505126724 10/04/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5173485

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the RECEIVING PARTY DATA CITY, STATE/COUNTRY, AND POSTAL CODE previously recorded on Reel 046813 Frame 0769. Assignor(s) hereby confirms the RECIVING PARTY DATA CITY SHOULD BE LONDON, STATE/COUNTRY SHOULD BE GREAT BRITAIN AND POSTAL CODE SHOULD BE SW1E 6AT.

CONVEYING PARTY DATA

Name	Execution Date
ENERGY TECHNOLOGIES INSTITUTE LLP	06/05/2018

RECEIVING PARTY DATA

Name:	ROLLS-ROYCE PLC	
Street Address:	62 BUCKINGHAM GATE	
City:	LONDON	
State/Country:	GREAT BRITAIN	
Postal Code:	SW1E 6AT	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14911969

CORRESPONDENCE DATA

Fax Number: (703)836-2787

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: EMAIL@OLIFF.COM

Correspondent Name: JAMES A OLIFF

Address Line 1: OLIFF PLC

Address Line 2: P.O. BOX 320850

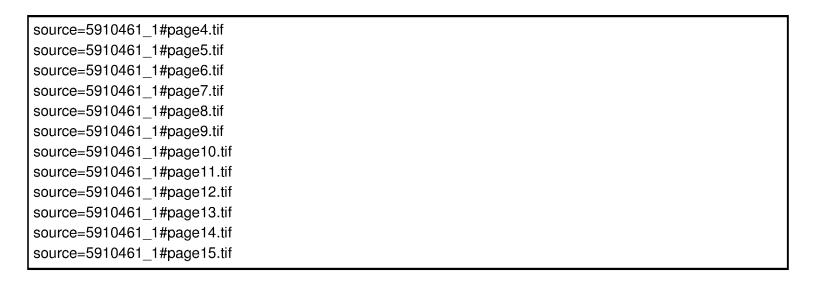
Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

ATTORNEY DOCKET NUMBER:	181964	
NAME OF SUBMITTER:	MORGAN HAUSER	
SIGNATURE:	/MORGAN HAUSER/	
DATE SIGNED:	10/04/2018	

Total Attachments: 15

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PATENT 505126724 REEL: 047192 FRAME: 0247



EXECUTION COPY

energy technologies

ASSIGNMENT

BETWEEN

ENERGY TECHNOLOGIES INSTITUTE LLP (1)

AND

ROLLS-ROYCE PLC (2)

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THIS AGREEMENT is dated 5" June

PARTIES

- (1) ENERGY TECHNOLOGIES INSTITUTE LLP incorporated and registered as a Limited Liability Partnership in England and Wales with registered number OC333553 whose registered office is at Holywell Building, Holywell Way, Loughborough, Leicestershire, LE11 3UZ ("the Assignor") and
- (2) ROLLS-ROYCE PLC a public company registered in England and Wales with registered number 01003142 whose registered office is at 65 Buckingham Gate, London, SW1E 6AT ("the Assignee")

BACKGROUND

- (A) The Assignor is the owner of the RSFCL Assets, the Patents, the Materials and the Intellectual Property rights embodied in the Materials.
- (B) The RSFCL Assets are located at the premises of the University of Manchester.
- (C) The Assignor has agreed to assign to the Assignee such right, title and interest as the Assignor has in the RSFCL Assets, the Materials and the Intellectual Property rights embodied in the Materials with effect from the Transfer Date upon the terms and conditions contained in this Agreement.
- (D) The Assignee has agreed to acquire from the Assignee such right, title and interest as the Assignor has in the RSFCL Assets, the Materials and the Intellectual Property rights embodied in the Materials with effect from the Transfer Date upon the terms and conditions contained in this Agreement.

AGREED TERMS

1. INTERPRETATION

1.1 The definitions and rules of interpretation in this clause apply in this Agreement.

ABC Legislation means the United Kingdom Bribery Act 2010, the United States Foreign Corrupt Practices Act 1977 (15 U.S.C. Section 78dd-1, et. seq.), as amended, and any other legislation relating to anti-bribery and corruption matters

applicable to the subject matter of the Agreement.

