504693166 12/18/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4739888

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------------------|----------------|
| STEPHEN JAMES ARCHIBALD | 08/30/2017 |
| PING HE | 07/18/2017 |
| NICOLE PAMME | 07/18/2017 |
| NATHANIEL JOEL BROWN | 08/04/2017 |
| MARK DUNCAN TARN | 07/06/2017 |
| RICHARD ALEXANDER | 09/20/2017 |
| MOHAMMAD MEHIDI NASR ESFAHANI | 08/05/2017 |

RECEIVING PARTY DATA

| Name: | THE UNIVERSITY OF HULL |
|-----------------|------------------------|
| Street Address: | COTTINGHAM ROAD |
| City: | HULL HUMBERSIDE |
| State/Country: | GREAT BRITAIN |
| Postal Code: | HU67RX |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15521204 |

CORRESPONDENCE DATA

Fax Number:

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.

Email:colleen.kline@faegrebd.comCorrespondent Name:FAEGRE BAKER DANIELS LLPAddress Line 1:2200 WELLS FARGO CENTERAddress Line 2:90 S. SEVENTH STREET

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

| ATTORNEY DOCKET NUMBER: 511940.000002 | |
|---------------------------------------|-----------------|
| NAME OF SUBMITTER: | COLLEEN KLINE |
| SIGNATURE: | /Colleen Kline/ |
| DATE SIGNED: | 12/18/2017 |

PATENT REEL: 044424 FRAME: 0682

504693166

Total Attachments: 9

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ASSIGNMENT

Attorney Docket No.: 511940.2

Page 1 of 4

First Named Inventor: Stephen Archibald

METHOD AND APPARATUS FOR THE ANALYSIS OF

COMPOUNDS

WHEREAS, we, Stephen James Archibald, a citizen of Great Britain, having an address of The University of Hull Cottingham Road, Hull Humberside HU67RX GB; Ping He, a citizen of Great Britain, having an address of The University of Hull Cottingham Road, Hull Humberside HU67RX GB, Stephen John Haswell, a citizen of Great Britain, having an address of The University of Hull Cottingham Road, Hull Humberside HU67RX GB, Nicole Pamme, a citizen of Great Britain, having an address of The University of Hull Cottingham Road, Hull Humberside HU67RX GB, ; Nathaniel Joel Brown, a citizen of Great Britain, having an address of The University of Hull Cottingham Road, Hull Humberside HU67RX GB, ; Mark Duncan Tarn, a citizen of Great Britain, having an address of The University of Hull Cottingham Road, Hull Humberside HU67RX GB, Richard Alexander, a citizen of Great Britain, having an address of The University of Hull Cottingham Road, Hull Humberside HU67RX GB, and Mohammad Mebdi Nasr Esfahani, a citizen of Iran, having an address of The University of Hull Cottingham Road, Hull Humberside HU67RX GB have invented certain new and useful improvements described in:

US Non-Provisional Application No. 15/521,204 Filing Date: April 21, 2017 International Filing Date: October 22, 2015

Title: METHOD AND APPARATUS FOR THE ANALYSIS OF COMPOUNDS

WHEREAS, The University of Hull, a Public University having an address of Cottingham Road, Hull Humberside HU67RX Great Britain ("Assignee"), is desirous of acquiring right, title and interest in and to the US Application, and any and all US Patents to be obtained therefor;

NOW, THEREFORE, we confirm we have transferred to Assignee, its successors and assigns, our entire right, title, and interest in and to the US Application and any and all corresponding US applications (including any and all divisionals, continuations, continuations-in-part and reissues), all US Patents or similar legal protection issuing thereon, and all rights and benefits to sue for past infringement; and we authorize the Commissioner of Patents and Trademarks of the United States to issue the US Patents or similar legal protection to the Assignee.

We authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for US Letters Patent or similar legal protection, in its own name, if desired.

We represent to the Assignee, its successors and assigns, that we have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. We, or our executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect their enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the US Letters Patent or similar legal protection on the invention in the United States of America.

