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(71) Applicant (for all designated States except US): **INVEN-SYS SYSTEMS, INC.** [US/US]; 33 Commercial Street, Foxboro, Massachusetts 02035 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **NARYZHNY, Yevgeny, V.** [RU/US]; 4810 Park Newport, Newport Beach, California 92660 (US). **AVERGUN, Mikhail** [US/US]; 12618 Caminito Radiante, San Diego, California 92130 (US).

(74) Agent: **JOY, Mark**; Leydig, Voit & Mayer, Ltd., Two Prudential Plaza, Suite 4900, Chicago, Illinois 60601 (US).

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(54) Title: METHOD AND SYSTEM FOR TIME-WEIGHTED CACHE MANAGEMENT

(57) Abstract: Disclosed is a technique for managing memory items in a cache. An "age-lock" parameter is set to protect the newer memory items. When an incoming memory item (such as a history block header) is to be added to the cache, the amount of free space in the cache is checked. If there is insufficient free space for the incoming memory item, then space is freed up by removing memory items from the cache. No memory items protected by the age-lock parameter are removed. Of the older items, the selection for removal follows any of a number of well know cache management techniques, such as the "least recently used" algorithm. A "maximum size" parameter can be set for the cache. If the cache exceeds this maximum size, then free space is released and memory items are removed to decrease the cache size.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: **G06F 12/00**(2006.01)
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USPC: 711/100,117,118,133,136,154,160

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)

U.S. : 711/100,117,118,133,136,154,160

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

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

EAST, DERWENT, USPGPUB, EPO/JPO abstr, NORTH database, NPL and IEEE.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,842,826 A (McNutt) 11 January 2005; column 1, lines 52-56; column 2, lines 13-45; figure 5, column 5, lines 11 et seq.; column 6, lines 6 et seq.; column 7, lines 14 et seq.; column 9, lines 5 et seq.;).	1-6, 9-14 and 17-22
A	US 5,511,180 A (SCHIEVE) 23 April 1996; see entire patent.	1-24
A	US 5,974,509 A (BERLINER) 26 October, 1999. See entire document.	1-24.

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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22 April 2008 (22.04.2008)

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

Mathew M. Kim

Telephone No. (703) 305-3900