

Filed on behalf of Intellectual Pixels Limited

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SONY INTERACTIVE ENTERTAINMENT LLC,
Petitioner,

v.

INTELLECTUAL PIXELS LIMITED,
Patent Owner.

Case No. IPR2021-00237
U.S. Patent No. 10,681,109

PATENT OWNER'S RESPONSE BRIEF ON REMAND

TABLE OF EXHIBITS

Exhibit No.	Description
2001	Disclaimer of Claims 13-18 of U.S. Patent No. 10,681,109
2002	Excerpt from IEEE 1000: The Authoritative Dictionary of IEEE Standards Terms (“IEEE Dictionary”) (7th ed. 2000)
2003	Excerpt from Microsoft Computer Dictionary (5th ed. 2002)
2004	File History of U.S. Patent No. 10,681,109
2005	U.S. Patent No. 6,929,549 (“Yamada1”)
2006	U.S. Patent No. 6,266,930
2007	Excerpts from Shelly, Cashman, and Vermaat, Discovering Computers: Fundamentals (4th ed. 2008)
2008	Frameless Rendering: Double Buffering Considered Harmful (1994)
2009	Declaration of Dr. John Hart in Support of Patent Owner Response
2010	Transcript of Deposition of Dr. Henry Fuchs (Aug. 17, 2021)
2011	Excerpt from Random House Webster’s College Dictionary (1997)
2012	McVeigh et al., “A Software-Based Real-Time MPEG-2 Video Encoder,” IEEE Transactions on Circuits and Systems for Video Technology 10(7), Oct. 2000, pp. 1178-1184
2013	H.261 Standard, available at https://www.itu.int/rec/dologin_pub.asp?lang=e&id=T-REC-H.261-198811-S!!PDF-E&type=items
2014	Fuchs, Henry, “Beyond the Desktop Metaphor: Toward More Effective Display, Interaction, and Telecollaboration in the Office of the Future via a Multitude of Sensors and Displays,” Proc. International Conference on Advanced Multimedia Content Processing, Nov. 9, 1998, pp. 30-43
2015	MPEG 2 Video standard, available at https://mpeg.chiariglione.org/standards/mpeg-2/video

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Exhibit No.	Description
2016	ITU-T Recommendation H.262, available at https://www.itu.int/rec/T-REC-H.262-199507-S/en
2017	Patent Owner’s Demonstratives for Oral Hearing
2018	Brief for Appellant Sony Interactive Entertainment LLC, <i>Sony Interactive Ent. v. Intellectual Pixels</i> , No. 2022-2118, Dkt. No. 12 (Fed. Cir. Nov. 14, 2022)
2019	Brief for Appellee Intellectual Pixels Limited, <i>Sony Interactive Ent. v. Intellectual Pixels</i> , No. 2022-2118, Dkt. No. 14 (Fed. Cir. Dec. 27, 2022)
2020	Reply Brief for Appellant Sony Interactive Entertainment LLC, <i>Sony Interactive Ent. v. Intellectual Pixels</i> , No. 2022-2118, Dkt. No. 15 (Fed. Cir. Jan. 17, 2023)

Sony’s remand briefing only confirms its original Petition grounds cannot be sustained and that multiple reasons again require confirming patentability. Instead of invoking its Petition arguments which never addressed Doom, on remand Sony scrambles to assemble a lineup of new theories based on Wiltshire’s “Doom” embodiment. Because none of these new theories were presented in the Petition, it’s too late to consider them now. Doing so would violate the Board’s remand order, the Administrative Procedure Act, and 35 U.S.C. § 312(a)(3). IPL Br. (Paper 46) at 3-4 (collecting cases); *Sony v. Intellectual Pixels*, IPR2020-01248, Paper 38 at 43-44 (P.T.A.B. Jan. 11, 2022); Paper 43 at 2 (remand briefing “*limited to* the impact of the Federal Circuit’s decision on the parties’ *arguments made during the inter partes review*”) (emphasis added). Even if considered, Petitioner’s latest arguments fail on the merits as discussed below.

The Petition Did Not Prove That Wiltshire’s “Doom” Requires “Compressing.” Petitioner briefly re-argues that Wiltshire’s general Figure 2 teachings disclose “generating,” “compressing,” and “transmitting” an updated image. Sony Br. (Paper 47) at 1-3 (citing Pet. at 27-34). The Board already correctly rejected this argument, finding Wiltshire’s unspecific teachings too vague to inherently show “generating.” FWD at 19-26. The Federal Circuit did not disturb these findings, and Petitioner’s citation to the appellate court’s discussion of Wiltshire’s step 220 is unavailing, Sony Br. at 2 n.2, because it acknowledges the

court’s ultimate finding was solely based on Wiltshire’s “Doom” inherently disclosing “generating.” Sony Br. at 1; IPL Br. at 1-4.

Quickly abandoning its original argument, Petitioner now contends that Doom “requires real-time compression when used in Wiltshire’s Figure 2.” Sony Br. at 3. Again, Petitioner’s new theory is untimely and improper under Board rules, the APA, and Section 312(a)(3). Even if considered, this argument is unsupported.

