505420575 04/10/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5467366

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
UNIVERSITY HOSPITALS OF NORTH MIDLANDS NATIONAL HEALTH SERVICE TRUST	11/30/2018

RECEIVING PARTY DATA

Name:	NEPESMO LIMITED
Street Address:	LEIGH SAXTON GREEN
Internal Address:	MUTUAL HOUSE, 70 CONDUIT STREET
City:	LONDON
State/Country:	UNITED KINGDOM
Postal Code:	W1S 2GF

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	8812249

CORRESPONDENCE DATA

Fax Number: (704)221-1197

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: 704.375.0057

Email: mpurvis@shumaker.com

Correspondent Name: SHUMAKER, LOOP & KENDRICK, LLP

Address Line 1: 101 SOUTH TRYON STREET

Address Line 2: SUITE 2200

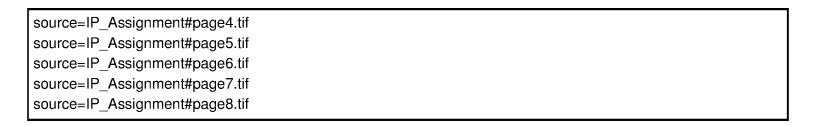
Address Line 4: CHARLOTTE, NORTH CAROLINA 28280-0002

ATTORNEY DOCKET NUMBER:	0148/489US
NAME OF SUBMITTER:	S. ALEXANDER LONG, JR.
SIGNATURE:	/S. Alexander Long, Jr./
DATE SIGNED:	04/10/2019

Total Attachments: 8

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PATENT 505420575 REEL: 048846 FRAME: 0899



PATENT REEL: 048846 FRAME: 0900

DATE 30TH NOVEMBER 2018

(1) UNIVERSITY HOSPITALS OF NORTH MIDLANDS NHS TRUST

AND

(2) NEPESMO LIMITED

Intellectual Property Assignment

1 of 7

PATENT REEL: 048846 FRAME: 0901

BETWEEN:

- (1) University Hospitals of North Midlands NHS Trust whose administrative offices are at Royal Stoke University Hospital, Stoke-on-Trent, Staffordshire ST4 6QG ("UHNM"); and
- (2) **NEPESMO Limited** (company number: 11071606) whose registered office is at Leigh Saxton Green, Mutual House, 70 Conduit Street, London, W1S 2GF ("**NEPESMO**")

Hereinafter reference to "Parties" shall mean UHNM and NEPESMO and reference to "Party" shall mean UHNM or NEPESMO.

WHEREAS

- (A) UHNM has generated Intellectual Property as detailed in Schedule 1 to this Agreement (the "Project IP").
- (B) UHNM is the initial owner of all rights in the Project IP.
- (C) UHNM has filed the patent applications as detailed in Schedule 1 to this Agreement.
- (D) UHNM agrees to assign to NEPESMO all of its rights, title and interest in and to the Project IP owned by it upon the terms and conditions set out below.

NOW IT IS HEREBY AGREED as follows:

1. DEFINITIONS AND INTERPRETATION

1.1 As used in this Agreement the following terms and expressions shall have the meaning ascribed to them below:

"Effective Date"

means 30TH NOVEMBER 2018.

"Intellectual Property"

means all patents, rights to inventions, copyright and related rights, trademarks and trade names, rights to goodwill or to sue for passing off, rights in designs, database rights, rights in confidential information (including know-how) and any other intellectual property rights, in each case whether registered or unregistered and including all applications (or rights to apply) for, and

renewals or extensions of, such rights and all similar or equivalent rights or forms of protection which subsist now or in the future in any part of the world.

"Patents"

means the patents and all applications and granted patents or other similar forms of protection anywhere in the world claiming priority with or from such Patents including utility model and design patents and certificates of invention and all divisionals, continuations, continuations-in-part, reissues, renewals, extensions, additions, supplementary protection certificates or the equivalent to any such patent applications and patents as set out in Schedule 1

1.2 The headings in this Agreement are for convenience only and shall not affect its interpretation.

2. ASSIGNMENT AND OWNERSHIP

Subject to the terms and conditions of this Agreement and in consideration of payment of £1 (one pound), the receipt of which is hereby acknowledged, UHNM hereby assigns to NEPESMO in respect of the Project IP:

- 2.1 all its right, title and interest in and to the Project IP and the full exclusive benefit of it;
- 2.2 all its right, title and interest in and to the Project IP and the full and exclusive benefit of it and all rights, privileges and advantages associated with it;
- 2.3 the full right to apply for and obtain patents or other similar forms of protection in respect of any part or parts of the subject-matter of the Project IP throughout the world and the right to claim priority from the Patents or other similar forms of protection; and
- 2.4 the right to bring proceedings for any previous infringement of the rights assigned.

