IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

_____

BEFORE THE PATENT TRIAL AND APPEAL BOARD

_____

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

Petitioner,

v.

NOKIA TECHNOLOGIES OY,

Patent Owner.

_____

Case No. IPR2024-00605

U.S. Patent No. 10,536,714

_____

STATEMENT REGARDING MULTIPLE PETITIONS

Petitioner submits this Paper in support of its Petitions of U.S. Patent No. 10,536,714 (the "'714 patent"). Pursuant to the November 2019 Consolidated Trial Practice Guide, Petitioner (1) ranks the Petitions for the Board's consideration, and (2) identifies the differences between the Petitions and the reasons justifying multiple petitions.

I. Ranking of Petitions

Petitioner requests consideration of the Petitions in the following order:

Rank	Petition	Prior Art	Claims Challenged
1	IPR2024-00605	U.S. Patent App. Pub. No. 2011/0194609 ("Rusert"), U.S. Patent App. Pub. No. 2011/0249721 ("Karczewicz"), U.S. Patent App. Pub. No. 2014/0092981 ("Lin"), JCTVC-F419 Proposal ("Nakamura"), and JCT-VC HEVC Working Draft 4 ("WD4")	9-14, 23-28, 30
2	IPR2024-00604	Rusert, Karczewicz, Lin, Nakamura, and WD4	1-8, 15-22, 29

II. Material Differences and Factors Support Multiple Petitions

A. Two Petitions are Necessary Given the Large Number of Lengthy Claims

The Consolidated Trial Practice Guide (Nov. 20, 2019) (page 59) recognizes petitioners may be justified in bringing multiple petitions against a single patent "when the patent owner has asserted a large number of claims." Here, two petitions are necessary because of the large number of challenged claims (30). Since Patent

Owner has not yet identified the claims it intends to assert in district court, all of the challenged claims therefore remain material to the parties' dispute.

The Board has repeatedly found "that about twenty claims constitutes the 'large number' that the CTPG suggests may justify multiple petitions." *Platform Sci., Inc. v. Omnitracs, LLC*, IPR2020-01518, Paper 14 at 17-18 (Apr. 15, 2021). Multiple petitions have been considered reasonable when claims were numerous, lengthy, and complex in subject matter. *Samsung Elecs. Co. v. Hardin*, IPR2022-01335, Paper 13 at 22 (Feb. 8, 2023) (recognizing large number of claims and finding three petitions reasonable); *ASSA ABLOY AB v. CPC Patent Technologies Pty Ltd.*, IPR2022-01089, Paper 21 at 3-5 (Jan. 3, 2023) (recognizing voluminous claims and finding two petitions reasonable). Besides volume of the claims, the Board also considers factors such as "[the claims'] detail and specificity and the nature of the subject matter[.]" *3Shape A/S and 3Shape Inc. v. Align Technology, Inc.*, IPR 2020-01644, Paper 9 at 3-4 (May 11, 2021) (finding two petitions reasonable and noting that "[w]e agree with Petitioner that the number of claims, their detail and specificity and the nature of the subject matter support multiple petitions in this case."); *see also Dolby Labs., Inc., v. Intertrust Techs. Corp.*, IPR2020-01105, Paper 14 at 21 (Jan. 5, 2021) (finding two petitions reasonable "[g]iven the length of the remaining eighteen claims in the [challenged] patent, [and] the complexity of the involved subject matter[.]").

Similar considerations apply here. The ’714 patent has 30 claims, which alone include 4,349 words, spanning over 10 columns of text, reciting complex video compression subject matter. Given the volume of claims, challenging all 30 claims in a single petition would materially reduce the petitions’ thoroughness and unduly burden the Board with overly terse analysis that would be more difficult to analyze. Filing two petitions, on the other hand, allows for clearer and more detailed analysis for this volume of claims.

Institution of both Petitions would not be an inefficient use of resources because (i) the challenged claims share some common limitations and similar subject matter; and (ii) the petitions are based on the same prior art. Two petitions are necessary, as discussed below, to address non-overlapping limitations related to encoding/decoding that include different explanations regarding the same prior art.

