



- (51) **International Patent Classification:**
G06F 7/00 (2006.01) *G06F 17/30* (2006.01)
- (21) **International Application Number:**
PCT/IB2013/054812
- (22) **International Filing Date:**
12 June 2013 (12.06.2013)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
13/524,921 15 June 2012 (15.06.2012) US
- (71) **Applicant:** INTERNATIONAL BUSINESS MACHINES CORPORATION [US/US]; New Orchard Road, Armonk, New York 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:** GREINER, Dan; IBM Corporation, SVL/090/F374, 555 Bailey Avenue, Santa Teresa Lab, San Jose, California 95141-1003 (US). JACOBI, Christian; IBM Corporation, EG17, 2455 South Road, Poughkeepsie, New York 12601-5400 (US). SLEGEL, Timothy; IBM Corporation, MS-P310, 2455 South Road, Poughkeepsie, New York 12601-5400 (US).

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

- (81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report (Rule 48.2(g))

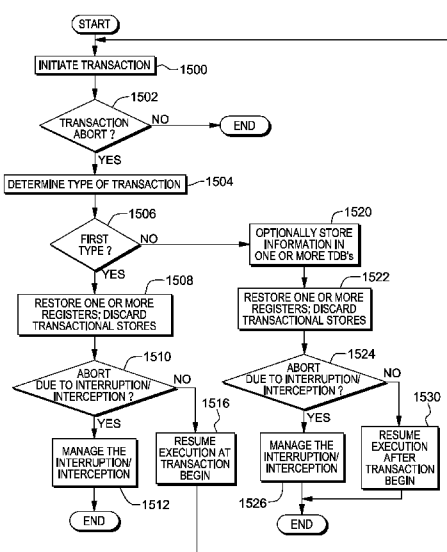
(54) **Title:** TRANSACTIONAL PROCESSING

FIG. 15A

- (57) **Abstract:** A transaction is initiated via a transaction begin instruction. During execution of the transaction, the transaction may abort. If the transaction aborts, a determination is made as to the type of transaction. Based on the transaction being a first type of transaction, resuming execution at the transaction begin instruction, and based on the transaction being a second type, resuming execution at an instruction following the transaction begin instruction. Regardless of transaction type, resuming execution includes restoring one or more registers specified in the transaction begin instruction and discarding transactional stores. For one type of transaction, the nonconstrained transaction, the resuming includes storing information in a transaction diagnostic block.