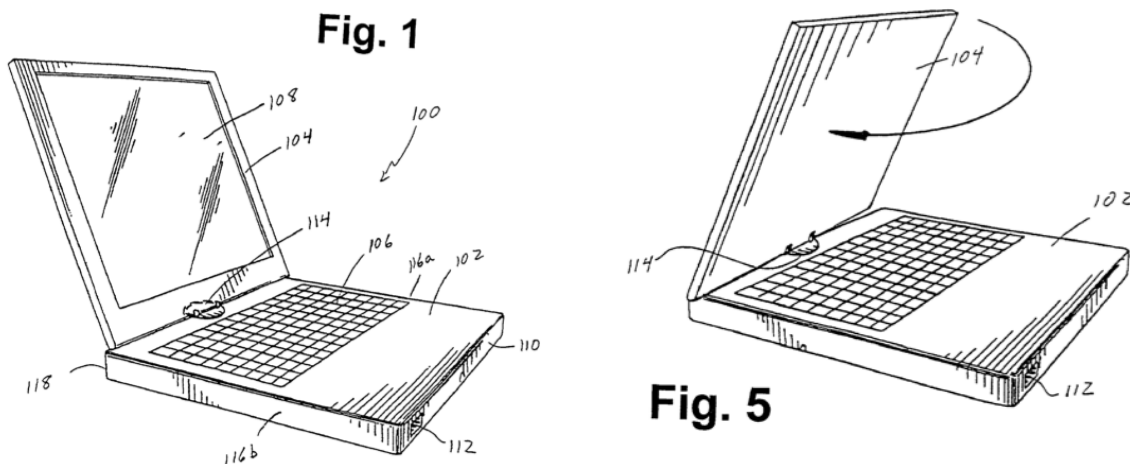
improved laptop system that allows users to employ the flat-panel display of a laptop with their desktop computer. (*Id.* at 2:60-63). In this way, users could avoid having to purchase an additional flat-panel display for exclusive use with their desktop computers. (*See id.*).

To increase the flexibility of the laptop and its display, the invention covered by the challenged claims includes an innovative mounting assembly that joins the keyboard and display on the laptop. An exemplary embodiment of the claimed invention is shown in Figures 1-5 of the ‘931 Patent. In this embodiment, the mounting assembly permits both pivotal and rotational motion of the display relative to the keyboard unit. (*Id.* at 6:64-7:2). At the time of invention, the displays on most laptops simply opened and closed, or “pivoted,” in the words of the ‘931 Patent. The display on the claimed laptop also swivels, or “rotates,” around a vertical axis, meaning that the user can rotate the display to improve the viewing angle. Indeed, a user can rotate the display on the claimed laptop over a range of at least 180°, so that the display faces completely away from the keyboard unit and can be used as a flat-panel display for a desktop computer (among other uses). This configuration allows for viewing the display without the obstruction of the keyboard unit (since from the intended viewer’s perspective, when the display is rotated, the keyboard is hidden behind the display). (*Id.* at 7:7-12).

The claimed laptop also includes a port for receiving signals from an

ancillary computer system (*e.g.*, the user’s desktop computer). Ports on prior art laptops were often located on the back wall of the keyboard unit. This port positioning, however, is problematic when the display can rotate, since when the display is rotated, the back becomes the front and ports that were previously hidden are now exposed. Accordingly, the port is positioned on the claimed laptop so that any cables connecting the laptop and ancillary computer system are out of the user’s way when the display is rotated. (*Id.* at 3:44-53).

The pivotal and rotational capabilities of the claimed laptop are shown at a high level, for example, in Figures 1 and 5 of the ‘931 Patent:



(*Id.*, Figs. 1 & 5). Figure 1 shows the display 104 in a first viewing position, namely, where the display is facing a user sitting in front of the keyboard base 102. In Figure 5, by contrast, the display has been rotated nearly 180°, and the keyboard base is now behind the viewing surface of the display. Note that port 112 is positioned such that when the display is rotated, the port is not in front of a person

viewing the display.

Claim 1 – the only challenged independent claim – claims an embodiment of this innovative laptop. It recites a computer system with a keyboard unit and a display screen, joined by a mounting assembly with a unique design, as well as a port positioned proximate the front wall and adapted to receive image-generating signals, as recited below:

1. A computer system comprising:
 - a) a keyboard unit including a computer keyboard and a keyboard base that includes a front wall and a back wall;
 - b) a display screen for displaying computer-generated images, said display screen defining first and second side walls, a bottom edge that extends from the first side wall to the second side wall and two spaced slots formed in said bottom edge;
 - c) a mounting assembly proximate said back wall of said keyboard base, said mounting assembly including two spaced mounting brackets extending upwardly from a rotatable element and configured and dimensioned to be received within said two spaced slots, said mounting assembly joining said display screen to said keyboard unit and permitting both rotational motion of said display screen relative to a first axis and pivotal motion of said display screen relative to a second axis that is perpendicular to said first axis; and
 - d) a port positioned proximate said front wall of said keyboard base, said port adapted to receive a signal from an ancillary computer system;

wherein a signal from said ancillary computer system delivered to said port is effective to generate a computer-generated image on said display screen; and

wherein said bottom edge of said display screen defines an intermediate region between said pair of slots and wherein a communication conduit extends from said keyboard base directly

into said intermediate region of said display screen.

(*Id.*, claim 1). As mentioned, the claimed “mounting assembly” utilizes a unique design. It includes “two spaced mounting brackets extending upwardly from a rotatable element and dimensioned to be received within ... two spaced slots” defined in the “bottom edge” of the display screen. The “bottom edge” also “defines an intermediate region between said pair of slots,” and “a communication conduit extends from said keyboard base directly into said intermediate region of said display screen.” According to the inventor, the claimed design, among other benefits, “maximizes the size of the display screen while providing a mounting mechanism that facilitates both rotational and pivotal motion.” (Ex. 2002 at 7).

B. Prosecution History

The ‘931 Patent issued on October 31, 2006. (‘931 Patent, p. 1). During prosecution, the Examiner considered three of the five references now identified by Petitioner. The references previously considered by the Office include Wu (US Patent No. 5,016,948, Ex. 1005), the only primary reference relied upon by Petitioner throughout the Petition, as well as Kikinis (US Patent No. 5,708,840, Ex. 1006) and Anderson (US Patent No. 5,335,142, Ex. 1007), the first two secondary references cited by Petitioner. Despite having considered Wu and having rejected claims based on the combination of Kikinis and Anderson, the Examiner later withdrew those rejections based on the applicant’s arguments, and the ‘931 Patent

was allowed to issue. The Office’s prior consideration of these references is discussed below in greater detail, in Part III.

C. Petitioner’s Grounds of Challenge

The Petitioner challenges seven claims of the ‘931 Patent (claims 1, 2, 3, 6, 8, 9, and 10) through six grounds of challenge based on five references. (Pet. at 4-6). All grounds are obviousness challenges based on multiple-reference combinations. The Petition also relies on the Declaration of Dr. T. Kim Parnell (“the Parnell Declaration,” Ex. 1002). The asserted grounds of challenge are as follows:

No.	Ground	Challenged Claims
1	Section 103: Wu + Kikinis	1-3, 8
2	Section 103: Wu + Kikinis + Anderson	9 and 10
3	Section 103: Wu + Kikinis + Ioka (JP App. No. 11-161367)	6
4	Section 103: Wu + Kumar (US Patent No. 5,632,373)	1 and 8
5	Section 103: Wu + Kumar + Anderson	3, 9, and 10
6	Section 103: Wu + Kumar + Ioka	2 and 6

(Pet. at 5-6). Throughout this Preliminary Response, for ease of understanding, the Patent Owner will refer to these prior art references by the inventor names indicated above.

D. Petitioner’s Proposed Claim Constructions

Petitioner does not offer any proposed claim constructions in its Petition. (Pet. at 10). Patent Owner agrees that the Board need not resolve any claim construction disputes to evaluate the Petition for institution. As explained below, the Petition contains several fatal flaws that prevent institution. Accordingly, for the sake of brevity, Patent Owner does not present any of its own proposed constructions at this preliminary stage, and reserves its right to do so at the appropriate time.

III. THE BOARD SHOULD DENY INSTITUTION BECAUSE THE SAME PRIOR ART AND ALL OF THE SAME ARGUMENTS WERE PREVIOUSLY PRESENTED TO THE OFFICE.

