

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Stephen Anthony Moyle</td> <td>12/07/2011</td> </tr> <tr> <td>Graham Kenneth Thwaites</td> <td>12/07/2011</td> </tr> </tbody> </table>		Name	Execution Date	Stephen Anthony Moyle	12/07/2011	Graham Kenneth Thwaites	12/07/2011				
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Oracle International Corporation</td> </tr> <tr> <td>Street Address:</td> <td>500 Oracle Parkway</td> </tr> <tr> <td>City:</td> <td>Redwood Shores</td> </tr> <tr> <td>State/Country:</td> <td>CALIFORNIA</td> </tr> <tr> <td>Postal Code:</td> <td>94065</td> </tr> </table>		Name:	Oracle International Corporation	Street Address:	500 Oracle Parkway	City:	Redwood Shores	State/Country:	CALIFORNIA	Postal Code:	94065
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CORRESPONDENCE DATA											
<p>Fax Number: (650)326-2422          Phone: 650-326-2400          Email: dbogorodsky@kilpatricktownsend.com  <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Kilpatrick Townsend &amp; Stockton LLP          Address Line 1: Two Embarcadero Center, 8th Floor          Address Line 4: San Francisco, CALIFORNIA 94111</p>											
ATTORNEY DOCKET NUMBER:	88325-821895(115300US)										
NAME OF SUBMITTER:	Deborah L. Caswell										
<p>Total Attachments: 5          source=88325-821895_assgnmt#page1.tif          source=88325-821895_assgnmt#page2.tif          source=88325-821895_assgnmt#page3.tif          source=88325-821895_assgnmt#page4.tif          source=88325-821895_assgnmt#page5.tif</p>											

OP \$40.00 13377803

## Acknowledgement and Confirmatory Assignment

WHEREAS, I/WE, the undersigned (the "ASSIGNOR(S)");

- (1) MOYLE, Stephen Anthony;
- (2) THWAITES, Graham Kenneth;

am an/are inventor(s) of a inventions entitled A METHOD, A COMPUTER PROGRAM AND APPARATUS FOR ANALYSING SYMBOLS IN A COMPUTER ("Inventions") for which one or more applications for patent, design registration, utility model registration, or other form of protection, rights, or title have been or will be made in certain countries ("Applications"), as further described below:

Country	Application No.	Filing Date	
USA	61/219,520	23 June 2009	"Provisional Application"
International Application under the Patent Co-operation Treaty	PCT/GB2010/050812	18 May 2010	"International Application"

and we, the undersigned acknowledge that, under United Kingdom national law, the right to inventions made by an employee is governed by s39 of the Patents Act 1977 according to which an invention made by an employee shall, as between him and his employer, be taken to belong to his employer for the purposes of this Act and all other purposes if --

- (a) it was made in the course of the normal duties of the employee or in the course of duties falling outside his normal duties, but specifically assigned to him, and the circumstances in either case were such that an invention might reasonably be expected to result from the carrying out of his duties; or
- (b) the invention was made in the course of the duties of the employee and, at the time of making the invention, because of the nature of his duties and the particular responsibilities arising from the nature of his duties he had a special obligation to further the interests of the employer's undertaking.

and we, the undersigned, confirm that while devising the inventions we were employees in the United Kingdom subject to s39 of the Patents Act 1977 of

Sacerno Limited  
a United Kingdom company of Seacourt Tower, West Way, Oxford, Oxfordshire OX2 0JJ, United Kingdom

and we, the undersigned, confirm that Sacerno Limited acquired the entire right, title and interest in the inventions and the Applications and the right to apply for and be granted patents, design registrations, utility model registrations, or other forms of protection, rights, or title for the inventions, and the right to claim priority from the applications under the Paris Convention by virtue of our employment and by operation of the abovementioned statute,

and we, the undersigned, acknowledge that ownership of the developments and the Applications and the right to claim priority therefrom was assigned from Sacerno Limited to

