

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

INTERDIGITAL MADISON PATENT HOLDINGS, SAS,
Patent Owner

Case IPR2026-00195
U.S. Patent No. 10,250,877

**PATENT OWNER'S SUR-REPLY TO
PETITIONER'S PRELIMINARY REPLY**

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I. PETITIONER RELIES ON EXPERT TESTIMONY TO SUPPLY MISSING LIMITATIONS.

The Petition improperly relies on expert testimony to supply six missing claim limitations, not to explain how a POSITA would have understood the references' disclosures, as Petitioner now argues in its Preliminary Reply. *See* POPR, § III; Pet. Reply, 1-3. The Board's Memorandum is instructive in distinguishing the two uses, citing *Unification Techs. LLC, v. Micron Tech. Inc.*, 2024 WL 3738401, at *7 (Fed. Cir. Aug. 9, 2024) as an example of proper expert testimony. EX2015, 1-2. There, the petitioner's expert explained how a disclosed element—the “erase command”—functioned. He did not extrapolate *missing* limitations based on POSITA knowledge as Petitioner and its expert do here.

First, it is undisputed that Nakagawa does not expressly teach an external decoder. POPR, 12-16. Petitioner and its expert argue that a POSITA would have “found it obvious” to implement the missing decoder because the *encoder's* internal decoding loop¹ provides “*some* detail about the operation of the decoder.” Pet., 15-17; EX1003, ¶¶119-120 (emphasis added). That is, a POSITA would need to *modify* Nakagawa to implement a decoder. It does not itself disclose one.

Second, Sita does not disclose a vertical filter. POPR, 16-20. Petitioner

¹ The Petition does not rely on the internal decoding loop as the claimed decoder. *See* POPR, 13.

admits this. Pet., 21, 29. Sita's acknowledgement that a POSITA could implement "motion translation in the vertical translation *if desired*" confirms it. EX1008, ¶95 (emphasis added); Pet. Reply, 2; POPR, 19. While this acknowledgement could be used to argue that such filter is *obvious*, that one would *modify* Sita to implement it, it is nevertheless a missing limitation. *See* EX1003, ¶186. Sita does not disclose a vertical filter, let alone one with the specifically claimed features.

Third, Fimoff does not teach the claimed horizontal filter. POPR, 20-22. Petitioner again admits this. Pet., 52, 58; EX1003, ¶¶259, 281-282. Unable to identify in Fimoff a filter having the claimed structure or functionality, Petitioner instead argues one is taught because that "is the entire point of a horizontal filter," relying again on its expert and general knowledge to argue *obviousness*. Pet. Reply, 2.

Fourth, Wiegand does not disclose reconstructing a current block from a residue block and a motion compensated reference block, as claimed. POPR, 23-25. Wiegand merely mentions a "reconstruction process" that had not yet been written. EX1009, 109. It does not disclose the claimed process. Recognizing this, Petitioner merely argues it is taught because *other* "predictive video-decoding process[es]" teach this process (i.e., based on general knowledge). Pet. Reply, 3.

Finally, Wiegand does not disclose a decoding or coding device comprising at least one circuit. POPR, 25-26. Petitioner admits that Wiegand does not disclose

an encoder at all. *See* POPR, 22-23; Pet., 63-64, 70. It nevertheless argues that a POSITA would have found it obvious to implement an encoder, and to apply Wiegand's process using a circuit in both an encoder and a decoder. Pet., 63-64, 68; Pet. Reply, 3. But Petitioner cannot point to a circuit or an encoder. Wiegand does not disclose either.

II. PETITIONER'S PROPOSED COMBINATION RENDERS NAKAGAWA INOPERABLE.

The POPR demonstrates that collapsing Nakagawa's resampling and motion compensation functions into a single operation, as proposed by Petitioner, would render its encoder unable to generate motion vectors. POPR, 27-37. Petitioner's Reply does not even attempt to rebut this argument. It instead argues only that "motion vectors are not required for [motion compensation interpolation (MCI)]." Pet. Reply, 3-4. This is both incorrect and irrelevant.

