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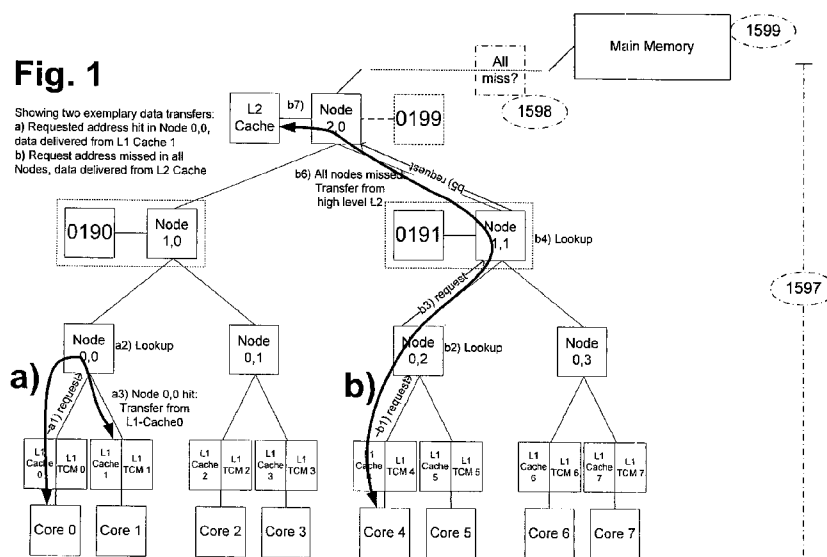
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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR A CACHE IN A MULTI-CORE PROCESSOR

Fig. 1

Showing two exemplary data transfers:
a) Requested address hit in Node 0,0,
data delivered from L1 Cache 1
b) Requested address missed in all
Nodes, data delivered from L2 Cache



(57) Abstract: The invention relates to a multi-core processor system, in particular a single-package multi-core processor system, comprising at least two processor cores, preferably at least four processor cores, each of said at least two cores, preferably at least four processor cores, having a local LEVEL-1 cache, a tree communication structure combining the multiple LEVEL-1 caches, the tree having at least one node, preferably at least three nodes for a four processor core multi-core processor, and TAG information is associated to data managed within the tree, usable in the treatment of the data.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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ADD.

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

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 practical, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/143404 A1 (CHEN YEN-KUANG [US] ET AL) 29 June 2006 (2006-06-29)	1,3,4,9, 14,31, 33,34, 36,38
Y	abstract; figure 1	2,35,37
A	paragraphs [0035] - [0039]; figure 5 paragraphs [0041] - [046,]; figure 6 paragraphs [0024] - [0025]; figure 3	5-8, 10-13, 15-30, 32,39-42
Y	----- US 6 986 003 B1 (SIPPLE RALPH E [US] ET AL) 10 January 2006 (2006-01-10) figure 5	2,35,37
A	----- GB 2 316 204 A (IBM [US]) 18 February 1998 (1998-02-18) abstract; figure 1 figures 5-7 -----	1-42



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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