Agreement means this agreement including any schedules and any

attachments.

Assigned Rights means the Patents and the Intellectual Property rights

embodied in the Materials owned by the Assignor.

Business Day a day other than a Saturday, Sunday or public holiday in

England when banks in London are open for business.

Intellectual Property means any patent, registered design, copyright, database

right, design right, topography right, application to register and rights to the grant of any of the aforementioned rights, trade secret, know-how, invention and any other intellectual or industrial property right of any nature whatsoever in any part of the world for the full term of that right (including any

extensions).

Materials means the materials described in Schedule 3, all relating to

the resistive fault current limiter device developed by

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Applied Superconductor Limited under a project funded by the Assignor which was acquired by the Assignor from the administrators of Applied Superconductor Limited.

Patents the patent applications short particulars of which are set out

in Schedule 2.

RSFCL Assets means those physical assets comprising the prototype

resistive superconducting fault current limiter (including a cryostat, coil and former assemblies, thermal management components, coolers, compressors, control cubicle and high and low voltage electrical connection boxes) mounted on a steel baseplate which are located at the premises of the University of Manchester as at the Transfer Date.

Sub-licensees means any party who has been granted a sub-licence of the

Intellectual Property embodied in the Materials by the Assignor prior to the Transfer Date pursuant to the Assignor's rights under the Technology Contract together with any third party who has been granted a further sublicence in respect of the Intellectual Property embodied in the Materials by any direct sub-licensee of the Assignor in accordance with the rights granted to that party by the

Assignor.

Technology Contract means an agreement between the Assignor, the Assignee

and others dated 17 June 2011 relating to a project to design, build and demonstrate a resistive superconducting

fault current limiter.

Transfer Date means the date of this Agreement.

VAT value added tax chargeable under the Value Added Tax Act

1994.

1.2 Clause, Schedule and paragraph headings shall not affect the interpretation of this Agreement.

- 1.3 A person includes a natural person, corporate or unincorporated body (whether or not having separate legal personality) and that person's personal representatives, successors and permitted assigns.
- 1.4 The Schedules 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 Schedules.
- 1.5 A reference to a company shall include any company, corporation or other body corporate, wherever and however incorporated or established.
- A reference to a holding company or a subsidiary means a holding company or a subsidiary (as the case may be) as defined in section 1159 of the Companies Act 2006 and a company shall be treated, for the purposes only of the membership requirement contained in sections 1159(1)(b) and (c), as a member of another company even if its shares in that other company are registered in the name of (a) another person (or its nominee) by way of security or in connection with the taking of security, or (b) its nominee. In the case of a limited liability partnership which is a subsidiary of a company or another limited liability partnership, section 1159 of the Companies Act 2006 shall be amended so that: (a) references in sections 1159(1)(a) and (c) to voting rights are to the members' rights to vote on all or substantially all matters which are decided by a vote of the members of the limited liability partnership; and (b) the reference in section 1159(1)(b) to the right to appoint or remove a majority of its board of directors is to the right to appoint or remove members holding a majority of the voting rights.

- 1.7 Unless the context otherwise requires, words in the singular shall include the plural and in the plural shall include the singular.
- 1.8 Unless the context otherwise requires, a reference to one gender shall include a reference to the other genders.
- 1.9 A reference to any party shall include that party's personal representatives, successors and permitted assigns.
- 1.10 A reference to a statute or statutory provision is a reference to it as amended, extended or reenacted from time to time.
- 1.11 A reference to a statute or statutory provision shall include all subordinate legislation made from time to time under that statute or statutory provision.