Sub-pixel motion vectors are a prerequisite to MCI. Motion vectors tell the decoder *whether* interpolation is required and *which* reference pixel locations are interpolated. Petitioner's own evidence confirms this. Dr. Havlicek explains that motion vectors that capture a "fractional number of pixels" are used in the motion compensation process to "apply interpolation filters" (i.e., to apply MCI). EX1003, ¶146. Petitioner's other cited evidence explains similarly. EX1020, 8 ("If either component of the motion vector has a noninteger value, interpolation is used to estimate the image at non-integer pixel locations."); EX1021, 20 (motion vectors

“that have more than integer precision” require “interpolation when performing [motion compensation]”); EX1029, §4.4. Sita itself operates in this manner. EX1008, ¶82, 89, FIG. 2B.

Petitioner appears to argue the narrow point that motion vectors do not themselves perform the mathematical act of interpolation. Pet. Reply, 4. This is irrelevant for the reasons provided above. Petitioner’s combination prevents the encoder from generating accurate motion vectors at all. And as explained, these motion vectors are fundamental to the predictive coding and decoding process, including MCI. EX1003, ¶¶44, 51-52, 67, 84, 89; EX1020, 5-8; EX1007, 4:52-5:12; EX1008, ¶82. Petitioner does not explain how its system would generate motion vectors. *See* Pet. Reply, 3-4. Its narrow and incorrect argument sidesteps and thus fails to rebut the POPR’s argument.

III. PETITIONER IMPROPERLY INCORPORATES BY REFERENCE.

The Petition improperly incorporates testimony from Dr. Havlicek and Dr. Reader. POPR, 40-43, 51-52. Petitioner argues that its reliance on Dr. Havlicek is a “far cry” from the cases cited in the POPR. Not so. *Cisco* found improper incorporation by reference where the Petition cited to the declaration to support “conclusory statements for which the Petition does not otherwise provide an argument or explanation.” *Cisco Sys., Inc. v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12 at 8-9 (P.T.A.B. Aug. 29, 2014) (informative). The Board has also

held: “What a petitioner may not do is to simply state conclusions in the petition, and rely on the expert declaration to provide all of the reasoning, explanation, and analysis.” *Vivint, Inc. v. SB IP Holdings LLC*, IPR2022-00814, Paper 15 at 14-15 (P.T.A.B. Oct. 16, 2023). That is precisely what the Petition does here. *See* POPR, 40-43.

Moreover, contrary to Petitioner’s assertion, the Board routinely finds improper incorporation of declarations purporting to show public accessibility. *Microsoft Corporation v. Throughputer, Inc.*, IPR2023-00852, Paper 18 at 17-18 (P.T.A.B. Nov. 9, 2023); *VMware, Inc. v. WSOU Investments, LLC*, IPR2021-00572, Paper 8 at 49-50 (P.T.A.B. Sept. 7, 2021); *VMAC Global Techs. Inc. v. Vanair Mfg., Inc.*, IPR2018-00670, Paper 9 at 11–12 (P.T.A.B. Aug. 10, 2018) (“providing a conclusory statement in the Petition... and an unexplained citation to a declaration does not... demonstrate public accessibility”).

Petitioner’s proffered case law does not demonstrate otherwise. *See* Pet. Reply, 5. Incorporation by reference was not at issue in *DISH Network LLC v. Entropic Communications, LLC*, IPR2024-00373, Paper 48 at 27-31 (P.T.A.B. Nov. 14, 2025). And in *Samsung Elecs. Co. v. Wilus Institute of Standards and Tech. Inc.*, the Petition provided three pages of argument regarding public accessibility and cited to a declaration for support. IPR2025-00934, Paper 12 at 10-11 (P.T.A.B. Nov. 3, 2025). That is a far cry from the Petition here.

Respectfully submitted,

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CERTIFICATE OF SERVICE (37 C.F.R. § 42.6(e))

I certify that the above-captioned **PATENT OWNER'S SUR-REPLY TO PETITIONER'S PRELIMINARY REPLY** was served in its entirety on May 8, 2026, upon the following parties via electronic mail:

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