

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT2705326

| 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>JOANNE FREDRICH</td> <td>12/09/2013</td> </tr> <tr> <td>ELIZABETH LIU</td> <td>12/09/2013</td> </tr> <tr> <td>LAURENT LOUIS</td> <td>11/01/2013</td> </tr> <tr> <td>DIANNE NI</td> <td>12/09/2013</td> </tr> </tbody> </table> | | Name | Execution Date | JOANNE FREDRICH | 12/09/2013 | ELIZABETH LIU | 12/09/2013 | LAURENT LOUIS | 11/01/2013 | DIANNE NI | 12/09/2013 |
| Name | Execution Date | | | | | | | | | | |
| JOANNE FREDRICH | 12/09/2013 | | | | | | | | | | |
| ELIZABETH LIU | 12/09/2013 | | | | | | | | | | |
| LAURENT LOUIS | 11/01/2013 | | | | | | | | | | |
| DIANNE NI | 12/09/2013 | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | |
| <table border="1"> <tr> <td>Name:</td> <td>BP CORPORATION NORTH AMERICA INC.</td> </tr> <tr> <td>Street Address:</td> <td>501 WESTLAKE PARK BOULEVARD</td> </tr> <tr> <td>City:</td> <td>HOUSTON</td> </tr> <tr> <td>State/Country:</td> <td>TEXAS</td> </tr> <tr> <td>Postal Code:</td> <td>77079</td> </tr> </table> | | Name: | BP CORPORATION NORTH AMERICA INC. | Street Address: | 501 WESTLAKE PARK BOULEVARD | City: | HOUSTON | State/Country: | TEXAS | Postal Code: | 77079 |
| Name: | BP CORPORATION NORTH AMERICA INC. | | | | | | | | | | |
| Street Address: | 501 WESTLAKE PARK BOULEVARD | | | | | | | | | | |
| City: | HOUSTON | | | | | | | | | | |
| State/Country: | TEXAS | | | | | | | | | | |
| Postal Code: | 77079 | | | | | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>14063742</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 14063742 | | | | | | |
| Property Type | Number | | | | | | | | | | |
| Application Number: | 14063742 | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | |
| Fax Number: | (866)662-0763 | | | | | | | | | | |
| Phone: | 630-420-3817 | | | | | | | | | | |
| Email: | Carol.Wilson@bp.com | | | | | | | | | | |
| <i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i> | | | | | | | | | | | |
| Correspondent Name: | CAROL WILSON BP AMERICA INC. | | | | | | | | | | |
| Address Line 1: | 150 WEST WARRENVILLE ROAD | | | | | | | | | | |
| Address Line 2: | MC 200-1W | | | | | | | | | | |
| Address Line 4: | NAPERVILLE, ILLINOIS 60563 | | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 500274 CP1 | | | | | | | | | | |
| NAME OF SUBMITTER: | BERNADETTE Y. HARPER | | | | | | | | | | |

| | |
|--|------------------------|
| Signature: | /Bernadette Y. Harper/ |
| Date: | 01/30/2014 |
| Total Attachments: 3 source=500274CP1assignment#page1.tif source=500274CP1assignment#page2.tif source=500274CP1assignment#page3.tif | |

Assignment to
BP Corporation North America Inc.
Houston, Texas, United States of America

| | |
|---------------------|---|
| Whereas we, | |
| First inventor | Joanne Fredrich |
| Post Office Address | 150 West Warrenville Road, MC 200-1W, Naperville, IL 60563, USA |
| Residence | Houston, Texas |
| Second inventor | Elizabeth Liu |
| Post Office Address | 150 West Warrenville Road, MC 200-1W, Naperville, IL 60563, USA |
| Residence | Houston, Texas |
| Third inventor | Laurent Louis |
| Post Office Address | 150 West Warrenville Road, MC 200-1W, Naperville, IL 60563, USA |
| Residence | Katy, Texas |
| Fourth inventor | Dianne Ni |
| Post Office Address | 150 West Warrenville Road, MC 200-1W, Naperville, IL 60563, USA |
| Residence | Katy, Texas |

