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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/49713

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04Q7/38

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 H04Q

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	EP 0 744 727 A (HIGHWAYMASTER COMMUNICATIONS, INC.) 27 November 1996 (1996-11-27) column 10, line 35 -column 11, line 44; claims 30-32; figures 1,2,6 *Idem*	1,13,24, 37,47 2-12, 14-23, 25-36, 38-46, 48-62
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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"P" document published prior to the international filing date but later than the priority date claimed

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Date of the actual completion of the international search

13 November 2002

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/49713

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 115 611 A (KIMOTO ET AL.) 5 September 2000 (2000-09-05) abstract; figures 7,9,10,37,48 column 27, line 63 -column 29, line 57 column 33, line 1 - line 15 column 33, line 30 -column 34, line 41	1,13,24, 37,47
A		2-12, 14-23, 25-36, 38-46, 48-62
A	US 5 519 760 A (BORKOWSKI ET AL.) 21 May 1996 (1996-05-21) abstract; figures 1-4 column 2, line 22 - line 48	1,13,24, 37,47
A	US 5 408 683 A (ABLAY ET AL.) 18 April 1995 (1995-04-18) abstract; figures 2-4B column 8, line 1 - line 11	1,13,24, 37,47
A	US 6 111 539 A (MANNINGS ET AL.) 29 August 2000 (2000-08-29) abstract; figures 1,4,6 column 5, line 46 - line 64 column 11, line 28 - line 62	1,13,24, 37,47
A	WO 96 36193 A (TELECOM FINLAND OY.) 14 November 1996 (1996-11-14) abstract; figure 1	1,13,24, 37,47

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/49713

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 744727	A	27-11-1996	US 5155689 A EP 0744727 A2 AT 192597 T DE 69132158 D1 EP 0501058 A2 NO 912516 A ,B, NO 963257 A US 5884221 A US 6148202 A US 5398190 A US 5513111 A US 5734981 A US 5519621 A US 5652707 A US 5832394 A US 5299132 A	13-10-1992 27-11-1996 15-05-2000 08-06-2000 02-09-1992 20-01-1992 20-01-1992 16-03-1999 14-11-2000 14-03-1995 30-04-1996 31-03-1998 21-05-1996 29-07-1997 03-11-1998 29-03-1994
US 6115611	A	05-09-2000	JP 10013961 A	16-01-1998
US 5519760	A	21-05-1996	CA 2169955 A1 EP 0714589 A1 JP 9502333 T WO 9535636 A1	28-12-1995 05-06-1996 04-03-1997 28-12-1995
US 5408683	A	18-04-1995	NONE	
US 6111539	A	29-08-2000	AU 684228 B2 AU 3393195 A AU 695816 B2 AU 5538998 A CA 2198886 A1 DE 69506563 D1 DE 69506563 T2 DK 777863 T3 EP 1085345 A1 EP 0777863 A1 EP 0837341 A1 ES 2126931 T3 FI 970848 A WO 9607110 A1 JP 10505420 T NO 970940 A NZ 292210 A NZ 329889 A US 6169515 B1	04-12-1997 22-03-1996 20-08-1998 23-04-1998 07-03-1996 21-01-1999 06-05-1999 16-08-1999 21-03-2001 11-06-1997 22-04-1998 01-04-1999 28-02-1997 07-03-1996 26-05-1998 28-02-1997 28-07-1998 28-05-1999 02-01-2001
WO 9636193	A	14-11-1996	FI 952280 A AU 5651096 A EP 0779013 A1 WO 9636193 A1	11-11-1996 29-11-1996 18-06-1997 14-11-1996