FURTHER ASSURANCE

3.1 UHNM hereby agrees with NEPESMO that UHNM will execute, sign and do all instruments, applications, documents, acts and things that may reasonably be required by NEPESMO to enable NEPESMO to enjoy the full benefit of the property

and rights hereby assigned (if requested to do so by NEPESMO and at NEPESMO's cost and expense).

4. WARRANTIES

4.1 UHNM confirms that is has the right and authority to assign its right title and interest in the rights to NEPESMO as described in Clause 2 and has sought and received any necessary internal approvals including the approval from the Secretary of State for Health and Social Care.

5. GENERAL

- **5.1** Nothing in this Agreement shall give rise to any partnership or the relationship of principal and agent between any of the Parties.
- 5.2 Neither of the Parties shall make any press or other public announcement concerning any aspect of this Agreement without first obtaining the agreement of the other to the text of that announcement, such agreement not to be unreasonably withheld or delayed.
- Neither Party shall be liable for any delay or failure in performing its obligations under this Agreement if such delays are caused by strike, riot, civil commotion, fire, acts of God or other circumstances beyond its reasonable control ("Force Majeure") provided that the Party so affected shall give prompt notice thereof to the other Party. Subject to the remainder of this Clause 5.3 the Party giving such notice shall be excused from such of its obligations hereunder for as long as it continues to be so affected and shall perform its obligations as soon as such circumstances shall cease to affect its operations. If such Force Majeure continues unabated for a period of sixty (60) days or more, the Parties will meet to discuss in good faith what actions to take or what modification should be made to this Agreement as a consequence of such Force Majeure in order to alleviate its consequences on the affected Party.
- 5.4 UHNM shall not assign, transfer, charge, encumber, sub-contract or otherwise deal with any of its rights (or, for the avoidance of doubt, obligations) under this Agreement.
- 5.5 Any notices to be sent by either Party to the other shall be in writing and sent to the relevant address set out on the front of this document and shall be marked for the attention of the Chief Executive Officer or to any other address as may have been notified to the other Party in accordance with the terms of this Agreement.

- No variation, modification, amendment, extension or release from any provision of this Agreement shall be effective unless it is in writing and signed by both Parties.
- 5.7 This Agreement represents the entire understanding and constitutes the whole agreement in relation to its subject matter and supersedes any previous agreement, understanding or arrangement between the Parties in relation to the Project IP however nothing in this Agreement shall be taken to exclude either Party's liability to the other for fraudulent misrepresentation or fraudulent misstatement.
- 5.8 No relaxation, forbearance or indulgence by either Party in enforcing any of the terms or conditions of this Agreement or the granting of time by either Party to the other shall prejudice, affect or restrict the rights and powers of such Party. The waiver of any breach of any term or any condition of this Agreement shall not be construed as a waiver of any subsequent breach of a term or condition of the same or of a different nature.
- 5.9 If any provision of this Agreement shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not be affected or impaired.
- 5.10 This Agreement shall be governed by and construed in accordance with English law and all questions in any way affecting or arising out of this Agreement shall be subject to the exclusive jurisdiction of the English courts to which the Parties hereby submit.
- 5.11 This Agreement may be executed in one or more counterpart agreements, each of which, when executed shall be deemed to form part of and together constitute this Agreement.
- **5.12** No term of this Agreement is enforceable under the Contracts (Rights of Third Parties Act) 1999 by a person who is not a Party to this Agreement.

IN WITNESS whereof this Agreement is executed by the Parties on the date stated at the beginning of this Agreement through their authorised signatories

For and on behalf of University Hospitals of North Midlands NHS Trust

For and on behalf of NEPESMO Limited

Signature:

Name:

Name:

SCHEDULE 1

SCHEDULE OF "PROJECT IP"

Patent - 'Analyser apparatus and methods for lung disease':

US patent, application number 12/506,864 [filed 21 July 2009, Granted Issue date 19 August 2014, patent number 8812249]. Canadian patent, application 2766699 (filed 25 June 2010; Granted: Issue date 15 December 2015; patent number 2,766,699].

