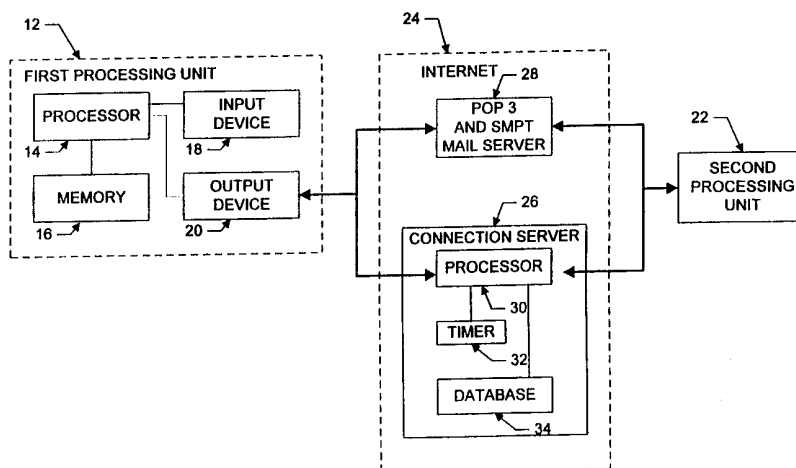




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification ⁶ : H04L 29/06</p>	<p>A3</p>	<p>(11) International Publication Number: WO 97/14234 (43) International Publication Date: 17 April 1997 (17.04.97)</p>
<p>(21) International Application Number: PCT/US96/15504 (22) International Filing Date: 25 September 1996 (25.09.96) (30) Priority Data: 08/533,115 25 September 1995 (25.09.95) US (71) Applicant: NETSPEAK CORPORATION [US/US]; Suite 104, 902 Clint Moore Road, Boca Raton, FL 33487 (US). (72) Inventor: HUTTON, Glenn, W.; Apartment 206, 9725 Hammocks Boulevard, Miami, FL 33196 (US). (74) Agent: JOBSE, Bruce, D.; Bookstein & Kudirka, P.C., One Beacon Street, Boston, MA 02108 (US).</p>		<p>(81) Designated States: AU, BR, CA, CN, JP, KR, MX, RU, SG, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> (88) Date of publication of the international search report: 30 April 1998 (30.04.98)</p>

(54) Title: POINT-TO-POINT INTERNET PROTOCOL



(57) Abstract

A point-to-point Internet protocol exchanges Internet Protocol (IP) addresses between units (12, 22) to establish a point-to-point communication link between the processing units through the Internet (24). In accordance with the disclosed protocol, a method of locating a user process over a computer network, the user process having a dynamically assigned network protocol address comprises the steps of (a) maintaining in a computer memory (34) a compilation of entries, each entry comprising a network protocol address of a user process connected to the computer network; and (b) in response to identification of one of the entries by a requesting user processor, providing the network protocol address of the identified entry to the requesting user process. In accordance with another embodiment of the invention, a computer system having an audio transducer and a display device (36) and being operatively coupled to other computers and a server (26) over a computer network comprises (a) means for transmitting an E-mail signal containing a network protocol address of a first process to a second process over the computer network; (b) means for receiving a second network protocol address from the second process over the computer network; and (c) means, for responsive to the second network protocol address for establishing a communication link between the first process and the second process over the computer network.

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AM	Armenia	GB	United Kingdom	MW	Malawi
AT	Austria	GE	Georgia	MX	Mexico
AU	Australia	GN	Guinea	NE	Niger
BB	Barbados	GR	Greece	NL	Netherlands
BE	Belgium	HU	Hungary	NO	Norway
BF	Burkina Faso	IE	Ireland	NZ	New Zealand
BG	Bulgaria	IT	Italy	PL	Poland
BJ	Benin	JP	Japan	PT	Portugal
BR	Brazil	KE	Kenya	RO	Romania
BY	Belarus	KG	Kyrgystan	RU	Russian Federation
CA	Canada	KP	Democratic People's Republic of Korea	SD	Sudan
CF	Central African Republic	KR	Republic of Korea	SE	Sweden
CG	Congo	KZ	Kazakhstan	SG	Singapore
CH	Switzerland	LI	Liechtenstein	SI	Slovenia
CI	Côte d'Ivoire	LK	Sri Lanka	SK	Slovakia
CM	Cameroon	LR	Liberia	SN	Senegal
CN	China	LT	Lithuania	SZ	Swaziland
CS	Czechoslovakia	LU	Luxembourg	TD	Chad
CZ	Czech Republic	LV	Latvia	TG	Togo
DE	Germany	MC	Monaco	TJ	Tajikistan
DK	Denmark	MD	Republic of Moldova	TT	Trinidad and Tobago
EE	Estonia	MG	Madagascar	UA	Ukraine
ES	Spain	ML	Mali	UG	Uganda
FI	Finland	MN	Mongolia	US	United States of America
FR	France	MR	Mauritania	UZ	Uzbekistan
GA	Gabon			VN	Viet Nam

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 96/15504

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 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 6 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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 92 19054 A (CONCORD COMMUNICATIONS, INC.) 29 October 1992 see page 7, line 1 - line 21 see page 10, line 23 - line 33 see page 82, line 26 - page 87, line 29	1-5,7
Y	---	6
X	EP 0 556 012 A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.) 18 August 1993 see column 1, line 5 - column 2, line 17 see column 13, line 46 - column 17, line 1 see column 20, line 6 - column 22, line 58	1-6
A	---	7
	-/--	

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

30 May 1997

Date of mailing of the international search report

27. 01. 98

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

Vaskimo, K

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 96/15504

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 5 425 028 A (BRITTON ET AL.) 13 June 1995 see column 1, line 28 - line 42 see column 2, line 24 - line 61 see column 4, line 30 - line 34 see column 7, line 32 - column 11, line 39	6
A	---	1-5,7
X	EP 0 455 402 A (HEWLETT-PACKARD COMPANY) 6 November 1991 see column 1, line 34 - column 3, line 44 see column 5, line 38 - column 10, line 51	1
A	---	1-7
X	DOUGLAS E. COMER: "Internetworking with TCP/IP" 11 November 1992 , PRENTICE HALL , ENGLEWOOD CLIFFS, US XP002031754 192830 see page 1 - page 3 see page 17 - page 19 see page 311 - page 333	1
A	-----	2-7

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 96/ 15504

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-7

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims 1-7: A method of locating a user or users over a computer network, where a list of entries is maintained, where each entry comprises a protocol address for a user connected to a network, where in response to selection of one of entries the network protocol address of the entry is provided.
2. Claims 8-10: Apparatus for establishing a point-to-point communication link in a computer system comprising an audio transducer and a display, and being coupled to other computers and a server over a computer network, that comprises means for transmitting from the first process, means for receiving a network protocol address, and means for establishing a point-to-point communication link between the first and second process.

INTERNATIONAL SEARCH REPORT

Information on patent family members

national Application No PCT/US 96/15504

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9219054 A	29-10-92	NONE	
EP 556012 A	18-08-93	JP 5227161 A	03-09-93
		JP 6095998 A	08-04-94
		JP 6149689 A	31-05-94
		US 5517618 A	14-05-96
US 5425028 A	13-06-95	NONE	
EP 455402 A	06-11-91	US 5185860 A	09-02-93
		JP 4229742 A	19-08-92