

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3442878

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
DUO DING	04/16/2014
SRINIVAS SANIVARAPU	04/17/2014
LAI-CHING LYDIA SO	04/22/2014
JOSEPH CURT PETERS	04/17/2014
CARL ALFRED SHISLER	04/17/2014
GARY LYNN FOWLER	04/17/2014
THUVAN LE	04/21/2014
KAIWHA PENG	04/21/2014
TAO HOU	04/22/2014
WILSON FAI CHIN	04/21/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ORACLE INTERNATIONAL CORPORATION
<b>Street Address:</b>	500 ORACLE PARKWAY
<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>	14266708
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(713)228-8778
<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>	7132288600
<b>Email:</b>	graves@oshaliang.com
<b>Correspondent Name:</b>	ROBERT P. LORD
<b>Address Line 1:</b>	909 FANNIN
<b>Address Line 2:</b>	SUITE 3500
<b>Address Line 4:</b>	HOUSTON, TEXAS 77010
<b>ATTORNEY DOCKET NUMBER:</b>	33227/916001

PATENT

<b>NAME OF SUBMITTER:</b>	COURTNEY GRAVES
<b>SIGNATURE:</b>	/Robert P. Lord/
<b>DATE SIGNED:</b>	07/15/2015
<b>Total Attachments: 8</b> source=916001Assignment#page1.tif source=916001Assignment#page2.tif source=916001Assignment#page3.tif source=916001Assignment#page4.tif source=916001Assignment#page5.tif source=916001Assignment#page6.tif source=916001Assignment#page7.tif source=916001Assignment#page8.tif	

## ASSIGNMENT – WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned individual(s) (referred to herein as the "INVENTOR(S)") hereby assign, transfer, and set over to:

Oracle International Corporation

having the following address:

500 Oracle Parkway  
Redwood Shores, California 94065

(referred to herein as "COMPANY"), its successors, and assigns, the entire right, title, and interest, worldwide, in and to the invention known by the following title:

### METHOD AND APPARATUS FOR DUMMY CELL PLACEMENT MANAGEMENT

for which the undersigned has/have executed an application for patent in the United States of America on or about this same day, together with said patent application, all divisions, continuations, continuations-in-part, reissues, and extensions thereof, and all Letters Patent (domestic and foreign) which may be granted therefor. Such interest represents the entire ownership of said applications and Letters Patent when granted and is to be owned by COMPANY, its successors, and assigns, or their legal representatives, for the full and entire term for which such Letters Patent may be granted or extended, as fully and entirely as the same would have been enjoyed by the INVENTOR(S) if this assignment had not been made.

In addition, the undersigned INVENTOR(S) each hereby agrees:

1. To sign and execute any further documents which may be necessary or desirable, lawful, and proper in connection with the prosecution of all applications for patent(s) on the INVENTION in the United States, including without limitation said application and all divisions, continuations, continuations-in-part, amendments thereof, and all interference proceedings associated therewith, or otherwise necessary or desirable to secure the title thereto to COMPANY;
2. To execute all papers and documents and to perform all lawful acts which may be necessary in connection with claims to priority or otherwise under the International Convention for the Protection of Industrial Property or similar treaties or agreements;
3. To perform all lawful affirmative acts which may be necessary to obtain the grant of a valid and enforceable patent to COMPANY.

The undersigned INVENTOR(S) each hereby authorizes and requests the Commissioner of Patents and Trademarks in the United States to issue any and all Letters Patent resulting from said application, including without limitation any division, continuation, continuation-in-part, or reissue thereof to COMPANY.

The undersigned INVENTOR(S) each hereby grants to the firm of OSHA LIANG LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for the recordation of this document.

32615

PATENT TRADEMARK OFFICE

**OSHALIANG**

Intellectual Property Law

**PATENT**

**REEL: 036116 FRAME: 0803**

IN WITNESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individual's signature:

<u>April 16, 2014</u> Date	1 <sup>st</sup> Inventor Signature: <u>[Signature]</u> Print or Type Name: <u>Duo Ding</u>
_____ Date	2 <sup>nd</sup> Inventor Signature: _____ Print or Type Name: <u>Srinivas Sanivarapu</u>
_____ Date	3 <sup>rd</sup> Inventor Signature: _____ Print or Type Name: <u>Lai-ching Lydia So</u>
_____ Date	4 <sup>th</sup> Inventor Signature: _____ Print or Type Name: <u>Joseph Curt Peters</u>
_____ Date	5 <sup>th</sup> Inventor Signature: _____ Print or Type Name: <u>Carl Alfred Shisler</u>
_____ Date	6 <sup>th</sup> Inventor Signature: _____ Print or Type Name: <u>Gary Lynn Fowler</u>
_____ Date	7 <sup>th</sup> Inventor Signature: _____ Print or Type Name: <u>Thuvan Le</u>
_____ Date	8 <sup>th</sup> Inventor Signature: _____ Print or Type Name: <u>Kaiwha Peng</u>
_____ Date	9 <sup>th</sup> Inventor Signature: _____ Print or Type Name: <u>Tao Hou</u>
_____ Date	10 <sup>th</sup> Inventor Signature: _____ Print or Type Name: <u>Wilson Fai Chin</u>

