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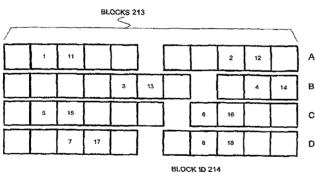
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[Continued on next page]

(54) Title: CACHING OF INFORMATION ACCORDING TO POPULARITY



7 17 8 18 19 D

BLOCK ID 214 POPULARITY 215 POPULARITY 216

1 9 2 2 1 4 6 10

3 1 13 1 11 14 16 20

4 7 14 8

5 3 15 3

6 5 7 1 17 1

8 18 3

(57) Abstract: A system and method to cache at least one block (214) in at least one cache (216) if the block has a popularity (215) that compares favorably to the popularity of other blocks in the cache, where the popularity of the block is determined by the reads of the block from persistent storage and reads of the block from the cache.

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PCT/US06/22880 CLASSIFICATION OF SUBJECT MATTER IPC: G06F 12/12(2006.01) USPC: 711/134.133 According to International Patent Classification (IPC) or to both national classification and IPC R FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S.: 711/134,133,136 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) WEST (PG PUBS, US Patents, US OCR, JP ABS, EPO ABS, DERWENT, IBM TDB) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category * Relevant to claim No. X US 5,778,430 A (ISH et al) 7 July 1998 (07.07.1998), note the abstract and Figures 6a-c. 1, 21 Y 2-20, 22 X US 5,590,320 A (MAXEY) 31 December 1996 (31.12.1996), note Figures 6 and 7 and 1, 21 column 6, lines 20-27. Y 2-20, 22 US 7,133,971 B2 (MATICK et al) 7 November 2006 (11.07.2006), note the abstract and Х 1, 21 Figures 2 and 4. 2-20, 22 Further documents are listed in the continuation of Box C. See patent family annex. later document published after the international filing date or priority Special categories of cited documents: date and not in conflict with the application but cited to understand the "A" document defining the general state of the art which is not considered to be of principle or theory underlying the invention document of particular relevance; the claimed invention cannot be "E" earlier application or patent published on or after the international filing date considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to "V" establish the publication date of another citation or other special reason (as 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 "വ" document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the document member of the same patent family priority date claimed Date of mailing of the international search report 0.9 MAR 2007 Date of the actual completion of the international search 06 January 2007 (06.01.2007) Name and mailing address of the ISA/US Authorized officer Michelle R. Tason Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Telephone No. (571) 272-9000 Alexandria, Virginia 22313-1450

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