506005887 04/08/2020 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6052598

SUBMISSION TYPE:		1	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		/	ASSIGNMENT		
CONVEYING PARTY D	ΑΤΑ				
		N	lame		Execution Date
RICHARD HAMMOND					03/11/2020
DREW NELSON					03/11/2020
ALAN GOTT					03/12/2020
RODNEY PELZEL					03/11/2020
ANDREW CLARK					03/19/2020
RECEIVING PARTY DA	TA				
Name:	IQE PL	С			
Street Address:	PASCA		SE, ST. MELLONS		
City:	CARDI	FF			
-		UNITED KINGDOM			
State/Country:		J KING	aDOM		
Postal Code:	CF3 0L	W			
Postal Code: PROPERTY NUMBERS	CF3 0L	W			
Postal Code: PROPERTY NUMBERS Property Type	CF3 0L	W	Number		
Postal Code: PROPERTY NUMBERS Property Type PCT Number:	CF3 0L	.W US201	Number 13559		
Postal Code: PROPERTY NUMBERS Property Type PCT Number:	CF3 0L	W	Number 13559		
Postal Code: PROPERTY NUMBERS Property Type PCT Number: Application Number:	CF3 0L	.W US201	Number 13559		
Postal Code: PROPERTY NUMBERS Property Type PCT Number: Application Number: CORRESPONDENCE D	CF3 0L	W US201 167428	Number 13559		
Postal Code: PROPERTY NUMBERS Property Type PCT Number: Application Number: CORRESPONDENCE D Fax Number: Correspondence will b	CF3 0L Total: 2 DATA	.W US201 167428 (646)2 o the e-	Number 13559 827 19-6229 -mail address first; if that is un		
Postal Code: PROPERTY NUMBERS Property Type PCT Number: Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i>	CF3 0L Total: 2 OATA e sent to provided	.W US201 167428 (646)2 (646)2 (646)2	Number 13559 827 19-6229 -mail address first; if that is un at is unsuccessful, it will be se		
Postal Code: PROPERTY NUMBERS Property Type PCT Number: Application Number: CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone:	CF3 0L Total: 2 DATA e sent to provided	W US201 167428 (646)2 o the e- l; if tha 64697;	Number 13559 827 -mail address first; if that is un at is unsuccessful, it will be se 32500		
Postal Code: PROPERTY NUMBERS Property Type PCT Number: Application Number: CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone: Email:	CF3 0L	.W US201 167428 (646)2 (646)2 (if the 64697 (TRAC)	Number 13559 827 -mail address first; if that is un at is unsuccessful, it will be se 32500 Y.CHU@HGLAW.COM		
Postal Code: PROPERTY NUMBERS Property Type PCT Number: Application Number: CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone: Email: Correspondent Name:	CF3 0L Total: 2 DATA e sent to provided	W US201 167428 (646)2 o the e- d; if tha 64697 TRAC HALE	Number 13559 827 -mail address first; if that is un at is unsuccessful, it will be se 32500		
Postal Code: PROPERTY NUMBERS Property Type PCT Number: Application Number: CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone: Email: Correspondent Name: Address Line 1:	CF3 0L	W US201 167428 (646)2 o the e- d; if tha 64697 TRAC HALE	Number 13559 827 - <i>mail address first; if that is un</i> <i>at is unsuccessful, it will be se</i> 32500 Y.CHU@HGLAW.COM Y GUILIANO LLP OAD STREET		
Postal Code: PROPERTY NUMBERS Property Type PCT Number: Application Number: CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 2:	CF3 0L	W US201 167428 (646)2 5 the e- 1; if tha 64697 TRAC TRAC HALE 75 BR SUITE	Number 13559 827 - <i>mail address first; if that is un</i> <i>at is unsuccessful, it will be se</i> 32500 Y.CHU@HGLAW.COM Y GUILIANO LLP OAD STREET		
PCT Number: Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will b</i>	CF3 0L	W US201 167428 (646)2 5 the e- (if the 64697 TRAC TRAC TRAC SUITE NEW	Number 13559 827 - <i>mail address first; if that is un</i> <i>at is unsuccessful, it will be se</i> 32500 Y.CHU@HGLAW.COM Y GUILIANO LLP OAD STREET 5 1000		
Postal Code: PROPERTY NUMBERS Property Type PCT Number: Application Number: CORRESPONDENCE D Fax Number: Correspondence will b using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	CF3 0L	W US201 167428 (646)2 o the e- d; if tha 646973 TRAC TRAC HALE 75 BR SUITE NEW	Number 13559 827 -mail address first; if that is un at is unsuccessful, it will be set 32500 Y.CHU@HGLAW.COM Y GUILIANO LLP OAD STREET 1000 YORK, NEW YORK 10004		

