



(51) International Patent Classification:

G06F 7/06 (2006.01) *G06F 7/575* (2006.01)
G06F 7/44 (2006.01) *G06F 11/10* (2006.01)

(21) International Application Number:

PCT/US2015/040435

(22) International Filing Date:

14 July 2015 (14.07.2015)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

201410333960.X 14 July 2014 (14.07.2014) CN
 14/797,577 13 July 2015 (13.07.2015) US

(71) Applicant: ALIBABA GROUP HOLDING LIMITED

[—/US]; Fourth Floor, One Capital Place, P.O. Box 847,
 George Town, Grand Cayman (KY).

(72) Inventor: QIU, Shuo; Alibaba Group Legal Department,

5/F, Building 3, No. 969 West Wen Yi Road, Yu Hang
 District, Hangzhou, Zhejiang 311121 (CN).

(74) Agent: YAO, Shun; 2800 Fifth Street, Suite 110, Davis,

California 95618 (US).

(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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, 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, SA, 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, ST, 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:

— with international search report (Art. 21(3))

(54) Title: METHOD AND SYSTEM FOR MANAGING RESIDUAL VALUE IN DISTRIBUTED PROCESSING OF TRANSACTIONS

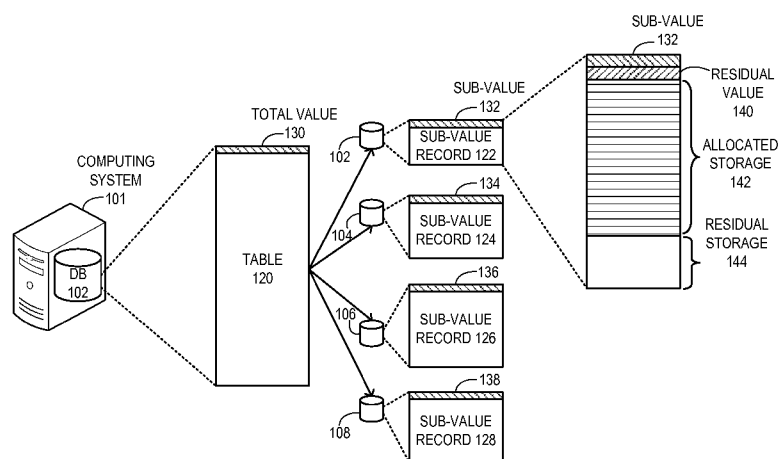


FIG. 1A

(57) **Abstract:** A system is provided for facilitating residual-value management. During operation, the system stores in a computing system a total value, which corresponds to a total amount of goods or service. The system divides the total value into a number sub-values, and determining that a sub-value is less than or equal to a threshold. In response, the system merges the sub-value into a merged residual-value. Furthermore, the system receives a transaction that indicates a subtraction operation with an associated value. Subsequently, the system allows the merged residual-value to be considered for processing the subtraction operation, thereby reducing residual-value fragmentation.