# 504300884 03/31/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4347565

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
BRUNEL UNIVERSITY LONDON	12/02/2016

# **RECEIVING PARTY DATA**

Name:	CRANFIELD UNIVERSITY	
Street Address:	COLLEGE ROAD CRANFIELD	
City:	BEDFORDSHIRE	
State/Country:	ENGLAND	
Postal Code:	MK43 0AL	

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Patent Number:	9446366

## **CORRESPONDENCE DATA**

**Fax Number:** (608)252-9243

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.

**Phone:** 6082558891

Email: mal@dewittross.com

Correspondent Name: MARCIA LAYTON

Address Line 1:DEWITT ROSS & STEVENS S.C.Address Line 2:2 E. MIFFLIN STREET, SUITE 600Address Line 4:MADISON, WISCONSIN 53703-2865

ATTORNEY DOCKET NUMBER:	78104168
NAME OF SUBMITTER:	MARCIA LAYTON
SIGNATURE:	/marcialayton/
DATE SIGNED:	03/31/2017

# **Total Attachments: 16**

source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page1.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page2.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page3.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page4.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page5.tif

PATENT 504300884 REEL: 041811 FRAME: 0846

source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page6.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page7.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page8.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page10.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page11.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page12.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page13.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page14.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page15.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page15.tif source=USPTO--161202--Assignment--Brunel\_to\_Cranfield--EXECUTED--N30981#page15.tif

PATENT REEL: 041811 FRAME: 0847 DATED

ASSIGNMENT OF INTELLECTUAL PROPERTY RIGHTS

between

Brunel University London

and

CRANFIELD UNIVERSITY

PATENT REEL: 041811 FRAME: 0848

# CONTENTS

CLAUS	<u>&amp;</u>
1.	Interpretation
2.	Assignment 2
3.	VAT
4.	Warranties2
5.	Indemnity
6.	Moral rights4
7.	Further assurance4
8.	Walver
<b>\$</b> .	Entire agreement
10.	Variation
11.	Severance 5
12.	Counterparts 6
13.	Third party rights 6
14.	Notices 6
15.	Governing law
16.	Jurisdiction
ANNEX	
ANNEX	1 PATENTS 8
ANNEX	2 TRADE MARKS 9
ANNEX	3 ROYALTY PROVISIONS
Part 1.	Registered trade marks and applications9

PATENT REEL: 041811 FRAME: 0849 THIS AGREEMENT is dated [DATE]

#### PARTIES

(1) Brunel University London a Charity incorporated and registered in England and Wales with company number RC000079 whose registered office is at: Brunel University London, Kingston Lane, Uxbridge, Middlesex UB8 3PH (Assignor).

(2) Cranfield University a Charity incorporated and registered in England and Wales with company number RC000151 whose registered office is at College Road Cranfield Bedfordshire MK43 0AL (Assignee).

#### BACKGROUND

- (A) The Assignor owns the intellectual property rights in the Materials (as defined below).
- (B) Assignor has agreed to assign to the Assignee the intellectual property rights shown in the Annexes to this agreement on the terms set out in this agreement.
- (C) In consideration of assignment Assignee has agreed to pay to the Assignor a royalty on the terms contained in Annex 3.

#### AGREED TERMS

## 1. INTERPRETATION

The following definitions and rules of interpretation apply in this agreement.

# 1.1 Definitions:

Assigned Rights: all the Intellectual Property Rights set out in the Annexes

Business Day: a day other than a Saturday, Sunday or public holiday in England when banks in London are open for business.

Intellectual Property Rights: patents, utility models, rights to inventions, copyright and related rights, trade marks and service marks, business names and domain names, rights in get-up, goodwill and the right to sue for passing off rights in designs, database rights, rights to use, and protect the confidentiality of, confidential information (including know-how) and all other intellectual property rights, in each case whether registered or unregistered and including all applications and rights to apply for and be granted, renewals or extensions of, and rights to claim priority from, such rights and all similar or equivalent rights or forms of protection which subsist or will subsist now or in the future in any part of the world.

Patents: the patents and the applications short particulars of which are set out in 0.

Patent Costs: the costs incurred by the Assignor of applying for, maintaining, defending and or renewing all of the Patents.

