Tab settings To the Honorable Commissioner of Patents and Trademarks: I 1. Name of conveying party(ies): Oracle Corporation Additional name of conveying party(ies) attached? Yes No	· · · · · · · · · · · · · · · · · · ·
Name of conveying party(ies): Oracle Corporation	Name and address of receiving party(ies)
Oracle Corporation	
Additional name of conveying party(ies) attached? ☐ Yes ⊠ No	Name: Oracle International Corporation
Additional name of conveying party(ies) attached? ☐ Yes ☒ No	
Additional name of conveying party(ies) attached? ☐ Yes ☒ No	Address: 500 Oracle Parkway
	Box 5op7
	Redwood Shores, CA 94065
3. Nature of conveyance:	Additional Name(s) & address(es) attached? Yes
	Additional Hame(s) & address(es) attached:
☐ Security Agreement ☐ Change of Name	
Other	
Execution Date: October 30, 2003	
Additional numbers att	ached? ☐ Yes ⊠ No
Additional numbers are	
Name and address of party to whom correspondence concerning this document should be mailed:	Total number of applications and patents involved:
Name: Edward A. Pennington, Esq.	7. Total fee (37 CFR 3.41) \$ 40
Address: Swidler Berlin LLP 3000 K Street, NW	☐ Enclosed
Suite 300 Washington, DC 20007-5116	Authorized to be charged to deposit account
	8. Deposit account number:
5 GTON11 00000007 195127 11179497	19-5127, Order # <u>19111.0186</u>
40.00 DA	(Attach duplicate copy of this page if paying by depos
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Statement and signature.	
9. Statement and signature. To the best of my knowledge and belief, the foregoing infor-	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT ASSIGNMENT

WHEREAS, in consideration of good and valuable consideration, the receipt of which is hereby acknowledged, Oracle Corporation, a corporation of Delaware, with a place of business at 500 Oracle Parkway, Redwood Shores, California 94065, hereinafter referred to as "Assignor," has sold, assigned, transferred and set over, unto Oracle International Corporation (OIC), a corporation of California, with a place of business at 500 Oracle Parkway, Redwood Shores, California 94065, hereinafter referred to as "Assignee," its successors, legal representatives and assigns, Assignor's entire right, title and interest in, to, and under the issued patents and provisional and non-provisional pending applications listed on the attached Schedule A, as well as any divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may hereafter be filed for inventions embodied by said pending applications in any country or countries foreign to the United States, and all Letters Patent which may be granted for said inventions embodied by said pending applications in any country or countries foreign to the United States and all extensions, renewals and reissues thereof and all rights of priority in any such country or countries based upon the filing of said pending applications in the United States which are created by any law, treaty or international convention; and Assignor hereby authorizes and requests the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty is to issue patents on any such applications as aforesaid, to issue all Letters Patent for said inventions to Oracle International Corporation, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND Assignor does hereby covenant that it had full right to convey the entire interest herein assigned, and that Assignor has not executed, and will not execute, any agreement in conflict herewith.

AND Assignor does further hereby covenant and agree that it will communicate to said Assignee, its successors, legal representatives and assigns, any facts known to it respecting said pending applications, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything reasonably necessary to aid said Assignee, its successors, legal representatives and assigns, to obtain and enforce any attendant rights in all countries.

1 of 4

PATENT REEL: 016778 FRAME: 0014

IN WITNESS WHERE	EOF, Oracle Corporation has caused this instrument to	to be signed
by a duly authorized corporate of	officer and its corporate seal to be affixed, as of this _	30th
day of October	, 2003.	

