PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Adam FERRARI	07/24/2012
Joshua William KAPELL	07/31/2012
Jason FURTADO	06/20/2012
Matthew L. BRANDWEIN	06/20/2012
Spiro MICHAYLOV	07/24/2012
Omri TRAUB	06/20/2012
Eli DANIEL	06/25/2012
Vladimir ZELEVINSKY	06/25/2012
Alexander D. ROSEN	06/26/2012
John HUFFAKER	06/21/2012
Gregory C. SCOTT	07/16/2012
Eugene JITOMIRSKY	06/20/2012

RECEIVING PARTY DATA

Name:	Oracle International Corporation	
Street Address:	500 Oracle Parkway	
Internal Address:	Mail Stop 5OP7	
City:	Redwood Shores	
State/Country:	CALIFORNIA	
Postal Code:	94065	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13495175

CORRESPONDENCE DATA

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 7037207801

 Phone:
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Email: ipgeneraltyc@squiresanders.com,sonia.mcvean@squiresanders.com
PATENT

REEL: 028749 FRAME: 0355

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.

Correspondent Name: Squire Sanders (US) LLP

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ATTORNEY DOCKET NUMBER:

104402.00580

NAME OF SUBMITTER:

Barry S. Goldsmith

Total Attachments: 13

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PATENT REEL: 028749 FRAME: 0356

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

- (A) Adam FERRARI, a United States citizen, residing in Cambridge, MA;
- (B) Joshua William KAPELL, a United States citizen, residing in Brooklyn, NY;
- (C) Jason FURTADO, a United States citizen, residing in Boston, MA;
- (D) Matthew L. BRANDWEIN, a United States citizen, residing in San Francisco, CA;
- (E) Spiro MICHAYLOV, a United States citizen, residing in Kirkland, WA;
- (F) Omri TRAUB, a United States citizen, residing in Brookline, MA;
- (G) Eli DANIEL, a United States citizen, residing in Somerville, MA;
- (H) Vladimir ZELEVINSKY, a United States citizen, residing in Sharon, MA;
- (I) Alexander D. ROSEN, a United States citizen, residing in Somerville, MA;
- (J) John HUFFAKER, a United States citizen, residing in Boston, MA;
- (K) Gregory C. SCOTT, a United States citizen, residing in Boston, MA; and
- (L) Eugene JITOMIRSKY, a Canada citizen, residing in Somerville, MA;

(hereinafter referred to as ASSIGNOR(S)), has made a discovery and/or invention entitled:

INFORMATION RETRIEVAL AND NAVIGATION USING A SEMANTIC LAYER

	for which application for Letters Patent of the United States has been executed on even date herewith,
\boxtimes	for which application for Letters Patent of the United States has been filed on <u>June 13, 2012</u> , under Application No. <u>13/495,175</u> , and

Oracle International Corporation, a corporation of California, having a business address of 500 Oracle Parkway, Mail Stop 5OP7, Redwood Shores, CA 94065

and which, together with its successors, assigns, and legal representatives, is hereinafter referred to as ASSIGNEE, is desirous of acquiring the entire right, title and interest in, to and under said invention and in, to and under Letters Patent or similar legal protection to be obtained therefor in the United States and in any and all foreign countries.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN:

Be it known that for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sells, assigns and transfers to ASSIGNEE, the full and exclusive right, title and interest to said discovery or invention in the United States and its territorial possessions and in all foreign countries and to all Letters Patent or similar legal protection in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any continuation, continuation-in-part,

Oracle Matter No. ORA121114-US-NP

WHEREAS:

PATENT REEL: 028749 FRAME: 0357 divisional, reexamination, renewal, substitute, reissue and/or any application claiming priority thereof, including any legal equivalent thereof, in a foreign country for the full term or terms for which the same may be granted.

I. SAID ASSIGNOR(S), hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and any Official of any country or countries foreign to the United States of America whose duty it is to issue Letters Patent on applications as aforesaid, to issue all such Letters Patent for said discovery or invention to the ASSIGNEE, as assignee of the entire right, title and interest in, to and under the same, for the sole use and benefit of the ASSIGNEE in accordance with the terms of this instrument.

