

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NINTENDO CO., LTD. and
NINTENDO OF AMERICA INC.,
Petitioners,

v.

GAMEVICE, INC.,
Patent Owner.

Case IPR2023-00643
U.S. Patent No. 10,391,393

PATENT OWNER'S SUR-REPLY

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I. INTRODUCTION

In attempting to reconstruct claims 1–7 of the '393 Patent with hindsight, Nintendo's Petition proposes obviousness combinations in Grounds 1–3 with flawed mechanics. Combining an adjustable structural bridge designed for a relatively narrow smartphone in landscape mode (Park's bridge (30, 40) or Kessler's extension mechanism 82) with a rigid cradle designed to accommodate a much taller/wider tablet computing device (Willner's adaptor 210 (in portrait mode) or Schoenith's cradle 20) yields proposed combinations in which the computing device tends to come out of the game controller during normal user operation. Gamevice's position is supported by the independent technical analysis of Prof. Slocum, a Professor of Mechanical Engineering for over thirty years at the Massachusetts Institute of Technology, one of the foremost research universities in the world, and previously a mechanical engineer at the National Institute of Standards and Technology within the U.S. Department of Commerce.

In two ways, Nintendo tries to evade an independent merits evaluation of its petitioned grounds—arguing that Gamevice is collaterally estopped from raising the mechanical issues, and presenting, for the first time in its reply, entirely new theories of obviousness. As explained below, Nintendo's collateral estoppel arguments are incorrect, and its untimely obviousness theories in its reply should be disregarded because they deny Gamevice a full and fair opportunity to develop the evidentiary

record on those theories. Finally, with respect to Ground 4, Nintendo's arguments mischaracterize the record evidence, as well as Gamevice's infringement positions in district court.

II. NINTENDO'S COLLATERAL ESTOPPEL ARGUMENTS ARE INCORRECT

A. The Board's Decision in IPR2018-01522 of the '119 Patent Does Not Collaterally Estop Gamevice's Issues Raised Against Ground 1 (Willner and Park)

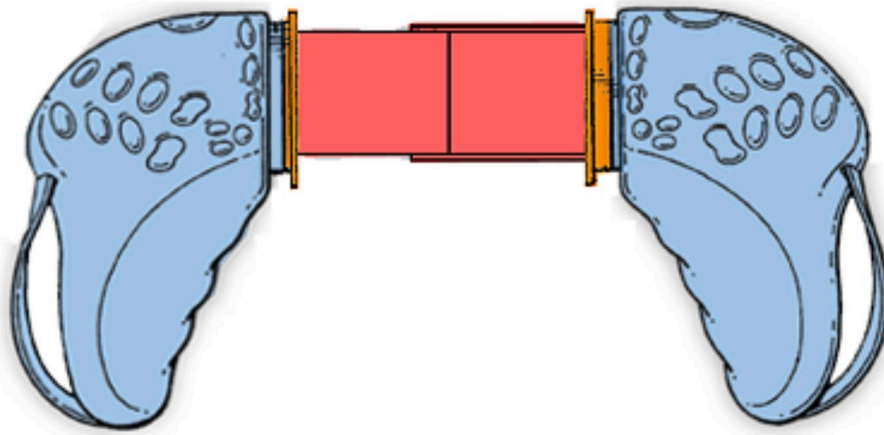
In its Patent Owner Response, Gamevice raised the issues of whether the specific combination of Willner and Park that Nintendo proposed in its Petition discloses or suggests the recited arrangement of the "pair of confinement structures" in claim 1 of the '393 Patent. *See* Paper No. 18, 16-25. Contrary to Nintendo's position, *see* Paper No. 21, 5-8, these issues present materially different questions of invalidity than the Board adjudged in IPR2018-01522 of the '119 Patent. Thus, Gamevice is not collaterally estopped from raising the issues here. *See VirnetX Inc. v. Apple, Inc.*, 909 F.3d 1375, 1378 (Fed. Cir. 2018); Paper No. 18, 25-26.

In IPR2018-01522 of the '119 Patent, the Board did not perceive any need to construe "confinement structures." Ex. 1011, 8. Instead, it "note[d] only that the term 'confinement structures,' as used in the claims [of the '119 Patent] and read in light of [its] specification, encompasses a 'three-sided structure' in which the computing device 'is fully nested', as well as structures that serve as a 'cradle' to 'securely hold' the computing device." *Id.*, 11 (internal citations omitted). Turning

to its analysis of Nintendo’s obviousness ground, *see id.*, 11-16, the Board observed that “Willner’s adaptor has ‘*a bottom*, a rear, facing side, and *a front cross-beam*,” *id.*, 13 (emphasis added), and that “the sidewalls of Willner’s adaptor are additionally connected by a bridge structure spanning the *bottom*, *front*, and rear sides of the computing device,” *id.*, 15 (emphasis added). Analogizing to the ’119 Patent’s specification embodiment that acts as a “cradle” in which “the computing device is fully nested,” the Board found that “as Willner clearly illustrates, once the computing device is received within the opening, movement of the computing device is *confined not only by the adaptor’s opposing sidewalls but also by front, rear, and bottom walls* bridging the two sidewalls.” *Id.*, 16 (emphasis added). As seen from the Board’s analysis above, Nintendo’s argument that the Board was only describing Willner’s adaptor generally, not analyzing Nintendo’s overall obviousness combination, is incorrect. *See* Paper No. 21, 6-7.

