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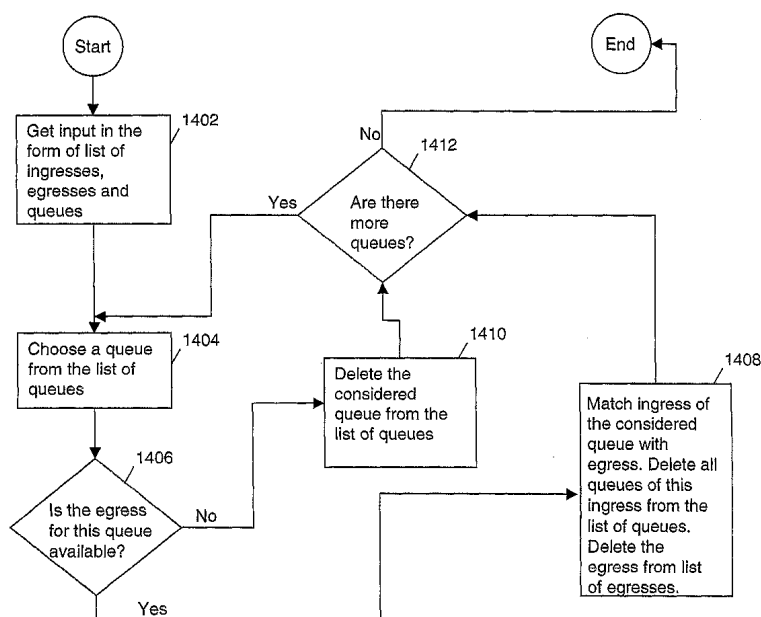
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(54) Title: METHOD AND APPARATUS FOR BANDWIDTH GUARANTEE AND OVERLOAD PROTECTION IN A NETWORK SWITCH



(57) Abstract: A method for selecting a queue for service across a shared link. The method includes classifying each queue from a group of queues within a plurality of ingresses into one tier of a number "N" of tiers. The number "N" is greater than or equal to 2. Information about allocated bandwidth is used to classify at least some of the queues into the tiers. Each tier is assigned a different priority. The method also includes matching queues to available egresses by matching queues classified within tiers with higher priorities before matching queues classified within tiers with lower priorities.

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A. CLASSIFICATION OF SUBJECT MATTER

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USPC: 370/232

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)

U.S. : 370/232,229-240,351,389,395.4,431,442,467,498

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/0135449 A1 (XU et al) 17 July 2003 (17.07.2003), paragraphs 18-35 Figures 3-4	1, 3-4, 9, 14-18, 28, 32
Y		2, 5-7, 10-13, 26-27, 29-31
Y	US 6,064,651 A (ROGERS et al) 16 May 2000 (16.05.2000), column 14 lines 3-21	2, 6-7
Y	US 2003/0086424 A1 (TSUBOTA) 08 May 2003 (08.05.2003), paragraph 56 and Figure 3	5, 10-13, 26-7, 29-31

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

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