The Board should deny institution because Petitioner relies entirely on identical prior art and arguments previously presented to the Office. “In determining whether to institute or order a proceeding ... , the Director may take into account whether, and reject the petition or request because, the same or substantially the same prior art or arguments previously were presented to the Office.” 35 U.S.C. § 325(d). Here, in contending that the prior art discloses the claimed “mounting assembly” recited in claim 1, Petitioner relies entirely on prior art previously presented to the Office. For the remaining claimed features, Petitioner again relies on prior art previously presented to the Office or that is

cumulative and redundant of such prior art. For that reason, the Board should exercise its discretion and deny institution.

A. The Petition Relies on Old Art and Old Arguments.

By way of overview, Petitioner offers six grounds of challenge in total, with two parallel grounds advanced for each challenged claim of the ‘931 Patent. (Pet. at 5-6). All grounds advanced by Petitioner rely on Wu as the primary reference in a proposed obviousness combination. (*Id.*). For every ground, Petitioner contends that the “swivel mechanism” disclosed in Wu is the same as the “mounting assembly” recited in claim 1, the only independent claim challenged in the Petition. (*Id.* at 19, 35, 42, 47, 51, 53). Stated otherwise, despite purporting to advance six separate grounds of challenge, Petitioner relies on a single primary reference, Wu, throughout the Petition in an effort to show that the prior art discloses the “mounting assembly” recited in claim 1. (*Id.*).

Likewise, for every ground directed to further aspects of the “mounting assembly” recited in certain dependent claims, Petitioner relies on either Anderson (Grounds 2 and 5) or Ioka (Grounds 3 and 6). Regarding Grounds 2 and 5 directed to claims 9 and 10, Petitioner relies solely on Anderson in an effort to show that the prior art discloses the further aspects of the claimed “mounting assembly” recited in those dependent claims, namely, the “stop for limiting rotational motion of said display screen” recited in claim 9 and the rotating “turret” recited in claim

10. Regarding Grounds 3 and 6 directed to claim 6, Petitioner relies solely on Ioka as supposedly disclosing “angular motion ... of at least one hundred eighty degrees,” as recited in claim 6.

At the same time, with respect to the lone independent claim element that Petitioner admits is missing from Wu (*i.e.*, the “port” recited in claim 1), Petitioner alternatively relies on Kikinis (Grounds 1-3, *id.* at 19-21, 35-36, 42) or Kumar (Grounds 4-6, *id.* at 47-49, 51-53). Although Petitioner relies on Kikinis and Kumar interchangeably for the “port” element, Petitioner never explains what Kumar adds compared to Kikinis, or vice versa. (*Compare* Grounds 1-3 with 4-6). Indeed, for the “port” element, Petitioner’s discussion of Kumar repeats its discussion of Kikinis nearly verbatim. (*Compare* Pet. at 19-21 with 47-48).

At bottom, across all six grounds of challenge, Petitioner asserts that Wu discloses the “mounting assembly” of claim 1 (Ground 1 and 4), that Anderson discloses the additional “mounting assembly” features of claims 9 and 10 (Ground 2 and 5), and that Ioka discloses the additional “mounting assembly” feature of claim 6 (Ground 3 and 6). Petitioner then purports to pair each of these theories alternatively with Kikinis (Grounds 1-3) and Kumar (Grounds 4-6). Thus, while the Petition purports to set forth six separate grounds of challenge, the Petition instead relies on only a limited number of prior art references and a limited number

of basic propositions. As discussed in the next section, the Office already considered and rejected most of these references and all of these propositions.

B. The Office Already Considered Wu, Anderson, and Kikinis.

The first problem for Petitioner is that the Office already considered Wu, Anderson, and Kikinis during prosecution of the ‘931 Patent. There, the Examiner identified each of these references through her own prior art searches. (Ex. 2003, Notice of References Cited; Ex. 2004, Notice of References Cited). At the time that the Examiner explicitly considered these references, the claims pending in the application were identical to the claims of the ‘931 Patent now challenged by Petitioner, as the claims underwent no further amendment in prosecution. (Ex. 2005, Claim Listing).

Further, the Examiner considered each of these three references in the same way as proposed by Petitioner. First, while the Examiner did not rely on Wu in rejecting any claims of the ‘931 Patent (and for good reason, as explained below in Part IV.C), the Examiner expressly stated in an Office Action that she considered the “swivel mechanism” from Wu:

The prior art made of record and not relied upon is considered pertinent to applicant’s disclosures.

Wu ... teaches a swivel mechanism for a monitor for a laptop computer.

(Ex. 2004, Office Action, pp. 8-9). Wu only discloses a single “swivel mechanism.” (*See generally* Wu). Thus, the Examiner expressly considered Wu in the exact same capacity as Petitioner asks the Board to do here, *i.e.*, that the “swivel mechanism” in Wu is the same as the “mounting assembly” recited in claim 1 of the ‘931 Patent. The Examiner rejected this contention.

Second, instead of relying on Wu, the Examiner rejected each of claims 1, 9 and 10 – challenged claims with “mounting assembly” features – based on Anderson in view of Kikinis and a third reference, Kim (US Patent No. 6,151,207). (Ex. 2004, Office Action, pp. 2-4). In making this rejection, the Examiner specifically discussed the operation of the “tilt and swivel mechanism” shown in Anderson. (*Id.* (discussing Anderson, Figs. 2-5 & 7-8)). Indeed, since Anderson, like Wu, discloses only a single embodiment, the Examiner relied on the same figures and disclosures as Petitioner does now. (Pet. at 30-38 (discussing Anderson, Figs. 2-3 & 7-9)). Thus, the Examiner likewise rejected the contention that Anderson discloses the mounting assembly recited in claims 1, 9 and 10.

Third, in making that same rejection, the Examiner also relied on Kikinis, just like Petitioner does now in Grounds 1-3, to find the claimed “port.” (*Compare* Ex. 2004, Office Action, p. 4 *with* Pet. at 19-21, 35-36 & 42). Yet the claims of the ‘931 Patent were allowed to issue.

C. For “New” Art, the Office Previously Considered the Same Arguments.

The second problem for Petitioner is that, for the few “new” prior art references, Petitioner simply repeats old arguments. Of the five references identified in the Petition, only two are not cited on the face of the ‘931 Patent. Those references are Kumar and Ioka. As discussed above, for the “port” element, Petitioner substitutes Kikinis with Kumar but never explains what Kumar adds over Kikinis, instead leaving it to the reader to guess at the differences. Thus, based on the Petition, Grounds 4-6 are redundant of Grounds 1-3, respectively. The Office already considered and rejected the combination of the alleged “port” from Kikinis with the “swivel mechanism” from Wu and thus, by extension, already considered and rejected the combination of the alleged “port” from Kumar with the “swivel mechanism” from Wu. Petitioner adds Kumar to the mix in an apparent attempt to come up with a “new” reference.

Likewise, Petitioner relies solely on Ioka in an effort to disclose the subject matter of claim 6, namely, “angular motion of said display screen relative to said keyboard of at least one hundred eighty degrees.” (Pet. at 43 & 54). But here too, Petitioner recycles arguments from prosecution. There, as here, the primary reference indisputably lacked 180° angular motion, as required by claim 6. And there, as here, the challenger turned to a reference with 180° angular motion and

argued that extending the range of motion would have been obvious. During prosecution, the Examiner stated:

[I]t would have been obvious ... to have the angular motion of the display screen relative to the keyboard base of at least 180° as taught by Nobuchi since it would allow the user for showing [sic] material on the display to a person on the opposite side of the user.

(Ex. 2004, Office Action, pp. 5-6). Likewise, except for swapping Ioka for Nobuchi, the Petitioner makes the exact same argument here:

Ioka discloses the advantage of providing at least 180 degrees of rotation of the display screen about the vertical axes to allow the screen to be rotated to those sitting across from the laptop user. A POSITA would have combined Wu with Ioka’s rotation of at least 180 degrees to improve the convenience and functionality of a laptop system.

(Pet. at 41 (internal citation omitted)). The arguments are identical in substance. And while the Examiner may not have seen Ioka, it adds nothing over Nobuchi with respect to angular motion. As Petitioner does with Kumar, the addition of Ioka appears solely intended to create the appearance of something new for the Board to consider.

D. The Petition Therefore Relies on Prior Art and Arguments Previously Considered by the Office, and Should be Denied.

Accordingly, all grounds of challenge set forth in the Petition rely on prior art and argument previously presented to the Office. Grounds 1 and 2, advanced

by Petitioner, are proposed obviousness combinations consisting entirely of previously-presented prior art. Ground 1 is a proposed combination of the “swivel mechanism” of Wu (previously considered) and the “port” in Kikinis (previously considered). Ground 2 is a proposed combination of the “swivel mechanism” of Wu (previously considered), the “tilt and swivel mechanism” of Anderson (previously considered), and the “port” of Kikinis (previously considered). Thus, Grounds 1 and 2 indisputably rely entirely on the same prior art previously presented to the Office, in the same way that such prior art was previously considered by the Office. Grounds 1 and 2 present a clear-cut case for the application of section 325(d).

