

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 April 2007 (26.04.2007)

PCT

(10) International Publication Number
WO 2007/045839 A3

- (51) International Patent Classification:
H04L 29/06 (2006.01) H04L 12/56 (2006.01)
- (21) International Application Number:
PCT/GB2006/003828
- (22) International Filing Date: 13 October 2006 (13.10.2006)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
11/255,124 20 October 2005 (20.10.2005) US
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- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

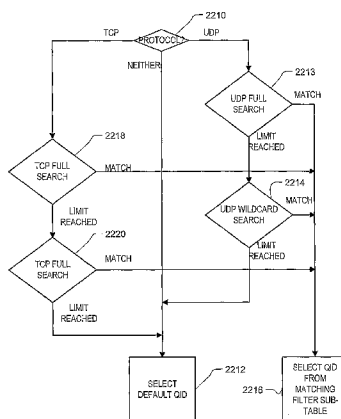
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
1 November 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: HASHING ALGORITHM FOR DETERMINING A RECEIVE QUEUE



(57) Abstract: Roughly described, a network interface device is assigned a maximum extent-of-search. A hash function is applied to the header information of each incoming packet, to generate a hash code for the packet. The hash code designates a particular subset of the table within which the particular header information should be found, and an iterative search is made within that subset. If the search locates a matching entry before the search limit is exceeded, then the incoming data packet is delivered to the receive queue identified in the matching entry. But if the search reaches the search limit before a matching entry is located, then device delivers the packet to a default queue, such as a kernel queue, in the host computer system. The kernel is then responsible for delivering the packet to the correct endpoint.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2006/003828

A. CLASSIFICATION OF SUBJECT MATTER
INV. H04L29/06
ADD. H04L12/56

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)
H04L G06F

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, WPI Data, COMPENDEX, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DIXON J T ET AL: "TUNING TCP AND UDP DEMULTIPLEXING" INTERNET CITATION, [Online] 1998, XP007901883 Retrieved from the Internet: URL:http://www.smartech.gatech.edu/bitstream/1853/6630/1/GIT-CC-98-09.pdf> [retrieved on 2007-03-20]	1-14, 19-23, 25-44
A	sections 2.1, 2.3.3, 5.2.1	15-18, 24, 45, 46
X	US 5 914 938 A1 (BRADY DAVID M [US] ET AL) 22 June 1999 (1999-06-22)	1-14, 19-23, 25-44
A	column 5, line 34 - line 63 column 6, line 22 - line 31 claims 1,5	15-18, 24, 45, 46

Further documents are listed in the continuation of Box C.

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

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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.
- *G* document member of the same patent family

Date of the actual completion of the international search

27 August 2007

Date of mailing of the international search report

04/09/2007

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INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2006/003828

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/081615 A1 (KOHN LESLIE D [US] ET AL) 1 May 2003 (2003-05-01) paragraphs [0028], [0029] -----	47-49

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2006/003828

Box 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 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 fee, this Authority did not invite payment of any additional fee.
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.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- 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: 1-46

Method directed to limiting the processing time for an incoming packet.

2. claims: 47-49

Method directed to avoiding discarding an incoming packet.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2006/003828

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5914938	A1	NONE	
US 2003081615	A1	01-05-2003	NONE