In the Petition here, Nintendo explicitly construes “a pair of confinement structures” as “physical component(s) that hold(s) a computing device,” Pet., 14–15. Absent from Nintendo’s proposed combination, however, are Willner’s front cross-beam and bottom walls that contributed to the “cradle” that the Board in IPR2018-

01522 found “fully nested” the computing device.¹ Instead, as shown in the Petition’s graphic with respect to claim limitation 1[b][1] (reproduced below), Nintendo’s proposed combination of Willner and Park relies *solely* on the opposing sidewalls (orange) of Willner’s adaptor and Park’s adjustable bridge (red) to interact with the computing device.



Pet., 25. Thus, whether in the Petition’s proposed combination of Willner and Park, Willner’s opposing adaptor sidewalls *devoid of the adaptor’s front cross-beam and bottom walls* hold the computing device is a new factual inquiry underlying the obviousness analysis—the differences between the proposed prior art combination

¹ Nintendo apparently modified its proposed combination of Willner and Park because claim 1 of the ’393 Patent additionally requires that “the pair of confinement structures” is “adjacent . . . not more than three sides of the sides of the computing device” (claim limitation 1[b][1]). *See* Pet., 23-25.

and the challenged claims—which neither party litigated and the Board did not adjudge in IPR2018-01522. *See Interconnect Plan. Corp. v. Feil*, 774 F.2d 1132, 1136 (Fed. Cir. 1985) (“Where obviousness is the basis for the prior invalidity holding, an inquiry into the identity of the validity issue is more properly phrased in terms of the factual inquiries mandated by *Graham v. John Deere Co.*, 383 U.S. 1, 17, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966), as a prerequisite to such a validity determination.”). For this same reason, Gamevice is also not collaterally estopped from litigating whether a person having ordinary skill in the art would be motivated to combine Willner and Park in the manner that the Petition here proposes, *i.e.*, with Willner’s opposing adaptor sidewalls devoid of the adaptor’s front cross-beam and bottom walls.

Contrary to Nintendo’s argument, *see* Paper No. 21, 5-7, the Petition’s Ground 1 based on Willner and Park treats the “pair of confinement structures” limitation in the ’393 Patent materially differently than it and the Board did for the ’119 Patent in IPR2018-01522. Although, like the Petition here, Nintendo there pointed to Willner’s opposing adaptor sidewalls as the “pair of confinement structures,” as shown above Nintendo proposed a different overall combination of Willner’s and Park’s teachings against the ’119 Patent than the Petition does here against the ’393 Patent, in a manner that materially alters whether the overall

proposed combination of Willner and Park here “holds the computing device” as Nintendo’s claim construction of “pair of confinement structures” requires.

Because the question of invalidity presented to the Board here is materially different, Nintendo’s cited cases are inapposite. *See* Paper No. 21, 3–5. Those cases featured prior art applied identically in both actions and only minor differences in claim language that did not alter the invalidity analysis. In *Soverain Software LLC v Victorias Secret Direct Brand Management LLC*, the plaintiff argued that collateral estoppel should not apply over independent claim 15 to render obvious dependent claim 39. 778 F.3d 1311, 1319 (Fed. Cir. 2015). Dependent claim 39, however, merely recited “a hypertext statement in accordance with claim 15, wherein the network is an Internet.” *Id.* There was no dispute that the use of hypertext was a routine incorporation of known Internet technology into existing processes, and thus did not change the invalidity analysis. *Id.* at 1319-20. Similarly, in *Ohio Willow Wood v. Alps South LLC*, the patent claims in the second action recited “block copolymer gel” instead of “polymeric gel,” but the patentee “failed to explain how the ‘block copolymer’ limitation changes the invalidity analysis” where the prior art disclosed a “tri block copolymer.” 735 F.3d 1333, 1339, 1342-43 (Fed. Cir. 2013).

In sum, because Gamevice has raised materially different factual inquiries underlying the obviousness analysis of the ’393 Patent’s claims than the Board

adjudged in IPR2018-01522 of the '119 Patent, Gamevice is not collaterally estopped from raising the issues here.

B. The Board's Decision in IPR2018-01521 of the '119 Patent Does Not Collaterally Estop Gamevice's Issues Raised Against Ground 2 (Schoenith and Park)

In its Patent Owner Response, Gamevice raised the issues of whether the Petition's proposed combination of Schoenith and Park discloses or suggests the recited arrangement of the "pair of confinement structures" in claim 1 of the '393 Patent. *See* Paper No. 18, 29-37. Contrary to Nintendo's position, *see* Paper No. 21, 7-8, these issues present two materially different factual inquiries underlying the obviousness analysis than the Board adjudged in IPR2018-01521 of the '119 Patent. Thus, Gamevice is not collaterally estopped from raising the issues here. *See VirnetX*, 909 F.3d at 1378; *Interconnect Plan. Corp.*, 774 F.2d at 1136; Paper No. 18, 37-38.