Grounds 4 and 5, which parallel Grounds 1 and 2, fare no better.² Both Grounds 4 and 5 rely on the “swivel mechanism” of Wu (previously considered). Although Petitioner substitutes the alleged “port” from Kumar for the alleged “port” from Kikinis, Petitioner offers no explanation of the need for these alternative grounds, and as discussed above, its arguments about Kikinis and Kumar are substantively identical and repeated nearly word-for-word. (*Compare*

² Although Grounds 2 and 5 parallel one another, Petitioner inexplicably adds claim 3 to Ground 5 compared to Ground 2, even though, in Ground 2, Petitioner relies on the sole primary reference, Wu, to assert that the prior art discloses the same subject matter. Therefore, the addition of claim 3 to Ground 5 does not change the fact that Grounds 2 and 5 are substantively the same.

Pet. at 19-21 *with* 47-48). Instead, Petitioner surmises by way of footnote only that Kumar is relevant “[t]o the extent the Board concludes that Kikinis does not disclose the ‘port’ limitation.” (Pet. at 5). Yet Petitioner never carries its burden of explaining how the Board could ever reach that conclusion. Ground 4 and 5 likewise present a strong case for the application of section 325(d).

Petitioner’s attempts to explain why the Board should reconsider this previously-presented prior art miss the mark. First, Petitioner incorrectly and irrelevantly asserts that “the examiner did not substantively apply Wu.” (Pet. at 5). Section 325(d) imposes no such requirement. “To fall within the scope of Section 325(d) ... , all that is required is that the same or substantially similar art and arguments were *presented* to the Office.” *Guardian Bldg. Prods., Inc. v. Manville*, IPR No. 2017-00633, slip op. at 11 (PTAB July 26, 2017) (Paper 13). At any rate, the record unambiguously shows that the Examiner considered the “swivel mechanism” of Wu in connection with the same claims now challenged by Petitioner. (Ex. 2004, Office Action, pp. 8-9).

And second, Petitioner incorrectly claims that “the combination of Wu with Kikinis is a new combination.” (Pet. at 5). The Examiner expressly considered the “swivel mechanism” from Wu and the “port” from Kikinis, which is exactly what Petitioner proposes here. The fact that the Examiner did not issue a rejection based on the combination of Wu and Kikinis does not mean that the Examiner did not

consider that combination. To the contrary, given that Wu indisputably lacks a “port” (thus necessitating obviousness grounds of rejection in prosecution and similarly obviousness grounds of challenge in the Petition), and given that the Examiner explicitly relied on Kikinis for the claimed “port” (as does Petitioner), the combination of Wu and Kikinis is the only realistic combination that the Examiner would have considered when she considered Wu. The combination of Wu and Kikinis is not, therefore, a new combination in any meaningful sense, and despite having the burden to do so, Petitioner never explains why this combination is neither redundant nor cumulative. (*Id.*). And even if the combination of Wu and Kikinis were new, such a combination is not required for the Board to exercise its discretion under section 325(d). *See Guardian*, slip op. at 11 (“Regardless of the exact combination of references cited in the Examiner’s rejections, it is beyond dispute that all references in the Petition were presented to the Office.... The statute, therefore, gives us the discretion to deny the Petition.”).

As for remaining Grounds 3 and 6,³ Petitioner presents a combination of old prior art and old arguments. Both grounds challenge claim 6, which recites angular

³ Similar to Grounds 2 and 5, Petitioner adds claim 2 to Ground 6 compared to corresponding Ground 3, even though, in Ground 3, Petitioner relies on Wu to disclose the subject matter of claim 2. Here, too, the addition of claim 2 to Ground 6 does not meaningfully vary the substance of Ground 6 over Ground 3.

motion of 180°. While Petitioner purports to identify 180° angular motion in Ioka, the Office was already presented with 180° angular motion in prosecution (in the form of the Nobuchi reference), and the Office was already presented with the same theory of obviousness. Simply repeating the same arguments is enough to justify denial of the Petition. *Adidas AG v. Nike, Inc.*, IPR No. 2017-00263, slip op. at 4 (PTAB July 20, 2017) (Paper 11) (stating that “our invocation of § 325(d) did not require that we determine that the same or substantially the same prior art *and* arguments presented in the instant Petitions previously were presented to the Office, but rather that the same or substantially the same prior art *or* arguments previously were presented to the Office”). Here, for Grounds 3 and 6, Petitioner goes a step further and layers old arguments on top of old prior art.

Ultimately, there is no injustice in denying institution here. Petitioner has been aware of the ‘931 Patent since March, 2016, when Petitioner was sent a copy of a federal court complaint alleging infringement of the ‘931 Patent. Wu, Anderson, and Kikinis are listed on the face of the ‘931 Patent. The complaint was served on Petitioner on May 6, 2016. Exactly one year later – on the very last day of the statutory period to seek IPR – Petitioner filed the instant Petition. Yet in all of that time, and with all of the incentive that a patent infringement defendant has to challenge the ‘931 Patent, Petitioner could only identify the same prior art that

the Office identified over a decade ago or, in a few other cases, could only repeat the same arguments that the Office considered back then relying on substantively identical art. This is precisely the type of situation that section 325(d) was intended to prevent, and the Board’s discretion to deny institution should be exercised here. *Neil Ziegman, N.P.Z., Inc. v. Stephens*, Case No. IPR2015–01860, slip op. at 12-13 (PTAB Feb. 24, 2016) (Paper 11) (“The Board weighs petitioners’ desires to be heard against the interests of patent owners, who seek to avoid harassment and enjoy quiet title to their rights.”).

IV. IF THE BOARD DECIDES TO CONSIDER THE PETITION, PETITIONER FAILS TO DEMONSTRATE A REASONABLE LIKELIHOOD OF SUCCESS.

A. Grounds 1-3: No Motivation to Combine Wu and Kikinis.

Petitioner fails to carry its burden of establishing a motivation to combine Wu and Kikinis, as asserted in Grounds 1-3. Petitioner acknowledges that Wu does not disclose the “port positioned proximate said front wall of said keyboard base” recited in claim 1, the only challenged independent claim. (Pet. at 19). Petitioner instead asserts that Kikinis discloses the claimed “port.” (*Id.* at 20). For each of Grounds 1-3, Petitioner offers the same alleged motivations to combine Wu with Kikinis. (*Id.* at 20, 35-36, 42). Yet those alleged motivations to combine are based on impermissible hindsight and are otherwise legally insufficient.

By way of background, the specification of the ‘931 Patent explains the claimed port positioning is advantageous because it “permits efficient and non-encumbered coupling of the laptop computer to an ancillary computer system.” (‘931 Patent, 3:50-53). For wired port embodiments, the claimed port positioning places cabling out of the way, physically and visually, when the display is rotated. (*See also id.* at 6:31-35). Similarly, for wireless port embodiments, the claimed port positioning avoids the line of sight being blocked when the display is rotated (*e.g.*, for infrared-based communications). (*See id.* at 3:50-53 & 6:6:2-3).

Petitioner initially asserts that “a POSITA would have looked for existing solutions to provide a complete laptop that addressed the same efficiency and practicality design goals addressed by Wu.” (Pet. at 15). This proffered motivation to combine suffers from multiple flaws. First, the “efficiency and practicality design goals” addressed by Wu have nothing to do with adding ports, let alone a “port positioned proximate said front wall of said keyboard unit,” as claimed. Indeed, in discussing these same goals earlier in the Petition, Petitioner acknowledges that these goals relate to the “swivel mechanism” shown in Wu. (*Id.* at 14-15). In explaining the “swivel mechanism” from Wu, Petitioner states that “Wu recognizes that the working efficiency and practicality of a laptop computer could be improved by providing a swivel mechanism.” (*Id.* (citing Wu at 1:23-36)). Indeed, the cited portion of Wu confirms that Wu seeks “to provide a swivel

mechanism,” “widen the visible range,” and generally “further the feasibility of a laptop computer.” (Wu at 1:23-36). Thus, Wu makes no suggestion of adding any ports at all, and only through a sleight of hand based on hindsight is Petitioner able to proffer such a suggestion.

