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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
6 June 2002 (06.06.2002)

PCT

(10) International Publication Number
WO 02/45373 A2

(51) International Patent Classification[7]: H04L 29/00

(74) Agents: MCLEAN, Robert, Andreas et al.; Dummett Copp, 25 The Square, Martlesham Heath, Ipswich, Suffolk IP5 3SL (GB).

(21) International Application Number: PCT/GB01/05253

(22) International Filing Date:
29 November 2001 (29.11.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0029179.9 30 November 2000 (30.11.2000) GB

(71) Applicant *(for all designated States except US)*: **RIDGEWAY SYSTEMS AND SOFTWARE LIMITED** [GB/GB]; 66 Suttons Business Park, Reading RG6 1AZ (GB).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **READ, Stephen, Michael** [GB/GB]; 18 Meadow View, Water Eaton Road, Summertown, Oxford OX2 7QS (GB).

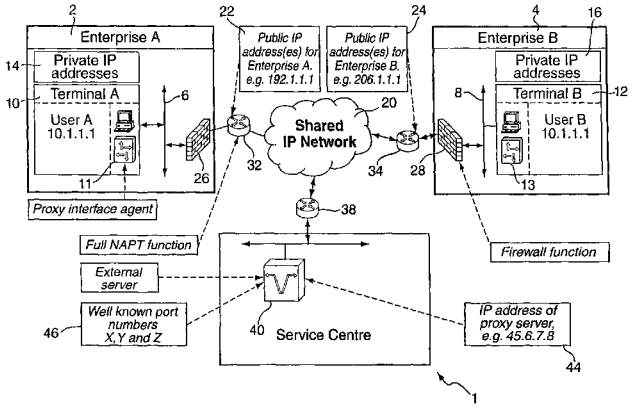
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, 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:
— *without international search report and to be republished upon receipt of that report*

[Continued on next page]

(54) Title: COMMUNICATIONS SYSTEM



(57) Abstract: The present invention relates to a communications system (1) for handling communications sessions, for example multimedia calls or voice calls. The communications system (1) comprises a local terminal (10), an external server (40), a proxy interface agent (PIA) (11) between the terminal (10) and a shared network (20). The communication means includes a NAT function (32) though which the communications session must pass. The communications session is carried over the network (20) over one or more logical channels between the terminal (10) and the external server (40), during which the first NAT function (32) applies network address mappings on the terminal's transport addresses (14). The PIA (11) acts on behalf of the terminal (10) in communications with the external server (40), and establishes a logical channel on an outbound connection to the server that serves as a control channel between the PIA (11) and the server (40). The PIA (11) establishes dynamic outbound connections to the server (40), and in response to a request from the server or in response to a request from the PIA itself (11), makes one or more associations between the terminal's transport address(es) (14) and identifiable logical channel(s) between the PIA (11) and the server. These identifiable logical channel(s) are established on one or more of the dynamic outbound connections from the PIA (11) to the server (40).

WO 02/45373 A2

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.