Trade Marks: the registered trademarks short particulars of which are set out in 0.

VAT: value added tax or any equivalent tax chargeable in the UK

- 1.2 Clause, Annex and paragraph headings shall not affect the interpretation of this agreement.
- 1.3 The Annexes form part of this agreement and shall have effect as if set out in full in the body of this agreement. Any reference to this agreement includes the Annexes.
- 1.4 References to clauses and Annexes are to the clauses and Annexes of this agreement.
- 1.5 A reference to writing or written includes email but not Fax

#### 2. ASSIGNMENT

In consideration of the sum of one Pound Sterling (£1) and the payment by the Assignee of all Patent Costs incurred from the 02nd May 2016 up to and including the date of this agreement (receipt of which the Assignor expressly acknowledges), the Assignor hereby assigns to the Assignee absolutely with full title guarantee all its right, title and interest in and to the Assigned Rights, including:

- (a) the absolute entitlement to any registrations granted pursuant to any of the applications comprised in the Patents, Registered Designs and Trade Marks;
- (b) all goodwill attaching to the Trade Marks and in respect of the business relating to the goods or services in respect of which the Trade Marks are registered or used; and
- (c) the right to bring, make, oppose, defend, appeal proceedings, claims or actions and obtain relief (and to retain any damages recovered) in respect of any infringement, or any other cause of action arising from ownership, of any of the Assigned Rights whether occurring before, on, or after the date of this agreement.

#### 3. VAT

All payments made by the Assignee under this agreement are exclusive of VAT. If any such payment constitutes the whole or any part of the consideration for a taxable or deemed taxable supply by the Assignor, the Assignee shall increase that payment by an amount equal to the VAT which is chargeable in respect of the taxable or deemed taxable supply, provided that the Assignor shall have delivered a valid VAT invoice in respect of such VAT to the Assignee.

## 4. WARRANTIES

The Assignor warrants that:

- it is the sole legal and beneficial owner of, and owns all the rights and interests in, the Assigned Rights;
- (b) for each of the applications and registrations listed in 0, and Errorl Reference source not found, it is properly registered as the applicant or registered proprietor, and all application, registration and renewal fees have been paid;
- (c) it has not licensed or assigned any of the Assigned Rights;
- (d) the Assigned Rights are free from any security interest, option, mortgage, charge or lien;
- it is unaware of any infringement or likely infringement of any of the Assigned Rights;
- (f) so far as it is aware, all the Assigned Rights are valid and subsisting and there are and have been no claims, challenges, disputes or proceedings, pending or threatened, in relation to the ownership, validity or use of any of the Assigned Rights, and there is nothing that might prevent any application listed in 0, Errori Reference source not found, or 0 proceeding to grant;
- (g) so far as it is aware, exploitation of the Assigned Rights will not intringe the rights of any third party; and
- (h) all previous assignments of the applications and registrations listed in 0, and Errori Reference source not found, are valid and were registered within applicable time limits.

# 5. INDEMNITY

- 5.1 The Assignor shall indemnify the Assignee against all liabilities, costs, expenses, damages and losses (including but not limited to any direct losses and all interest, penalties and legal costs (calculated on a full indemnity basis) and all other professional costs and expenses) suffered or incurred by the Assignee arising out of or in connection with:
  - (a) any breach of the warranties contained in clause 4; pr
  - (b) the enforcement of this agreement.
- 5.2 At the request of the Assignee and at the Assignor's own expense, the Assignor shall provide all reasonable assistance to enable the Assignee to resist any claim, action or proceedings brought against the Assignee as a consequence of that breach.
- 5.3 This indemnity shall apply whether or not the Assignee has been negligent or at fault.

