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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 November 2002 (14.11.2002)

PCT

(10) International Publication Number
WO 02/091642 A3

(51) International Patent Classification[7]: H04J 3/06

(21) International Application Number: PCT/US02/13726

(22) International Filing Date: 2 May 2002 (02.05.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/288,912 4 May 2001 (04.05.2001) US
60/288,901 4 May 2001 (04.05.2001) US

(71) Applicant: APPIAN COMMUNICATIONS, INC. [US/US]; 35 Nagog Park, Acton, MA 01720 (US).

(72) Inventors: LEE, Charles; 166 Oak Street, Ashland, MA 01721 (US). KAPOOR, Harsh; 120 Coolidge Farm Road, Boxborough, MA 01719 (US).

(74) Agents: REYES, Jason, A. et al.; Hale and Dorr LLP, 60 State 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, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW.

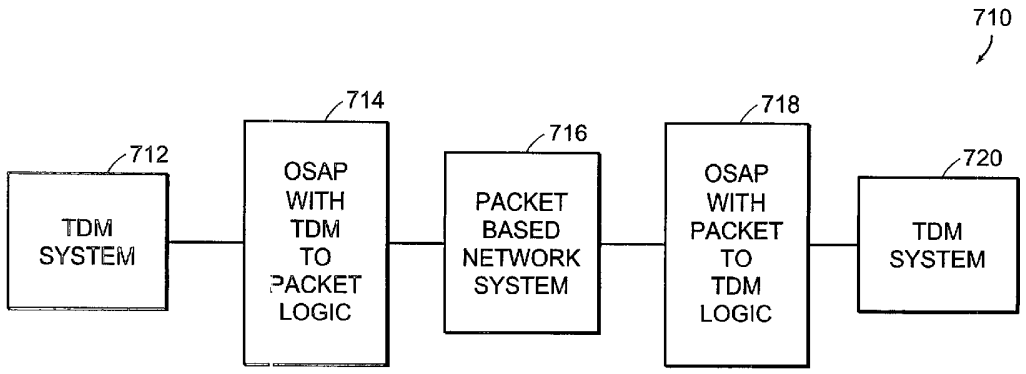
(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

(88) Date of publication of the international search report:
20 November 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: COMMUNICATING DATA BETWEEN TDM AND PACKET BASED NETWORKS



(57) Abstract: A method and a system are provided for use in communicating data between a time division multiplexing (TDM) network and a packet based network. A clock signal is derived from data packets containing data originally transmitted over the TDM network. Outgoing TDM data is obtained using the data packets and the clock signal. The outgoing TDM data has timing characteristics of the data originally transmitted over the TDM network. Data extracted from the data packets may be collected in a FIFO and the clock signal may be derived in part from fill level information for the FIFO.

WO 02/091642 A3

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 02/13726

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04J3/06

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 H04J

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.
Y	US 5 790 538 A (SUGAR GARY) 4 August 1998 (1998-08-04) abstract column 3, line 16 -column 4, line 61 column 5, line 51 -column 6, line 21 column 7, line 48 -column 8, line 44 ---	1-54
Y	US 4 866 704 A (BERGMAN LARRY A) 12 September 1989 (1989-09-12) abstract column 3, line 10 - line 33 figure 8 ---	1-54
A	WO 01 26289 A (NOKIA CORP ;NOKIA INC (US)) 12 April 2001 (2001-04-12) page 4, line 21 -page 6, line 17 figure 2 -----	1,21,22, 26,41, 42,52

☐ 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)

"O" 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.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
23 June 2003	02/07/2003

Name and mailing address of the ISA	Authorized officer
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	Bernardini, A

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 02/13726

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5790538 A	04-08-1998	NONE	
US 4866704 A	12-09-1989	NONE	
WO 0126289 A	12-04-2001	US 6577648 B1	10-06-2003
		AU 7032100 A	10-05-2001
		EP 1224769 A1	24-07-2002
		WO 0126289 A1	12-04-2001