REEL: 044424 FRAME: 0684

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Attorney Docket No.: 511940.2

Page 2 of 4

First Named Inventor: Stephen Archibald

itie: METHOD

METHOD AND APPARATUS FOR THE ANALYSIS OF

COMPOUNDS

Stephen James Archibald

Date 30/8/17

Ping He

Date ____

Stephen John Haswell

Date _____

Nicole Pamme

Date _____

Nathaniel Joel Brown

Date _____

| ASSIGNMENT |
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Attorney Docket No.: 511940.2 Page 2 of 4

First Named Inventor: Stephen Archibald

Title: METHOD AND APPARATUS FOR THE ANALYSIS OF COMPOUNDS

| Stephen James Archibald |
|-------------------------|
| Date |
| |
| Doen- |
| Ping He |
| Date 18-07-2017 |
| |
| Stephen John Haswell |
| Date |
| |
| |
| Nicole Pamme Date |
| |
| |
| |
| Nathaniel Joel Brown |
| Date |

| ASSIGNMENT |
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Attorney Docket No.: 511940.2 Page 2 of 4

First Named Inventor: Stephen Archibald

Title: METHOD AND APPARATUS FOR THE ANALYSIS OF

COMPOUNDS

Nathaniel Joel Brown

Date ____

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Attorney Docket No.: 511940.2 Page 2 of 4

First Named Inventor: Stephen Archibald

Title: METHOD AND APPARATUS FOR THE ANALYSIS OF COMPOUNDS

| Stephen James Archibald |
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| Date |
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| Ping He |
| Date |
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| Stephen John Haswell |
| Date |
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| |
| Nicole Pamme |
| Date |
| |
| Nathaniel Joel Brown |
| Date 01408/2017 |

ASSIGNMENT

Attorney Docket No.: 511940.2

Page 3 of 4

First Named Inventor: Stephen Archibald

Title:

METHOD AND APPARATUS FOR THE ANALYSIS OF

COMPOUNDS

Mark Duncan Tarn

Date 6/7/17

Richard Alexander

Date _____

Mohammad Mehdi Nasr Esfahani

Date ____

PATENT

REEL: 044424 FRAME: 0689

| | A | attorney Docket No.: 511940.2 | Page 3 of 4 |
|------------|---|-----------------------------------|---------------------|
| ASSIGNMENT | First Named Inventor: Stephen Archibald | | |
| | Title: | METHOD AND APPARATUS COMPOUNDS | FOR THE ANALYSIS OF |
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| | | Mark Duncan Tarn | |
| | | Date | |
| | | | |
| • | | Richard Alexander | |
| | | Date 20.09.17 | |
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| | | | |
| | ٠ | Mohammad Mehdi Nasr Esfahani | |
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| ASSIGNMENT |
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Attorney Docket No.: 511940.2 Page 3 of 4

First Named Inventor: Stephen Archibald

Title: METHOD AND APPARATUS FOR THE ANALYSIS OF COMPOUNDS

| Mark Duncan Tarn | |
|-------------------|--|
| Date | |
| Richard Alexander | |
| Date | |
| | |

Date 05/08/2017

Mohammad Mehdi Nasr Esfahani

| | Attorney Docket No.: 511940.2 | Page 4 of 4 | |
|------------|---|---------------------|--|
| ASSIGNMENT | First Named Inventor: Stephen Archibald | | |
| | Title: METHOD AND APPARATUS COMPOUNDS | FOR THE ANALYSIS OF | |

ACCEPTANCE OF ASSIGNMENT BY ASSIGNEE

This Assignment is accepted by the Assignee, the University of Hull, as evidenced by the following signature from an authorized representative of the Assignee:

| Signature MADL |
|---|
| Printed Name Dr M. McCrowan |
| Professional Capacity / Position <u>Durestor</u> of RPT |
| Date 23/10/17 |

PATENT REEL: 044424 FRAME: 0692

RECORDED: 12/18/2017