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(54) Title: COMPUTING SYSTEM WITH HARDWARE RECONFIGURATION MECHANISM AND METHOD OF OPERATION THEREOF

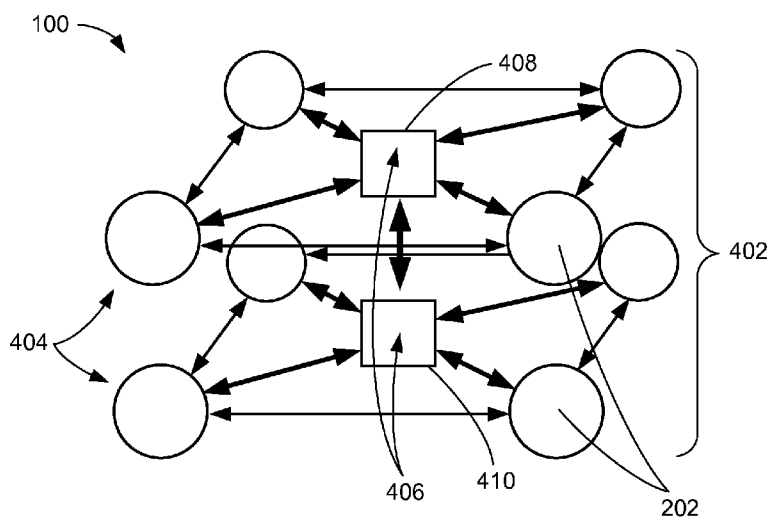


FIG. 4

(57) Abstract: A method for operating a computing system includes: receiving an application-tree for instantiating an application in a reconfigurable hardware device; operating a kernel unit for determining an unoccupied logic-sector within a reconfigurable hardware device; calculating a layout section from the application-tree according to the unoccupied logic-sector for instantiating a fragment circuitry corresponding to the layout section; and determining a system table for connecting the fragment circuitry to other portions of the application to form the application having the fragment circuitry.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/036673

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06F 12/00 (2012.01)

USPC - 711/112

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(8) - G06F 12/00; G06F 9/44, 9/45 (2012.01)

USPC - 711/112, 118; 717/134, 158

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

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

Orbit, Patbase, Google Patent

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/0088691 A1 (HAMMES et al) 06 May 2004 (06.05.2004) entire document	1,3,5-6,8-10,13
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Y		2,4,7,11,12,14-20
Y	US 2007/0078988 A1 (MILOUSHEV et al) 05 April 2007 (05.04.2007) entire document	2,17
Y	US 2010/0079302 A1 (EIDE et al) 01 April 2010 (01.04.2010) entire document	4,19
Y	US 2005/0108464 A1 (ZIEVERS) 19 May 2005 (19.05.2005) entire document	7,11,14,15
Y	US 2009/0172666 A1 (YAHALOM et al) 02 July 2009 (02.07.2009) entire document	12
Y	US 2010/0262779 A1 (POTKONJAK) 14 October 2010 (14.10.2010) entire document	11
Y	US 6,784,903 B2 (KODOSKY et al) 31 August 2004 (31.08.2004) entire document	16-20

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“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

“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

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