And second, even assuming for the sake of argument that a POSITA were motivated to provide a “complete laptop,” as Petitioner contends (and that such a laptop, at the time of invention, necessarily required the claimed “port”), a POSITA would, at most, add a port positioned *somewhere* on the laptop disclosed in Wu. There is no reason, and Petitioner articulates none, why a POSITA who wanted a “complete laptop” would add “a port positioned proximate said front wall of said keyboard base,” as claimed, to arrive at a “complete laptop” with the same cabling advantages as the claimed invention. (*Id.*). Neither Petitioner nor its expert identifies any disclosures in Wu or Kikinis suggesting that a “proximate” port positioning will place cabling in an advantageous position for a swivel display, as taught by the ‘931 Patent. (Pet. at 14-16, 19-21; Decl. ¶¶ 52, 58).

That the record reflects no such suggestion is consistent with the disclosures of Wu and Kikinis. Petitioner concedes that “Wu ... does not disclose the maximum degree to which the monitor can rotate about the vertical axis.” (Pet. at 43). What is clear from Wu is that the maximum degree of rotation falls far short of 180°. (*See, e.g.,* Wu, Fig. 5). As a result, even if the display in Wu were rotated

to its maximum extent, it is never rotated very far from its original position, and the display still generally faces the original user. In the limited rotational context of Wu, positioning the ports on the rear of the laptop remains the most sensible location to place them even if, as the ‘931 Patent teaches, a POSITA knew to put them in a position that is out of the way from diverse viewing angles. Likewise, Kikinis never suggests positioning ports proximate the front wall in order to obscure cabling. Nor would Kikinis. Kikinis discloses card slots that directly accept cards without the use of cabling. (*See, e.g.*, Kikinis, Fig. 5). In short, Kikinis does not make up for Wu’s shortcomings.

The remaining motivations to combine proffered by Petitioner are legally insufficient under Federal Circuit case law. Petitioner otherwise asserts only that Wu and Kikinis “could be” combined, which is simply not enough. For example, Petitioner asserts that “[a] POSITA would understand that [the alleged “port”] used in Kikinis’s laptop **could be** placed on other laptop computers, such as disclosed in Wu.” (*Id.* at 20 (emphasis added)). By way of further example, Petitioner asserts that “[a] POSITA would have known that the ports positioned proximate the front wall of the keyboard base in Kikinis **could be** used in Wu’s computer to facilitate communication with ancillary computer systems.” (*Id.* at 20-21 (emphasis added)).

But establishing that two references “could be” combined is legally insufficient to establish that they would have been combined, as the law requires. Indeed, the Federal Circuit finds such assertions legally insufficient to establish a motivation to combine. In *Personal Web Technologies v. Apple*, the Federal Circuit flatly rejected the exact same approach taken by Petitioner here:

[Ppetitioner] conten[ds] that “a person of ordinary skill in the art reading Woodhill and Stefik would have understood that the combination of Woodhill and Stefik *would have allowed for* the selective access features of Stefik to be used with Woodhill’s content-dependent identifiers feature.” But that reasoning seems to say no more than that a skilled artisan, once presented with the two references, would have understood that they *could be* combined. And that is not enough: it does not imply a motivation to pick out those two references and combine them to arrive at the claimed invention.

848 F.3d 987, 993-94 (Fed. Cir. 2017). Put simply, just because a POSITA *could* combine two references to arrive at the claimed invention says nothing about whether they *would*. *Id.* Here, Petitioner does nothing more than what the Federal Circuit holds is not enough.

B. Grounds 4-6: No Motivation to Combine Wu and Kumar.

For much the same reasons, Petitioner fails to carry its burden of establishing a motivation to combine Wu and Kumar, as proposed in Grounds 4-6. Petitioner offers the same insufficient motivations to combine Wu and Kumar.

(Pet. at 45-48). As a threshold matter, as discussed above in Part III, Petitioner never explains what Kumar adds over Kikinis, making these grounds redundant. And as discussed above in Part IV.A, nothing in Wu suggests adding ports positioned proximate the front wall or, for that matter, any ports at all. At most, Petitioner asserts that a POSITA would have been motivated to add a port somewhere to the Wu laptop, not that a POSITA would have been motivated to add “a port positioned proximate said front wall of said keyboard base,” as claimed, to obscure cabling or avoid blocking sight lines. (‘931 Patent, 6:31-35). Likewise, Petitioner merely asserts that Wu “could be” combined with Kumar. (Pet. at 46-47). Like the motivations to combine proffered earlier by Petitioner as to Wu and Kikinis, Petitioner’s proffered motivations to combine Wu and Kumar are legally insufficient. *Personal Web*, 848 F.3d at 993-94.

C. All Grounds: The Combinations of Wu and Kikinis/Kumar Do Not Disclose All of the Elements of Independent Claim 1.

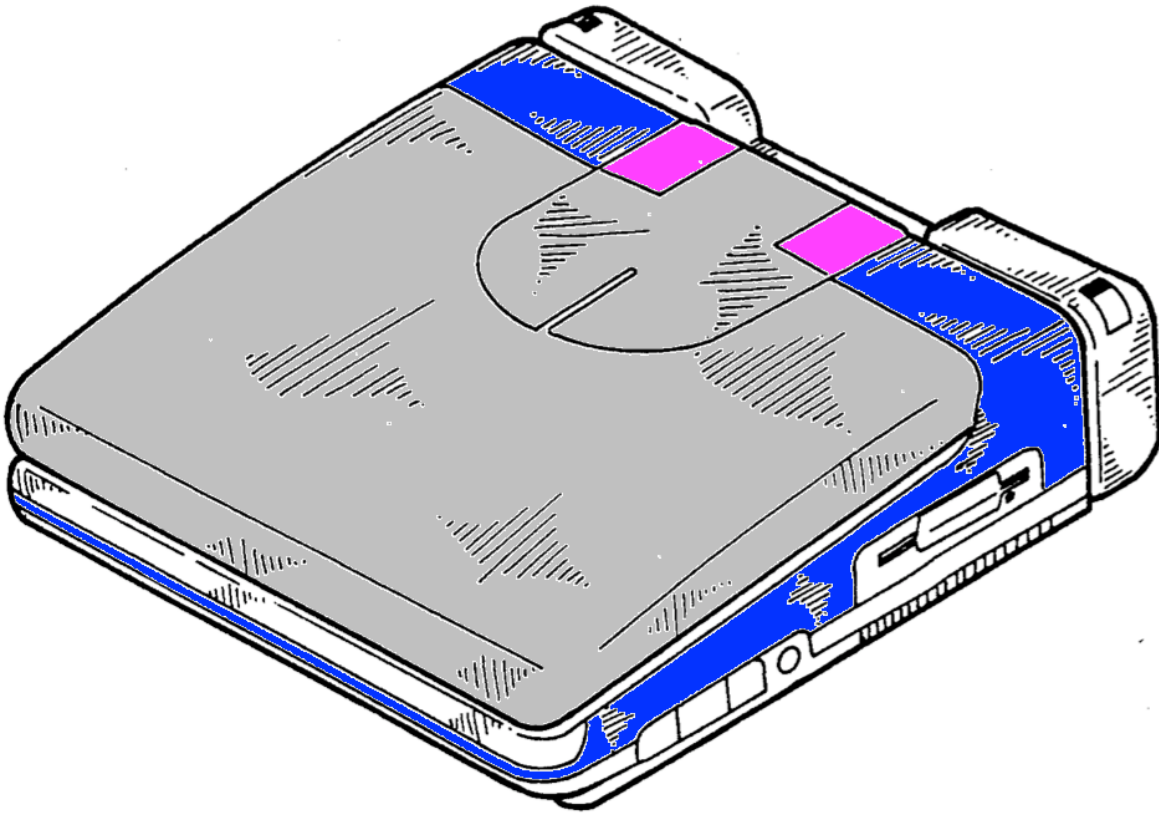
Even if Wu were properly combinable with Kikinis or Kumar (which it is not), Petitioner fails to carry its burden of showing that these proposed combinations disclose the claimed “mounting assembly” or the claimed “communication conduit,” as recited in independent claim 1, as explained in turn below. These failings underscore why the Examiner declined to issue a rejection based on Wu after considering that reference. Because Petitioner relies exclusively on Wu for these claim elements, but because Wu does not actually disclose them

(as the Examiner concluded during prosecution), Petitioner’s failure to carry its burden here is fatal to the entire Petition.

1. The “Swivel Mechanism” in Wu is Fundamentally Different from the “Mounting Assembly” in the ‘931 Patent.

What Wu discloses is anything but clear. Wu is a short patent. It comprises five figures (only one of which is labeled) accompanied by less than two columns of written description. The figures are inconsistent with each other, and the single-column “Detailed Description” purports to describe only a single embodiment and, in so doing, refers to unlabeled, mislabeled, and otherwise missing components. The result of the brevity, inconsistency, and inaccuracy of the Wu disclosure is that the design and operation of the “swivel mechanism” in Wu is unknown, which explains why the Examiner did not issue a rejection based on Wu despite considering it.

