



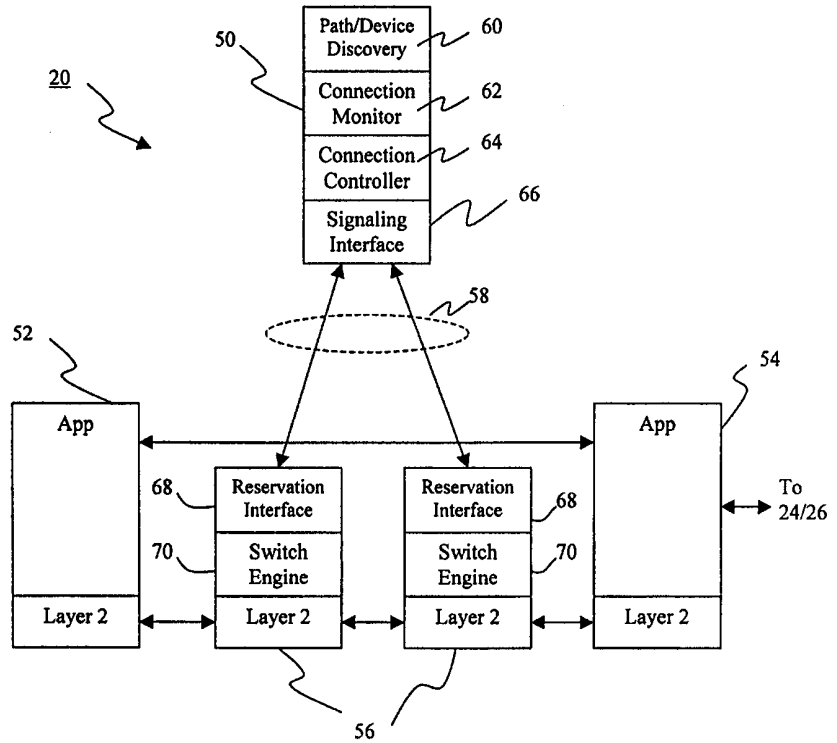
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/US99/27375 (22) International Filing Date: 18 November 1999 (18.11.99) (30) Priority Data: 09/200,161 25 November 1998 (25.11.98) US (71) Applicant: WARPSPEED COMMUNICATIONS [US/US]; 6683 Owens Drive, Pleasanton, CA 94588 (US). (72) Inventors: GOLDEN, Michael, E.; 3693 Mohr Avenue, Pleasanton, CA 94588 (US). RUNDQUIST, William, A.; 267 Yerba Buena Place, Fremont, CA 94536 (US). (74) Agents: MARK, J., Danielson et al.; Pillsbury Madison & Sutro LLP, 1100 New York Avenue, N.W., Washington, DC 20005 (US).</p>	<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report.</i></p> <p>(88) Date of publication of the international search report: 23 November 2000 (23.11.00)</p>	

(54) Title: METHOD AND APPARATUS FOR PROVIDING GUARANTEED QUALITY/CLASS OF SERVICE WITHIN AND ACROSS NETWORKS USING EXISTING RESERVATION PROTOCOLS AND FRAME FORMATS

(57) Abstract

A method and apparatus provide reserved bandwidth and QOS/COS virtual circuit connections in a network using both conventional and novel reservation protocols and frame formats. An apparatus according to the invention includes an enterprise control point that communicates with switches via a reserved signaling channel. The switches have been upgraded or replaced to include enhanced functionality. The enhanced switches detect packets that include requests for reserved connections according to existing reservation protocols such as RSVP and IEEE 802.1P/Q. Such detected packets are forwarded to the enterprise control point for processing via a reserved signaling channel. The enterprise control point identifies a path within the network that can satisfy the requested QOS/COS and reserves the requested resources all along the path from beginning to end. A method according to the invention includes detecting packets that include requests for reserved connections according to existing reservation protocols such as RSVP and IEEE 802.1P/Q, forwarding detected packets to an enterprise control point for processing via a reserved signaling channel, identifying a path within the network that can satisfy the requested QOS/COS and reserving the requested resources all along the path from beginning to end.



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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/27375

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 H04L12/56 H04L12/46

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 98 37730 A (ERICSSON TELEFON AB L M ;FALCHI MICHELA (SE)) 27 August 1998 (1998-08-27) column 8, line 22 -column 9, line 6 ---	1, 11, 21, 30, 33, 34, 36-38
A	WO 98 47309 A (AT & T WIRELESS SERVICES INC) 22 October 1998 (1998-10-22) page 5, line 8-20 page 12, line 5 -page 13, line 14 -----	36, 37

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Patent family members are listed in annex.

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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