505592401 07/26/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5639202

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MATTHEW LIAM BUSWELL	07/25/2016
HELEN CUDDY	07/27/2016
THOMAS JAMES EDWARDS	07/11/2016
GAVIN WALSH MILLAR	07/11/2016
ANDRE VAN SCHALKWYK	07/12/2016
IAN LEE WAI KWAN	07/12/2016
PING SI	07/11/2016
SINAA ALNASHI	07/11/2016
KIERAN MICHAEL ORCHARD	07/26/2016
IBRAHIM AL-TIAY	07/18/2016
ELMO BENSON STOKS	07/11/2016
CHARLES CHRISTOPHER NORTH	09/01/2016
MATTHEW ROBERT WILSON	02/11/2016
PAUL JAMES TONKIN	07/12/2016

RECEIVING PARTY DATA

Name:	FISHER & PAYKEL HEALTHCARE LIMITED	
Street Address:	15 MAURICE PAYKEL PLACE	
Internal Address:	EAST TAMAKI	
City:	AUCKLAND	
State/Country:	NEW ZEALAND	
Postal Code:	2013	

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	14442688	

CORRESPONDENCE DATA

Fax Number: (949)760-9502

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.

9497600404 Phone:

> **PATENT REEL: 049874 FRAME: 0978**

505592401

Email: efiling@knobbe.com

Correspondent Name: KNOBBE, MARTENS, OLSON & BEAR, LLP

Address Line 1: 2040 MAIN STREET, 14TH FLOOR

Address Line 4: IRVINE, CALIFORNIA 92614

ATTORNEY DOCKET NUMBER:	FPHCR.335NP
NAME OF SUBMITTER:	XIAOYAN WANG
SIGNATURE:	/Xiaoyan Wang/
DATE SIGNED:	07/26/2019

Total Attachments: 17

source=FPHCR335NP Declaration Assignment#page1.tif source=FPHCR335NP Declaration Assignment#page2.tif source=FPHCR335NP_Declaration_Assignment#page3.tif source=FPHCR335NP_Declaration_Assignment#page4.tif source=FPHCR335NP_Declaration_Assignment#page5.tif source=FPHCR335NP_Declaration_Assignment#page6.tif source=FPHCR335NP Declaration Assignment#page7.tif source=FPHCR335NP Declaration Assignment#page8.tif source=FPHCR335NP_Declaration_Assignment#page9.tif source=FPHCR335NP_Declaration_Assignment#page10.tif source=FPHCR335NP Declaration Assignment#page11.tif source=FPHCR335NP_Declaration_Assignment#page12.tif source=FPHCR335NP_Declaration_Assignment#page13.tif source=FPHCR335NP_Declaration_Assignment#page14.tif source=FPHCR335NP Declaration Assignment#page15.tif source=FPHCR335NP_Declaration_Assignment#page16.tif source=FPHCR335NP_Declaration_Assignment#page17.tif

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR.335NP Page 1 of 17

Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwards; Gavin Walsh Millar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert Wilson; Paul James Tonkin;

Declaration

This Declaration is directed to the application identified above that:

Was filed May 13, 2015 as U.S. or International Application No. 14/442,688 and incorporating any amendments made thereto prior to the signature date of this Declaration.

As a named inventor, I declare that:

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

Assignment from Inventors

WHEREAS, above-identified inventors (individual(s) hereinafter "ASSIGNOR") invented certain new and useful improvements, technology, inventions, developments, ideas, ornamental designs, or discoveries, and hereby assign or are under an obligation to assign to the below identified Assignee the above-titled application (collectively hereinafter referred to as the "Work") for which an application for Letters Patent in the United States (identified above) has been prepared for filing with the United States Patent and Trademark Office (hereinafter the "Application").

AND WHEREAS, Fisher & Paykel Healthcare Limited, with its principal place of business at 15 Maurice Paykel Place, East Tamaki, Auckland, New Zealand 2013 (hereinafter the "ASSIGNEE"), desires to acquire the entire right, title, and interest in and to the Application and the Work.

