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Declarations under Rule 4.17:

[Continued on next page]

(54) **Title:** MULTI-THREADED SORT OF DATA ITEMS IN SPREADSHEET TABLES

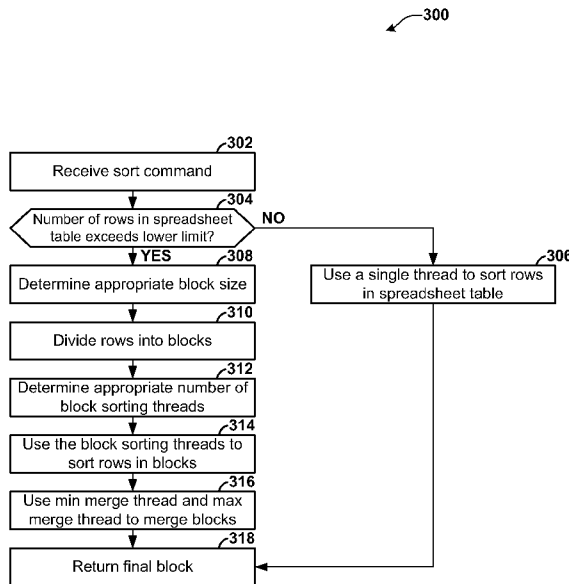


FIG. 3

(57) **Abstract:** To perform a sort operation on a spreadsheet table, data items in the spreadsheet table are divided into a plurality of blocks. Multiple threads are then used to sort the data items in the blocks. After the data items in the blocks are sorted, multiple threads are used to merge the blocks into a final block. The final block contains each of the data items in the spreadsheet table. A sorted version of the spreadsheet table is then displayed. Data items in the sorted version of the spreadsheet table have the same order as an order of data items in the final block.

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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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A. CLASSIFICATION OF SUBJECT MATTER**G06F 9/38(2006.01)i, G06F 9/44(2006.01)i, G06F 17/00(2006.01)i**

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)

G06F 9/38; G06F 7/08; G06F 17/00; G06F 12/00

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

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords:merge, sort, multiple threads, appropriate block size

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	INOUE, H. et al, AA-Sort: A New Parallel Sorting Algorithm for Multi-Core SIMD Processors, IN: the 16th International Conference on Parallel Architecture and Compilation Techniques, 2007, ISBN:0-7695-2944-5 (INOUE, H. et al)	1,7-9,10,13-14
Y	See chapter 4.3 and figure 6.	2-3,11-12
A		4-6,15
Y	HAMEED, A. Parallelization of the AAE algorithm, Honours thesis, University of Tasmania, 2007 (HAMEED, A.)	2-3,11-12
A	See chapter 5.2.2.	1,4-10,13-15
A	US 2008-0208861 A1 (RAY, R.S. et al.) 28 August 2008 See abstract, paragraphs [0015]-[0020], and figure 2.	1-15
A	KR 10-2009-0018097 A (Microsoft Corporation) 19 February 2009 See the whole document.	1-15

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

* Special categories of cited documents:

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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