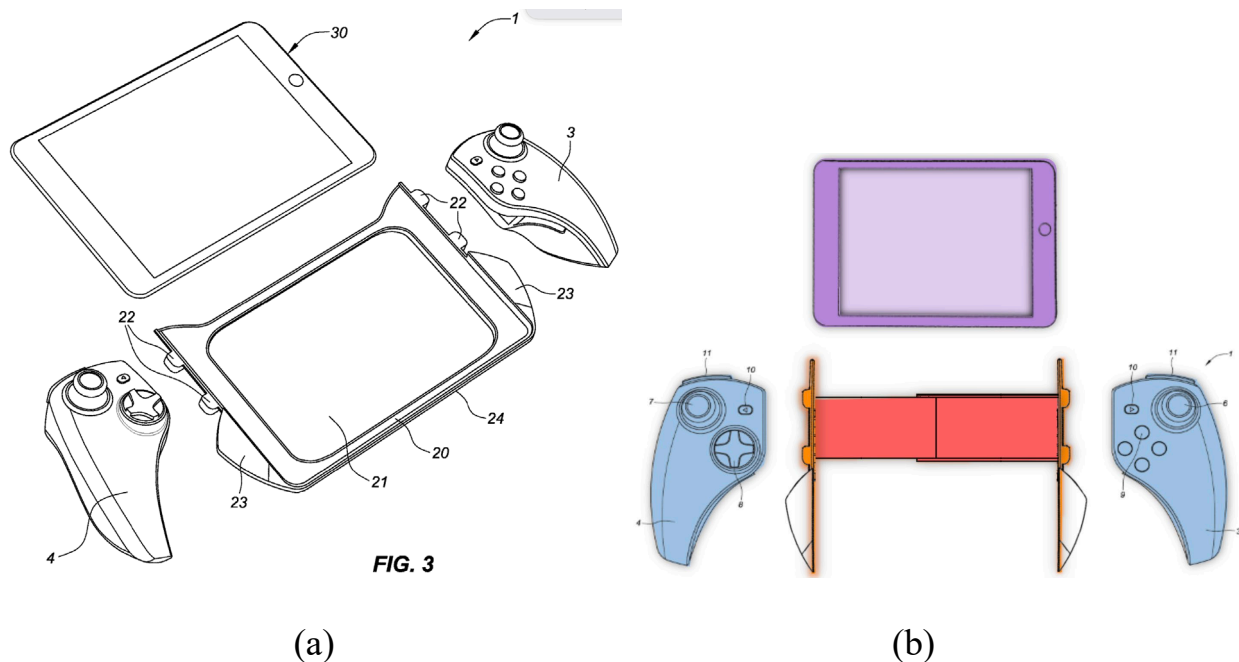
The first materially different factual inquiry here is whether the electronic game control modules in the Petition's proposed combination of Schoenith and Park are separate and distinct structures from, and forming no structural portion of, the physical components that hold the computing device. This is because claim 1 of the '393 Patent recites that "each electronic game control module is a separate and distinct structure from each of their corresponding confinement structures, forming no structural portion of their corresponding confinement structures," '393 Patent, claim 1 (limitation 1[d][4]), and Nintendo explicitly construes "a pair of confinement

structures” as “physical component(s) that hold(s) a computing device,” Pet., 14–15. The Board in IPR2018-01521 had no occasion to compare the Schoenith/Park combination against these claimed requirements because, unlike in *Soverain Software* and *Ohio Willow Wood* where the claims had only minor differences in language, the ’119 Patent’s challenged claims did not recite any limitation that was even remotely similar to claim limitation 1[d][4] of the ’393 Patent. Thus, the Board in IPR2018-01521 did not adjudge this factual inquiry underlying the obviousness analysis of the ’393 Patent’s claims.

The second materially different factual inquiry here is whether in the Petition’s proposed combination of Schoenith and Park, the left- and right-facing raised sidewalls 24 of Schoenith’s cradle 20 *devoid of any of the other structures of cradle 20* hold the computing device. In IPR2018-01521, the Board did not construe “confinement structures” but only clarified that it “encompasses a ‘three-sided structure’ in which the computing device ‘is fully nested’, as well as structures that serve as a ‘cradle’ to ‘securely hold’ the computing device.” Ex. 1010, 11 (internal citation omitted). Then, in its obviousness analysis, the Board clearly stated: “Importantly, Schoenith teaches that the raised wall may be ‘on the cradle’s right side, left side, *front side, back side, and/or a combination thereof*’ so as to ‘provide support *along the whole perimeter of the smart device* or along certain parts of the perimeter of the smart device.” *Id.*, 12-13 (emphasis added).

By contrast, in the Petition here, Nintendo explicitly construes “a pair of confinement structures” as “physical component(s) that hold(s) a computing device.” Pet., 14–15. Absent from Nintendo’s proposed combination, however, are the *front side* and *back side* of Schoenith’s cradle 20 that in the Board’s decision in IPR2018-01522 contributed to “fully nesting” the computing device.² Instead, as shown in the Petition’s graphic with respect to claim limitation 1[b][1] (reproduced below), Nintendo’s proposed combination of Schoenith and Park relies *solely* on the left- and right-facing raised sidewalls 24 (orange) of Schoenith’s cradle 20 and Park’s adjustable bridge (red) to interact with the computing device.