NOW, THEREFORE, for good and valuable consideration of which receipt is hereby acknowledged, ASSIGNOR hereby acknowledges that ASSIGNOR has sold, assigned, transferred and set over, and by these presents does hereby sell, assign, transfer and set over, unto said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in the Application and the Work, including all patent properties filed or issued upon the Application and the Work; where "Patent Properties" include, but are not limited to:

all provisional applications relating thereto (including but not limited to U.S. Provisional Application No(s). 61/726532; 61/786141; 61/877736; 61/877784; 61/877622; 67/877566, filed November 14, 2012; March 14, 2013; September 13, 2013; September 14, 2013; Septemb

all nonprovisional applications claiming priority to aforementioned provisional(s) and/or the present Application, including, all divisions, continuations, continuations-in-part, and reissues, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof; and

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR.335NP Page 2 of 17

Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwards; Gavin Watsh Millar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert Wilson; Paul James Tonkin;

all rights of priority under International Conventions and any related Letters Patent which may hereafter be granted or filed in any country or countries foreign to the United States, all extensions, renewals and reissues thereof.

ASSIGNOR hereby acknowledges the ASSIGNEE as the Applicant for all aforementioned patent properties, and authorizes and requests the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all related Letters Patent to the ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND ASSIGNOR DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND ASSIGNOR DOES HEREBY covenant and agree that ASSIGNOR will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the Work, and testify in any legal proceeding, assist in the preparation of any other Patent Property relating to the Application and the Work or any improvements made thereto, sign/execute all lawful papers, authorize the filing of and execute and make all rightful oaths and/or declarations in connection with the Application and the Work including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Work in all countries.

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR:335NP

Page 3 of 17

Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwards; Gavin Walsh Millar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert Wilson; Paul James Tonkin;

Legal Name of Inventor: Matthew Liam Buswell

Signature:

Witnessed by: ______AUUUULET(.

Witness Name (printed): MARCHINA NUELLER)

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR.335NP

Page 4 of 17

Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwards; Gavin Walsh Millar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert Wilson; Paul James Tonkin;

Signature: Helen Guddy

Signature: Helen Guddy

Witnessed by: Hobby Date: 77 July 2016

Witness Name (printed): FAIMONN MCRNICHT

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR.335NP Page 5 of 17

Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwards; Gavin Walsh Millar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert Wilson; Paul James Tonkin;

Legal Name of Inventor: Thomas James Edwards

Signature: Date: // Joly 29/6

Witnessed by: Matthewallows

Witness Name (printed): MACTINA MUCLLERS

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR.335NP Page 6 of 17

Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Guddy; Thomas James Edwards; Gavin Walsh Millar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert

Wilson; Paul James Tonkin;

Legal Name of Inventor: Gavin Walsh Millar

graune.

will loss our by.

Witness Name (printed): MARTINA MUELLERA

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR.335NP Page 7 of 17

Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwards; Gavin Walsh Millar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert Wilson; Paul James Tonkin;

Legal Name of Inventor: Helgard Oosthuysen

Signature: ______ Date: ______

Witnessed by: ______

Witness Name (printed): ______

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR.335NP Page 8 of 17

Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwards; Gavin Walsh Millar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert

Wilson; Paul James Tonkin;

Legal Name of Inventor: Andre van Schalkwyk

Signature:

Witness Name (printed): Notable Robertson

Date: 🏄 [ころん] このほ

Docket No.: FPHCR.335NP			Page 9 of 17
Title: ZONE HEATING FOR RESPIRATORY	CIRCUITS		
Inventors: Matthew Liam Buswell; Helen Gudd Oosthuysen; Andre van Schalkwyk; lar Orchard; Ibrahim Al-Tiay; Elmo Benso Wilson; Paul James Tonkin;	n Lee Wai Kwan; Ping Si	; Sinaa A	Inashi: Kieran Michael
Legal Name of inventor: Jan Lee Wai Kwan		***************************************	
Signature: Jen Kush		Date:	12 JAY 2016
Witnessed by:	<u> </u>		
Witness Name (printed):	VANESSA (VD.D.0	

