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INTERNATIONAL SEARCH REPORT

International application No PCT/IN2011/000355

A. CLASSIFICATION OF SUBJECT MATTER INV. H04N21/234 ADD. 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) H₀4N Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Χ US 2004/158858 A1 (PAXTON BRIAN [GB] ET 1-3,5-7,AL) 12 August 2004 (2004-08-12) 12-16,18 figure 3 paragraph [0002] paragraph [0034] paragraph [0046] paragraph [0052] paragraph [0055] - paragraph [0056] paragraph [0082] Α US 2002/162110 A1 (WAKIMOTO KOJI [JP] ET 1-3.5-7.AL) 31 October 2002 (2002-10-31) 12-16.18 paragraph [0142] paragraph [0146] - paragraph [0147] paragraph [0157] - paragraph [0158] paragraph [0168] paragraph [0240] - paragraph [0243] -/--X Further documents are listed in the continuation of Box C. Χ 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 "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date 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) involve an inventive step when the document is taken alone "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 docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 13 March 2012 27/03/2012 Name and mailing address of the ISA/ Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016 Boubal, Olivier

INTERNATIONAL SEARCH REPORT

International application No
PCT/IN2011/000355

C(Continua		1/1N2011/000355
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Α	US 2009/288113 A1 (SKINNER JAMES L [US]) 19 November 2009 (2009-11-19) paragraph [0013] paragraph [0016] paragraph [0018] paragraph [0022] - paragraph [0023] paragraph [0027] paragraph [0034] paragraph [0041] - paragraph [0043] paragraph [0048]	1-3,5-7, 12-16,18
Α	EP 2 182 729 A1 (HITACHI LTD [JP]) 5 May 2010 (2010-05-05) paragraph [0013] - paragraph [0014] paragraph [0018] paragraph [0027] - paragraph [0032] paragraph [0037] paragraph [0054] - paragraph [0060] paragraph [0107] paragraph [0155]	1-3,5-7, 12-16,18
A	US 2009/193454 A1 (CONNERY GLENN [US] ET AL) 30 July 2009 (2009-07-30) the whole document	1-3,5-7, 12-16,18

International application No. PCT/IN2011/000355

INTERNATIONAL SEARCH REPORT

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-3, 5-7, 10, 12-16, 18
Remark on Protest The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee. The additional search fees were accompanied by the applicant's protest but the applicable protest
fee was not paid within the time limit specified in the invitation.
No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-3, 5-7, 10, 12-16, 18

Method for splicing on a broadcast stream

2. claims: 4, 8, 9, 17

Method for calculating channel delay

3. claim: 11

Method for program schedule verification

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
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US 2004158858 A1 12-08-2004 CN 1748417 A	15-03-2006 22-03-2006 16-03-2011 22-10-2010 18-01-2012 12-08-2004 12-08-2004 19-05-2011
US 2002162110 A1	29-01-2003 02-11-2001 31-10-2002 01-11-2001
US 2009288113 A1 19-11-2009 NONE	
EP 2182729 A1 05-05-2010 EP 2182729 A1 JP 2010109791 A US 2010115565 A1	05-05-2010 13-05-2010 06-05-2010
US 2009193454 A1 30-07-2009 US 2009193454 A1 WO 2009097356 A1	30-07-2009 06-08-2009