Oracle Corporation

y. /rance

Name: Daniel Cooperman

Title: Senior Vice President and General Counsel

Schedule A Patent Applications

No	Attorney	OIC Docket No.	Appl. No.	Filing Date	<u>Title</u>
	Docket No.			<u> </u>	
1	19111.0008	OID-2000-077-01	10/040,362	1/9/2002	DATABASE-CENTRIC ARCHITECTURE SUPPORTING DATA MINING
2	19111.0010	OID-2000-077-03	10/146,821	5/17/2002	PROGRESS NOTIFICATION SUPPORTING DATA
3	19111.0011	OID-2000-077-04	10/284,,088	10/31/2002	CHECKPOINT MODEL BUILDING FOR DATA MINING
4	19111.0012	OID-2000-081-01	09/915,286	7/27/2001	DATA MINING APPLICATION PROGRAMMING INTERFACE
5	19111.0013	OID-2000-082-01	09/788,459	2/21/2001	AUTOMATED MULTI-LINE LABELING OF A TIME AXIS
6	19111.0018	OID-2000-087-01	10/142,,169	5/10/2002	UNIVERSAL TREE INTERPRETER FOR DATA MINING MODELS
7	19111.0021	OID-2000-096-01	10/152,574	5/23/2002	CLUSTERING MODULE FOR DATA MINING
8	19111.0023	OID-2000-101-01	10/077,965	2/20/2002	DATA MINING RECOMMENDATION WEB BEANS AND JSP TAG LIBRARIES
9	19111.0024	OID-2000-103-01	09/917,763	7/31/2001	DATA MINING AGENTS FOR EFFICIENT HARDWARE UTILIZATION
10	19111.0025	OID-2000-077-07	10/324,007	12/20/2002	WEB BASED DATA MINING WITH INTEGRATED METHODOLOGIES
11	19111.0028	OID-2000-092-01	10/156,060	5/29/2002	SQL-BASED NAÏVE BAYES MODEL BUILDING AND SCORING
	19111.0032	OID-2000-100-01	10/152,731	5/23/2002	NEURAL NETWORK MODULE FOR DATA MINING
13	19111.0034	OID-2000-110-01	09/893,550	6/29/2001	NEAREST NEIGHBOR QUERY PROCESSING IN A LINEAR QUADTREE SPATIAL INDEX
14	19111.0037	OID-2000-119-01	09/865,597	5/29/2001	QUADTREE CENTER TILE/BOUNDARY TILE OPTIMIZATION
15	19111.0038	OID-2000-126-01	09/867,678	5/31/2001	MAPPING LOGICAL ROW IDENTIFIERS FOR PRIMARY B+TREE-LIKE STRUCTURES TO PHYSICAL ROW IDENTIFIERS
16	19111.0039	OID-2000-169-01	10/153,607	5/24/2002	INTELLIGENT SAMPLING FOR NEURAL NETWORK DATA MINING MODELS
17	19111.0040	OID-2000-170-01	09/865,599	5/29/2001	SUPPORTING BITMAP INDEXES ON PRIMARY B+TREE LIKE STRUCTURES
18	19111.0041	OID-2000-171-01	09/865,598	5/29/2001	ONLINE TRACKING AND FIXING OF INVALID GUESS-DBAS IN SECONDARY INDEXES AND MAPPING TABLES ON PRIMARY B+TREE STRUCTURES
19	19111.0042	OID-2000-160-01	09/886,487	6/22/2001	QUERY PRUNING USING INTERIOR RECTANGLES IN AN R-TREE INDEX
20	19111.0043	OID-1999-154-01	09/730,828	12/7/2000	SUMMARY CREATION
	19111.0045	OID-2000-016-01	09/730,826	12/7/2000	QUERY GENERATOR
22	19111.0046	OID-2000-020-01	09/730,751	12/7/2000	USER INTERFACE
23	19111.0048	OID-2000-030-01	09/730,724	12/7/2000	PROPERTY EXTENSIONS
24	19111.0049	OID-2000-094-01	09/963,401	9/27/2001	ENTERPRISE WEB MINING SYSTEM AND METHOD
25	19111.0050	OID-2001-115-01	09/871,720	6/4/2001	SUPPORTING B+TREE INDEXES ON PRIMARY B+TREE STRUCTURES WITH LARGE PRIMARY KEYS
26	19111.0051	OID-2001-039-01	09/933,905	8/22/2001	SYSTEM AND METHOD FOR SEARCH AND RECOMMENDATION BASED ON USAGE MINING
27	19111.0053	OID-2001-041-01	09/993,670	11/27/2001	METHOD AND SYSTEM FOR PROVIDING LOCATION-BASED EVENT SERVICE