B. Material Differences Between the Petitions and the Complex Subject Matter Involved Support Filing of Two Petitions

This is not a situation where multiple petitions attack the same claims, leveraging the extra space to assert additional prior art references or permutations of references. *See 3Shape A/S and 3Shape Inc. v. Align Technology, Inc.*, IPR2020-01644, Paper 9 at 3 (finding two petitions reasonable where there was no overlap in the claims challenged by the petitions). *First*, substantive differences exist between the claims: claims 9-14, 23-28, and 30 (challenged in the first-ranked petition) have specific limitations for receiving and decoding blocks of pixels,

while claims 1-8, 15-22, and 29 (challenged in the second-ranked petition) are directed to encoding a block of pixels. For example, independent claims 1, 15, and 29 uniquely recite causing "information identifying the one spatial motion vector prediction candidate from the motion vector prediction list to be transmitted to a decoder or to be stored," a limitation specific to encoding. Independent claims 9, 23, and 30 uniquely recite limitations specific to decoding, such as "decoding the encoded block of pixels" and "using information that was received identifying a respective spatial motion vector prediction candidate from the motion vector prediction list constructed by an encoder."

Second, although the two petitions are based on the same art, different disclosures from the prior art references are relied upon in the two petitions. For encoding, Rusert teaches a video encoding method and apparatus, which transmits the encoded video stream and an index (a "signaling bit") to a motion vector predictor (PMV) candidate to a decoder. Ex-1004, ¶¶24, 34-35. For decoding, Rusert teaches a video decoding method and apparatus, which receives the encoded video stream and the index and reconstructs the motion vector using the signaled PMV candidate for decoding. Ex-1004, ¶¶25, 34, 37. Nakamura also performs separate simulations in encoding and decoding environments, described using separate tables. *See* Ex-1007, §3.3; *compare* Ex-1007, Table 5, *with* Table 6.

Furthermore, and notably, multiple petitions are warranted due to the complex nature of the claims. The ’714 claims recite granular details of operations performed during motion prediction. The prior art satisfies these limitations with detailed teachings regarding the procedures of selecting and de-duplicating motion vector prediction candidates, as required by the claims. For example, Nakamura and WD4 are documents from the development of the H.264 video standard. They include highly technical disclosures on the precise syntax, algorithms, and modes used for motion vector prediction candidates. As such, the Petitions provide testimony from Dr. Creusere to explain how the teachings of Nakamura and WD4 relate to the challenged claims, including explanations of variables (e.g., “availableFlagN,” “PartIdx,” “mergeCandList,” and more), partition modes (e.g., PART_2NxN versus PART_Nx2N), and algorithmic pseudocode in the draft standard. Hence, two petitions are needed to thoroughly explain how the prior art teachings, including the different disclosures related to encoding and decoding from the prior art references, meet the claim language.

Respectfully submitted,

SHEPPARD, MULLIN,
RICHTER & HAMPTON LLP

/Harper Batts /
Harper Batts (Reg. No. 56,160)

Date: April 8, 2024

CERTIFICATE OF SERVICE

The undersigned certifies that on April 8, 2024, a true and correct copy of the MULTIPLE PETITION STATEMENT was served on the Patent Owner at the following addresses of record via Priority Mail Express®, and was also sent via electronic mail to the attorneys of record for Plaintiff in the concurrent litigation matters as listed below:

Nokia Corporation and Alston & Bird LLP
Vantage South End
1120 South Tryon Street, Suite 300
Charlotte, NC 28203-6818
Official Correspondence Address

Brian E. Farnan
bfarnan@farnanlaw.com
Alexandra F. Easley
aeasley@mckoolsmith.com
John D Haynes
john.haynes@alston.com
Joshua Newcomer
jnewcomer@mckoolsmith.com
Kevin Burgess
kburgess@mckoolsmith.com
Michael J. Farnan
mfarnan@farnanlaw.com

Nicholas T. Tsui
nick.tsui@alston.com
R. Mitch Verboncoeur
mverboncoeur@mckoolsmith.com
Shawn P. Gannon
shawn.gannon@alston.com
Stephen R. Lareau
stephen.lareau@alston.com
Theodore Stevenson, III
ted.stevenson@alston.com
Warren H. Lipschitz
wlipschitz@mckoolsmith.com

SHEPPARD, MULLIN,
RICHTER & HAMPTON LLP

/Harper Batts/
Harper Batts (Reg. No. 56,160)
Attorney for Petitioner

Date: April 8, 2024

1540 El Camino Real Suite 120
Menlo Park, CA 94025
Tel: (650) 815-2673