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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
1 April 2004 (01.04.2004)

PCT

(10) International Publication Number
WO 2004/027612 A2

(51) International Patent Classification[7]: G06F 9/46

(21) International Application Number:
PCT/GB2003/004063

(22) International Filing Date:
19 September 2003 (19.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/246,909 19 September 2002 (19.09.2002) US

(71) Applicant: **INTERNATIONAL BUSINESS MACHINES CORPORATION** [US/US]; New Orchard Road, Armonk, NY 10504 (US).

(71) Applicant *(for MG only)*: **IBM UNITED KINGDOM LIMITED** [GB/GB]; PO Box 41, North Harbour, Portsmouth, Hampshire PO6 3AU (GB).

(72) Inventors: **BIRK, Peter**; 1925 Chasewood Drive, Austin, TX 78727 (US). **CHAO, Ching-Yun**; 11518 Rustic Rock Drive, Austin, TX 78750 (US). **CHUNG, Hyen**; 8619 Priest River Drive, Round Rock, TX 78681 (US). **MASON, Carlton**; 12602 Barricks Cove, Austin, TX 78727 (US). **REDDY, Ajaykumar**; 15512 Omro Cove, Austin, TX 78727 (US). **VENKATARAMAPPA, Vishwanath**; 8704 Fritsch Drive, Austin, TX 78717 (US).

(74) Agent: **LING, Christopher, John**; IBM United Kingdom Limited, Intellectual Property Law, Hursley Park, Winchester, Hampshire SO21 2JN (GB).

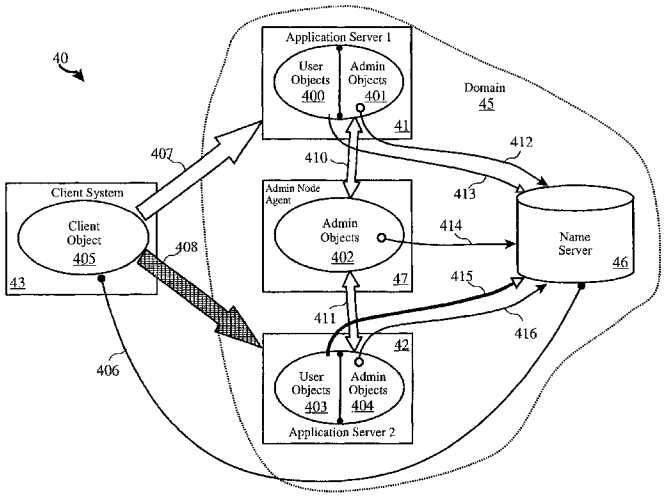
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, 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, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, 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: APPLICATION SERVER OBJECT-LEVEL SECURITY FOR DISTRIBUTED COMPUTING DOMAINS



(57) Abstract: Objects on application servers may be defined into classes which receive different levels of security protection, such as definition of user objects and administrative objects. Domain-wide security may be enforced on administrative objects, which user object security may be configured separately for each application server in a domain. In a CORBA architecture, IOR's for shared objects which are to be secured on a domain-wide basis, such as administrative objects, are provided with tagged components during IOR creation and exporting to a name server. Later, when the IOR is used by a client, the client invokes necessary security measures such as authentication, authorization and transport protection according to the tagged components.

WO 2004/027612 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.