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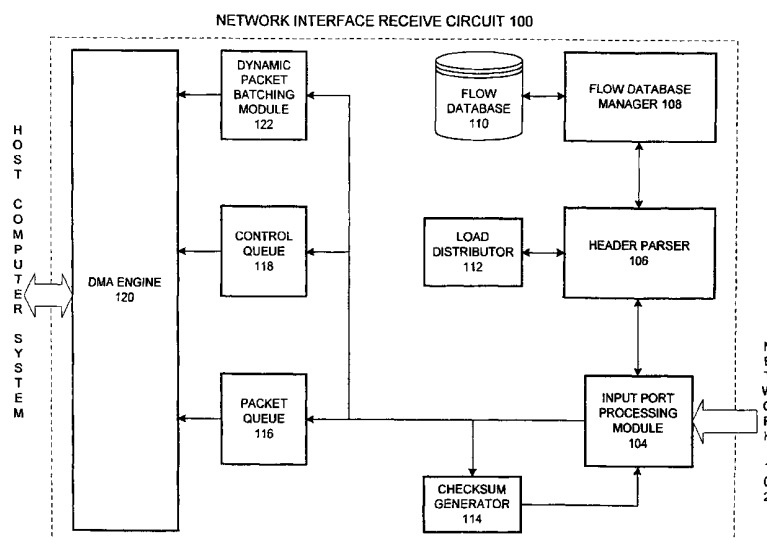
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **METHOD AND APPARATUS FOR EARLY RANDOM DISCARD OF PACKETS**



(57) Abstract: A system and method are provided for randomly discarding a packet received at a high performance network interface if the rate of packet transfers cannot keep pace with the rate of packet arrivals. A selected packet may be dropped as it arrives at a packet queue, or a packet already in the queue may be discarded. The queue has multiple defined regions, any of which may overlap or share a common boundary. A probability indicator is associated with a region to specify the probability of a packet being discarded when the level of traffic in the queue is within the region. Probability indicators may differ from region to region so that the probability of discarding a packet fluctuates as the level of traffic stored in the queue changes. Information gleaned from a packet may be applied to prevent certain types of packets from being dropped.



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INTERNATIONAL SEARCH REPORT

Int'l Application No

PCT/US 00/05343

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 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)

IPC 7 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, PAJ, INSPEC, IBM-TDB, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FLOYD S ET AL: "RANDOM EARLY DETECTION GATEWAYS FOR CONGESTION AVOIDANCE" IEEE / ACM TRANSACTIONS ON NETWORKING,US,IEEE INC. NEW YORK, vol. 1, no. 4, 1 August 1993 (1993-08-01), pages 397-413, XP000415363 ISSN: 1063-6692	1-5,9, 11,12, 14, 30-34,39
A	abstract page 399, right-hand column, line 45 -page 400, left-hand column, line 3	21-29
A	WO 99 00949 A (SUN MICROSYSTEMS INC) 7 January 1999 (1999-01-07) page 14, line 10 - line 21 page 34, line 17 - line 22 page 35, line 29 -page 36, line 7 --- -/--	1,21,30, 39

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

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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.

G document member of the same patent family

Date of the actual completion of the international search

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 573 739 A (ROKE MANOR RESEARCH) 15 December 1993 (1993-12-15) abstract -----	1,21,30, 39

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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EP 0573739 A	15-12-1993	GB 2268372 A JP 6062042 A US 5566175 A	05-01-1994 04-03-1994 15-10-1996