² Nintendo apparently modified its proposed combination of Schoenith and Park because claim 1 of the ’393 Patent additionally requires that “the pair of confinement structures” is “adjacent . . . not more than three sides of the sides of the computing device” (claim limitation 1[b][1]). See Pet., 42-43.



Ex. 1005, Fig. 3; Pet., 43.

Thus, whether in the Petition’s proposed combination of Schoenith and Park, Schoenith’s left- and right-facing raised sidewalls 24 *devoid of the front side and back side* of Schoenith’s cradle 20 hold the computing device is a new factual inquiry underlying the obviousness analysis, which the Board did not adjudge in IPR2018-01522. Contrary to Nintendo’s argument, *see* Paper No. 21, 7-8, the Petition’s Ground 2 based on Schoenith and Park treats the “pair of confinement structures” limitation in the ’393 Patent materially differently than it and the Board did for the ’119 Patent in IPR2018-01521. Although, like the Petition here, Nintendo in IPR2018-01521 pointed to Schoenith’s left- and right-facing raised sidewalls 24 as the “pair of confinement structures,” as shown above Nintendo proposed a different overall combination of Schoenith’s and Park’s teachings against the ’119 Patent than

the Petition does here against the '393 Patent, in a manner that materially alters whether the overall proposed combination of Schoenith and Park here “holds the computing device” as Nintendo’s claim construction of “pair of confinement structures” requires.

For the same reasons as above, Gamevice is also not collaterally estopped from litigating whether a person having ordinary skill in the art would be motivated to combine Schoenith and Park in the manner that the Petition here proposes, *i.e.*, with the electronic game control modules in their proposed configuration and with Schoenith’s left- and right-facing raised sidewalls 24 *devoid of the front side and back side* of Schoenith’s cradle.

In sum, because Gamevice has raised two materially different factual inquiries underlying the obviousness analysis of the '393 Patent’s claims than the Board adjudged in IPR2018-01521 of the '119 Patent, Gamevice is not collaterally estopped from raising the issues here.

C. The Board’s Decision in IPR2018-01521 of the '119 Patent Does Not Collaterally Estop Gamevice’s Issues Raised Against Ground 3 (Schoenith and Kessler)

In its Patent Owner Response, Gamevice raised the issues of whether the Petition’s proposed combination of Schoenith and Kessler discloses or suggests the recited arrangement of the “pair of confinement structures” in claim 1 of the '393 Patent. *See* Paper No. 18, 29-37, 49. Contrary to Nintendo’s position, *see* Paper

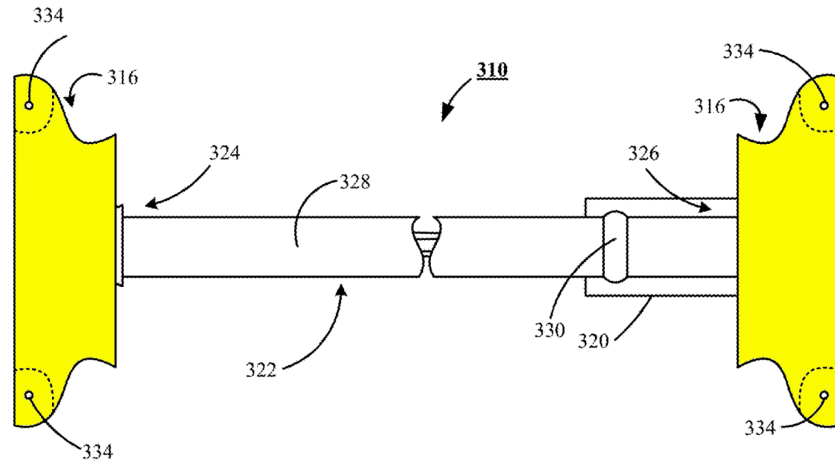
No. 21, 7-8, these issues present the same two materially different factual inquiries underlying the obviousness analysis as discussed above with respect to Ground 2, *see* Section II.B, *supra*, which for the same reasons discussed above the Board did not adjudge in IPR2018-01521 of the '119 Patent. Thus, Gamevice is not collaterally estopped from raising the issues here. *See VirnetX*, 909 F.3d at 1378; *Interconnect Plan. Corp.*, 774 F.2d at 1136; Paper No. 18, 37-38, 49.

