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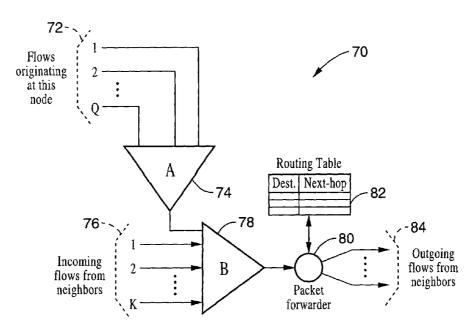
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(54) Title: METHOD FOR MAINTAINING RESERVATION STATE IN A NETWORK ROUTER



(57) Abstract: Methods are described for maintaining a small bounded aggregate state within network routers pertaining to selected architectural families. Small bounded reservations states are utilized wherein the method is fully scalable for use on large networks. The size of the aggregate state and the complexity of the associated refresh mechanism is determined by the parameters of the network, such as size, and classes, which is in contrast to states based on the number of end-users flows. The method can render deterministic bandwidth use within the network wherein real-time multimedia applications may be accorded strict delay and bandwidth guarantees. The invention provides a middle-ground between the stateful Intserv and the stateless SCORE architectures.



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INTERNATIONAL SEARCH REPORT

International Application No PCT/US 01/31728

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, WPI Data, PAJ, INSPEC C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category ° Relevant to claim No. χ LIXIA ZHANG ET AL: "RSVP: A NEW RESOURCE 1 - 56RESERVATION PROTOCOL" IEEE NETWORK, IEEE INC. NEW YORK, US, vol. 7, no. 5, September 1993 (1993-09), pages 8-18, XP000828446 ISSN: 0890-8044 page 12, right-hand column, line 29 - line page 15, column 1, line 1 -page 16, column 2, line 15 χ EP 0 762 799 A (FUJITSU LTD) 1,21,40 12 March 1997 (1997-03-12) claim 14 χ EP 0 982 899 A (FUJITSU LTD) 1,21,40 1 March 2000 (2000-03-01) column 24, line 6 - line 16 Further documents are listed in the continuation of box C. Patent family members are listed in annex. ° 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 "A" document defining the general state of the art which is not considered to be of particular relevance cited to understand the principle or theory underlying the "E" earlier document but published on or after the international "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 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) "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 docu-"O" document referring to an oral disclosure, use, exhibition or other means ments, such combination being obvious to a person skilled in the art. document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 15 August 2002 23/08/2002 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, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016. Gregori, S

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