04/08/2020

DATE SIGNED:

Total Attachments: 10

source=111848-0114-101_Assignment#page1.tif source=111848-0114-101_Assignment#page2.tif source=111848-0114-101_Assignment#page3.tif source=111848-0114-101_Assignment#page4.tif source=111848-0114-101_Assignment#page5.tif source=111848-0114-101_Assignment#page6.tif source=111848-0114-101_Assignment#page7.tif source=111848-0114-101_Assignment#page8.tif source=111848-0114-101_Assignment#page9.tif source=111848-0114-101_Assignment#page1.tif

WHEREAS, we, Richard Hammond, Drew Nelson, Alan Gott, Rodney Pelzel, and Andrew Clark, have invented one or more inventions in

SEMICONDUCTOR MATERIAL HAVING TUNABLE

PERMITTIVITY AND TUNABLE THERMAL CONDUCTIVITY,

and have made application for Letters Patent therefor as follows:

Jurisdiction	Application No.	Date Filed
United States	16/742,827	January 14, 2020
PCT	PCT/US2020/013559	January 14, 2020
EP	20159980.0	February 28, 2020
Taiwan	109104558	February 13, 2020

WHEREAS, IQE plc, (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the United Kingdom having principal offices at Pascal Close, St. Mellons, Cardiff, CF3 0LW, U.K., desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention(s) as described in said invention and said patent applications, together with our entire right, title and interest in and to such Letters Patent as may issue thereon, and any substitution, reissue, continuation, divisional, revival and foreign counterparts thereof and including the right to claim priority under any applicable statute, treaty or convention based on said application; said invention(s), applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the

779001<u>_1</u>

right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional, continuation or revival applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request patent authorities in all jurisdictions to issue such Letters Patent as shall be granted upon said applications, or additional applications based thereon, to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seal(s) the date set forth below.

Inventor

Date: 11 MARCH 2020

Address: Cascades, Llandevaud, Newport NP18 2AD, United Kingdom.

Inventor ____

Date:

Drew Nelson

Alan Gott

Address: Liansannor House, Cowbridge, Vale of Glamorgan, UK, CF71 7RW.

Inventor _____

Date: _____

Address: 7 Gillebank Close, Stockwood, Bristol BS14 8HT, United Kingdom.

111848-0114

Inventor Rodel & Pelzel

Date; 11 March 2020

Address: 119 Technology Drive, Bethlehem, PA 18015.

Inventor _______

Date:

Address: 192 Preston Drive, Mountain View, CA 94040.

ACKNOWLEDGEMENT OF ASSIGNEE/APPLICANT:

I hereby acknowledge the foregoing executed Assignment on behalf of IQE PLC.

By Rootelzef

Date 11 March 2020

Name: Rodney Pelzel, Ph.D.

Title: Chief Technology Officer

WHEREAS, we, Richard Hammond, Drew Nelson, Alan Gott, Rodney Pelzel, and Andrew Clark, have invented one or more inventions in SEMICONDUCTOR MATERIAL HAVING TUNABLE PERMITTIVITY AND TUNABLE THERMAL CONDUCTIVITY, and have made application for Letters Patent therefor as follows:

Jurisdiction	Application No.	Date Filed
United States	16/742,827	January 14, 2020
PCT	PCT/US2020/013559	January 14, 2020
EP	20159980.0	February 28, 2020
Taiwan	109104558	February 13, 2020

WHEREAS, IQE plc, (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the United Kingdom having principal offices at Pascal Close, St. Mellons, Cardiff, CF3 0LW, U.K., desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention(s) as described in said invention and said patent applications, together with our entire right, title and interest in and to such Letters Patent as may issue thereon, and any substitution, reissue, continuation, divisional, revival and foreign counterparts thereof and including the right to claim priority under any applicable statute, treaty or convention based on said application; said invention(s), applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the

779001_1

right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional, continuation or revival applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request patent authorities in all jurisdictions to issue such Letters Patent as shall be granted upon said applications, or additional applications based thereon, to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seal(s) the date set forth below.

Date:

Inventor ______ Richard Hammond

Address: Cascades, Llandevaud, Newport NP18 2AD, United Kingdom.

Inventor

MINUM

Date: 11th March 2020

Address: Liansannor House, Cowbridge, Vale of Glamorgan, UK, CF71 7RW.