For example, the inconsistencies between the figures of Wu lend uncertainty to what Wu teaches in ways that critically undermine Petitioner’s arguments. In particular, Figure 1 of Wu is shown below:



(Wu, Fig. 1 (annotations added)). In Figure 1, the display on the Wu laptop is shown in the closed position. The back of the display (gray) is therefore visible. Relative to the display, the system base (blue) is stationary. Note that the rear portion of the system base includes a pair of upward protrusions in the base housing, such that those protrusions are flush with the back of the display when the display is closed. While Wu does not annotate Figure 1 (or for that matter any other figure besides Figure 3), it appears that the portions colored in pink represent the side covers (41 and 42) shown in Figure 3.

Two observations are readily apparent from Figure 1, both of which undermine Petitioner’s contentions and for which Petitioner offers no explanation.

First, the bottom edge of the display screen does not define “two spaced slots,” as claimed. Rather, it is a straight edge except for the extension leg that protrudes downward. The fact that Figure 1 shows no spaced slots explains Petitioner’s failure to carry its burden of identifying with particularity the structures in Wu that it contends constitute the “two spaced slots.” (*See* Pet. at 19).

Second, although Wu purports to relate to a “swivel mechanism for a monitor of a laptop computer” (Wu, Abstract), Figure 1 appears to depict a device that is not even capable of rotational motion. To be sure, Wu claims that the display screen is capable of rotational and pivotal motion (*see, e.g.*, Wu, 1:15-18), and Wu even purports to shows a display screen that has been partially rotated (*see, e.g., id.*, Fig. 5). But Wu never explains how the “swivel mechanism” in Figure 3 actually works. Nor does Petitioner or its expert. Petitioner has identified nothing in the record to fill these critical gaps in Wu.

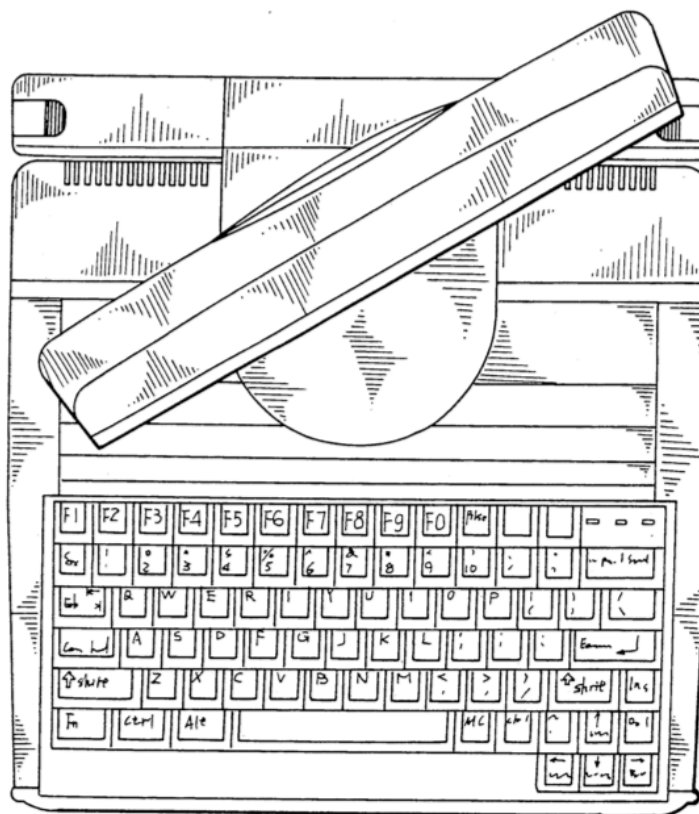
Imagine opening the display on the laptop shown in Figure 1 of Wu and trying to rotate the display. The screen portion includes a box-like “leg” member (gray, *see also* Fig. 3, between inner sides 51 and 52), positioned between what appear to be a pair of box-like side covers (pink, *see also* Fig. 3, side covers 41 and 42), which are in turn positioned between a pair of box-like stationary protrusions in the housing (blue). The screen portion cannot rotate because the leg member is flush with, and blocked by, the side covers. The side covers, in turn, are blocked

by the stationary protrusions in the housing. There is no space for the leg, or for the leg in combination with the side covers, to rotate.

Figures 2 and 3 of Wu, despite appearing to provide additional detail, confirm that the Wu display cannot actually rotate. Like Figure 1 of Wu, Figures 2 and 3 suggest that side covers 41 and 42 are flush with the protrusions from the housing, given the dimensions of the side covers depicted in Figures 2 and 3, and that the side covers appear to be the only structures in Figures 2 and 3 that could possibly correspond to the elements annotated in pink in Figure 1 (as reproduced above). As before, the device depicted in Figures 2 and 3 would be similarly blocked from rotating.

Figure 5 of Wu, by contrast, is inconsistent with Figures 1 through 3. Figure 5 is reproduced below:

[see next page]



(Wu, Fig. 5). Although Figure 5 shows a rotated display from an angle about the vertical axis (*id.* at 1:54-55), it is entirely unclear how the “swivel mechanism” from Figures 2 and 3, or the laptop of Figure 1, could accomplish the rotation shown in Figure 5. Indeed, the swivel mechanism from Figures 2 and 3 is not shown at all in the rotated display of Figure 5. Specifically, portions of side covers 41 and 42 (the pink elements in the annotated version of Figure 1 above) should remain visible in Figure 5. Yet they are not. Neither Petitioner nor its expert do anything to explain these serious inconsistencies in the Wu disclosure.

Further, what little textual description Wu offers includes several errors and mis-labelings that make it difficult to discern how exactly the mechanism in Wu even fits together. (*See, e.g.*, Wu, 2:17-26 (“The axle 21 extends through the fixed block 211 to connect to a threaded hole 11 [NB: *mislabeled, element 11 is the fixed seat, not a threaded hole*] of the fixed seat 11 and kept in position by a screw [(not shown), with its longitudinal raised lines contacting a curved portion 112 of the fixed seat 11. The axle 23 [NB: *there is no element 23*] passes through the fixed block 231 to connect to a threaded hole 113 [NB: *there is no element 113 either*] of the fixed seat 11 and kept in position by a screw (not shown), also with its longitudinal raised lines contacting a curved portion 114 of the fixed seat 11.”)).

Against this backdrop of inaccuracies, inconsistencies, and non-functioning embodiments, Petitioner would seem to have reason to be more specific in its explanation of its application of Wu to the ‘931 Patent. Petitioner, however, does just the opposite. Its application of Wu to the ‘931 Patent is brief and conclusory. Unsurprisingly, Petitioner’s treatment of Wu is deficient in numerous respects.

2. *Petitioner Has Not Shown that Wu Discloses the Claimed “Mounting Assembly.”*

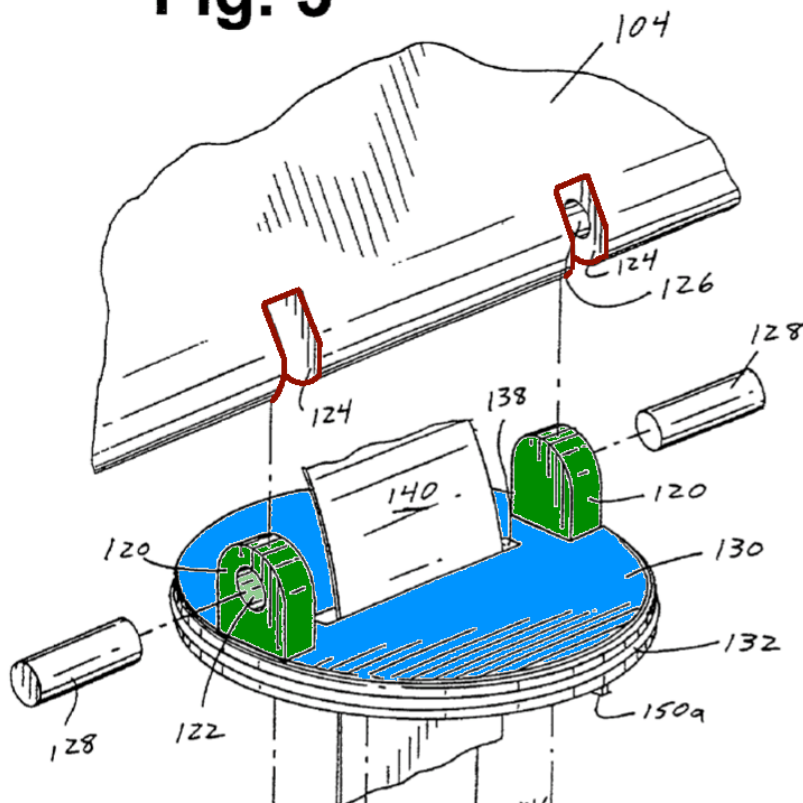
Petitioner has failed to demonstrate that Wu discloses the “mounting assembly” recited in claim 1 of the ‘931 Patent. Claim 1 recites, in pertinent part:

c) a mounting assembly proximate said back wall of said keyboard base, said mounting assembly including two spaced

mounting brackets extending upwardly from a rotatable element and configured and dimensioned to be received within said two spaced slots, said mounting assembly joining said display screen to said keyboard unit and permitting both rotational motion of said display screen relative to a first axis and pivotal motion of said display screen relative to a second axis that is perpendicular to said first axis.

