(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification:
G06F 11/14 (2006.01)   G06F 17/30 (2006.01)

(21) International Application Number:
PCT/US2006/005909

(22) International Filing Date:
17 February 2006 (17.02.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/061,152   18 February 2005 (18.02.2005)   US

(71) Applicant (for all designated States except US): ORACLE INTERNATIONAL CORPORATION [US/US]; 500 Oracle Parkway, Redwood Shores, California 94065 (US).

(72) Inventors; and
(75) Inventors/Applicants (for US only): CHAN-DRASEKARAN, Sashikanth [IN/US]; 4325 Renaissance Drive, #213, San Jose, California 95134 (US). PRUS-CINO, Angelo [IT/US]; 436 Distel Drive, Los Altos, California 94022 (US).
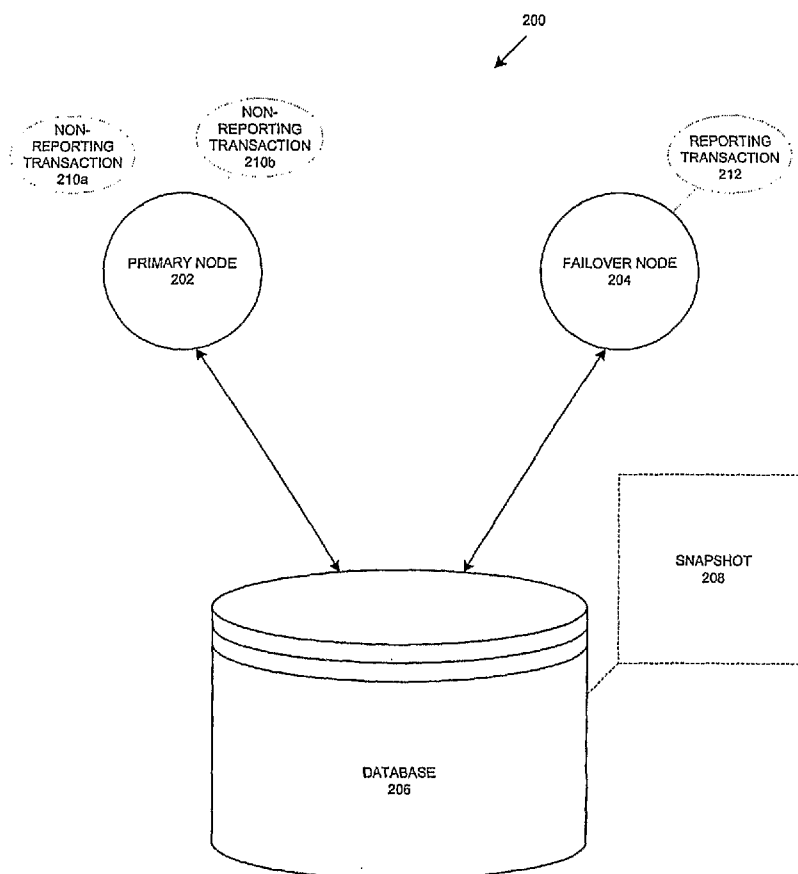
(74) Agents: MEI, Peter, C. et al.; BINGHAM McCUTCHEN, LLP, Three Embarcadero Center, Suite 1800, San Francisco, California 94111-4067 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, 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, IS, IT, LT, LU, LV, 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).

(54) Title: METHOD AND MECHANISM OF HANDLING REPORTING TRANSACTIONS IN DATABASE SYSTEMS

(57) Abstract: Disclosed are improved methods, systems, and mediums for handling reporting transactions in database systems. In some embodiments, database snapshots are used to carry out reporting transactions on a failover node concurrently with execution of non-reporting transactions on a primary node.

WO 2006/089263 A3

INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
INV. G06F11/14   G06F17/30

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)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BOBROWSKI S ET AL: "The Oracle8 Replication Manual, Part No. A58245-01, Chapters 1-2" ANNOUNCEMENT MARTIN SHOW DESIGNER, XX, XX, December 1997 (1997-12), page complete, XP002290509 pages 1-4 - pages 1-11 pages 2-1 - pages 2-24 pages 2-34 - pages 2-37 pages 2-40 - pages 2-41 -/--	1-23

[X] Further documents are listed in the continuation of Box C.

[X] 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

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"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

"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.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
24 May 2007	14/06/2007

Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Bozas, Ioannis

Form PCT/ISA/210 (second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DOMINIC J DELMOLINO: "Strategies and Techniques for Using Oracle7 Replication" INTERNET CITATION, [Online] 1995, XP002267343 Retrieved from the Internet: URL:http://www.indiana.edu/dbateam/resources/tips/ddelmoli.pdf> [retrieved on 2004-01-16] paragraph [0002] paragraph [05.2] – paragraph [0006]	1-23
A	US 2003/167380 A1 (GREEN ROBBIE A [US] ET AL) 4 September 2003 (2003-09-04) abstract paragraph [0003] – paragraph [0014]	1-23
A	EP 1 324 229 A (NCR INT INC [US]) 2 July 2003 (2003-07-02) abstract paragraph [0004] – paragraph [0008] paragraph [0018] – paragraph [0026]	1-23
P,A	HITZ, D. ET. AL:: "File system design fon an NFS File Server Appliance" NETWORK PPLIANCE TECHNICAL REPORT 3002, [Online] 2005, pages 1-13, XP002435037 Retrieved from the Internet: URL:http://www.netapp.com/library/tr/3002.pdf> [retrieved on 2007-05-24] the whole document	1-23
A	LINDSAY B ET AL: "A snapshot differential refresh algorithm" SIGMOD RECORD, SIGMOD, NEW YORK, NY, US, vol. 15, no. 2, 28 May 1986 (1986-05-28), pages 53-60, XP002134864 ISSN: 0163-5808 the whole document	1-23
A	ADIBA M E ET AL: "DATABASE SNAPSHOTS" IBM RESEARCH REPORT, SAN JOSE, CA, US, 7 March 1980 (1980-03-07), pages 1-16, XP000747603 the whole document	1-23

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US 2003167380	A1	04-09-2003	US	2006107006 A1	18-05-2006
EP 1324229	A	02-07-2003	NONE		