Inventor ______ Alan Gott

Date:

Address: 7 Gillebank Close, Stockwood, Bristol BS14 8HT, United Kingdom.

WHEREAS, we, Richard Hammond, Drew Nelson, Alan Gott, Rodney Pelzel, and Andrew Clark, have invented one or more inventions in SEMICONDUCTOR MATERIAL HAVING TUNABLE PERMITTIVITY AND TUNABLE THERMAL CONDUCTIVITY, and have made application for Letters Patent therefor as follows:

Jurisdiction	Application No.	Date Filed
United States	16/742,827	January 14, 2020
РСТ	PCT/US2020/013559	January 14, 2020
EP	20159980.0	February 28, 2020
Taiwan	109104558	February 13, 2020

WHEREAS, IQE plc, (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the United Kingdom having principal offices at Pascal Close, St. Mellons, Cardiff, CF3 0LW, U.K., desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention(s) as described in said invention and said patent applications, together with our entire right, title and interest in and to such Letters Patent as may issue thereon, and any substitution, reissue, continuation, divisional, revival and foreign counterparts thereof and including the right to claim priority under any applicable statute, treaty or convention based on said application; said invention(s), applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the

right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional, continuation or revival applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request patent authorities in all jurisdictions to issue such Letters Patent as shall be granted upon said applications, or additional applications based thereon, to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seal(s) the date set forth below.

Inventor ____

Richard Hammond

Date:

Address: Cascades, Llandevaud, Newport NP18 2AD, United Kingdom,

Inventor_____
Drew Nelson

Date:

Address: Liansannor House, Cowbridge, Vale of Glamorgan, UK, CF71 7RW.

Inventor	AP B.M.
	Alan Gott

Date: 12-03-20

Address: 7 Gillebank Close, Stockwood, Bristol BS14 8HT, United Kingdom.

WHEREAS, we, Richard Hammond, Drew Nelson, Alan Gott, Rodney Pelzel, and Andrew Clark, have invented one or more inventions in SEMICONDUCTOR MATERIAL HAVING TUNABLE

PERMITTIVITY AND TUNABLE THERMAL CONDUCTIVITY,

and have made application for Letters Patent therefor as follows:

Jurisdiction	Application No.	Date Filed
United States	16/742,827	January 14, 2020
PCT	PCT/US2020/013559	January 14, 2020
EP	20159980.0	February 28, 2020
Taiwan	109104558	February 13, 2020

WHEREAS, **IQE plc**, (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **United Kingdom** having principal offices at **Pascal Close**, **St. Mellons**, **Cardiff, CF3 0LW, U.K.**, desires to acquire an interest therein in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention(s) as described in said invention and said patent applications, together with our entire right, title and interest in and to such Letters Patent as may issue thereon, and any substitution, reissue, continuation, divisional, revival and foreign counterparts thereof and including the right to claim priority under any applicable statute, treaty or convention based on said application; said invention(s), applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment not been made; we hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent, all choses in action pertaining to the applications or Letters Patent including the right to sue for and collect damages and other recoveries for past infringement thereof, all rights to initiate proceedings before government and administrative bodies, and all files, records and other materials arising from the prosecution, exploitation, or defense of rights and registrations pertaining to the applications or Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the

right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein;

AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional, continuation or revival applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved;

AND, we do hereby authorize and request patent authorities in all jurisdictions to issue such Letters Patent as shall be granted upon said applications, or additional applications based thereon, to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seal(s) the date set forth below.

Inventor		e:
Address:	Richard Hammond s: Cascades, Llandevaud, Newport NP18 2AD, United	Kingdom.
Inventor	r Date Drew Nelson	e:
Address:	s: Liansannor House, Cowbridge, Vale of Glamorgan, U	/K, CF71 7RW.
Inventor	r Date Alan Gott	e:

Address: 7 Gillebank Close, Stockwood, Bristol BS14 8HT, United Kingdom.

Inventor _____

Rodney Pelzel

Date: _____

Address: 119 Technology Drive, Bethlehem, PA 18015.

Inventor A Clark Andrew Clark

Date: March 19th 2020

Address: 192 Preston Drive, Mountain View, CA 94040.

ACKNOWLEDGEMENT OF ASSIGNEE/APPLICANT:

I hereby acknowledge the foregoing executed Assignment on behalf of IQE PLC.

By _____

Date _____

Name: _____

Title:

 779001_1

RECORDED: 04/08/2020