



(51) International Patent Classification:

G06F 9/44 (2006.01) G06F 17/24 (2006.01)
G06F 9/46 (2006.01) G06F 17/21 (2006.01)

(21) International Application Number:

PCT/US2011/032806

(22) International Filing Date:

16 April 2011 (16.04.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/774,035 5 May 2010 (05.05.2010) US

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

(72) Inventors: **HOKE, Thomas**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). **ROTH-SCHILLER, Chad B.**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (US). **WU, Su-Piao**; c/o Microsoft Corporation, LCA - International Patents, One Microsoft Way, Redmond, Washington 98052-6399 (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, 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, KM, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, 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))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

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

(54) Title: MULTI-THREADED ADJUSTMENT OF COLUMN WIDTHS OR ROW HEIGHTS

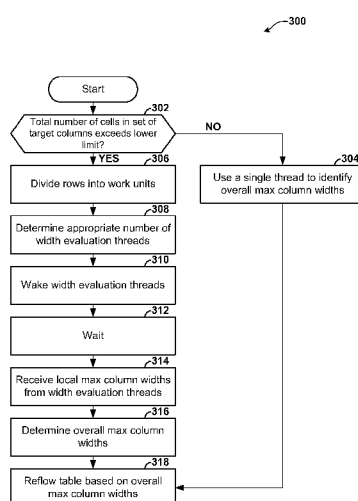


FIG. 3

(57) Abstract: A computing system performs a column adjustment process. The column adjustment process uses multiple threads to determine overall maximum column widths for each column in a set of target columns in a spreadsheet table. For each of the target columns, the overall maximum column width for the target column is based on the width of the widest textual representation of a value in any cell in the column. The set of target columns includes at least one column. The computing system then reflows the spreadsheet table such that each column in the set of target columns has a width based on the overall maximum column width for the column. A similar process is performed to adjust the height of rows.