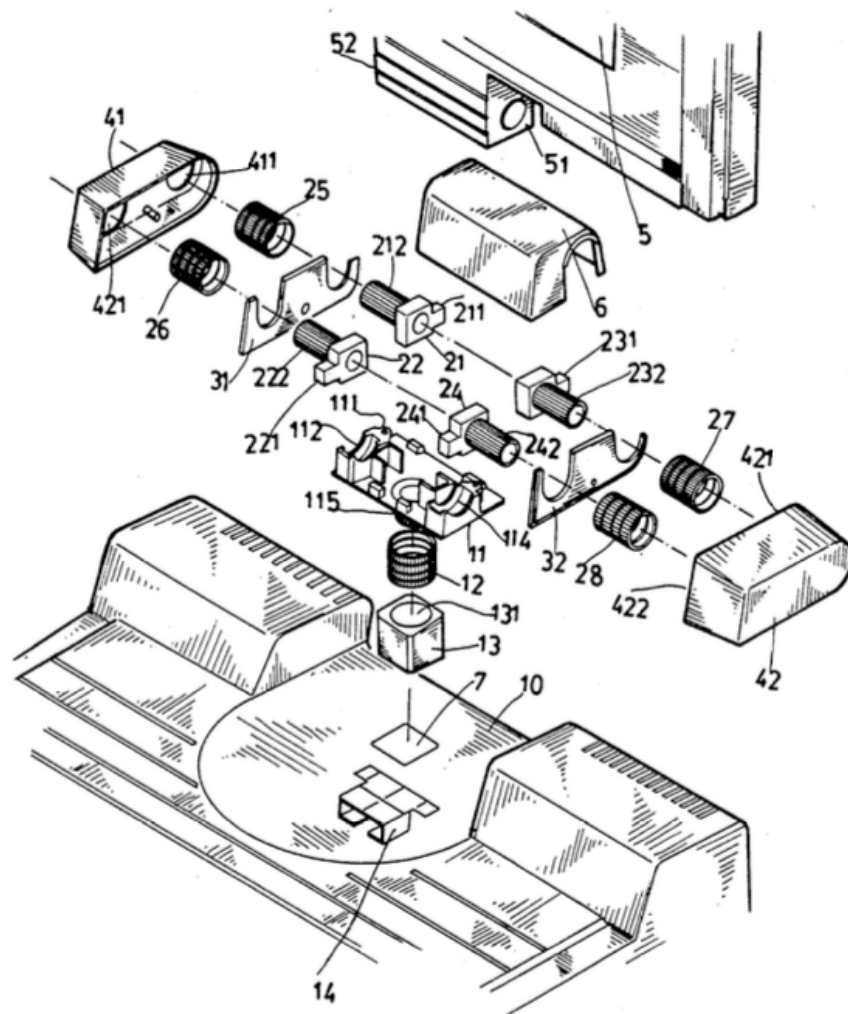
(‘931 Patent, claim 1). As claim 1 recites, the “mounting assembly includ[es] two spaced mounting brackets extending upwardly from a rotatable element and configured and dimensioned to be received within said two spaced slots.” This design “join[s] said display screen to said keyboard unit and permit[s] both rotational motion ... and pivotal motion of said display screen.” An exemplary embodiment of the claimed “mounting assembly” is shown in Figure 3 of the ‘931 Patent, reproduced in relevant part below:

[see next page]

Fig. 3

(‘931 Patent, Fig. 3 (annotations added)). As the specification of the ‘931 Patent explains, “mounting assembly 114 [not numbered in Figure 3] includes a pair of spaced mounting brackets 120 [green] protruding from a substantially circular turret 130 [blue].... Brackets 120 are dimensioned to fit within slots 124 [outlined in red] formed in display monitor 104.” (*Id.* at 7:13-17). In combination with rods 128, mounting brackets 120 permit pivotal motion that opens, closes, and otherwise tilts the display around a horizontal axis, while those structures combined with rotating turret 130 permit rotational motion that swivels the display around a vertical axis. (*Id.* at 7:13-46).

Wu discloses a substantially different design, reproduced below:



(Wu, Fig. 3). According to Petitioner, fixed seat 11 constitutes the claimed “rotatable element,” and longitudinal axles 22 and 24 constitute the claimed “spaced mounting brackets.” (Pet. at 19). Petitioner asserts that axles 22 and 24 “extend upward from the fixed seat [11] and are arranged to fit within the two spaced slots [not identified by Petitioner or labeled in Figure 3] beside the inner sides of the monitor.” (*Id.*). Petitioner’s proposed mapping of Wu to the “mounting assembly” element of claim 1 of the ‘931 Patent is fatally flawed.

As a threshold matter, Petitioner does not specifically identify the structures in Wu alleged to constitute the claimed “two spaced slots.” (Pet. at 19). Rather, Petitioner only asserts that, whatever they are, they are “beside inner sides of the monitor.” (*Id.*). Contrary to its burden, Petitioner leaves discerning the alleged “two spaced slots” in Wu up to the reader. (*Id.*). This is especially problematic because, as discussed above, it is readily apparent from at least some of the figures in Wu (*e.g.*, Fig. 1) that the monitor in Wu does not contain any “slots” that could possibly correspond to the “two spaced slots” in the ‘931 Patent. Again, given the inconsistencies in Wu, one might expect Petitioner to be *more* specific with its contentions. Instead, Petitioner fails to identify the allegedly corresponding elements in Wu *at all*.

Second, Petitioner has not shown that longitudinal axles 22 and 24 in Wu constitute “mounting brackets,” as claimed. As shown in Figure 3 of the ‘931 Patent, exemplary mounting brackets 120 are structures fixed to the substantially circular turret 130. The mounting brackets 120 contain cavities 122 that accept rods 128, which in turn are inserted into channels 126 in the display. (‘931 Patent, 7:15:22). By contrast, axles 22 and 24 in Wu are not “mounting brackets,” as claimed, and the “swivel mechanism” in Wu does not involve a mounting bracket-based design at all. If anything, axles 22 and 24 in Wu function more like rods 128 in the ‘931 Patent. While axles 22 and 24 in Wu are associated with fixed blocks

221 and 241,⁴ respectively, such fixed blocks cannot possibly constitute “mounting brackets” either, as they do not “extend upwardly from a rotatable element,” *i.e.*, fixed seat 11. Like axles 22 and 24, fixed blocks 221 and 241 do not extend upwardly from anything. As Wu explains, a different pair of longitudinal axles, *i.e.*, axles 21 and 23, are connected to fixed seat 11. Specifically, according to Wu, “[t]he axle 21 extends through the fixed block 211 to connect to a threaded hole 11 [sic] of fixed seat 11 and kept in position by a screw [(not shown).” (Wu, 2:16-19). Likewise, “[t]he axle 23 [not actually shown in Wu] passes through the fixed block 231 to connect to a threaded hole 113 [not actually shown in Wu] of the fixed seat 11 and kept in a position by a screw (not shown).” (*Id.* at 2:20-23). Wu

⁴ Petitioner further convolutes the application of Wu by inconsistently identifying what it contends correspond to the “mounting brackets.” First, Petitioner states that “[t]he monitor of Wu also includes two spaced slots in its bottom edge to receive the fixed blocks 221 and 241 of the swivel mechanism,” thus suggesting the fixed blocks constitute the claimed “mounting brackets.” (Pet. at 18). Then, just a paragraph later, Petitioner contradicts itself by suggesting that axles 22 and 24 instead constitute the “mounting brackets,” saying that “[t]he longitudinal axles 22 and 24 (*spaced mounting brackets*) with fixed blocks extend upward from the fixed seat and are arranged to fit within the two spaced slots beside the inner sides of the monitor.” (*Id.* at 19 (emphasis original)). Petitioner thus fails to particularly point out where it contends Wu discloses the claimed structures, and its analysis is deficient for this reason alone. Regardless, as shown above, neither the axles nor the fixed blocks could possibly correspond to the “mounting brackets.”

contains no disclosure that the alleged “mounting brackets,” *i.e.*, axles 22 and 24, “extend upwardly” from the alleged “rotatable element,” *i.e.*, fixed seat 11, as claimed.

