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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 December 2003 (24.12.2003)

PCT

(10) International Publication Number
WO 2003/107203 A3

(51) International Patent Classification[7]: H04L 29/06, G06F 17/60

(21) International Application Number: PCT/GB2003/002489

(22) International Filing Date: 9 June 2003 (09.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/170,300 12 June 2002 (12.06.2002) 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]; P.O. Box 41, North Harbour, Portsmouth, Hampshire PO6 3AU (GB).

(72) Inventors: **LINDQUIST, David**; 4001 Lake Springs Court, Raleigh, NC 27613 (US). **RAJARAMAN, Bala**; 109 Cromwell Court, Cary, NC 27513 (US). **TAN, Yih-Shin**; 300 Gretton Place, Raleigh, NC 27615 (US). **TOPOL, Brad**; 209 Fern Ridge Drive, Raleigh, NC 27606 (US).

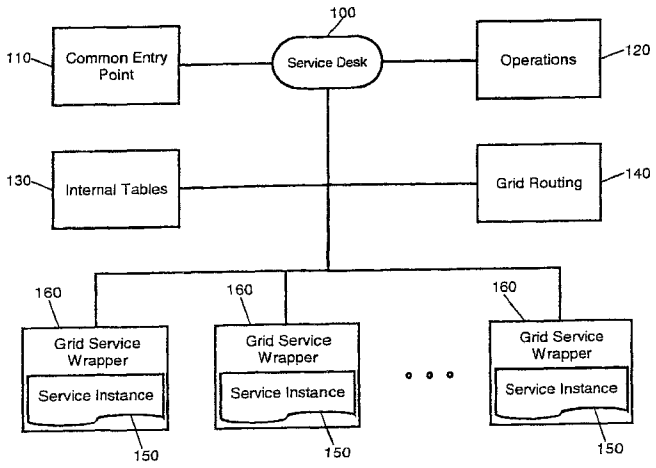
(74) Agent: **LING, Christopher, John**; IBM United Kingdom Limited, Intellectual Property Law, Hursley Park, Winchester, Hampshire SO21 2JN (GB).

(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, 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, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, 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).

[Continued on next page]

(54) Title: A COMPUTING SERVICES GRID



(57) Abstract: A computing services grid. The grid can include a service desk coupled to one or more computing service instances. Each service instance can conform to an interface which is common to all service instances in the grid. A routing component can be disposed in the grid. Specifically, the routing component can route individual service requests to individual ones of the service instances. An instance selection service is used to satisfy QoS characteristics associated with the requestor of the service. The grid further can include a service instance monitoring component. The monitoring component can monitor the performance of individual service instances charged with processing individual service requests. Fail-over logic can be configured to re-route service requests from selected service instances to others of the service instances where the monitoring component detects a fail-over condition in the selected service instances. In that regard, fail-over conditions can include error conditions and a performance deficiency conditions in which the performance of a selected service instance lags behind guaranteed levels of performance.

WO 2003/107203 A3

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*

(88) Date of publication of the international search report:
15 April 2004

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.