

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
8 September 2000 (08.09.2000)

PCT

(10) International Publication Number
WO 00/52895 A3

- (51) International Patent Classification⁷: H04L 29/06
- (21) International Application Number: PCT/US00/05243
- (22) International Filing Date: 29 February 2000 (29.02.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
09/260,367 1 March 1999 (01.03.1999) US
- (71) Applicant: SUN MICROSYSTEMS, INC. [US/US]; 901 San Antonio Road, Palo Alto, CA 94303 (US).
- (72) Inventor: GENTRY, Denton; 34892 Sea Cliff Terrace, Fremont, CA 94555 (US).
- (74) Agents: VAUGHAN, Daniel, E. et al.; Park & Vaughan LLP, Suite 310, 702 Marshall Street, Redwood City, CA 94063 (US).
- (81) Designated States (*national*): 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, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): 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).
- Published:**
— *With international search report.*
— *Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.*
- (88) Date of publication of the international search report:
14 December 2000
- 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.*



WO 00/52895 A3

(54) Title: METHOD AND APPARATUS FOR INTERRUPT HANDLING

(57) Abstract: A network interface is polled by a host computer system process to whether any packets have been received. Interrupts that would normally be issued by the network interface in response to the transfer of packets to the host system are suppressed during polling. If, however, a predetermined period of time elapses or a predetermined number of packets are received after a previous poll or a previous interrupt, then an interrupt may be generated. A time counter may track the passage of time; a packet counter may track the number of packets. After each polling operation or processing of an interrupt, the time and packet counters are reset to threshold values and decrement toward a final time count and a final packet count. Thus, a packet transferred after one polling operation or interrupt does not cause the issuance of an interrupt to the host processor unless a time or packet counter reaches its final value.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 00/05243

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04L29/06

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 496 177 A (IBM) 29 July 1992 (1992-07-29) abstract	1, 17, 30, 40, 41, 44
A	US 5 319 752 A (PETERSEN BRIAN ET AL) 7 June 1994 (1994-06-07) abstract	1, 17, 30, 40, 41, 44

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international 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)
- *C* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *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
- *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 documents, such combination being obvious to a person skilled in the art.
- *G* document member of the same patent family

Date of the actual completion of the international search

25 September 2000

Date of mailing of the international search report

02/10/2000

Name and mailing address of the ISA

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

Authorized officer

Canosa Aresté, C

INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No

PCT/US 00/05243

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0496177	A	29-07-1992	US 5317692 A	31-05-1994
			JP 2107782 C	06-11-1996
			JP 5153194 A	18-06-1993
			JP 8024320 B	06-03-1996
<hr/>				
US 5319752	A	07-06-1994	AU 674341 B	19-12-1996
			AU 4930093 A	12-04-1994
			CA 2143951 A	31-03-1994
			EP 0660955 A	05-07-1995
			JP 2584957 B	26-02-1997
			JP 7507173 T	03-08-1995
			KR 186928 B	15-05-1999
			WO 9407201 A	31-03-1994
<hr/>				