Swidler, Berlin, Shereff, Friedman

PATENT REEL: 016778 FRAME: 0016

No	Attorney	OIC Dock To.	Appl. No.	Filing Date	Title
	Docket No.				
28	19111.0054	• OID-2000-179-01	09/838,158	4/20/2001	METHOD FOR RETRIEVING DATA FROM A
					DATABASE
29	19111.0055	OID-1999-132-01	09/838,299	4/20/2001	DOCUMENT LINKS
30	19111.0056	OID-2001-018-01	09/867,680	5/31/2001	DATABASE INTERFACE SYSTEM
31	19111.0057	OID-2001-017-01	09/867,679	5/31/2001	DATA ENTRY CONTROL SYSTEM
32	19111.0058	OID-2001-016-01	09/866,799	5/30/2001	DISPLAY SYSTEM AND METHOD
33	19111.0059	OID-2001-096-01	09/988,155	11/19/2001	AUTOMATED ENTRY OF INFORMATION INTO
					FORMS OF MOBILE APPLICATIONS
34	19111.0060	OID-2001-097-01	10/003,263	12/6/2001	WALLET FOR STORAGE OF INFORMATION FOR
					AUTOMATED ENTRY INTO FORMS OF MOBILE
					APPLICATIONS
35	19111.0061	OID-2001-101-01	09/988,338	11/19/2001	RUNTIME TRANSLATOR FOR MOBILE
					APPLICATION CONTENT
	19111.0062	OID-2001-102-01	09/988,330	11/19/2001	END-TO-END MOBILE COMMERCE MODULES
	19111.0063	OID-2001-133-01	10/076,540	2/19/2002	AUTOMATIC TREND ANALYSIS DATA CAPTURE
38	19111.0064	OID-2001-131-01	10/117,116	4/8/2002	HIERARCHICAL ORG-CHART BASED EMAIL
					MAILING LIST MAINTENANCE
	19111.0065		10/337,309	1/7/2003	IMPROVED MEMORY PAGING
40	19111.0067	OID-2001-088-01	09/968,913	10/3/2001	SQL EXECUTION ANALYSIS
41	19111.0068	OID-2001-057-01	09/983,913	10/26/2001	AUTOMATIC SOURCE CODE GENERATION
42	19111.0070	OID-2001-058-01	10/228,043	8/27/2002	DATA STORAGE SYSTEM
	19111.0071	OID-2002-010-01	10/324,004	12/20/2002	DYNAMIC BUSINESS CARDS
	19111.0072	OID-2001-122-01	10/073,329	2/13/2002	DATA HANDLING APPLICATIONS
45	19111.0073	OID-2001-155-01	10/158,226	5/31/2002	COST/BENEFIT BASED CHECKPOINTING WHILE
					MAINTAINING A LOGICAL STANDBY DATABASE
46	19111.0074	OID-2001-160-01	10/153,034	5/23/2002	COMMUNICATING DATA DICTIONARY
					INFORMATION OF DATABASE OBJECTS THROUGH
					A REDO STREAM
47	19111.0085	OID-2002-140-01	10/230,267	8/29/2002	ASYNCHRONOUS DATA MINING SYSTEM FOR
					DATABASE MANAGEMENT SYSTEM
48	19111.0086	OID-2002-141-01	10/274,039	10/21/2002	ADAPTIVE BAYES NETWORK DATA MINING
					MODELING

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PATENT REEL: 016778 FRAME: 0017