When this Assignment is not filed concurrently with the patent application,  
the following identifying information may be added after execution:

U.S. Application Serial No.: 14/266,708  
Filing Date: April 30, 2014

OSHALIANG

Intellectual Property Law

PATENT  
REEL: 036116 FRAME: 0804

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Date	1 <sup>st</sup> Inventor Signature:	Print or Type Name:	Duo Ding
Date	2 <sup>nd</sup> Inventor Signature:	Print or Type Name:	Srinivas Sanivarapu
4/22/2014	3 <sup>rd</sup> Inventor Signature:	Print or Type Name:	Lai-ching Lydia So
Date	4 <sup>th</sup> Inventor Signature:	Print or Type Name:	Joseph Curt Peters
Date	5 <sup>th</sup> Inventor Signature:	Print or Type Name:	Carl Alfred Shisler
Date	6 <sup>th</sup> Inventor Signature:	Print or Type Name:	Gary Lynn Fowler
Date	7 <sup>th</sup> Inventor Signature:	Print or Type Name:	Thuvan Le
Date	8 <sup>th</sup> Inventor Signature:	Print or Type Name:	Kaiwha Peng
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Date	10 <sup>th</sup> Inventor Signature:	Print or Type Name:	Wilson Fai Chin

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_____	1 <sup>st</sup> Inventor Signature: _____
Date	Print or Type Name: Duo Ding
APRIL 17, 2014	2 <sup>nd</sup> Inventor Signature: <i>Srinivas Sanivarapu</i>
Date	Print or Type Name: Srinivas Sanivarapu
_____	3 <sup>rd</sup> Inventor Signature: _____
Date	Print or Type Name: Lai-ching Lydia So
4/17/14	4 <sup>th</sup> Inventor Signature: <i>Joseph Curt Peters</i>
Date	Print or Type Name: Joseph Curt Peters
4/17/14	5 <sup>th</sup> Inventor Signature: <i>Carl Alfred Shisler</i>
Date	Print or Type Name: Carl Alfred Shisler
4/17/14	6 <sup>th</sup> Inventor Signature: <i>Gary Lynn Fowler</i>
Date	Print or Type Name: Gary Lynn Fowler
_____	7 <sup>th</sup> Inventor Signature: _____
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Date	Print or Type Name: Kaiwha Peng
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Date	Print or Type Name: Tao Hou
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Date	Print or Type Name: Wilson Fai Chin

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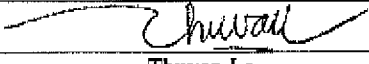
U.S. Application Serial No.: 14/266,708

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Intellectual Property Law

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_____	1 <sup>st</sup> Inventor Signature: _____
Date	Print or Type Name: Duo Ding
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_____	4 <sup>th</sup> Inventor Signature: _____
Date	Print or Type Name: Joseph Curt Peters
_____	5 <sup>th</sup> Inventor Signature: _____
Date	Print or Type Name: Carl Alfred Shister
_____	6 <sup>th</sup> Inventor Signature: _____
Date	Print or Type Name: Gary Lynn Fowler
April 21 <sup>st</sup> , 2014	7 <sup>th</sup> Inventor Signature: 
Date	Print or Type Name: Thuvan Le
_____	8 <sup>th</sup> Inventor Signature: _____
Date	Print or Type Name: Kaiwha Peng
_____	9 <sup>th</sup> Inventor Signature: _____
Date	Print or Type Name: Tao Hou
_____	10 <sup>th</sup> Inventor Signature: _____
Date	Print or Type Name: Wilson Fai Chin

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the following identifying information may be added after execution:

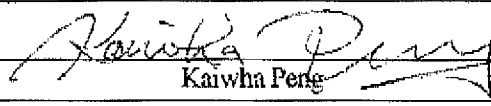
U.S. Application Serial No.: 14/266,708

Filing Date: April 30, 2014

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Intellectual Property Law

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_____	1 <sup>st</sup> Inventor Signature: _____
Date	Print or Type Name: Duo Ding
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Date	Print or Type Name: Gary Lynn Fowler
_____	7 <sup>th</sup> Inventor Signature: _____
Date	Print or Type Name: Thuvan Le
4-21-2014	8 <sup>th</sup> Inventor Signature: 
Date	Print or Type Name: Kaiwha Pere
_____	9 <sup>th</sup> Inventor Signature: _____
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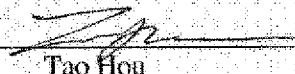
**OSHALLANG**

Intellectual Property Law

**PATENT**  
**REEL: 036116 FRAME: 0808**



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Date	1 <sup>st</sup> Inventor Signature:	Print or Type Name:	Duo Ding
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_____	9 <sup>th</sup> Inventor Signature: _____
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21 April 2014	10 <sup>th</sup> Inventor Signature: _____
Date	Print or Type Name: Wilson Fai Chin

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