IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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

v.

NOKIA TECHNOLOGIES OY,
Patent Owner

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Case: IPR2024-00605
U.S. Patent No. 10,536,714

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PATENT OWNER'S SUR-REPLY TO ITS PRELIMINARY RESPONSE

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Patent Trial and Appeal Board
U.S. Patent and Trademark Office
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TABLE OF AUTHORITIES

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CASES

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TABLE OF EXHIBITS

Exhibit	Description
2001	Declaration of Dr. Iain Richardson (previously submitted)
2002	CV of Dr. Iain Richardson (previously submitted)
2003	File History of App. Ser. No. 15/681,725 ("'725 Application") (previously submitted)
2004	File History of App. Ser. No. 16/741,156 ("'156 Application") (previously submitted)
2005	U.S. Patent No. 11,570,467 to Bici, et al. ("the '467 Patent") (previously submitted)
2006	Improved Video Compression Efficiency Through Flexible Unit Representation and Corresponding Extension of Coding Tools by Woo-Jin Han, *et al.* (previously submitted)
2007	A Multi-Pass True Motion Estimation Scheme with Motion Vector Propagation for Frame Rate Up-Conversation Applications by Shen-Chuan Tai, *et al.* (previously submitted)
2008	A Multistage Motion Vector Processing Method for Motion-Compensated Frame Interpolation by Ai-Mei Huang, *et al.* (previously submitted)
2009	Bross, "BoG Report on MV Coding and Throughput/Parsing Robustness," Joint Collaborative Team on Video Coding (JCTVC) of ITU-T SG16 WP3 and ISO/IEC JTC1/SC29/WG11, 6th Meeting, Torino, Italy, Jul. 14-22, 2011, Document JCTVC-F744 ("F744") (previously submitted)
2010	Reserved
2011	Excerpts from "The H.264 Advanced Video Compression Standard", Richardson, 2010 (Cover pages, book pages 28-38, 69, 106, 108, 223-229) (previously submitted)
2012	Gary J. Sullivan et al, "Overview of the High Efficiency Video Coding (HEVC) Standard," in IEEE Transactions on Circuits and Systems for Video Technology, vol. 22, no 12, pp. 1649-1668 (previously submitted)
2013	Respondents' Corrected Joint Expert Identification (without Exhibits) (previously submitted)

Patent Owner acknowledges Rusert (Ex. 1004), Karczewicz (Ex. 1005), and Lin (Ex. 1006) are not cited on the face of the ’714 patent. Nakamura (Ex. 1007) and WD4 (Ex. 1010) are cited on the face of the ’714 patent. The fact that the Examiner did not consider Nakamura’s WD proposal description (Ex. 1008) and Presentation (Ex. 1009) is irrelevant. These exhibits are nearly identical to the information in Exhibits 1007 and 1010. *Compare* Ex. 1009 with Ex. 1007; *Compare* Ex. 1008 with Ex. 1010, 111-116.

In response to Patent Owner’s (“PO”) contention that the Examiner considered Rusert when issuing the claims of similar scope of the continuation application to the ’714 patent that issued as U.S. Patent No. 11,570,467, Petitioner alleges that the Examiner of the ’467 patent “had no reason to consider Rusert’s reduced comparison teachings during prosecution of the ’467 patent because that limitation was not present [in Claim 1 of the ’467 patent].” Reply, 1. Petitioner’s contention (to the extent it is relevant) supports PO. If the reduced-comparison limitation is not present in Claim 1 of the ’467 patent but is present in Claim 1 of the ’714 patent, then Claim 1 of the ’714 patent is narrower than Claim 1 of the ’467 patent. Logically, therefore, if the Examiner found that the broader Claim 1 of the ’467 is patentable over Rusert, then a reasonable examiner would have also found the similar, but narrower, Claim 1 of the ’714 patent to be patentable over Rusert. The fact that PO may not have addressed whether Rusert taught the reduced-

comparison limitation during prosecution of the ’467 patent, as Petitioner argues (Reply, 1), is understandable given that there are additional limitations in both Claim 1 of the ’467 patent and the claims of the ’714 patent that distinguish the ’714 patent from Rusert. For instance, in the Notice of Allowance for the ’467 patent, the Examiner stated that the “[p]reviously cited prior arts fail to teach the feature of ‘… wherein the subset is determined based on a location of the block associated with the first spatial motion vector prediction candidate[.]” Ex. 2004, 262. This limitation is also present in Claim 1 of the ’714 patent, meaning that Claim 1 of the ’714 patent is patentable over Rusert for at least this additional reason.

