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Published:

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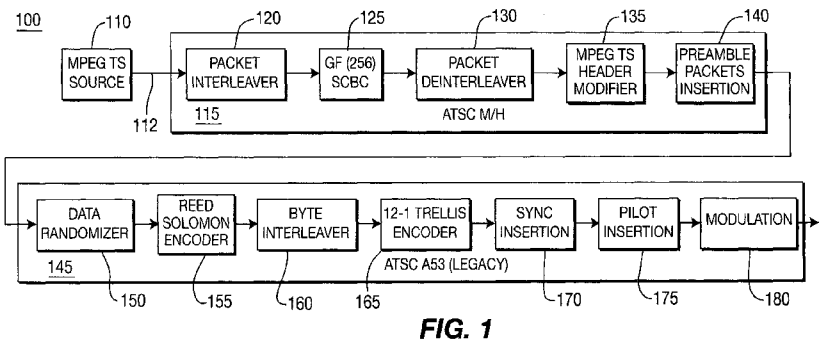


FIG. 1

(57) Abstract: A method and architecture for processing signal communications between an encoder and decoder operating according to the ATSC standard adapted for mobile handheld transmission is disclosed. The method and apparatus comprises embedding code rate identifiers in the packet ID and training sequences, using a chirp sequence as a training sequence and transmitting data in a single burst wherein the data is encoded according to multiple code rates.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/011707

A. CLASSIFICATION OF SUBJECT MATTER
INV. H04N7/24 H04L1/00

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 H04L

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, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SEBASTIAN MAX ET AL: "OFDM-UWB Physical Layer Emulation for Event-Based MAC Simulation" PERSONAL, INDOOR AND MOBILE RADIO COMMUNICATIONS, 2006 IEEE 17TH INTER NATIONAL SYMPOSIUM ON, IEEE, PI, 1 September 2006 (2006-09-01), pages 1-5, XP031023830 ISBN: 978-1-4244-0329-5 pages 1-2, paragraphs I,III figures 1,2 ----- -/--	1-5

[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"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)

"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

"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

"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

"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.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
31 August 2009	15/12/2009

Name and mailing address of the ISA/	Authorized officer
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/011707

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	"MPEG-2, systems part, 1st edition" JOINT VIDEO TEAM (JVT) OF ISO/IEC MPEG & ITU-T VCEG(ISO/IEC JTC1/SC29/WG11 AND ITU-T SG16 Q6), no. 13818-1, 1 July 1995 (1995-07-01), pages 18-20, XP002543590 the whole document	1-5
A	EP 0 822 722 A (GEN INSTRUMENT CORP [US]) 4 February 1998 (1998-02-04) column 2, line 57 - column 3, line 43 column 6, line 44 - column 7, line 44	1-5
A	DELAY J L: "Broadband data delivery over television networks" DIGITAL AND COMPUTATIONAL VIDEO, 2001. PROCEEDINGS. SECOND INTERNATION AL WORKSHOP ON FEB. 8-9, 2001, PISCATAWAY, NJ, USA,IEEE, 8 February 2001 (2001-02-08), pages 36-43, XP010547440 ISBN: 978-0-7695-1110-8 pages 40-41, paragraph "Achieving Reliable Data Delivery over Broadcast Networks"	
A	WO 02/100026 A (KONINKL PHILIPS ELECTRONICS NV [NL]) 12 December 2002 (2002-12-12) page 4, line 27 - page 7, line 20 figure 4	1-5
A	WES SIMPSON: "Video Over IP, A Practical Guide to Technology and Applications" ELSEVIER-FOCAL PRESS, 2006, pages 259-265, XP002543591 the whole document	1-5

INTERNATIONAL SEARCH REPORT

International application No.
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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:

1. ☐ 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

1. ☐ 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.:

see extra sheet

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: 1-5

   Method of indicating an encoding rate in a packet identifier.

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2. claims: 6-13

   Method of indicating an encoding format in a training sequence.

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3. claims: 14-19

   Method of encoding data portions, each portion being coded with a different code rate, in the same burst.

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4. claims: 20-23

   Method of encoding a training sequence comprising a chirp pattern.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2008/011707

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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