Further, Petitioner has definitely not shown that axles 22 and 24 or fixed blocks 221 and 241 are “configured and dimensioned to be received within said two spaced slots.” On this issue, Petitioner incorrectly asserts that “[t]he longitudinal axles 22 and 24 ... with fixed blocks [221 and 241] ... are arranged to fit within the two spaced slots beside the inner sides of the monitor.” (Pet. at 18). Even putting aside Petitioner’s failure to identify the alleged “two spaced slots” in Wu, there is no disclosure in Wu that the alleged “mounting brackets,” *i.e.*, axles 22 and 24, are “configured and dimensioned to be received within said two spaced slots,” as claimed. While Petitioner relies on Wu’s broad assertion that “axles 22 and 24 are engaged with the monitor 5 and the fixed blocks 221 and 241 are respectively disposed beside the inner sides 52 and 51 of the monitor 5” (Pet. at 19 (citing Wu at 2:26-29)), Petitioner fails to explain how the mere engagement of axles 22 and 24 with the monitor, or how the disposition of fixed blocks 221 and 241 beside the inner sides 51 and 52, means that axles 22 and 24 are “configured and dimensioned to be received within said two spaced slots,” as claimed. Petitioner has failed to carry its burden here, too.

3. *Petitioner Has Not Shown that Wu Discloses the Claimed “Communication Conduit.”*

Petitioner likewise fails to carry its burden of showing that Wu discloses the claimed “communication conduit,” which is fatal as to all grounds in the Petition. In relevant part, claim 1 of the ‘931 recites a “communication conduit” that “extends ... directly” into an “intermediate region” defined between the pair of slots on the display screen:

wherein said bottom edge of said display screen defines an intermediate region between said pair of slots and wherein a communication conduit extends from said keyboard base directly into said intermediate region of said display screen.

(‘931 Patent, claim 1). As shown in Figure 3 of the ‘931 Patent (reproduced above on page 32), the communication conduit 140 extends directly from the keyboard base into an intermediate region defined between slots 124, passing only through the mounting assembly and no other structure.

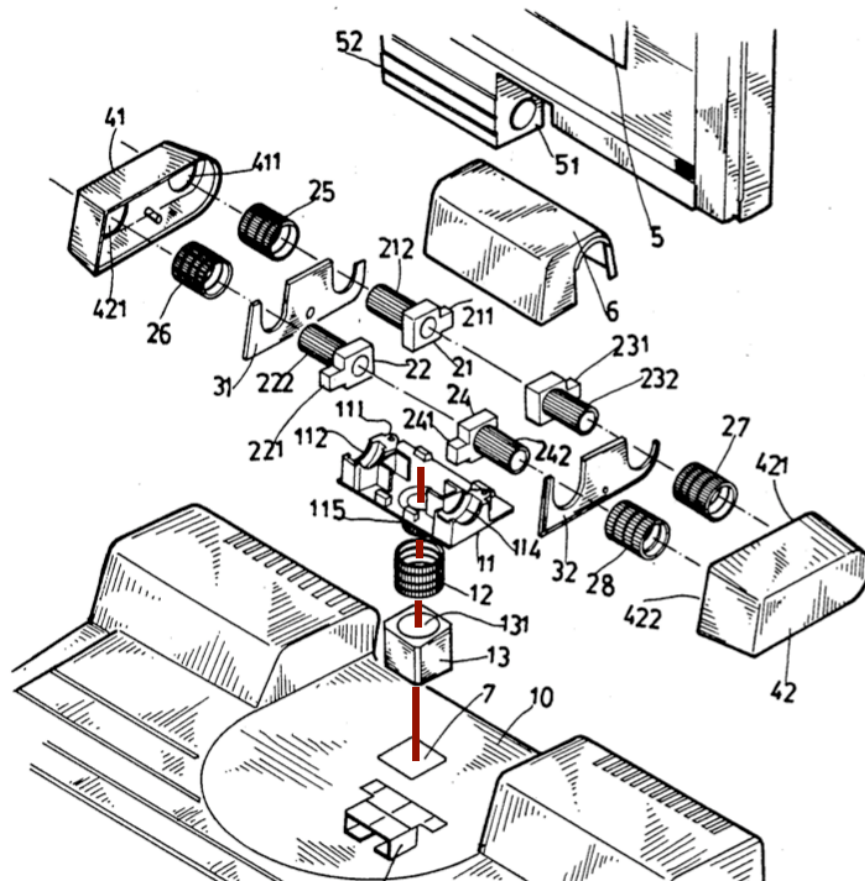
Wu, by contrast, does not disclose a communication conduit at all, as Petitioner concedes. (Pet. at 21). Petitioner nonetheless asserts that “the bottom edge of the monitor includes an intermediate region (made up by the inner sides 51 and 52) between the pair of slots.” (*Id.*). Petitioner then asserts that “[s]ome type of communication conduit between the monitor and the laptop base is essential and necessarily present.” (*Id.*). Those statements represent the entirety of Petitioner’s

analysis of the claimed “communication conduit” element. On its face, those statements, at most, suggest that Petitioner contends that Wu inherently discloses a communication conduit. They do not, by contrast, establish that Wu inherently discloses a communication conduit that “extends ... directly” into an “intermediate region,” as claimed.⁵ Neither Petitioner nor its expert even contends that Wu discloses this aspect of claim 1, and for that reason alone, Petitioner fails to carry its burden of showing that Wu discloses the claimed “communication conduit.”

Based on Petitioner’s scant claim chart (*id.* at 26), Petitioner apparently contends that a hypothetical communication conduit emerges from the system base through hole 7, then through vertical hole 131 in positioning block 13, and then through what is potentially a central hole (unnumbered, and never actually described by Wu as a hole) in fixed seat 11, as illustrated below:

[see next page]

⁵ Petitioner’s failure to identify “two spaced slots” in Wu with any particularity further undermines the analysis set forth in the Petition.



(Wu, Fig. 3). At this point, the hypothetical communication conduit would be somewhere beside axle 21 (which is not one of the alleged “mounting brackets” of axles 22 and 24). But, even giving Petitioner the benefit of the doubt that its imagined communication conduit makes it this far (through structures that may or may not have a cavity capable of routing a conduit, and through others that do not even have a hole shown in them), where this hypothetical communication conduit goes after that is anyone’s guess, and neither Petitioner nor its expert provides any explanation. Indeed, the Petition is silent on this issue. (Pet. at 21-22).

Certainly nothing in Wu suggests routing this hypothetical communication conduit into the region of the display between inner sides 51 and 52 (the closest elements to which Petitioner identifies as the claimed “two spaces slots”). In fact, such a routing of Petitioner’s hypothetical communication conduit is hard to square with any of the figures or disclosure in Wu, which do not suggest any direct access to these elements. Of course, other routes are possible (such as through protective cover 6, seemingly positioned behind the display, or snaked through additional elements in the mechanism).⁶ Where, as here, many possibilities exist in an ambiguous prior art reference, no inherent disclosure lies, contrary to Petitioner’s implicit suggestion. *See, e.g., Rexnord Indus., LLC v. Kappos*, 705 F.3d 1347, 1354-55 (Fed. Cir. 2013) (affirming the Board’s finding that the claims at issue were not anticipated by inherency in two prior art references that disclosed the use of a small link spacing but that provided no specifics as to the precise size of the spacing as required by the claims); *see also Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1297 (Fed. Cir. 2002) (“Inherency does not embrace probabilities or possibilities.”). And Petitioner makes no obviousness argument for

⁶ Any such hypothetical paths would still fall short of the claims of the ‘931 Patent because they fail to route the communications conduit “directly” into the intermediate region, as required by the claims and emphasized during prosecution of the ‘931 Patent.

this claim element and certainly articulates no motivation for a POSITA to route the communication conduit as claimed in the ‘931 Patent. (Pet. at 21-22).

D. Grounds 2 and 5: No Motivation to Combine Wu and Anderson for Claims 9 and 10.

In Grounds 2 and 5, Petitioner proposes combining Wu and Anderson to arrive at the “mounting assembly” features recited in claims 9 and 10.⁷ (Pet. 32, 51). As mentioned above in Part III, the Office already considered Wu and Anderson with respect to those features of the “mounting assembly,” and allowed the ‘931 Patent to issue. Petitioner nonetheless asserts that a POSITA would have been motivated to combine Wu and Anderson to arrive at the “at least one stop for limiting rotational motion of said display screen” recited in claim 9, as well as the rotatable “turret” recited in claim 10. However, Petitioner fails to articulate sufficient motivations to combine Wu and Anderson.

