

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/JP2019/050149

**A. CLASSIFICATION OF SUBJECT MATTER**

H04N 19/436 (2014.01) i; H04N 19/70 (2014.01) i  
FI: H04N19/70; H04N19/436

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
H04N19/00-19/98

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Published examined utility model applications of Japan	1922-1996
Published unexamined utility model applications of Japan	1971-2020
Registered utility model specifications of Japan	1996-2020
Published registered utility model applications of Japan	1994-2020

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WANG, Yekui et al., "Spec text for the agreed starting point on slicing and tiling", Joint Video Experts Team (JVET) of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11 12th Meeting: Macao, CN, 3-12 Oct. 2018, [JVET-L0686-v2], JVET-L0686 (version 2), 08 October 2018, JVET-L0686-v2.docx; p. 1, JVET-L0686-v2-SpecText.docx; pp. 28-29 in particular, Subclauses 7.3.3, 7.3.4.1	1-4
Y	TERADA, Kengo et al., "CABAG termination for the end of tile/WPP", Joint Collaborative Team on Video Coding (JCT-VG) of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11 11th Meeting: Shanghai, CN, 10-19 Oct. 2012, [JCTVC-K0182], JCTVC-K0182 (version 2), 14 October 2012, pp. 1-2 in particular, clauses 1-2	1-4

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search  
20 February 2020 (20.02.2020)

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	SJOBERG, Rickard et al., "Tile groups for VVC", Joint Video Experts Team (JVET) of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11 12th Meeting: Macao, CN, 3-12 Oct. 2018, [JVET-L0415-v1], JVET-L0415 (version 1), 25 September 2018, pp. 1-4 in particular, abstract, subclauses 2.3-2.4	1-4
A	WO 2014/024491 A1 (PANASONIC CORP.) 13.02.2014 (2014-02-13) entire text	1-4
P, X	IKAI, Tomohiro et al., "AHG12: Wavefront processing in a tile group", Joint Video Experts Team (JVET) of ITU-T SG 16 WP 3 and ISO/IEC JTC 1/SC 29/WG 11 13th Meeting: Marrakech, MA, 9-18 Jan. 2019, [JVET-M0070], JVET-M0070 (version 1), 03 January 2019, pp. 1-3 in particular, clause 2	1-4

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
PCT/JP2019/050149

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
WO 2014/024491 A1	13 Feb. 2014	US 2014/0044163 A1 entire text EP 2884747 A1 CN 104509116 A KR 10-2015-0040857 A	