III. GAMEVICE’S APPLICATION OF THE CONSTRUCTION OF “CONFINEMENT STRUCTURES” ACCORDS WITH THE ’393 PATENT’S DESCRIPTION

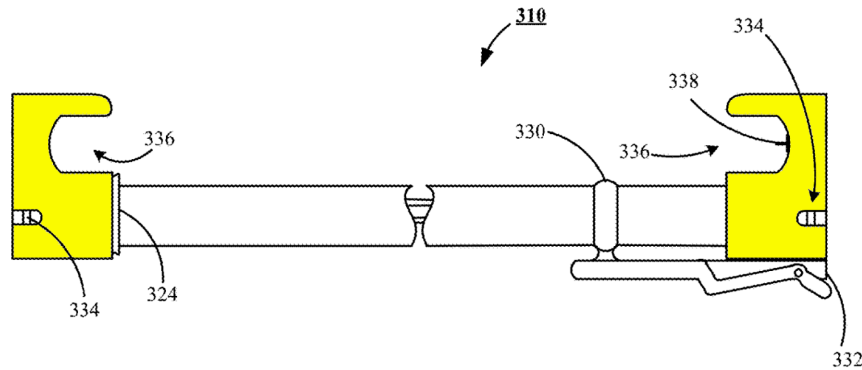
In its Patent Owner Response, Gamevice properly applied the construction of “a pair of confinement structures”—physical component(s) that hold(s) a computing device. Contrary to Nintendo’s argument, *see* Paper No. 21, 8-10, there is nothing untoward about Gamevice’s application of the simple word “hold” in the construction. To the extent “hold” needs any exposition: persons having ordinary skill in the art would understand that physical components do not hold a “computing device” if they allow it to inadvertently come out (including “pop out”) during normal user operation.

The ’393 Patent’s description, including the preferred embodiment of Figs. 16-18, supports Gamevice’s position. As shown in Figs. 17-18 below, each of the confinement structures 316 includes a cradle 336 (annotated in yellow) with a

lip that prevents a computing device 302 that is held between the confinement structures 316 from coming out in the direction of the user. Ex. 2004, ¶ 82.



'393 Patent, Fig. 17 (annotated)



'393 Patent, Fig. 18 (annotated)

The '393 Patent's description of Fig. 17 explicitly contrasts "removal of the computing device from the communication port 310" against "securely hold[ing] the computing device between the pair of confinement structures 316," *see* '393 Patent, 10:12-20 ("The expansion and contraction of the distance between the pair of confinement structures 316, facilitates placement of the computing device 302

between the pair of confinement structures 316, the application of sufficient compressive load being placed on the computing device 302 to *securely hold the computing device between the pair of confinement structures 316*, and an ability to remove the compressive load and allow *removal of the computing device from the communication port 310.*”) (emphasis added). This shows that a computing device coming out means that it is not held by the “confinement structures.” Other portions of the ’393 Patent also support that inadvertent removal of the “computing device” during normal use and operation means that it is not held by the “confinement structures.” *See, e.g.,* ’393 Patent, 4:28-31 (“The third structure mitigates *inadvertent removal of the computing device* from the three sided structure when the computing device is fully nested within the three sided structure.”) (emphasis added); *id.*, 5:22-31 (“the computing device 102 is confined by the u-shaped structure 128, and the u-shaped structure 128 mitigates *inadvertent removal of the computing device 102* from the u-shaped structure 128 when the computing device 102 is fully nested within the three sided structure 128.”) (emphasis added).

Nintendo wrongly argues that Gamevice effectively seeks means-plus-function treatment for “confinement structures” in this proceeding. *See* Paper No. 21, 9-10. Gamevice does no such thing. In the Patent Owner Response, as it does in this Paper, Gamevice merely cited the description of the preferred embodiments to show

that it fully supports Gamevice’s application of the construction of “confinement structures” in this proceeding. *See* Paper No. 18, 17-18.

Also, contrary to Nintendo’s arguments, *see* Paper No. 21, 9-10, Gamevice’s position is consistent with its positions before the International Trade Commission in Investigation No. 337-TA-1197, where it won the construction that Nintendo now essentially adopts in the Petition, *see* Ex. 1018, 28-32; Paper No. 21, 9, and its position in district court—physical components do not hold/keep the “computing device” if they allow it to inadvertently come out during normal user operation, *see* Ex. 1028, 11. Further, Nintendo mischaracterizes Gamevice’s infringement positions at the ITC and in district court. There, rather than requiring only some pressing contact as Nintendo contends, Gamevice argued consistent with the ’393 Patent’s description that in Nintendo’s accused Switch console the confinement structures (side rails) exerted a sufficient compressive force on the computing device by pressing contact with screws—which are tightened with a high degree of precision and loosened only for repair and maintenance—that a user could hold the entire console using the game controllers in normal user operation. *See* Ex. 1018, 115-116; Ex. 1037, 10-12; ’393 Patent, 10:12-20.

In sum, the ’393 Patent’s description fully supports Gamevice’s position—persons having ordinary skill would understand that physical components do not

hold a “computing device” if they allow it to inadvertently come out during normal user operation.

IV. NINTENDO FAILS TO REBUT GAMEVICE’S ARGUMENTS ON ORDINARY ARTISANS’ MOTIVATION TO COMBINE THE REFERENCES AS THE PETITION PROPOSES (GROUNDS 1-3)

A. Nintendo’s Petition Failed to Explain How Persons of Ordinary Skill Would Exercise Ordinary Creativity to Combine the References