- 5.4 If a payment due from the Assignor under this clause is subject to tax (whether by way of direct assessment or withholding at its source), the Assignee shall be entitled to receive from the Assignor such amounts as shall ensure that the net receipt, after tax, to the Assignee in respect of the payment is the same as it would have been were the payment not subject to tax.
- 5.5 Nothing in this clause shall restrict or limit the Assignee's general obligation at law to mitigate a loss it may suffer or incur as a result of an event that may give rise to a claim under this indemnity.
- 8. NOT USED

## 7. FURTHER ASSURANCE

- 7.1 At its own expense the Assignor shall, and shall use all reasonable endeavours to procure that any necessary third party shall, execute and deliver such documents and perform such acts as may reasonably be required for the purpose of giving full effect to this agreement, including:
  - registration of the Assignee as applicant or (as applicable) proprietor of the Assigned Rights; and
  - (b) assisting the Assignee in obtaining, defending and enforcing the Assigned Rights, and assisting with any other proceedings which may be brought by or against the Assignee against or by any third party relating to the Assigned Rights.
- 7.2 The Assignor appoints the Assignee to be its attorney in its name and on its behalf to execute documents, use the Assignor's name and do all things which are necessary or desirable for the Assignee to obtain for itself or its nominee the full benefit of this agreement.
- 7.3 This power of attorney is irrevocable and is given by way of security to secure the performance of the Assignor's obligations under this agreement and the proprietary interest of the Assignee in the Assigned Rights and so long as such obligations of the Assignor remain undischarged, or the Assignee has such interest, the power may not be revoked by the Assignor, save with the consent of the Assignee.
- 7.4 Without prejudice to clause 7.2, the Assignee may, in any way it thinks fit and in the name and on behalf of the Assignor.
  - take any action that this agreement requires the Assignor to take;
  - (b) exercise any rights which this agreement gives to the Assignor, and

- (c) appoint one or more persons to act as substitute attorney(s) for the Assignor and to exercise such of the powers conferred by this power of attorney as the Assignee thinks fit and revoke such appointment.
- 7.5 The Assignor undertakes to ratify and confirm everything where it is legally able to do so that the Assignee and any substitute attorney acting reasonably does or arranges or purports to do or arrange in good faith in exercise of any power granted under this clause.

### 8. WAIVER

No failure or delay by a party to exercise any right or remedy provided under this agreement or by law shall constitute a waiver of that or any other right or remedy, nor shall it prevent or restrict the further exercise of that or any other right or remedy. No single or partial exercise of such right or remedy shall prevent or restrict the further exercise of that or any other right or remedy.

## 9. ENTIRE AGREEMENT

- 9.1 This agreement constitutes the entire agreement between the parties and supersedes and extinguishes all previous agreements, promises, assurances, warranties, representations and understandings between them, whether written or oral, relating to its subject matter.
- 9.2 Each party agrees that it shall have no remedies in respect of any statement, representation, assurance or warranty (whether made innocently or negligently) that is not set out in this agreement. Each party agrees that it shall have no claim for innocent or negligent misrepresentation or negligent misstatement based on any statement in this agreement.

## 10. VARIATION

No variation of this agreement shall be effective unless it is in writing and signed by the parties (or their authorised representatives).

## 11. SEVERANCE

If any provision or part-provision of this agreement is or becomes invalid, illegal or unenforceable, it shall be deemed modified to the minimum extent necessary to make it valid, legal and enforceable. If such modification is not possible, the relevant provision or part-provision shall be deemed deleted. Any modification to or deletion of a provision or part-provision under this clause shall not affect the validity and enforceability of the rest of this agreement.

11.2 If any provision or part-provision of this agreement is invalid, illegal or unenforceable, the parties shall negotiate in good faith to amend such provision so that, as amended, it is legal, valid and enforceable, and, to the greatest extent possible, achieves the intended commercial result of the original provision.

## 12. COUNTERPARTS

12.1 This agreement may be executed in any number of counterparts, each of which when executed and delivered shall constitute a duplicate original, but all the counterparts shall together constitute the one agreement.

#### 13. THIRD PARTY RIGHTS

No one other than a party to this agreement their successors and permitted assignees, shall have any right to enforce any of its terms.

#### 14. NOTICES

Any notice or other communication given to a party under or in connection with this agreement shall be in writing and shall be delivered by hand or by pre-paid first-class post or other next working day delivery service at its registered office (if a company) or its principal place of business (in any other case);

- 14.1 Any notice or communication shall be deemed to have been received:
  - (a) If delivered by hand, on signature of a delivery receipt;
  - (b) If sent by pre-paid first-class post or other next working day delivery service, at 9.00 am on the second Business Day after posting or at the time recorded by the delivery service.
  - (c) if sent by email, at 9.00 am on the next Business Day after transmission.
- 14.2 This clause does not apply to the service of any proceedings or other documents in any legal action or, where applicable, any arbitration or other method of dispute resolution.

