(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 13 June 2002 (13.06.2002)

PCT

(10) International Publication Number WO 02/046866 A3

(51) International Patent Classification⁷: **G06F 11/00**, 13/00, 13/40

(21) International Application Number: PCT/US01/45771

(22) International Filing Date:

2 November 2001 (02.11.2001)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/245,295 2 November 2000 (02.11.2000)

(71) Applicant (for all designated States except US): PIRUS NETWORKS [US/US]; 43 Nagog Park, Acton, MA 01720-3425 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): GROSNER, George [US/US]; 49 Warren Street, Westboro, MA 01581 (US). WOOD, Douglas [US/US]; 15 Honeysuckle Road, Westford, MA 01886 (US).

(74) Agent: JACOBS, David; Lucash, Gesmer & Updegrove, LLP, 40 Broad Street, Boston, MA 02109 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, 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, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

(88) Date of publication of the international search report: 6 February 2003

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: SWITCHING SYSTEM

Pirus Hardware Architecture TO STORAGE TO CHEVES 1, 2 Gb CONTROL Fibre 10/100 Mb, Channel, 1 Gb SCSI Ethernet Switch 10 Gb Fabric Fibre 10 Gb Channel. Ethernet 1x. 4x InfiniBand IP Processing **Storage Processing High Speed Fabric** • Fast Forwarding • NAS (NFS/CIFS) · Redundant control processors Mediation · Content-aware Switching Redundant Switching Fabric · Load Balancing Scalable port density · Volume Management · Fibre Channel Switching Mediation • Media-type Independent • TCP Hardware acceleration SCSI RAID

WO 02/046866 A3

INTERNATIONAL SEARCH REPORT

International application No. PCT/US01/46771

A. CLASSIFICATION OF SUBJECT MATTER				
IPC(7) :G06F 11/00; 13/00, 13/40				
US CL :710/2, 100, 101, 126, 128, 129; 714/24 According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELDS SEARCHED Minimum documentation consider (classification questor followed by election symbols)				
Minimum documentation searched (classification system followed by classification symbols)				
U.S. : 710/2, 100, 101, 126, 128, 129; 714/24				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields				
searchede				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)				
WEST 2.1				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.	
X,Y	US 6.041,381 A (HOESE) 21 MARCH	2000, Abstract, col. 2, lines	1-14	
,	44-col. 5, lines 1-46, Figs. 1-6	, , ,	3	
	,			
X,Y	US 5,941,972 A (HOESE ET AL.) 24 August 1999, Abstract, col 1-14			
	2, lines 60 - col.8, lines 1-65, Figs. 1-5			
X,Y	US 5,938,776 A (SICOLA ET AL.) 17 August 1999, Abstract, col. 1-14			
	2, lines 59 - col. 9, lines 1-65, Figs. 1-6			
	<i>)</i>			
Further documents are listed in the continuation of Box C. See patent family 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 cited to understand				
"A" do	cument defining the general state of the art which is not usidered to be of particular relevance	the principle or theory underlying th		
"E" ear	rlier document published on or after the international filing date	"X" document of particular relevance; the considered novel or cannot be considered.		
	cument which may throw doubts on priority claim(s) or which is ed to establish the publication date of another citation or other	when the document is taken alone	· · · · · · · · · · · · · · · · · · ·	
	ecial reason (as specified)	"Y" document of particular relevance; the considered to involve an inventive		
	cument referring to an oral disclosure, use, exhibition or other	combined with one or more other suc being obvious to a person skilled in		
	cument published prior to the international filing date but later an the priority date claimed	"&" document member of the same paten	t family	
		Date of mailing of the international search report		
29 APRIL 2002		75 JUL 2002		
Name and mailing address of the ISA/US Authorized officer				
Commissioner of Patents and Trademarks		Yoggy.	Hanod	
Washington, D.C. 20231				
Facsimile N	lo. (703) 305-3230	Telephone No. (703) 305-9717		