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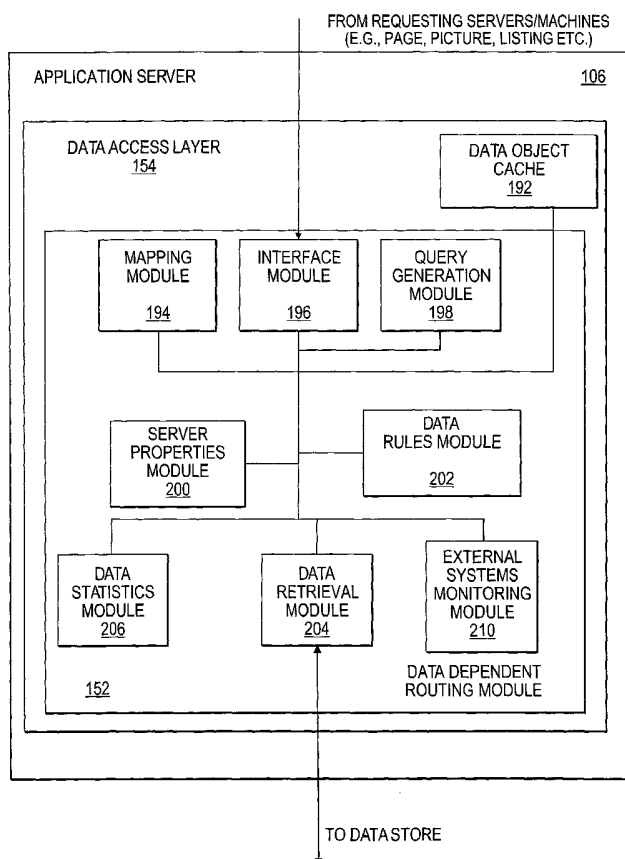
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(54) Title: METHOD AND SYSTEM FOR MANAGING DATA TRANSACTION REQUESTS



(57) Abstract: A method and system is provided to process data transactions in a data store including a plurality of databases. The system may comprise a computer interface module to receive a data transaction request from at least one requesting computer and a data store interface module to interface the system to the plurality of databases. The system also includes a data access layer defining an abstraction layer to identify at least one database of the plurality of databases. The data transaction request may be an object orientated request and the plurality of databases may be horizontally distributed wherein the data access layer defines an object orientated abstraction layer between the computer interface module and the plurality of databases. In one embodiment a data dependent routing module is provided that generates a query to a database that is identified based on content of the data in the data transaction request.



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/14997

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/60

US CL : 705/1

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. : 705/1, 22, 28

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)  
Please See Continuation Sheet

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,487,542 (EBATA et al.) 26 November 2002 (26.11.2002) abstract, figures 1-4D, 7-8, 10, 11, 15, column/line 12/58-16/24	1-30

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

☐ See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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## INTERNATIONAL SEARCH REPORT

### **Continuation of B. FIELDS SEARCHED Item 3:**

WEST

search terms: data layer, database, abstraction, two-tier architecture, n-tier architecture