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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
22 March 2007 (22.03.2007)

PCT

(10) International Publication Number
WO 2007/032852 A1

(51) International Patent Classification:
G06F 15/00 (2006.01) *G06F 17/00* (2006.01)

(21) International Application Number:
PCT/US2006/031877

(22) International Filing Date: 15 August 2006 (15.08.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/716,297 12 September 2005 (12.09.2005) US
11/326,992 5 January 2006 (05.01.2006) US

(71) Applicant *(for all designated States except US)*: **MICROSOFT CORPORATION** [US/US]; One Microsoft Way, Redmond, WA 98052-6399 (US).

(72) Inventors: **BEN-SHACHAR, Ido**; One Microsoft Way, Redmond, WA 98052-6399 (US). **MALAKAPALLI, Meher**; One Microsoft Way, Redmond, Washington 98052-6399 (US). **PALEKAR, Ashwin**; One Microsoft Way, Redmond, Washington 98052-6399 (US). **BARABOI, Tudor**; One Microsoft Way, Redmond, Washington 98052-6399 (US). **STEERE, David**; One Microsoft Way, Redmond, Washington 98052-6399 (US). **CHIK, Joy**; One Microsoft Way, Redmond, WA 98052-6399 (US).

(74) Agent: **MICROSOFT CORPORATION**; Attn.: Sharon Rydberg, (sharonr-21/2029), LCA, International Patent Department, One Microsoft Way, 21/2029, Redmond, WA 98052-6399 (US).

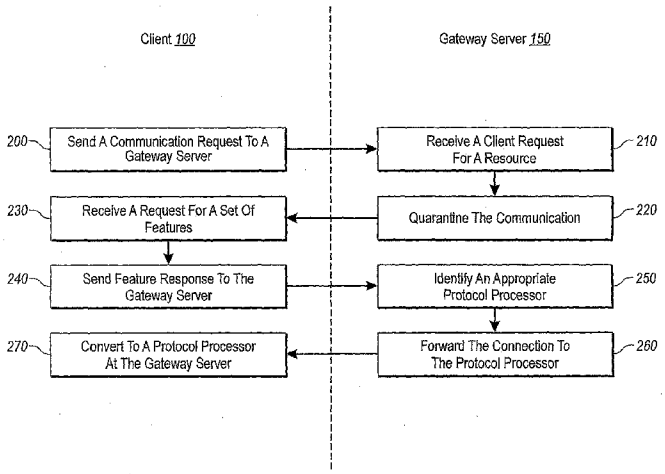
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:
— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

[Continued on next page]

(54) Title: PROVIDING CONSISTENT APPLICATION AWARE FIREWALL TRAVERSAL



(57) Abstract: Implementations of the present invention relate to a communication framework that is readily adaptable to a wide variety of resources intended to be accessible through a firewall. In general, a communication framework at a gateway server can provide a specific connection to a requested resource in accordance with a wide range of resource and/or network access policies. In one instance, a client requests a connection to a specific resource behind a firewall. The communication framework authenticates the connection, and quarantines the connection until determining, for example, that the client is using an appropriate resource features. If appropriately authenticated, the communication framework can pass control of the connection to an appropriately identified protocol plug-in processor, which facilitates a direct connection to the requested resource at an application layer of a communication stack.

WO 2007/032852 A1

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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.