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR.335NP

Page 10 of 17

Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwards; Gavin Waish Millar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert

Wilson; Paul James Tonkin;

Legal Name of inventor: Ping Si	
Signature:	Date: // Jul 20/
Witnessed by:	neguetlow.
Witness Name (printed):	MAGTINA MUELLERS

Docket No.: FPHCR.335NP	Page 11 of 17
Title: ZONE HEATING FOR RESPIRATORY CIRCUIT	rs
Inventors: Matthew Liam Buswell; Helen Cuddy; Thon Oosthuysen; Andre van Schalkwyk; Ian Lee W Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks Wilson; Paul James Tonkin;	ai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael
Legal Name of Inventor: Sinaa Alnashi	
Signature: Sixtas 478.Altasas	Co. Date: 11th July 2016
Witnessed by:	Memeriers.

Witness Name (printed): <u>MARTING MUEUERS</u>

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR.335NP

Page 12 of 17

Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwards; Gavin Walsh Miliar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert Wilson; Paul James Tonkin;

Legal Name of inventor: Kieran Michael Orchard

Signature:

Date: <u>26 July 2016</u>

Witnessed by:

Witness Name (printed):

٠. حا

Docket No.: FPHCR.335NP	Page 13 of 17
Title: ZONE HEATING FOR RESPIRATORY CIRCUITS	
Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwa Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping S Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christ Wilson; Paul James Tonkin;	Si; Sinaa Alnashi; Kieran Michael
Legal Name of inventor: Ibrahim Al-Tiay	
Signature: Acad Chaliay	Date: <u> </u>
Witnessed by:	
Witness Name (printed): かんだ がながら	DAGOLIK

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR.335NP Page 14 of 17 Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwards; Gavin Walsh Millar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert

Wilson; Paul James Tonkin;

Signature:	AS.		Date:	Ü	JULY	2016
		3001/201	13 15 1	P		

Legal Name of inventor: Elmo Benson Stoks Witnessed by: MUMLLE Witness Name (printed): MARTINA MUELLECS

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR.335NP Page 15 of 17

Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwards; Gavin Walsh Millar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert

Wilson; Paul James Tonkin;

Legal Name of inventor	: Charles Christopher North		
Signature:	/ James Commission	Date:	01883016
	Witnessed by:	while "	
Witne	ss Name (printed):	VANESSA WOOD	

Docket No.: FPHCR.335NP	Page 16 of 17
Title: ZONE HEATING FOR RESPIRATORY C	IRCUITS
Oosthuysen; Andre van Schalkwyk; lan	r; Thomas James Edwards; Gavin Walsh Millar; Helgard Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael I Stoks; Charles Christopher North; Matthew Robert
Legal Name of Inventor: Matthew Robert Wils	sori
Signature: /////	Date: <u>///០%/2016</u>
Wilnessed by:	receivellers.
Witness Name (printed):	MARTINA BANELLENS

Application Data Sheet filed previously or concurrently

Docket No.: FPHCR.335NP Page 17 of 17

Title: ZONE HEATING FOR RESPIRATORY CIRCUITS

Inventors: Matthew Liam Buswell; Helen Cuddy; Thomas James Edwards; Gavin Walsh Millar; Helgard Oosthuysen; Andre van Schalkwyk; Ian Lee Wai Kwan; Ping Si; Sinaa Alnashi; Kieran Michael Orchard; Ibrahim Al-Tiay; Elmo Benson Stoks; Charles Christopher North; Matthew Robert

Wilson; Paul James Tonkin;

Legal Name of inventor: Paul James Tonkin

Signature: 1 cent 10 w/s.

and the second

Witness Name (printed):

21345549

RECORDED: 07/26/2019