I. SAID, ASSIGNOR(S), hereby covenant with ASSIGNEE that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned and that I have full right to convey the entire right, title and interest herein sold, assigned, transferred and set over:

AND I, SAID ASSIGNOR(S) hereby further covenant and agree that the ASSIGNEE may apply for foreign Letters Patent on said discovery or invention and claim the benefits of the International Convention, and that I will, at any time, when called upon to do so by the ASSIGNEE communicate to the ASSIGNEE as the case may be, any facts known to me respecting said discovery or invention, and execute and deliver any and all lawful papers that may be necessary or desirable to perfect the title to the said discovery or invention, the said applications and the said Letters Patent in the ASSIGNEE and that if reissues or reexaminations of the said Letters Patent or disclaimers relating thereto, or divisionals, continuations, continuation-in-parts of the said applications shall hereafter be desired by the ASSIGNEE, I will, at any time, when called upon to do so by the ASSIGNEE sign all lawful papers, make all rightful oaths, execute and deliver all such disclaimers and all divisional, continuation, continuation-in-part, reexamination, and reissue applications so desired, and do all lawful acts requisite for the application for such continuations, continuation-in-parts, divisionals, reexaminations, or reissues and the procuring thereof and for the filing of such disclaimers and such applications, and generally do everything possible to aid the ASSIGNEE to obtain and enforce proper patent protection for said invention or discovery in all countries, all without further compensation but at the expense of the ASSIGNEE.

ASSIGNOR hereby authorizes and requests the prosecuting law firm to insert herein above the application number and filing date of said application when known.

Inventor(s): Please Sign and Date Below:

(A)	Adam FERRARI	Date:	7/24/12
(B)	Joshua William KAPELL	Date:	·

Oracle Matter No. ORA121114-US-NP

Attorney Docket No. <u>104402.00580</u>

divisional, reexamination, renewal, substitute, reissue and/or any application claiming priority thereof, including any legal equivalent thereof, in a foreign country for the full term or terms for which the same may be granted.

I, SAID ASSIGNOR(S), hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America and any Official of any country or countries foreign to the United States of America whose duty it is to issue Letters Patent on applications as aforesaid, to issue all such Letters Patent for said discovery or invention to the ASSIGNEE, as assignee of the entire right, title and interest in, to and under the same, for the sole use and benefit of the ASSIGNEE in accordance with the terms of this instrument.

I, SAID, ASSIGNOR(S), hereby covenant with ASSIGNEE that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned and that I have full right to convey the entire right, title and interest herein sold, assigned, transferred and set over;

AND I, SAID ASSIGNOR(S) hereby further covenant and agree that the ASSIGNEE may apply for foreign Letters Patent on said discovery or invention and claim the benefits of the International Convention, and that I will, at any time, when called upon to do so by the ASSIGNEE communicate to the ASSIGNEE as the case may be, any facts known to me respecting said discovery or invention, and execute and deliver any and all lawful papers that may be necessary or desirable to perfect the title to the said discovery or invention, the said applications and the said Letters Patent in the ASSIGNEE and that if reissues or reexaminations of the said Letters Patent or disclaimers relating thereto, or divisionals, continuations, continuation-in-parts of the said applications shall hereafter be desired by the ASSIGNEE, I will, at any time, when called upon to do so by the ASSIGNEE sign all lawful papers, make all rightful oaths, execute and deliver all such disclaimers and all divisional, continuation, continuation-in-part, reexamination, and reissue applications so desired, and do all lawful acts requisite for the application for such continuations, continuation-in-parts, divisionals, reexaminations, or reissues and the procuring thereof and for the filing of such disclaimers and such applications, and generally do everything possible to aid the ASSIGNEE to obtain and enforce proper patent protection for said invention or discovery in all countries, all without further compensation but at the expense of the ASSIGNEE.

ASSIGNOR hereby authorizes and requests the prosecuting law firm to insert herein above the application number and filing date of said application when known.