European patent, application 10737376.3 (derived from PCT/ GB2010/051061 filed 25 June 2010); Granted: Issue date 11 April 2018; patent number 2446386 designating all EPC contracting states available at date of filing, national validations underway in CH, DE, DK, ES, FR, GB, IT, NL, NO and SE.

Patent application - 'Improvements in and relating to Sample Collection':

Filing date 23 June 2014 [UK application 1411139,7; Publication number GB2527516A, awaiting UK examination as at 30 April 2018. Split into 3 distinct areas PCT applications in 2015:

- PCT/GB2015/051819 [lip engaging portion], entered US

national phase and the application has been allocated US application number 15/320,630. Published 13 July 2017 as US2017/0196542. Awaiting US examination as of 30 April 2018.

- PCT/GB2015/051820 [filter assembly], entered US national phase for and the application has been allocated US application number 15/320,690. Published 03 August 2017 as US2017/0215850. Awaiting US examination as of 30 April 2018. Also entered the UK national phase for PCT/GB2015/051820. The UK national application was published on 08 February 2017 Integrated COPD biomarker profiles with patient recorded health scores.

Predictive algorithms to determine change in health status and give early warning of exacerbation onset. Software and interface and associated interpretative guidelines.

Design right registration / patent protection for further developments on saliva collectors.

under number GB 2541150, and is awaiting examination as at 30 April 2018.	
- PCT/GB2015/051821 [assay unit interface] [Abandoned].	
EU Design Registration	
Filed an EU design registration for the appearance of the saliva sampler. The filing date is 08 December 2016 and registration number 003507532.	
Concepts/Designs of hardware and associated interfaces - UK and European Community unregistered design rights: saliva collectors, assay solution containers, multi-analyte lab-on-a-chip portable/ mobile bio-clinical analysers. CAD files generated. First 3D-printed saliva collector and filter prototypes.	Know-how of displaying information [e.g. test results/alerts] for clinical use — USER display ON INSTRUMENT. Protocols for patients to obtain samples and perform tests on analyser. Clinical Trial evaluation and associated data of fully integrated COPD-SPOC monitor—technical performance compared to UHNM adapted ELISA assays and functionality.
Copyright of look and content: Fully functional and trialled Mobile App – electronic COPD wellbeing diary – Published on Apple store 2012.	Design, look and content of electronic interfaces: Bespoke new COPD App for interactive COPD self- management and remote monitoring of key metrics, including wellbeing diary, automatic alert systems/ warnings to signal changes in clinical status to patients and clinicians and tracking of clinical outcomes — software and interface and associated guidelines for use.
<u>Databases</u> – salivary levels of biomarkers [e.g. CRP, PCT and NE] matched to clinical data in healthy subjects and COPD patients at varying stages of disease status and treatment. Point in time and longitudinal datasets from clinical studies.	Integrated COPD biomarker profiles with patient recorded health scores for [1] establishing a predictive/prognostic wellbeing index; [2] characterisation of COPD patient stable/ exacerbation/recovery/reexacerbation phenotypes and [3] relationships between salivary biomarkers and non-biological measurables.
End-user feedback log on concepts and designs for the optimisation and application of the COPD-SPOC monitor.	Recorded and written information on user experience on produced prototypes – monitor [including interface display] and other associated accessories.
End-user feedback log on concepts and designs for the development, optimisation and utility of a saliva collection device.	Recorded and written information on user experience of saliva production and end-user saliva collector design features.
Conveight - Standard operating procedures and guidelines for the obtaining, filtering and processing of saliva and protocols for the modification of commercial immunoassays for measurement of target analytes in saliva.	Updated Information on saliva collection methods and clinical guidelines on the use of the COPD-SPOC monitor in the self-management of COPD and for the management of community acquired pneumonia. Patient information leaflets [printed] as well as downloadable information via App.

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Know how of the medical field and care pathways and the NHS, and pertaining to the use of the COPD-SPOC monitor for use in respiratory diseases and for the application in other medical areas outside respiratory.	COPD-SPOC Cost analysis scoping	
F&S market report, headroom economic scenarios for a point-of-care bio-clinical monitor for COPD and commissioned MediLink overview.		