Nintendo bears the burden of making out a *prima facie* case of obviousness in its Petition. *See* 35 U.S.C. § 312(a)(3) (requiring petitions to identify “with particularity . . . the grounds on which the challenge to each claim is based”); *Wasica Finance GmbH v. Continental Automotive Systems, Inc.*, 853 F.3d 1272, 1286-87 (Fed. Cir. 2017) (requiring Petitioner to “make out its obviousness case in its petition”). Supported by Prof. Slocum’s declaration, Gamevice’s Patent Owner Response identified deficiencies in the Petition’s *prima facie* case. *See* Paper No. 18, 16-25, 29-37, 40-49, 52-62; Ex. 1041, 22:15-24:1, 51:19-52:13 (Prof. Slocum responded to Mr. Kitchen’s declaration). Without any citation to Gamevice’s response, however, Nintendo mischaracterizes Gamevice’s position as attempting to “bodily incorporate the adjustable bridge from Park or Kessler into the Willner/Schoenith devices.” Paper No. 21, 11-12. Similarly, Nintendo tries to fault Gamevice’s expert Prof. Slocum for not analyzing modifications outside the scope of the Petition that an ordinarily skilled artisan “could or would make.” Paper No. 21,

12-13; 15-16.³ But those are neither his nor Gamevice's burdens in this proceeding. On the contrary, Gamevice is merely holding Nintendo to the grounds *as Nintendo presented them in its Petition*. See, e.g., Paper No. 18, 19, 31, 34, 43, 46, 50 (reproducing and discussing proposed combinations as presented in the Petition). Notwithstanding that under the case law persons of ordinary skill in the art can exercise ordinary creativity, contrary to Nintendo's position, it's Petition, not Gamevice or Prof. Slocum, bore the burden of articulating what "adjustments" ordinary artisans would make to the reference combinations and explaining how they would exercise ordinary creativity to do so. See Paper No. 21, 11-12. Nintendo cannot spin its failure to provide such an explanation in its Petition into Gamevice somehow violating the case law or Prof. Slocum performing his technical analysis incorrectly.

³ Nintendo also mischaracterizes Prof. Slocum's relevant experience. As Prof. Slocum testified in deposition, he has extensive experience with mechanical assemblies and hand-held consumer devices. See Ex. 2004, 97-98; Ex. 1041, 60:2-68:7 (describing experience with designing consumer Polaroid cameras, handheld instruments for medical devices, handheld consumer power tools, and hand-held pendants for machine tools, as well as teaching classes at MIT on mechanical design).

B. Prof. Slocum's Technical Analysis of the Proposed Combinations is Fully Supported by the Record Evidence, and His Percipient Knowledge of the Background of the Art is Admissible

Prof. Slocum provided his technical expert opinions on the mechanical issues from the perspective of a person of ordinary skill in the art, based on his (1) unquestionable technical expertise in mechanical engineering, *see* Ex. 2004, 97-140, (2) extensive experience with mechanical assemblies and hand-held consumer devices, *see* Ex. 1041, 60:2-68:7, (3) analyzing the express teachings of Nintendo's cited references, *see, e.g.*, Ex. 2004, ¶¶ 47-49, 86-89, 119-120, and (4) applying sound, fundamental mechanical principles, *see, e.g.*, Ex. 2004, ¶ 73 (discussing bending moments in Park's ratcheting mechanism), ¶ 97-98 (discussing mechanics of resistance to tipping in the proposed combinations with equations), and (5) further supported by his own personal knowledge of background facts pertinent to the art before the February 2, 2015, effective filing date of the '393 Patent, *id.*, ¶ 20 (discussing personal knowledge relevant to level of ordinary skill in the art). Thus, contrary to Nintendo's arguments, Prof. Slocum's expert opinions are the product of sound scientific principles applied to facts established in the record evidence and further supported by his own personal knowledge of relevant background facts. *See* Paper No. 21, 13-14. Accordingly, Prof. Slocum's expert opinions are admissible, and they should be credited over those of Mr. Kitchen's opinion for the reasons already explained in Gamevice's Patent Owner Response.

Nintendo incorrectly argues that Prof. Slocum based his opinions “exclusively” on supposedly unverifiable anecdotal observations of players at his house wrestling with game controllers. *See* Paper No. 21, 14-15. As just explained above, this is demonstrably false. As just an example, contrary to Nintendo’s position, *see* Paper No. 21, 15, Prof. Slocum cites Park’s discussion of the deficiency in the embodiment that Mr. Kitchen relies on—“*the mobile phone is not sufficiently in contact with the device according to the present invention when using the above configuration, the mobile phone (1) may come loose during gaming or become detached in severe cases, hindering comfortable and stable operation of a game,*” Ex. 1004, ¶ [0040] (emphasis added); Ex. 2004, ¶¶ 68-69, 99; Paper No. 18, 15, 21-22, 35, 47. The “[in]sufficien[cy] in contact with the device” and “com[ing] loose during gaming” that Park discusses are consistent with Prof. Slocum’s opinions on the lack of mechanical resistance to tipping of any of the proposed combinations. *See* Ex. 2004, ¶¶ 97-98 (discussing insufficient overlap in the proposed combinations causing weak tilting moment capacity).

Further, nothing in the laws, regulations, or rules governing this proceeding prohibits Prof. Slocum from providing both expert opinion testimony under Fed. R. Evid. 702 and lay testimony under Fed. R. Evid. 701 based on his personal knowledge of background facts before the February 2, 2015, effective filing date of the ’393 Patent. Also, Prof. Slocum testified during Nintendo’s cross-examination

that his personal observations of use of hand-held controllers with screens were not performed casually but in the technical or scientific context of ergonomics design of hand-held controllers. *See* Ex. 1041, 70:5-73:16, 75:21-76:9.

