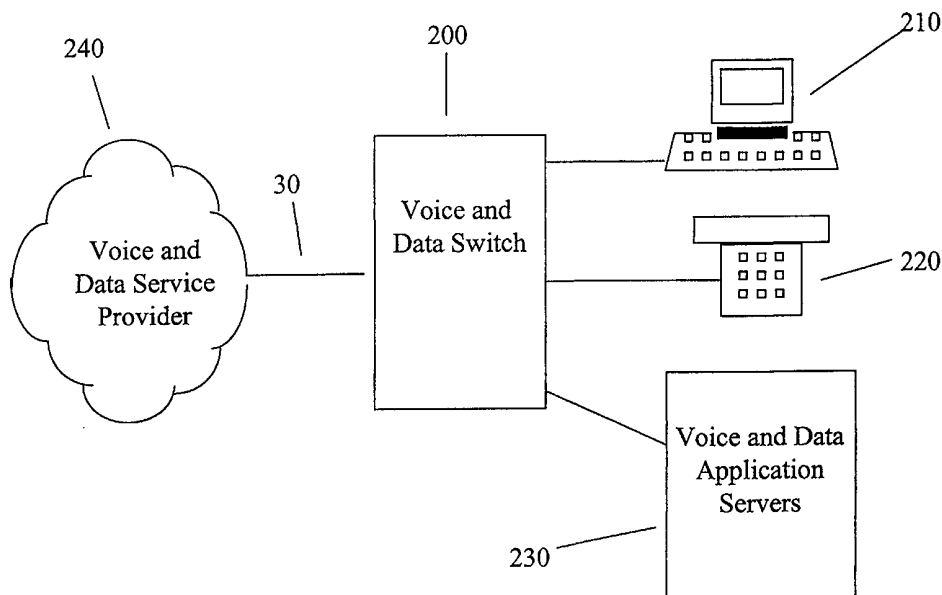




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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<p>(21) International Application Number: PCT/CA99/00395 (22) International Filing Date: 10 May 1999 (10.05.99) (30) Priority Data: 09/081,798 20 May 1998 (20.05.98) US (71) Applicant (for all designated States except US): NORTEL NETWORKS CORPORATION [CA/CA]; World Trade Center of Montreal, 8th floor, 380 St. Antoine Street West, Montreal, Quebec H2Y 3Y4 (CA). (72) Inventors; and (75) Inventors/Applicants (for US only): MARTIN, Richard [CA/CA]; 38, rue du Gisement, Hull, Quebec J82 3J9 (CA). SENYSHYN, Paul, A. [CA/CA]; 23 Shandon Avenue, Nepean, Ontario K2J 4E1 (CA). WAGNER, Mark [CA/CA]; 15 Edgeview Heights N.W., Calgary, Alberta T3A 4W8 (CA). WELLARD, Ron [CA/CA]; 4 Beamish Crescent, Kanata, Ontario K2K 2R5 (CA). ABELA, Richard [CA/CA]; 9 Leacock Drive, Kanata, Ontario K2K 1R6 (CA). (74) Agent: MEASURES, Jeffrey, M.; Nortel Networks Corporation, Station C, P.O. Box 3511, Ottawa, Ontario K1Y 4H7 (CA).</p>		<p>(81) Designated States: CA, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 29 December 1999 (29.12.99)</p>

(54) Title: METHODS AND APPARATUS FOR INTEGRATING VOICE AND DATA SYSTEMS



(57) Abstract

Methods and apparatus for integrating voice and data on a network including a key system unit; and a data module connected to the key system unit. The data module is connected to the key system unit through a high speed interface and includes a microprocessor, a network controller connected to the microprocessor, a multi-port repeater connected to the network controller, and a WAN processor (bridge and/or router) connected between the repeater and the key system unit. The WAN processor is configured to communicate data received from the repeater to a data service provider through the key system unit and over the same trunk line which the key system uses to connect voice communications to a PSTN.

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INTERNATIONAL SEARCH REPORT

International Application No

PC/CA 99/00395

A. CLASSIFICATION OF SUBJECT MATTER IPC 6 H04L12/64 H04M3/42 H04Q3/62				
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 6 H04L H04M H04Q				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched				
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C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X A	WO 98 14014 A (PREDACOMM INC) 2 April 1998 (1998-04-02) page 4, line 5 -page 5, line 4 page 14, line 11 - line 18 claims 1-9	8, 14, 16-22 1-7, 9-12, 15, 24-29, 31-33		
Y A	WO 97 41650 A (BELL COMMUNICATIONS RES) 6 November 1997 (1997-11-06) page 7, line 26 -page 8, line 8 page 12, line 1 - line 37 figure 2	23, 30 1-7		
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.				
<input checked="" type="checkbox"/> Patent family members are listed in annex.				
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Date of the actual completion of the international search <p style="text-align: center; font-weight: bold;">2 November 1999</p>	Date of mailing of the international search report <p style="text-align: center; font-weight: bold;">17/11/1999</p>			
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. 31 551 epo nl. Fax: (+31-70) 340-3016	Authorized officer <p style="text-align: center; font-weight: bold;">Perez Perez, J</p>			

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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