ORACLE INTERNATIONAL CORPORATION  
a United States of America company of 500 Oracle Parkway, Redwood City, CA 94065, USA

by virtue of an IP Transfer Agreement between them effective 1 August 2010 a copy of which is attached hereto as Annex A

and we, the undersigned, acknowledge that the International Application was filed naming the undersigned as applicant inventors, but we confirm that by virtue of our employment by Secerno Limited, operation of the abovementioned statute and the IP Transfer Agreement attached as Annex A, the entire right, title and interest in the International Application belongs to ORACLE INTERNATIONAL CORPORATION

and we, the undersigned, hereby confirm our consent to the entry of the International application into the national phase in the United States of America by the filing of a non-provisional patent application ("Non-Provisional Application") indicating ourselves as applicant-inventors

and we hereby confirm that we are desirous that ORACLE INTERNATIONAL CORPORATION is recorded as the owner of the Non-Provisional Application,

and ORACLE INTERNATIONAL CORPORATION is desirous of acquiring the full and exclusive right, title and interest in and to the Inventions, said Applications and said Non-Provisional Application inclusive of all ancillary rights relating thereto, any and all priority rights derived from said Applications and said Non-Provisional Application, and all patents, design registrations, utility model registrations and other forms of protection, rights and titles relating to said Invention, in any country or countries and in respect of the whole or any part or parts of or improvements to the Invention;

notwithstanding the above acknowledgements and confirmations, NOW THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned does/do hereby confirm that ASSIGNOR(S) has/have transferred, conveyed and assigned, and by way of further assurance does/do hereby agree(s) to assign, and hereby do(es) assign, transfer and set over to

ORACLE INTERNATIONAL CORPORATION

a United States of America company of 500 Oracle Parkway, Redwood City, CA  
94065, USA

(hereinafter designated as the ASSIGNEE) any and all of ASSIGNOR(S)'s respective rights, title and interest for the United States, its territories, dependencies and possessions in and to: the Inventions; the Applications including the Provisional Application, International Application and the Non-Provisional application; inclusive of any and all priority rights, including the right to claim priority, derived from the Applications; any further applications for patent, design registration, utility model registration or other forms of protection, rights or titles for the whole or any part or parts of or improvements to the Invention in any country or countries ("Further Applications") together with the right to file divisional applications, substitute applications and continuation applications of any one or more of the Applications and Further Applications ("Divisionals"); the right to obtain patents, design registrations, utility model registrations and all other forms of protection, rights and titles relating to the Invention; the right in and to any patent or reissue patent relating to the Applications, Further Applications and Divisionals ("Grants"); and the right to obtain any extensions / supplementary protection certificates ("Extensions"); together with the right to bring proceedings to recover damages and/or to obtain other remedies for acts committed in respect of one or more of the aforesaid Invention, Applications, Grants, Further Applications, Divisionals and Extensions, whether such acts are committed before or after the date of this Confirmatory Assignment; with the intent that the Invention, Applications, Grants, Further Applications, Divisionals and Extensions are owned and enjoyed by ASSIGNEE absolutely

to the full end of the term or terms for same, and

- 1) The undersigned agree(s) to execute all papers necessary in connection with the Non-Provisional Application and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary.
- 2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning the Non-Provisional Application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.
- 3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.
- 5) The undersigned hereby authorise(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said Non-Provisional Application or any division or divisions or continuing applications, extensions or re-issues thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has/she has (they have) full right to convey the entire interest herein assigned for the full term for which said Letters Patent may be granted, and that he has/she has (they have) not executed, and will not execute, any agreements in conflict herewith.

ORA110211-US-PCT

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Signature of Inventor (1)   
MOYLE, Stephen Anthony

Date 7 December 2011

Witness 

Name and Address of Witness: Rana Khaw  
16 Glenlands Road  
RG 30 2NY

Date 7<sup>th</sup> December 2011

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Signature of Inventor (2)

GK Thwaites  
THWAITES, Graham Kenneth

Date

7<sup>th</sup> Dec 2011

Witness

Name and Address of Witness:

KATHRYN PHILP

1 NORWICH RD

WROUGHTON SWINDON

Date

WILTS SN4 0UJ