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[Continued on next page]

(54) Title: METHODS AND SYSTEMS FOR FRAME GENERATION IN COMMUNICATION NETWORKS

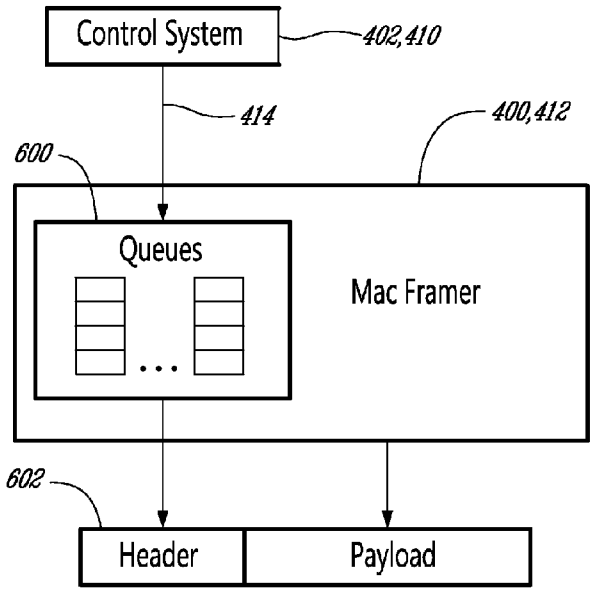


Fig. 6

(57) Abstract: Exemplary embodiments provide for methods and systems that enable frame generation by fields taken from various queues. Protocol control can also or alternatively be distributed so that one or more header fields can be generated separately from other portions of a frame, e.g., the payload. The one or more header fields can be entered into queues from which they are taken to generate frames.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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14 October 2010

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. H04J3/16 H04L29/06
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)
H04J 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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	EP 1 513 305 A2 (NOKIA CORP [FI]) 9 March 2005 (2005-03-09) * abstract paragraph [0032] - paragraph [0043] figures 1,3,6	1,10,21, 29 2,3,11, 12,25,33
X	US 2009/010650 A1 (TSUCHIYA AKIHIKO [JP] ET AL) 8 January 2009 (2009-01-08) * abstract paragraph [0041] - paragraph [0044] paragraph [0049] - paragraph [0052] paragraph [0058] - paragraph [0059] figures 2, 4	1-3, 10-12, 25,33

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[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

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"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
6 August 2010	13/08/2010

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	Moser, Jochen

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2010/050714

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HANDLEY M: "GERM: GENERIC RTP MULTIPLEXING" INTERNET ENGINEERING TASK FORCE, XX, XX, 11 November 1998 (1998-11-11), pages 1-7, XP002139359	1,10,21, 29
A	the whole document	2,3,11, 12,25,33
X	US 2004/151191 A1 (WU THOMAS [US] ET AL) 5 August 2004 (2004-08-05)	1,4,5, 8-10,13, 14, 19-24, 26, 29-32,34
Y	* abstract paragraph [0021] - paragraph [0029] paragraph [0037] - paragraph [0039] paragraph [0043] - paragraph [0046] paragraph [0072] - paragraph [0074] paragraph [0086] - paragraph [0089] paragraph [0093] - paragraph [0094] paragraph [0120] - paragraph [0122] paragraph [0134] paragraph [0140] - paragraph [0153] figures 1A,1B,2A-2E,3,4	6,7,15, 16,27, 28,35,36
Y	John Allen Robinson: "Software Design for Engineers and Scientists" 31 December 2004 (2004-12-31), Newnes , XP040425980 ISBN: 0750660805 page 194 - page 221	6,7,15, 16,27, 28,35,36

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2010/050714

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.:

1-17, 19-24, 26-32, 34-36(completely); 25, 33(partially)

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.:

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, 10-12, 21, 29(completely); 25, 33(partially)

   application of alleged invention to a GPON system

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2. claims: 4-7, 13-16, 26-28, 34-36

   details of queue administration

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3. claims: 8, 19, 23, 24, 31, 32

   prioritized queues

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4. claims: 9, 17, 20, 22, 30

   data to be stored in the queues

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5. claim: 18

   implementation details of device

   ---

6. claims: 25, 33(all partially)

   application of alleged invention to a SNMP system

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7. claims: 25, 33(all partially)

   application of alleged invention to a wireless system

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/IB2010/050714

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US 2004151191 A1	05-08-2004	NONE	