2. ASSIGNMENT

In consideration of the payment by the Assignee to the Assignor of the sums specified in Schedule 1 (excluding VAT), receipt of which the Assignor acknowledges, the Assignor hereby assigns to the Assignee with no title guarantee, such right, title and interest as it may have in and to:

- (a) the Assigned Rights, including:
 - the full and exclusive benefit of all inventions contained in the Intellectual Property embodied in the Materials;
 - all the rights of the Assignor in and to the Patents and the full and exclusive benefit of them and all rights privileges and advantages associated with them;
 - 3) the full right to apply for and obtain patents or other similar forms of protection throughout the world in respect of any inventions contained in the Intellectual Property embodied in the Materials;
 - 4) the right to make any new application or applications anywhere in the world in respect of any part or parts of the subject matter of the Patents or any other application or specification filed in connection with any invention contained in the Intellectual Property embodied in the Materials;
 - 5) the right to claim priority to any of the Patents under section 5 of the UK Patents Act 1977 and/or under the Paris Convention (as amended) or any equivalent provisions; and
 - 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;
- (b) the RSFCL Assets.
- 3. Duties, costs and other provisions relating to the assignment
- 3.1 The Assignee shall pay all stamp duty, documentation registration fees or any other duties and/or taxes of whatever kind and nature (including for the avoidance of doubt any VAT), which arise on or after the Effective Date, if any, from time to time imposed on or in connection with this assignment.
- 3.2 The Assignee shall do all things necessary to ensure compliance with all applicable laws as to possession, ownership or use of the RSFCL Assets as from the Transfer Date, including

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- obtaining all necessary licences, consents, certificates, permits and other authorisations relating to the ownership, possession and use of the RSFCL Assets.
- 3.3 The Assignee hereby undertakes to the ETI to take all steps (including but not limited to inspections, maintenance and training of relevant staff on the use or maintenance of the RSFCL Assets and the assessment of all relevant documentation relating to the design, fabrication and construction of the RSFCL Assets) to ensure, so far as is reasonably practicable, that the RSFCL Assets (or any of them) will be safe and without risk to health when they are being set, used, cleaned or maintained by or on behalf of the Assignee.
- 3.4 The RSFCL Assets are sold in their condition and location as at the Effective Date and subject to all faults, liens, executions, distraints, encumbrances and claims of third parties. Unless otherwise required by law (and then only to that extent), the ETI shall not be liable for any loss arising out of, or due to, or caused by any defect or deficiencies in any or all of the RSFCL Assets.
- 3.5 The Assignee agrees that the exclusions and limitations contained in this Agreement relating to the assignment of the RSFCL Assets are fair and reasonable having regard to the following:
 - 3.5.1 the Assignor acquired its right, title and interest in the RSFCL Assets from the administrator of Applied Superconductor Limited without receiving any warranties or other assurances relating to the RSFCL Assets.
 - 3.5.2 the Assignor's knowledge of the RSFCL Assets is limited;
 - 3.5.3 the Assignor has never had possession of the RSFCL Assets.
 - 3.5.4 the Assignee has relied solely on the opinions of itself and its professional advisors concerning the RSFCL Assets or any of them, their quality, condition, description, fitness and suitability for any purpose, the possibility that some or all of them may have defects not apparent on inspection and examination, and the use it intends or proposes to put them to;
 - 3.5.5 the Assignee has agreed to purchase the RSFCL Assets or any of them "as seen" in their present state and condition for a consideration that reflects this allocation of risk; and
 - 3.5.6 the Assignee, its representatives and advisers have been given every opportunity it or they may wish to have to examine and inspect the RSFCL Assets or any of them.
- 3.6 Risk and title in the RSFCL Assets assigned under this Agreement shall pass to the Assignee on the Effective Date. The Assignee shall be responsible for the collection of the RSFCL Assets from the University of Manchester.
- 3.7 The Intellectual Property rights embodied in the Materials are assigned to the Assignee expressly subject to any sub-licences granted by the Assignor prior to the Transfer Date pursuant to the rights granted to the Assignor under the Technology Contract together with any further sub-licences granted by the Sub-licensees in accordance with the rights set out in the Technology Contract and nothing in this Agreement is intended to or shall affect any such sub-licences.