## 15. GOVERNING LAW

This agreement and any dispute or claim (including non-contractual disputes or claims) arising out of or in connection with it or its subject matter or formation shall be governed by and construed in accordance with the law of England and Wales and shall be subject to the exclusive jurisdiction of the English Courts.

This document has been executed as a deed and is delivered and takes effect on the date stated at the beginning of it.

Signed for and on behalf of Cranfield University	
Signature <u>G</u>	
Name: MR S HOLYOAK HEAD OF CONTRACTS	Title:
Date: 5 12(0x/b/2)/6	
Signed for and on behalf of Brunel University London	
Signature (4/1/1/heure	*
Name: G.WICKREMERATUE	TIME: CONTRACTS MANAGER
nata 02/12/16	

# Annex 1

# Patents

Country or territory	Application or publication number	Date of filing or registration	Description
Europe	EP2747884A1	04/10/2012	A modular flow reactor
US	US20150010445 A1	04/10/2012	Modular flow reactor
World	WO2013050764A1	04/10/2012	A modular flow reactor

#### Annex 2

#### Trade Marks

Part 1. Registered trade marks and applications

Country/ territory	Mark	Application or registration number	Date of filing/regn	Classes*
UK	CENTILLION	UK00002589640	29/07/2011	01 04 07 09
				40 42

# \*Specification of goods or services

## Class 1

Chemicals used in industry, science and photography, as well as in agriculture, horticulture and forestry; unprocessed artificial resins, unprocessed plastics; fire extinguishing compositions; tempering and soldering preparations; chemical substances for preserving foodstuffs; tanning substances; adhesives used in industry; unprocessed plastics in the form of liquids, chips or granules; catalysts; biochemical catalysts; synthetic catalysts; catalyst carriers; supports for catalysts; synthetic silica.

#### Class 4

Industrial oils and greases; jubricants; dust absorbing, wetting and binding compositions; fuels and illuminants; combustible fuels; blodiesel.

#### Class 7

Machines for use in the design, synthesis, modification, catalysis, analysis, transport or storage of chemicals, chemical mixes, reagents or reactants; machine tools; chemical reactors; parts and fittings for the aforementioned goods

#### Class 9

Scientific, optical, weighing and measuring apparatus and instruments; apparatus and instruments for routing, regulating or controlling the flow of chemicals within a system; apparatus and instruments for heating and cooling chemicals within a system; apparatus and instruments for regulating or controlling the reactions between chemicals within a system; magnetic data carriers, recording discs; calculating machines, data processing equipment and computers; fire-extinguishing apparatus; recorded media, computer hardware and firmware; computer software; software downloadable from the Internet; downloadable electronic publications; optical discs containing data; clothing for protection against injury, accident, irradiation or fire; furniture adapted for laboratory use; chemical reactors; flow reactors; baffled flow reactors; modular chemical reactors; reconfigurable chemical reactors; feedback control systems for chemical reactors; software for chemical reactors; process control software; software for the design of theoretical chemical structures; genetic algorithms; parts and fittings for the aforementioned goods (including but not limited to reaction chambers, baffles, blades, slices, membranes, supports, washers, injection systems, mixing systems, custom components, coated components and printed components).

### Class 40

Treatment of materials; custom manufacture of chemicals; regeneration of spent catalysts Class 42

Scientific and technological services and research and design relating thereto; industrial analysis and research services; design and development of computer hardware and software; computer programming; installation, maintenance and repair of computer software; computer consultancy services; chemical design services; services for the design of theoretical chemical structures; services for the design of substances which possess specific properties.

