

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5957036

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the 7TH INVENTOR'S NAME previously recorded on Reel 051250 Frame 0395. Assignor(s) hereby confirms the ASSIGNMENT.
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MARCO ARNABOLDI	02/10/2020
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Oracle International Corporation
<b>Street Address:</b>	500 Oracle Parkway, Mail Stop 5OP7
<b>City:</b>	Redwood Shores
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94065
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16710740
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(408)414-1076
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	408/414-1080
<b>Email:</b>	DSakamoto@h35g.com
<b>Correspondent Name:</b>	HICKMAN PALERMO BECKER LLP
<b>Address Line 1:</b>	1 ALMADEN BOULEVARD, FLOOR 12
<b>Address Line 4:</b>	SAN JOSE, CALIFORNIA 95113
<b>ATTORNEY DOCKET NUMBER:</b>	50277-5552
<b>NAME OF SUBMITTER:</b>	TINA T. WANG
<b>SIGNATURE:</b>	/TinaTWang#64265/
<b>DATE SIGNED:</b>	02/11/2020
<b>Total Attachments: 12</b>	
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<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5862367

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
VLAD HAPRIAN	12/04/2019
LAURENT DAYNES	12/04/2019
SHASANK K. CHAVAN	12/06/2019
JEAN-PIERRE LOZI	12/06/2019
VASILEIOS TRIGONAKIS	12/09/2019
SUNGPACK HONG	12/07/2019
MARCO ARNABOLI <del>ARNABOLDI</del>	12/09/2019
CIPRIAN BAETU	12/10/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Oracle International Corporation
<b>Street Address:</b>	500 Oracle Parkway, Mail Stop 5OP7
<b>City:</b>	Redwood Shores
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94065
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16710740
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<b>Phone:</b>	408/414-1080
<b>Email:</b>	DSakamoto@h35g.com
<b>Correspondent Name:</b>	HICKMAN PALERMO BECKER LLP
<b>Address Line 1:</b>	1 ALMADEN BOULEVARD, FLOOR 12
<b>Address Line 4:</b>	SAN JOSE, CALIFORNIA 95113
<b>ATTORNEY DOCKET NUMBER:</b>	50277-5552
<b>NAME OF SUBMITTER:</b>	TINA T. WANG
<b>SIGNATURE:</b>	/TinaTWang#64265/

ASSIGNMENT OF APPLICATION FOR PATENT

WHEREAS:

Vlad Haprian of Zürich, SWITZERLAND; Laurent Daynes of Saint-Ismier, FRANCE; Shasank K. Chavan of Menlo Park, CA USA; Jean-Pierre Lozi of Zürich, SWITZERLAND; Vasileios Trigonakis of Zürich, SWITZERLAND; Sungpack Hong of Palo Alto, CA USA; Marco Arnaboldi of Zürich, SWITZERLAND and Ciprian Baetu of Zürich, SWITZERLAND

(hereinafter referred to as ASSIGNORS), have made a discovery and/or invention entitled:

HYBRID IN-MEMORY BFS-DFS APPROACH FOR COMPUTING GRAPH QUERIES AGAINST HOMOGENEOUS GRAPHS INSIDE RELATIONAL DATABASE SYSTEMS

- for which application for Letters Patent of the United States has been executed on even date herewith,
- for which application for Letters Patent of the United States has been filed on December 11, 2019, under Application No. 16/710,740, and

WHEREAS:

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, ASSIGNORS hereby sell, assign and transfer 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, 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

Oracle Matter No.  
ORA200094-US-NP-1

10-1-03

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.

**Inventors: Please Sign and Date Below:**

(1)  
Vlad Haprian  
.....  
Name

..... / ..... / .....  
Date

Oracle Matter No.  
ORA200094-US-NP-1

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(2)

Laurent Daynes

.....  
Name

..... / / .....  
Date

Oracle Matter No.  
ORA200094-US-NP-1

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**PATENT**  
**REEL: 051894 FRAME: 0280**

Attorney Docket No. 50277-5552

(3)

Shasank K. Chavan

Name

Date

/ /

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ORA200094-US-NP-1

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**PATENT**  
**REEL: 051894 FRAME: 0281**

(4)

Jean-Pierre Lozi

.....  
Name

..... / ..... / .....  
Date

Oracle Matter No.  
ORA200094-US-NP-1

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Attorney Docket No. 50277-5552

(5)

Vasileios Trigonakis

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

/ \_\_\_\_\_ /

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ORA200094-US-NP-1

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**PATENT**  
**REEL: 051894 FRAME: 0283**

(6)

Sungpack Hong

Name

Date

/

/

Oracle Matter No.  
ORA200094-US-NP-1

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10-1-03

**PATENT**  
**REEL: 051894 FRAME: 0284**

Attorney Docket No. 50277-5552

(7)

Marco Arnaboldi

Name

February 10, 2020

Date

DocuSigned by:

*Marco Arnaboldi*

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ORA200094-US-NP-1

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**PATENT**  
**REEL: 051894 FRAME: 0285**

(8)

Ciprian Baetu

.....  
Name

..... / ..... / .....  
Date

Oracle Matter No.  
ORA200094-US-NP-1

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