4. CONFIDENTIALITY

- 4.1 The existence and provisions of this Agreement shall remain strictly confidential and shall not be disclosed by either party to any third party, except as permitted by clauses 4.2 and 4.3.
- 4.2 Each party may disclose the confidential information:

- (a) to its employees, officers, representatives or advisers who need to know such information for the purposes of carrying out the party's obligations under the Agreement. Each party shall ensure that its employees, officers, representatives or advisers to whom it discloses the confidential information comply with clause 4.1; and
- (b) as may be required by law, a court of competent jurisdiction or any governmental or regulatory authority.
- 4.3 The ETI may disclose the confidential information to the member organisations of the ETI (and their affiliates) where required for the governance purposes of the ETI. The ETI shall ensure that the member organisations of the ETI (and their affiliates) to whom it discloses the confidential information comply with clause 4.1.

5. ANTI-BRIBERY

- 5.1 Each party represents and warrants to the other that neither it nor, to the best of its knowledge, its directors, officers, employees, representatives or any other person acting on its behalf (each an "Associated Party") have, in respect of the subject matter of this Agreement, engaged in any conduct which would constitute an offence under the ABC Legislation.
- 5.2 Each party undertakes to the other party that it will take reasonable steps to ensure that neither it nor any Associated Party, whether directly or indirectly, in connection with the subject matter of this Agreement, will engage in any conduct which would constitute an offence under the ABC Legislation.

6. FURTHER ASSURANCE

The Assignor shall, at the Assignee's cost, perform all further acts and things, and execute and deliver all further documents (or use reasonable efforts to procure such acts or things be done or documents are executed when such acts or things are required to be done or documents executed by a third party), required by law or which the Assignee reasonably requires to vest in the Assignee the full benefit of such right, title and interest assigned to the Assignee under this Agreement.

7. EXCLUSION OF WARRANTIES

All representations (whether made innocently, negligently or otherwise but not fraudulently), warranties, conditions and stipulations other than those expressly set out in this Agreement are excluded (including without limitation, warranties and conditions as to title, non-infringement, quiet possession, quality, condition, fitness for purpose and description) to the fullest extent permitted by law.

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

- 11.1 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 one party gives notice to the other of the possibility that 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.

COUNTERPARTS

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

- 14.1 Any notice given to a party under or in connection with this contract 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); or
 - (b) sent by fax to its main fax number.
- 14.2 Any notice shall be deemed to have been received:
 - (a) if delivered by hand, on signature of a delivery receipt or at the time the notice is left at the proper address;
 - (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 fax, at 9.00 am on the next Business Day after transmission.
- 14.3 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. For the purposes of this clause, "writing" shall not include e-mail.

15. GOVERNING LAW

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

ROLLS-ROYCE REFERENCE: ETC01295

16. JURISDICTION

Each party irrevocably agrees that the courts of England and Wales shall have the non-exclusive jurisdiction to settle any dispute or claim arising out of or in connection with this Agreement or its subject matter or formation (including non-contractual disputes or claims).

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SCHEDULE 1 - PAYMENT

Payment Due for RSFCL Assets:

Payment Due for the Assigned Rights:



Total Payment Due:



Amounts set out are the VAT exclusive amounts.

ROLLS-ROYCE REFERENCE: ETC01295

SCHEDULE 2 - PATENTS

ATTORNEY REFERENCE	COUNTRY	APPLICANT	Application Number	FILING DATE	PRIORITY DATE
J101743EPPCT	EUROPEAN PATENT APPLICATION	ENERGY TECHNOLOGIES INSTITUTE LLP	14761964.7	16/03/2016	16/08/2013
J101743CNPCT	CHINA	ENERGY TECHNOLOGIES INSTITUTE LLP	201480057332.1	18/04/2016	16/08/2013
J101743USPCT	USA	ENERGY TECHNOLOGIES INSTITUTE LLP	14/911969	15/08/2014	16/08/2013

