



(11) **EP 2 790 403 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
19.11.2014 Bulletin 2014/47

(51) Int Cl.:
H04N 7/035 (2006.01)

(43) Date of publication A2:
15.10.2014 Bulletin 2014/42

(21) Application number: **14161691.2**

(22) Date of filing: **26.03.2014**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME

(71) Applicant: **MStar Semiconductor, Inc. Chupei 302 (TW)**

(72) Inventor: **Wong, Wei-Shu 302 Chupei (TW)**

(74) Representative: **Mollekopf, Gerd Willi Kahler Käck Mollekopf Vorderer Anger 239 86899 Landsberg (DE)**

(30) Priority: **08.04.2013 US 201361809431 P**

(54) **Video signal decoding apparatus and associated method**

(57) A video signal decoding method for obtaining aspect ratio information of a video image includes: identifying (S410) a target scan line, whose signal includes a run-in code, identification information and additional information; detecting (S420) a synchronization signal of the target scan line and accordingly determining (S430) a first working interval (R); detecting (S440) the run-in code of the target scan line in the first working interval (R) and accordingly determining (S450) a second working interval (P) and a third working interval (S); in the second working interval (P), generating a sampling clock according to the signal of the of the target scan line; generating (S470) sampled data according to the sampled clock and the signal of the target scan line; in the third working interval (S), detecting (S480) the identification information according to the sampled data to generate a detection result of the identification result; and decoding (S490) the additional information according to the sampled data and the detection result of the identification information.

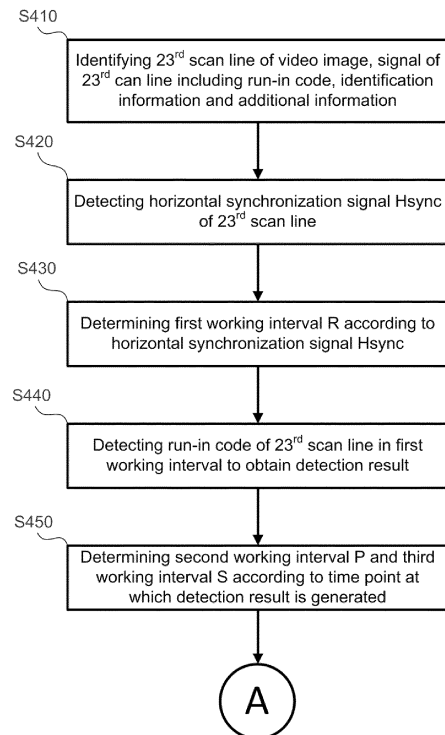


FIG. 4

EP 2 790 403 A3



EUROPEAN SEARCH REPORT

Application Number
EP 14 16 1691

5

10

15

20

25

30

35

40

45

50

55

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	WO 96/13936 A1 (PHILIPS ELECTRONICS NV [NL]; PHILIPS NORDEN AB [SE]) 9 May 1996 (1996-05-09) * page 4, line 6 - page 5, line 14 * * page 5, line 20 - page 6, line 24 * -----	1-15	INV. H04N7/035
A	US 2005/195326 A1 (KUDOU TAKASHI [JP]) 8 September 2005 (2005-09-08) * paragraph [0090]; figure 11 * * paragraph [0104]; figure 14 * * paragraph [0121]; figure 18 * -----	1-15	
			TECHNICAL FIELDS SEARCHED (IPC)
			H04N
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 10 October 2014	Examiner Beaudoin, Olivier
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

1

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 14 16 1691

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

10-10-2014

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9613936 A1	09-05-1996	AT 194741 T	15-07-2000
		AU 698995 B2	19-11-1998
		BR 9506438 A	02-09-1997
		CA 2180023 A1	09-05-1996
		CN 1141109 A	22-01-1997
		DE 69517952 D1	17-08-2000
		DE 69517952 T2	15-03-2001
		EP 0737402 A1	16-10-1996
		FI 962666 A	23-08-1996
		JP H09507637 A	29-07-1997
		KR 100379347 B1	22-10-2003
		US 5854660 A	29-12-1998
WO 9613936 A1	09-05-1996		
US 2005195326 A1	08-09-2005	JP 4353828 B2	28-10-2009
		JP 2005252713 A	15-09-2005
		US 2005195326 A1	08-09-2005

EPO FORM P0469

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82