Regarding claim 9, Petitioner incorrectly asserts that “[a] POSITA looking to provide a hinge mechanism that would not excessively twist the communication conduit would have used Anderson’s hinge mechanism with a rotational stop.” (Pet. at 35). To begin, Petitioner’s proffered motivation to combine is premised on

⁷ For whatever reason, Petitioner makes an obviousness argument for the “flat screen unit” recited in claim 3 for Ground 5 but not in parallel Ground 2. Patent Owner acknowledges that both Wu and Anderson disclose flat screen units. Grounds 2 and 5 advanced by Petitioner are otherwise the same.

the incorrect assumption that any communication conduit added to the Wu laptop would be routed through Wu’s “swivel mechanism.” As discussed above in Part IV.C.3, Wu does not disclose a “communication conduit,” let alone one that “extends ... directly” into an “intermediate region.” Thus, there is no reason to believe that “excessive twisting” of the hypothetical communication conduit proposed by Petitioner would even be a problem.

And even if the conduit proposed by Petitioner were routed as claimed in the ‘931 Patent (a proposition for which there is no support), “excessive twisting” of that conduit would still not be a problem in the Wu design. That is because, as Petitioner acknowledges elsewhere in the Petition, Wu only discloses a display with limited rotational capacity. (Pet. at 42). Because Wu can rotate only to a limited extent, any “twisting” of a hypothetical communication conduit would likewise be limited to the same extent. Stated otherwise, there would be no “excessive twisting” of the hypothetical communication conduit in Wu and thus no reason, as Petitioner proposes, to add a “rotational stop” to the Wu design to prevent that type of twisting. Petitioner’s proffered motivation to combine is based solely on speculative hindsight.

Other than that, Petitioner insufficiently alleges that “[a] POSITA would have known that the swivel mechanism of Wu *could be* adapted to provide at least one stop to limit the rotation of the display to a desired range of rotation.” (Pet. at

36 (emphasis added)). As discussed above in Part IV.A, alleging that a POSITA “could” do something does not establish that they “would” have done that same something, as the question of inventiveness relates not to the ability of a POSITA to *build* the claimed invention but rather the ability of a POSITA to *conceive* of the same invention. *Personal Web*, 848 F.3d at 993-94. Here, Petitioner’s allegations fall well short of that standard.

And regarding claim 10,⁸ Petitioner claims that “[a] POSITA looking to provide a hinge mechanism with a simple construction would have used Anderson’s swivel hinge that rotates relative to a circular opening in the base.” (Pet. at 37). Yet Petitioner elsewhere observes that “Wu [already] discloses a desire to provide a swivel that is simple in construction.” (Pet. at 34 (citing Wu, 1:37-38)). If Wu already purports “to provide a swivel that is simple in construction,” it is unclear why “[a] POSITA looking to provide a hinge mechanism with a simple construction” would then look to Anderson. That is because if, as Petitioner claims, Wu already discloses a simple construction, then a POSITA would have satisfied the alleged goal of providing that type of construction, and there would be no need to look elsewhere, such as to Anderson.

⁸ Claim 10 recites “[a] computer system according to claim 1, wherein said rotatable element of said mounting assembly defines a turret that is rotatable relative to a circular opening formed in said keyboard base.”

Further, Petitioner never explains how adding the alleged turret from Anderson would simplify the swivel mechanism from Wu. (Pet. at 37). Wu already discloses fixed seat 11, which according to Petitioner constitutes the “rotatable element” introduced in claim 1 and further defined in claim 10. (*Id.* at 19). But if Wu already discloses a working “rotatable element,” then a POSITA would not have been motivated to look to other references with rotatable elements absent some reason for doing so. *See, e.g., TRW Auto. U.S. LLC. v. Magna Elecs. Inc.*, IPR2015-00972, slip. op at 15, 17 (PTAB Sept. 16, 2015) (Paper 9) (finding that a POSITA would not have been motivated to look to a second reference when the first reference already discloses one version of the element in question). Petitioner’s vague reference to the desire for a “simple construction” does not explain why or how a POSITA would look to the alleged turret shown in Anderson. Put simply, Petitioner does not explain how adding the alleged turret from Anderson would simplify the “swivel mechanism” from Wu.

To the contrary, the addition of the alleged turret from Anderson would ***not*** simplify the “swivel mechanism” in Wu. Rather, such an addition would appear to interfere with the operation of that mechanism. Claim 10 requires the rotatable element in the mounting assembly to “define[] a turret that is rotatable relative to a circular opening formed in said keyboard base.” The fixed seat 11 in Wu – the alleged “rotatable element” – is shaped the way it is for a reason, namely, to

support axles *other than* axles 22 and 24 (the alleged “mounting brackets”). (*See* Wu, Fig. 3). Transforming the fixed seat 11 of Wu into a turret, as Petitioner suggests, would necessarily interfere with that supporting function of the fixed seat 11.

Likewise, Petitioner’s assertion that the combination of Wu and Anderson would arrive at “a less obtrusive swivel mechanism” is far from clear. (Pet. at 37). Petitioner never explains why transforming the fixed seat 11 into a turret would result in a “less obtrusive” swivel mechanism, nor what that combination would look like, instead alleging only that “[a] POSITA would have known that Wu’s hinge could be adapted to provide a turret,” which is insufficient. *Personal Web*, 848 F.3d at 993-94. This is especially true given that it is entirely unclear how the swivel mechanism in Wu even works (or *if* it even works at all).

E. Grounds 3 and 6: Petitioner Has Not Shown How to Combine Wu and Ioka (Claim 6).

Recognizing that Wu at most discloses a laptop with only limited capacity for rotational motion, Petitioner suggests combining Wu with Ioka to arrive at a display that can rotate at least 180°, as recited in claim 6. (Pet. at 43, 54). This is the same type of combination that was overcome during prosecution. (*See supra* Pt. III). In any event, Petitioner again suggests modifying a design with limited rotational capacity (Wu) to achieve an extended rotational capacity of at least 180°, as claimed. The only difference this time around is that Petitioner swaps Ioka for

Nobuchi even though Ioka adds nothing over Nobuchi, as both disclose rotational capacity of at least 180°. Here, although Petitioner asserts that “[a] POSITA would have known that the swivel mechanism of Wu could be adapted to swivel about the vertical axis at least 180 degrees, as disclosed by Ioka” (Pet. at 42), neither Petitioner nor its expert explain what those adaptations would be. To the contrary, both Wu and Ioka purport to describe complete hinging mechanisms, with fundamentally different designs. (*Compare* Wu, Fig. 3 *with* Ioka, Fig. 2).

Petitioner never explains which aspects of the Wu design would be retained and which aspects would be modified or eliminated, or which aspects of the Ioka design would need to be imported into Wu, in order to arrive at the invention recited in claim 6. Without any explanation, Petitioner expects the reader to come up with those design changes for himself, which is improper. *Ex Parte Thomas G. Cloft*, Appeal No. 2015-006655 (PTAB June 9, 2017) (reversing rejection where “neither the Final Office Action nor Answer explains adequately how to combine the teachings of [the] Balk and Brodell [references] to provide an afterbody mount case connected to an afterbody portion,” as claimed). Petitioner has not, therefore, carried its burden of showing that the combination of Wu and Ioka would produce the invention recited in claim 6.

CONCLUSION

For at least the reasons discussed above, the Board should deny the Petition firstly because the Petition simply recycles grounds previously presented during prosecution in contravention of section 325(d), and secondly because, as the Office previously found when presented with those grounds, they do not establish that the inventions recited in the challenged claims of the ‘931 Patent are neither new nor non-obvious. There is no “reasonable likelihood” that Petitioner would prevail with respect to at least one of the claims challenged in the Petition, as required by section 314(a). The Petition should be denied and no trial instituted.

IPR2017-01381 – Patent Owner’s Preliminary Response

Dated: September 11, 2017

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CERTIFICATE OF WORD COUNT

The undersigned certifies that the foregoing PATENT OWNER’S PRELIMINARY RESPONSE complies with the type-volume limitation in 37 C.F.R. § 42.24(b)(1). According to the word processing system’s word count, the brief contains 10,532 words, excluding the parts of the response exempted by 37 C.F.R. § 42.24(a).

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CERTIFICATE OF SERVICE

I hereby certify that on September 11, 2017, a true and correct copy of the foregoing PATENT OWNER PRELIMINARY RESPONSE is being served electronically to the Petitioners as authorized in the Petition at the correspondence email address of record as follows:

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