ROLLS-ROYCE REFERENCE: ETC01295

SCHEDULE 3 - MATERIALS

Documents or Other Materials Comprising or
Containing the Following: Design Risk Assessment
HAZOP study
Work package specifications
Detailed mechanical drawings and models
Detailed electrical drawings
Deliverable ST01.D00, Commercialisation Pathway
Definition Document
Deliverable ST01.D08, Preliminary Design Review Stage
Gate Minutes
Prototype and FCL Design Books
Design review and stage gate materials presented and
supporting information prepared
Deliverable ST01.D02, Test Wire and Formers Delivered
Report
Deliverable ST01.D07, Initial Wire and Module Test
Report Deliverable CT01 D10 Final Wire and Mediule
Deliverable ST01.D12, Final Wire and Module
Optimisation Report Deliverable ST01.D01, Cooling Concept Selection Report
Deliverable ST01.D01, Cooling Concept Selection Report Deliverable ST01.D03, Test Cryogenic Equipment
Delivered Report Deliverable ST01.D04, Thermal Medium Selection Report
Deliverable ST01.D09, Thermal Anchor Test Report
Deliverable ST01.D10, Thermal Control Report
Deliverable ST01.D11, Cold Head Exchange System Report
Deliverable ST01.D05, Current Leads Design Report Deliverable ST01.D06, Cryogenic System Design Report
Specific SCADA software and hardware
Deliverable ST01.D13, Prototype Design Report with
Design Book and supporting information
Deliverable ST01.D14, Prototype Purchases Report
Deliverable ST01.D15, Prototype Assembly Report
Deliverable ST01.D16, Prototype Test Report
Deliverable ST03.D04, Site Busbar Modifications
Completed
Manuals - Installation, Operation and maintenance,
procedures and experience
FCL requirements definition
FCL concepts developed to meet requirements (including
cooling system concepts, 3-min reset and other key
requirements)
Specific design calculations
Specific thermal calculations and models
Information relating to the development of candidate wire
concepts and manufacturing techniques
Definition of wire requirements, specifications and designs
Test requirements, methods and results for all candidate
wires
Technical and commercial details of supply chain for wire
and related components

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New wire winding method, including candidate coil design
concepts and detailed designs
Wire termination to current lead
Wire support former development and final design
Thermal busbar final design
Solid coolant
Cryogen-free FCL cryostat system design
Thermal models and tools
Electrostatic design, HV withstand design,
Electromagnetic force withstand
Thermal busbar cooling methodology
Heat exchanger in vessel
Thermal anchor development, design and testing
Cold head exchange system development, design and
testing
HTS superconducting current lead section
Non-HTS current lead development, design and testing
Current lead dynamic thermal modelling & control
Current lead joints
Internal support methods
Cooling system connections
Vacuum connection
Design of cryostat system complete with all internal
components and cold head release system
Modular cryocooler design - redundancy
Modular cryocooler design - modulation of power output,
including auxiliary load reduction by proposed turn-down
of cryo-coolers
Modular cryocooler design - skid mount & plug/play
Modular cryocooler design - climate modification
Noise reduction systems
Software validation and verification programme
Development, design and test of prototype
FCL control design, including philosophy, algorithms and
software for FCL components, sub-systems, auxiliary
systems and interfaces
Type test programme for this device
Standard for testing FCLs
Generic model of resistive FCL
Unit GAs and weights & termination points
Installation Risk Assessments & Method statements

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EXECUTION COPY

This Agreement has been executed on the date stated at the beginning of it

Signed for and on behalf of The Energy Technologies Institute LLP:

(Signature of Authorised Signatory)

(name of Authorised Signatory)

(Signature of Authorised Signatory)

(name of Authorised Signatory)

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Signed for and on behalf of Rolls-Royce PLC

(Signature of Authorised Signatory)

David Smith

Director - Central Technology

(name of Authorised Signatory)