Finally, even in his supplemental declaration, Nintendo's expert Mr. Kitchen stops short of stating that a person of ordinary skill in the art would have been motivated to design a handheld video game controller that only works if users would never move the device suddenly or extremely. *See* Ex. 1031, ¶ 26. On the contrary, Prof. Slocum testified on cross-examination that "if, when using the device, the screen tips or were to slide out, that would distract the user and would confound the using of the device," Ex. 1041, 100:18-101:19, and thus persons of ordinary skill in the art would be motivated to design devices in which that did not occur. Moreover, Nintendo's own history of developing active gameplay devices like the Wii (*e.g.*, in which gameplay mimics actions like casting a fishing rod) suggests that persons of ordinary skill in the art would have been motivated to design handheld video game controllers taking into account the possibility of sudden or extreme user movements. *See* Ex. 1002, ¶ 31 (Mr. Kitchen citing work related to Nintendo Wii as relevant experience); Ex. 1041, 17:74-75:3 (describing active gameplay).

C. The Board Should Disregard Nintendo's Entirely New Theories of Obviousness in Its Reply

As explained previously, Nintendo bears the burden of making out a *prima facie* case of obviousness in its Petition. *See* 35 U.S.C. § 312(a)(3); *Wasica Finance*,

853 F.3d at 1286-87. By contrast, “[a] reply may only respond to arguments raised in the corresponding opposition or patent owner response.” *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016). (quoting 37 C.F.R. § 42.23(b)). Rather than explaining how its original Petition was correct, however, Nintendo for the first time in reply presents arguments amounting to entirely new theories of *prima facie* obviousness absent from its Petition. “Shifting arguments in this fashion is foreclosed by statute, our precedent, and Board guidelines.” *Wasica Finance*, 853 F.3d at 1286-87; *see Colas Solutions, Inc. v. Blacklidge Emulsions, Inc.*, 759 F. App’x 986, 988-989 (Fed. Cir. 2019) (affirming Board’s finding of waiver for untimely disclosure of new “overlapping ranges” theory of obviousness in Petitioner reply); *3M Co. v. Bay Materials, LLC*, IPR2022-01214, Paper No. 77, 29-30 (P.T.A.B. Jan. 16, 2024) (disregarding improper new arguments in petitioner’s reply); Trial Practice Guide, 77 Fed. Reg. 48,756, 48,767 (Aug. 14, 2012) (prohibiting parties from submitting evidence necessary for a *prima facie* showing of obviousness in a reply).

Here, Nintendo presents at least four new theories of *prima facie* obviousness absent from its Petition, including: (1) adding “lips” from Schoenith, Fig. 10,

Willner, Fig. 4, and Kessler, Fig. 11;⁴ (2) adding a “cushioning pad (60) or connecting assembly” from Park, Figs. 4-5; (3) “broadening Park’s or Kessler’s bridge or including a lock switch to offer additional stability,” and (4) adding a tensioning mechanism from Kessler to Park to solve the problems that Park identifies in its own disclosure. *See* Paper No. 21, 16-20, 24-25; Ex. 1033, ¶¶ 50-62.

Moreover, Nintendo’s arguments that persons of ordinary skill would have a reasonable expectation of connecting the sidewalls and bridges in Nintendo’s proposed combinations with known connectors mischaracterizes Prof. Slocum’s testimony and misses the mark. First, Prof. Slocum actually testified that creating the structural connections in the context of how users use the device is “not straightforward,” “wouldn’t be an obvious, simple thing to do,” and “would require undue experimentation” including “user testing to verify” the design, because the connectors would be “small and tight and constrained, “it’s hard to model how [users] put forces on things in small pieces of plastic,” and “users are very finicky” and may not want to buy the device anymore. Ex. 1041, 218:13-219:13. For example, Prof. Slocum testified that screws wouldn’t work because they are “too thin” and

⁴ Indeed, Nintendo expressly removed the lips of Schoenith and Willner from its original combinations presented in its Petition. *See* Paper No. 18, 20-21, 30, 42; Ex. 2004, ¶¶ 60-63, 91-93, 121-124.

would “likely break,” invoke “a lot of cost,” and “it may not be feasible in the end to use them for a product.” *Id.* 219:20-220:12. Similarly, he testified that a lap joint between Willner’s adaptor sidewalls and Park’s bridge wouldn’t work because Willner’s sidewalls, absent the surrounding structure that gave it structural integrity, would be too thin to make a connection with structural integrity. *Id.*, 221:2-222:4.

Second, Nintendo’s belated reply arguments miss the mark because it was required but failed to articulate in its Petition where and how to position the connectors between the sidewalls of Willner’s adaptor 210, or the left- and right-facing raised sidewalls 24 of Schoenith’s cradle 20, and Park’s adjustable bridge (30, 40) or Kessler’s extension mechanism 82.

In sum, Nintendo’s failure to present its entirely new theories of obviousness in its Petition has denied Gamevice a full and fair opportunity to develop the record evidence with respect to these theories. Accordingly, the Board should disregard Nintendo’s new, untimely theories presented in its reply.

