

2002060499
07/10/02

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



162162

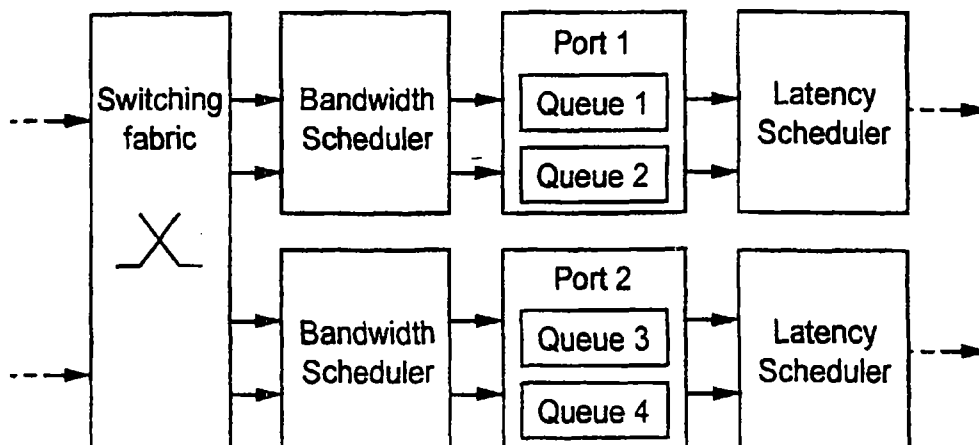
(43) International Publication Date
18 October 2001 (18.10.2001)

PCT

(10) International Publication Number
WO 01/78420 A1

- (51) International Patent Classification⁷: H04Q 3/64, H04L 12/56
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- (21) International Application Number: PCT/SE01/00733
- (22) International Filing Date: 4 April 2001 (04.04.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
09/546,494 10 April 2000 (10.04.2000) US
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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, 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, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, 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, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
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- Published:
— with international search report
- 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 DISTRIBUTION OF BANDWIDTH IN A SWITCH



(57) Abstract: The invention relates to a method and an apparatus for distribution of bandwidth in a switch or router. More particularly, the invention relates to a scheduler and an associated algorithm for distributing bandwidth over data traffic directed to output ports and received in various traffic classes and flows. The switch comprises a switching fabric. Preferably, the bandwidth scheduler is located before output queues, and the method comprises: receiving a stream of data from the switching fabric; subjecting the stream to a decision making algorithm in the bandwidth scheduler resulting in that the stream is forwarded or interrupted (accepted or rejected). Preferably, the stream of data includes identifiable data packets and the decision making algorithm in the bandwidth scheduler results in that the data packet is accepted or rejected. The bandwidth scheduler may be located before the output queues leading to early discarding of packets and efficient use of output buffer memory. The algorithm includes logical rules operating on counters and variables recording the accepted traffic to implement the bandwidth distribution. The algorithm enables weighted distribution and short term as well as long term fairness.

WO 01/78420 A1



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