have invented certain new and useful improvements in

**SYSTEMS AND METHODS FOR IMPROVING DIRECT NUMERICAL SIMULATION OF
MATERIAL PROPERTIES FROM ROCK SAMPLES AND DETERMINING
UNCERTAINTY IN THE MATERIAL PROPERTIES**

identified as: *Fredrich et al.*
Attorney Docket: 500274.CP1

and described in an application for patent in the United States of America identified above and executed by us, respectively; and

Whereas, BP Corporation North America Inc., a corporation duly organized and existing under the laws of the State of Indiana, United States of America, and having a place of business at Houston, Texas, United States of America, desires to record a specific assignment to the entire right, title and interest in and to the above-identified invention or inventions, and in and to any Letters Patent therefore in the United States of America and countries foreign thereto;

Now therefore, for good and valuable consideration, the receipt of which is hereby acknowledged, we have sold and assigned, and hereby do sell and assign, to BP Corporation North America Inc., its successors and assigns, the entire right, title and interest (a) in the above-identified invention or inventions and all improvements and modifications thereof, (b) in the above-identified application, all provisional and non-provisional applications for patent upon which the above-identified application claims benefit, and all other applications for patent of the United States of America and countries foreign thereto for the above-identified invention or inventions and all improvements and modifications thereof, (c) in all Letters Patent which may issue from said applications in the United States of America and countries foreign thereto, and (d) in all divisions, reissues, continuations, conversions, and extensions of said applications and Letters Patent; and covenant we have the full right so to do; and we hereby authorize and request the Commissioner of Patents and Trademarks to issue all United States Letters Patent on the invention or inventions included herein to BP Corporation North America Inc. as assignee of the entire interest.

We further agree that we shall communicate to BP Corporation North America Inc., its successors and assigns, or their representatives or agents all facts and information known or available to us relating to said invention or inventions, improvements and modifications including evidence for interference,

reexamination, reissue, opposition, revocation, conversion, extension, or infringement purposes or other legal, judicial or administrative proceedings, whenever requested; testify in person or by affidavit as required by BP Corporation North America Inc., its successors and assigns, in any such proceeding in the United States of America or a country foreign thereto; execute and deliver, on request, all lawful papers including, but not limited to, original, provisional, non-provisional, divisional, continuation, continuation-in-part, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, declarations, and depositions; and provide all reasonable assistance to BP Corporation North America Inc., its successors and assigns, in obtaining and enforcing proper protection for said invention or inventions, improvements and modifications under the intellectual property laws of the United States of America and countries foreign thereto.

In testimony whereof, I have hereunto set our hand,

Dated: Dec 9, 2013 Joanne Fredrich [Signature]
Inventor name and signature

[Signature]
Witnessed (signature)

John L. Wood
Witness name

Dated: 12/9/2013 Elizabeth Liu [Signature]
Inventor name and signature

[Signature]
Witnessed (signature)

John L. Wood
Witness name

Dated: 11/21/13 Laurent Louis [Signature]
Inventor name and signature

[Signature]
Witnessed (signature)

John L. Wood
Witness name

Dated: 12/09/2013 Dianne Ni [Signature]
Inventor name and signature

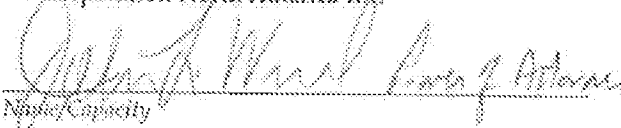
[Signature]
Witnessed (signature)

John L. Wood
Witness name

This Assignment is accepted on behalf of the Assignee by its duly authorized representative.

BP Corporation North America Inc.

By:


Master/Company

Dated:

9 Sept. 2013