Inventor(s): Please Sign and Date Below:

	Date:
Adam FERRARI	
Joshua William KAPELL	Date: 7/31/20

Oracle Matter No. ORA121114-US-NP

(C)	Jason FURTADO	Date: <u>6/20/12</u>
(D)	Matthew L. BRANDWEIN	Date:
(E)	Spiro MICHAYLOV	Date:
(F)	Omri TRAUB	Date:
(G)	EII DANIEL	Date:
(H)	Vladimir ZELEVINSKY	Date:
(1)	Alexander D. ROSEN	Date:
(J)	John HUFFAKER	Date:
(K)	Gregory C. SCOTT	Date:
(L)	Eugene JITOMIRSKY	Date:

Oracle Matter No. ORA121114-US-NP

(C)	Jason FUNTADO	
(D)	Namey L. BRANDWEIN	Oate: <u>6/20/17</u>
(E)	Spir MICHAYLOV	
(F)	CHT THACH	
(G)	ER DANIEL	
(*)	Viadimir ZELEVINSKY	
(1)	Alexander D. ROSEN	
(3)	LOWER WATER	
(%)	Gregory C. SCOTT	
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(C).	Jason FURTADO	Date:	
(D).	Matthew L. BRANDWEIN	Date:	
(E)	Spiro MICHAYLOV	Date:	7/24/2012
(F)	Omri TRAUB	Date:	
(G)	Eli DANIEL	Date:	
(H)	Vladimir ZELEVINSKY	Date:	
(1)	Alexander D. ROSEN	Date:	,4444444444444444444444444444444444444
(J)	John HUFFAKER	Date:	·
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(1)	Eugene JITOMIRSKY	Date:	·

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Jason FURTADO	Date:
Matthew L. BRANDWEIN	Date:
Spiro MICHAYLOV	Date:
On 525 Omri TRAUB	Date: <u>6/20//2</u>
EII DANIEL	Date:
/ladimir ZELEVINSKY	Date:
Alexander D. ROSEN	Date:
John HUFFAKER	Date:
Gregory C. SCOTT	Date:
Eugene JITOMIRSKY	Date:

(C)	Jason FURTADO	Date:		• .		
(D)	Matthew L. BRANDWEIN	Date:	-			
(E)	Spiro MICHAYLOV	Date:				
(F)	Omri TRAUB	Date:		.*		
(G)	Eli DANIEL	Date:	6/25/2012			
(H)	Vladimir ZELEVINSKY	Date:				
(1)	Alexander D. ROSEN	Date:		• • •		
(J)	John HUFFAKER	Date:				
(K)	Gregory C. SCOTT	Date:				
(L)	Eugene JITOMIRSKY	Date:				

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Attorney Docket No. <u>104402.00580</u>

(C)	Jason FURTADO	Date:	
(D)	Matthew L. BRANDWEIN	Date:	
(E)	Spiro MICHAYLOV	Date:	Proposal purpose harder group may be commissioned as the company of the company o
(F)	Omri TRAUB	Date:	
(G)	Eli DANIEL	Date:	
(H)	Vladimir ZELEVINSKY	Date:	6/25/2012
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(K)	Gregory C. SCOTT	Date:	
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(L)	Eugene JiTOMIRSKY	Date:	

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(H)	Vladimir ZELEVINSKY	Date:	
(1)	Alexander D. ROSEN	Date:	
(J)	Jørn HUFFAKER	Date:	6/21/2012
(K)	Gregory C. SCOTT	Date:	
(L)	Eugene JITOMIRSKY	Date:	

Oracle Matter No. ORA121114-US-NP

(C)	Jason FURTADO	Date:
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(E)	Spiro MICHAYLOV	Date:
(F)	Omri TRAUB	Date:
(G)	Eli DANIEL	Date:
(H)	Vladimir ZELEVINSKY	Date:
(I)	Alexander D. ROSEN	Date:
(J)	John HUFFAKER	Date:
(K)	Gregory C. SCOTT	Date: 7-16-12
(L)	Eugene JITOMIRSKY	Date:

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(C)	Jason FURTADO	Pate:	
(D)	Matthew L. BRANDWEIN	Pate:	
(E)	Spiro MICHAYLOV	ate:	
(F)	Omri TRAUB	Pate:	
(G)	Eli DANIEL	Pate:	
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(1)	Alexander D. ROSEN	Pate:	
(J)	John HUFFAKER	Pate:	
(K)	Gregory C. SCOTT	Pate:	
(L)	Eugene JITOMIRSKY	pate: <u>C6/20/2</u> 012	

Oracle Matter No. ORA121114-US-NP

3

PATENT REEL: 028749 FRAME: 0369