10

### Annex 3

# Royalty provisions

In consideration of the Assignment Assignee has agreed to pay to the Assignor on the terms of this Agreement a cumulative royalty received from licensing of the Technology based on the Net Royalty received by the Assignee directly or indirectly from the exploitation of the Assigned Rights as shown in Table 1

- 1. ADDITIONAL DEFINITIONS
- 1.1 The following terms shall have the following meanings:
- 1.1.1 "Accounting Period" means each period of twelve (12) months or portion thereof beginning on the 1st April and ending on 31st March in each year of this Agreement.
- 1.1.2 "Technology" means the patents specified in Annex 1 above and assigned to pursuant to this Assignment.
- 1.1.3 "Half Yearly Period" means a six (6) month calendar period ending respectively 31 March and 30 September in any calendar year;
- 1.1.4 "Net Royalty" means a payment of cumulative royalty income from licensing of Technology all costs of administration, patent and any other cost of IP protection insurance, legal fees of defending any disputed intellectual Property ownership or costs related to use thereof, VAT and any other government taxes, duties or levies, and trade discounts and other allowances granted...
- 1.1.5 "Value Added Tax" means value added tax as provided for in the Value Added Tax Act 1994 and any legislation supplemental thereto or replacing modifying or consolidating it.

## 2. ROYALTIES

2.1 In consideration of the Assignment Assignee shall within forty five (45) days after the end of each relevant Half Yearly Period during the Term pay to Assignor the proportion of the Royally payments as specified above which are received by Assignee in each Half Yearly Period;

11

- 2.2 Each royalty payment which becomes due under this Agreement shall be made within forty five (45) days after the end of the relevant Half Yearly Period.
- 2.3 All royalties payable under this Agreement -
- 2.5.1 are exclusive of any Value Added Tax which shall be payable in addition on the rendering by Assignor of any appropriate Value Added Tax invoice;
- 2.5.2 payments shall be made without deduction of any tax or other statutory payments and the Assignor undertakes to pay all such charges required by HMRC and further undertakes to indemnify Assignee for and against any liability in respect thereof. The Parties agree to cooperate in all respects necessary to take advantage of such double taxation agreements as may be available.
- 2.6 In the event of default by the Assignee in payment of any amount due and payable to Assignor under this Agreement (including any sum due under this Clause) the Assignee shall on demand pay to Assignor interest at the rate of interest equal to the base lending rate of National Westminster Bank plc from time to time plus 3% on such amount from the date such amount from 60 days after the date such amount becomes due up to the date of actual payment (as well after as before any judgement).
- 2.7 For the purpose of paying royalties to Assignor under this Agreement, the Assignee shall, in respect of monies received by it during a Haif Yearly Period convert all Territorial Currency into the Required Currency by reference to the Exchange Rate on the last day of that Quarter Period before payment of any royalty to Assignor pursuant to this Agreement.

## 3 RECORDS AND REPORTS

- 3.1 The Assignee shall submit to Assignor within forty five (45) days after the end of each Half Yearly Period a statement setting out the total Royalties due and payable during that Half Yearly Period whether by the Assignee for itself and its subsidiaries
- 3.2 The Assignee shall keep true and accurate records and books of account containing all data necessary for the determination of royalties payable under Clause 2 hereof which records and books of account shall no more often than once a year and upon reasonable notice of Assignor be open at all reasonable times during business hours for inspection by Assignor or its duly authorised agent reasonably acceptable to the Assignee for the purpose of verifying the accuracy of the Assignee's reports hereunder. The agent may take copies of the records and books of account but shall not disclose to Assignor any information relating to the business or affairs of the Assignee other than information that relates to the proper computation of royalties payable hereunder.
- 3.3 Assignor agrees to maintain as strictly confidential all financial information received with respect to the Assignee's operations pursuant to the foregoing

TABLE 1

Third party foreground IP required and licensed to support the product/service sales		Notes
none	30%	Brunel receive full 30%
CU IP-none	30%	Cranfield owned foreground IP does not dilute Brunel's share
1.	15%	Third party IP proportionally dilutes Brunel's share (50% reduction in royalty paid)
2	10%	Third party IP proportionally dilutes Brunel's share (66% reduction in royalty paid)
3	7.5%	Etc
4	6.%	Etc
5 or more	5%	Dilution is capped to 5%

13

PATENT REEL: 041811 FRAME: 0863

**RECORDED: 03/31/2017**