Next, Petitioner contends that the *Advanced Bionics* factors weigh against denial. Reply, 2-4. Petitioner first addresses factors (a), (b), and (d) and argues that these factors “weigh against denial because Rusert, Karc[z]ewicz, and Lin [] were not cited or considered during the prosecution of *the ’714 patent* and therefore are not the same or substantially the same as the cited references.” Reply, 2 (emphasis original). Nowhere in *Advanced Bionics* did the Board state that a particular reference is not the same or substantially the same as the cited references simply because it was not cited or considered during prosecution. *See, e.g.*, *Evapco Dry Cooling, Inc., v. SPG Dry Cooling USA*, IPR2021-00687, Paper 11, 24-25 (P.T.A.B. Sept. 24, 2021) (finding a newly asserted reference not cited during prosecution to be substantially the same as the references before the Examiner during prosecution).

Here, Rusert is cumulative of Tai. *See* Exs. 1004, 2007. For example, Tai teaches "utiliz[ing] the motion information relating to neighboring blocks generated in the previous pass …[,]" as well as confining the search "to vectors [] defined in the candidate vector set [], i.e., a full search is not performed." Ex. 2007, 189. Likewise, "Rusert's PMV candidates [] comprise spatial motion vector prediction candidates obtained from previously-encoded blocks in the current frame[,]" including "'spatially neighboring motion vectors[,]'" Pet., 28 (citing Ex. 1004, ¶¶ 3-6), as well as "compar[ing] motion information of a selected candidate with the subset of PMV candidates …, without making a comparison of each pair from the set of motion vectors used for all previous blocks." Pet., 40. As to Nakamura and WD4, Petitioner speculates that, even though the Examiner considered both Nakamura and WD4, the Examiner did not consider Nakamura in combination with WD4. Reply, 2-3. If the Examiner considered Nakamura and WD4, it is reasonable to believe that the Examiner also considered the combination of the two references.

Petitioner's additional arguments for factors (a), (b), and (d) are similarly misplaced. Petitioner cites to *Snap, Inc.* to argue that "the combinations presented in Grounds 1-3 were never considered by the Examiner." Reply, 3-4; *see also Snap, Inc. v. Playvuu, Inc.*, IPR2023-00848, Paper 12, 16 (P.T.A.B. Dec. 6, 2023). However, arguments concerning how the PTO treated a reference fall under factor (c). Additionally, factor (d) does not weigh against denial. Petitioner explicitly states

that "Rusert's subset is defined by—thus *depends on*—the x-, y- position of the PMV candidate block; the subset includes candidates from the blocks in Rusert's scan pattern up to the selected candidate." Reply, 4 (emphasis added). This position directly overlaps with PO's argument made during prosecution that led to the allowance of the '467 Patent. *See* Ex. 2004, 218 ("[T]he subset of Rusert is determined based on the location of the current block[.]").

Petitioner next turns to factors (c), (e), and (f). While PO is aware the prior art references were never the basis of a rejection for the '714 Patent, there is no requirement that an Examiner must rely on a reference in a rejection during prosecution for the reference to be "considered" during prosecution. *Invantis, Inc. et al. v. Sight Sciences, Inc.*, IPR2022-0153, Paper 14, 17 (P.T.A.B. March 27, 2023); *see, e.g.*, *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6, 7-8 (P.T.A.B. Feb. 13, 2020) (precedential) (stating that previously presented art includes art cited in an IDS). To the extent the Petitioner is relying on an expert declaration from Dr. Creusere under factor (f) because the Creusere declaration was not before the Patent Office, the expert's arguments are not entitled to any weight because they merely repeat the arguments from the Petition, and they are not supported with objective evidence. *See NHK Spring Co. v. IntriPlex Techs., Inc.*, IPR2018000752, Paper 8, 16-17 (P.T.A.B. Sept. 12, 2018) (precedential).

Dated: September 27, 2024

Respectfully submitted,

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CERTIFICATION OF SERVICE

The undersigned hereby certifies that a copy of this **PATENT OWNER'S SUR-REPLY TO ITS PRELIMINARY RESPONSE** has been served on Petitioner via email on the following counsel of record for Petitioner:

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