V. NINTENDO FAILS TO PROVE ANTICIPATION OR OBVIOUSNESS OF CLAIMS 1–4 AND 6–7 OVER HIRSCHMAN (GROUND 4)

Nintendo fails to properly rebut any of the arguments that Gamevice presented in its Patent Owner Response with respect to Ground 4.

A. Nintendo Fails to Show How Hirschman Discloses or Suggests the Claimed Arrangement of the “Pair of Confinement Structures”

As Gamevice explained in its Patent Owner Response, an ordinary artisan would not regard the combination of Hirschman’s sidewalls 282 and retention structures 260 as together forming a “confinement structure” because they are not even connected to one another. Paper No. 18, 53. Contrary to Nintendo’s argument, Mr. Kitchen’s opinions in this regard are not unrebutted. *See* Paper No. 21, 26-27. Instead, Prof. Slocum, the only mechanical engineering expert in this case, clearly rebuts those opinions in his declaration by explaining why the retention structures 260 are neither taught nor suggested as connected to sidewalls 282. Ex. 2004, ¶¶ 153-157. His deposition testimony is consistent in this regard. Ex. 1041, 121:3-14. He explained that although connecting Hirschman’s sidewalls 282 to retention structures 260 is theoretically possible, he “wouldn’t do it that way,” considering the perspective of a person of ordinary skill in the art. *See* Ex. 1041, 158:2-5. On the contrary, Nintendo fails to rebut any of the detailed arguments that Gamevice presented in its Patent Owner Response explaining why an ordinary artisan would not be motivated to connect Hirschman’s sidewalls 282 to retention structures 260. *See* Paper No. 18, 53-54.

Without any citation to Gamevice’s positions in district court, Nintendo incorrectly contends that Prof. Slocum’s deposition testimony is inconsistent with Gamevice’s infringement positions. *See* Paper No. 21, 27. Nintendo apparently

misunderstands Gamevice’s positions in district court, and it is unclear what point Nintendo is even making. In any event, the infringement of Nintendo’s accused products is irrelevant to the evaluation of validity of the challenged claims in this proceeding. Also, Nintendo mischaracterizes Prof. Slocum’s deposition testimony—in the cited portion, he does not state what Nintendo contends he does. *Compare* Paper No. 21, 27 *with* Ex. 1041, 122:13-19.

As for Nintendo’s argument that Hirschman taught that retention ports 122 may be included on fewer sides, there is no dispute that Hirschman’s sidewalls 282, which at best could constitute the “confinement structures” surround all four sides of Hirschman’s device, and therefore fail to be “adjacent . . . not more than three sides of the sides of the computing device,” as claimed. Previously, the Administrative Law Judge in International Trade Commission Investigation No. 337-TA-1197 rejected Nintendo’s argument. Ex. 1018, 398; Ex. 2004, ¶ 160.

B. Nintendo Fails to Show How Hirschman discloses or suggests that “each of the pair of confinement structures compris[es] a communication link, each of the communication links configured for electronic communication with the computing device”

In addition to arguing that Hirschman fails to disclose or suggest that the retention structures 260 can be part of the “pair of confinement structures” (rendering its ability to communicate signals irrelevant), Gamevice also argued that Mr. Kitchen improperly attempts to modify Hirschman by removing USB communication port 242 (*see* Ex. 1007, ¶¶ [0056], [0060]) attached to circuit board

240 and adding one or more wires going from retention structures 260 to circuit board 240, and that an ordinary artisan would not be motivated to make these modifications. Paper No. 18, 58-60. Nintendo apparently is no longer pursuing such an argument. *See* Paper No. 21, 26 n.2. Nintendo's concession is important to the analysis of the "passageway" limitation, as explained below.

C. Nintendo Fails to Show How Hirschman discloses or suggests a "rigid structural bridge comprising a passageway between the pair of confinement structures"

As explained in Gamevice's Patent Owner Response, even assuming that retention structures 260 are part of the "confinement structures" (which they are not, as discussed above) any electrical communication between retention structures 260 and circuit board 240 via the dorsal fins 262 of retention structures 260 fitting into the slots 244 in circuit board 240 does not involve any "communication wire," as the construction of "passageway" requires. In this regard, Nintendo again mischaracterizes Prof. Slocum's deposition testimony. *See* Paper No. 21, 25-26 (citing Ex. 1041, 175:22-176:5). Prof. Slocum clarified that Hirschman has no disclosure of retention structure communicating signals to circuit board 240 using any communication wire. Ex. 1041, 273:3-274:1 (discussing Ex. 1007, ¶ [0058]). Instead, Hirschman discloses using a "hard pin contact" through conductive material in retention structure 260 without any need for communication wire. *Id.*; Ex. 1007, ¶ [0058].

VI. CONCLUSION

For the foregoing reasons, the Board should rule in its Final Written Decision that Nintendo has failed to show by a preponderance of the evidence that any of claims 1–7 of the '393 Patent are unpatentable.

Respectfully submitted,

Dated: June 4, 2024

By: / Joshua L. Goldberg /
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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24, the undersigned hereby certifies that the foregoing Patent Owner's Sur-Reply contains 5,597 words, as measured by the word- processing system used to prepare this paper.

Dated: June 4, 2024

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **Patent Owner's Sur-Reply** was served by email on June 4, 2024, on Petitioner's counsel of record at:

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