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(21) International Application Number: PCT/IB98/01940 (22) International Filing Date: 7 December 1998 (07.12.98) (30) Priority Data: 09/001,040 30 December 1997 (30.12.97) US (71) Applicant (for all designated States except US): NEXABIT NETWORKS INC. [US/US]; 200 Nickerson Road, Marlborough, MA 01752 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): OPALKA, Zbigniew [US/US]; 25 Quarry Lane, Harvard, MA 01451 (US). AGGARWAL, Vijay [US/US]; 25 Langelier Lane, Marlborough, MA 01752 (US). KONG, Thomas [US/US]; 175 Freeman Street, Brookline, MA 02146 (US). FIRTH, Christopher [US/US]; 28 John Alden Circle, Bellingham, MA 02019 (US). COSTANTINO, Carl [US/US]; 7 Nutfield Drive, Londonderry, NH 03053 (US). (74) Agent: RINES, Robert, Harvey; MacLeod Allsop, Bledington Grounds, Bledington, Gloucestershire OX7 6XL (GB).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, 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, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, 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). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: NETWORKING SYSTEMS		
(57) Abstract A novel networking architecture and technique for transmitting both cells and packets or frames across a common switch fabric, effected, at least in part, by utilizing a common set of algorithms for the forwarding engine (the ingress side) and a common set of algorithms for the QoS management (the egress part) that are provided for each I/O module to process packet/cell information without impacting the correct operation of ATM switching and without transforming packets into cells for transfer across the switch fabric.		