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(54) Title: PRIVATE VIEWS OF DATA AND LOCAL CALCULATIONS DURING REAL TIME COLLABORATION

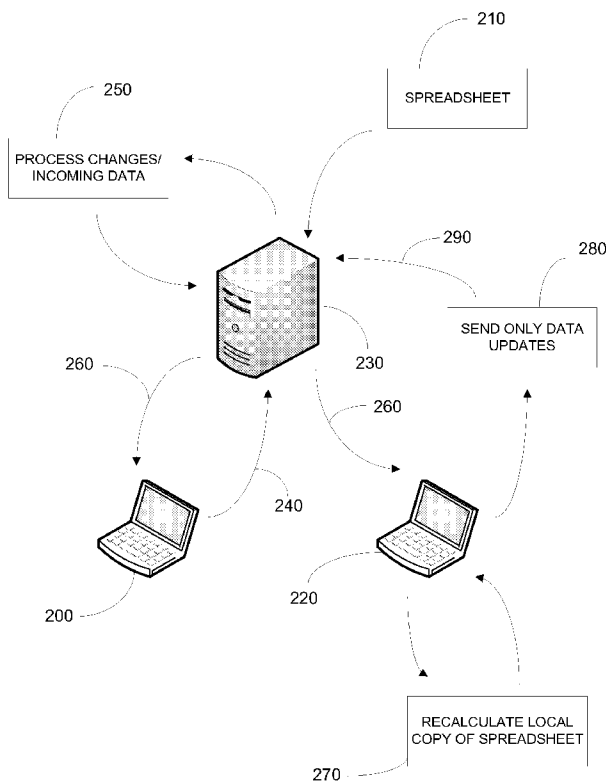


FIG. 2

(57) Abstract: Techniques for performing a process during a real time collaboration by multiple users or clients on a spreadsheet file are disclosed herein which may permit calculations to be performed locally by at least one of the clients. By doing so, increases in performance are realized since only data updates need to be provided to the host machine. As such, a determination is preferably made whether calculations performed locally can result in different data. If conflicting data is a possibility, then the calculations for the spreadsheet file will usually be performed remotely by a host machine. If not, then each client capable of doing so will perform the calculations locally and then provide only the updated data to the host machine. The determination of whether to perform the calculations locally or not may also be made dynamically, such as when one or more new formulas are added to the spreadsheet file.

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- *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))*

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## INTERNATIONAL SEARCH REPORT

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According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC: G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility models and applications for Utility models since 1975  
Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS(KIPO internal) "Keywords: spreadsheet, collaborate, data conflict, synchronization and similar terms"

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category* | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|-----------|---|-----------------------|
| X         | US 2007-233811 A1 (ROCHELLE et al.) 04 October 2007   | 1-13                  |
| Y         | See the abstract, figures 1 and 3-4, paragraphs [0006]-[0008] and [0030-0037], and claims 1-8.  | 14-20                 |
| Y         | US 6,564,246 B1 (VARMA et al.) 13 May 2003<br>See the abstract, figures 2-4, col.2 line 38 - col.3 line 50, col. 6 lines 1-14,<br>and col.10 line 8 - col.11 line 19. | 14-20                 |
| A         | KR 10-2000-0076508 A (IBM CORP.) 26 December 2000<br>See the abstract, figures 1-2 and 5, and pages 3 and 5.  | 1-20                  |
| A         | KR 10-2004-0077497 A (MICROSOFT CORP.) 04 September 2004<br>See the abstract, figures 2-5, and pages 5-7.   | 1-20                  |
| A         | US 2005-0102364 A1 (OZZIE et al.) 12 May 2005<br>See the abstract and figures 3-5.  | 1-20                  |

 Further documents are listed in the continuation of Box C. See patent family annex.

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Information on patent family members

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