Even if Doom inherently requires some images to be generated in real time, there is no evidence in the record showing that Doom further inherently requires compressing images. Petitioner tries to spin the Federal Circuit’s findings that Doom uses Figure 2 and generates real-time images into a chain of unsupported inferences that the other limitations must also be satisfied. Petitioner tries to imply that the appellate decision also dictates that (1) Figure 2 may involve use of a compressed video MPEG stream among numerous other options; and when Doom uses Figure 2 it will (2) *necessarily* use a compressed video MPEG stream and (3) *necessarily* involve real-time MPEG compression of Doom’s images. But Petitioner certainly cannot make it to its speculative step (2) or (3) because Wiltshire is entirely silent on how or even if Doom images are compressed. The Board correctly found Wiltshire does not show *how* Wiltshire’s system would be applied to Doom. FWD at 27. The Federal Circuit acknowledged and did not disturb this finding, Opinion at 8, and now Petitioner can go no further.

Further, nothing in Wiltshire discloses “real-time compression of new, updated images,” or that “Wiltshire’s Figure 2 server can compress updated images.” Sony Br. at 4. Wiltshire merely teaches that an “image *may include*... a compressed video MPEG stream.” EX1004 at 7:15-18 (emphasis added); IPL Br. at 5. Petitioner’s reliance on Wiltshire’s mention of “data compression,” Sony Br. at 2, is similarly unavailing as Wiltshire does not explain how compression would work or that it would or even could involve compressing updated images in real-time, IPL Br. at 6-7.

Petitioner lastly resorts to arguing that the Federal Circuit’s decision on “generating” equally applies to “compressing.” Sony Br. at 5. The Federal Circuit found that “generating” was inherently disclosed because Doom necessarily requires “generating.” Opinion at 9. There is no evidence that Doom necessarily requires “compressing”; accordingly, the Federal Circuit’s logic does not apply.

The Petition Did Not Prove That Wiltshire’s Doom Requires “Frames.”

Petitioner pivots to yet another new theory that “Doom generates ‘frames’ under PO’s construction,” and when compressed result in compressed frames. Sony Br. at 6. But the Petition relied exclusively on “Wiltshire’s disclosure of ‘a compressed video MPEG Stream’ as teaching compression of image frames.” Pet. at 30; *see also* Paper 13 (Institution Decision) at 26 (relying on “Saha’s express disclosure of frames”). Petitioner’s Reply similarly relied exclusively on Wiltshire’s Figures 4-9

to show a “frame” in Wiltshire and never mentions Doom. Reply at 19-20. Petitioner again cannot now pivot to this new argument on remand without running afoul of Board rules, the APA, and Section 312(a)(3).

Even if considered, again Petitioner’s latest theory is divorced from the evidence. Petitioner asserts that Dr. Hart admitted that “Doom displays the contents of a ‘frame buffer’.” Sony Br. at 7. But that is plainly false. Instead, Dr. Hart stated that he “was looking at the contents of a frame buffer that was being rendered by the same machine” while playing Doom. EX1025 at 52:2-8. He never testified that Doom was responsible for any portion, much less all, of the frame buffer. Petitioner’s assertion that Dr. Fuchs “likewise confirmed that Doom generates frames,” Sony Br. at 7, is also inaccurate because his cited testimony never mentions a “frame,” nor does he explain what portion of the display is represented by his “screen shots” he copied from YouTube, *see* EX1033 ¶42. Even if both had been true, Petitioner never even argues, much less presents any evidence, that Doom running on Wiltshire’s server would necessarily operate in the exact same manner as Doom on a PC. *E.g.*, EX1025 at 52:2-5. Rather than there being “no dispute that Doom produces ‘frames,’” Sony Br. at 7, there is instead no evidence that Doom in Wiltshire produces frames.

Finally, even if Petitioner had argued (it didn’t) that Wiltshire disclosed compressing Doom images with MPEG, if you don’t “start with a frame” as the term

is used in the '109 Patent, “you don’t get a ... compressed frame” simply by using MPEG. Paper 37 (Hearing Tr.) at 59:4-8. Wiltshire’s lack of disclosure of a “frame,” even in “Doom,” is not fixed simply by using Saha’s MPEG.

Dependent Claims. For the “mobile device” and “asymmetric bandwidth” limitations, Petitioner again pivots to new Doom theories never articulated during the IPR, which should not be entertained now. Also, Petitioner asserts that Wiltshire “must be considered for everything that it teaches” on one page but on the next instructs the Board to ignore Wiltshire’s teachings about a commercial casino. Sony Br. at 8, 9-10. But Wiltshire’s teaching of “non-casino” games remained in a casino environment. Wiltshire taught the use of “non-casino games where players play against each other for money with the house taking a percentage of the stake for providing the game.” EX1004 at 12:10-13. Petitioner has no contrary evidence.

That Wiltshire’s casino gaming system can play non-casino games is no reason to replace the casino-standard “immobile” “large, bulky gaming stations” with PC Magazine’s “iBook” laptop which would be inappropriate in a casino environment. Sony Br. at 8; POR at 46-52; Sur-Reply at 20-22. Nor is Wiltshire’s mention of Doom a justification to use Chen’s “ADSL” connection, which Petitioner does not dispute is “not sufficient for a commercial casino operation...” Sony Br. at 9; POR at 53-63; Sur-Reply at 22-26. Petitioner’s arguments further fail for the reasons discussed during the IPR. POR at 46-63; Sur-Reply at 20-26.

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Dated: February 1, 2024

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CERTIFICATE OF SERVICE

The undersigned certifies that pursuant to 37 C.F.R. § 42.6(e), a true copy of the foregoing **PATENT OWNER’S RESPONSE BRIEF ON REMAND** is being served electronically on February 1, 2024 to the following lead and back-up counsel for Petitioner to the following email addresses:

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