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**Declarations under Rule 4.17:**

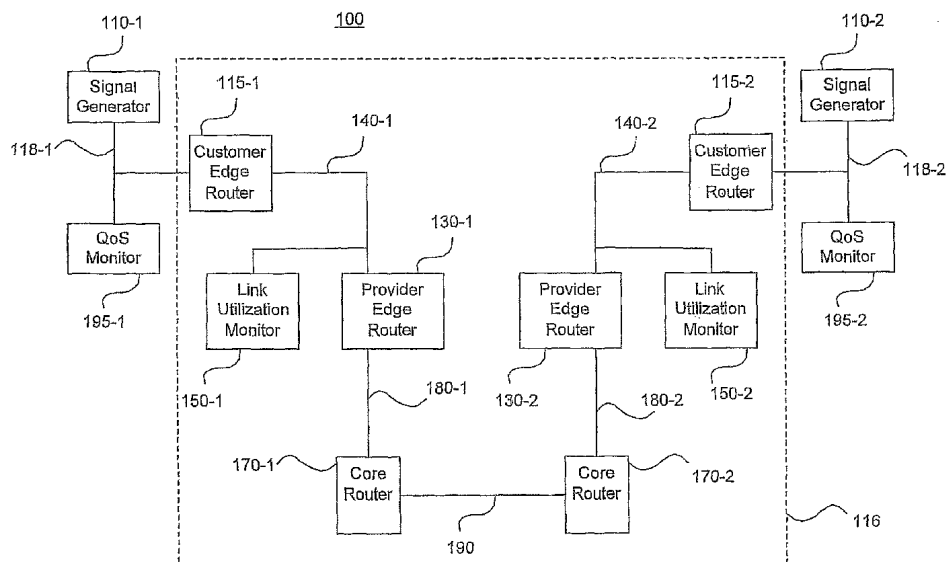
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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(54) Title: METHODS AND SYSTEMS FOR MAINTAINING QUALITY OF SERVICE (QOS) LEVELS FOR DATA TRANSMISSIONS



(57) Abstract: A system is provided for maintaining Quality of Service ("QoS") parameters of data transmissions. A packet-switched network framework is provided. The network framework includes at least one router for routing the data transmissions over the network framework. The network framework also includes multiple links, including a first link and a second link. The first link forms at least part of a first path over the network framework, and the second link forms at least part of an alternate, second path over the network framework. A link utilization monitor is configured to monitor a link utilization rate of the first link and to determine whether the rate has exceeded a predetermined maximum utilization threshold. The router is configured to reroute data transmissions over the second link when the rate is determined to have exceeded the predetermined maximum utilization threshold.

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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/15467

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H04L 12/56 (2007.01)

USPC - 370/395.21

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)

IPC(8) - H04L 12/26; H04L 12/28; H04L 12/56 (2007.01)

USPC - 370/230, 395.2, 395.21, 395.43

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 practicable, search terms used)

Databases: MicroPatent, IP.com, DialogPro, Google Scholar

Search Terms: QoS, "quality of service", jitter, "packet loss", "edge router"

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/0190527 A1 (OKURA et al) 30 September 2004 (30.09.2004) entire document	1-4, 7, 10-17, 19-22
Y		5, 6, 8, 9, 18
Y	WO 2003/032563 A1 (CONWAY) 17 April 2003 (17.04.2003) paragraphs 0047, 0048	5
Y	US 2004/0202157 A1 (CHASE et al) 14 October 2004 (14.10.2004) paragraph 0003	6
Y	US 2002/0194362 A1 (RAWLINS et al) 19 December 2002 (19.12.2002) paragraph 0063	8, 9, 18
A	US 6,577,595 B1 (COUNTERMAN) 10 June 2003 (10.06.2003) entire document	1-22

 Further documents are listed in the continuation of Box C.

* 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 invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent but published on or after the international filing date	"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
"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)	"&" document member of the same patent family
"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	

Date of the actual completion of the international search 12 June 2007	Date of mailing of the international search report <b>28 FEB 2008</b>
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