

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3208103

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	SECURITY INTEREST	
CONVEYING PARTY DATA		
Name		Execution Date
NOVOCURE LIMITED		01/30/2015
RECEIVING PARTY DATA		
Name:	BIOPHARMA SECURED INVESTMENTS III HOLDINGS CAYMAN LP	
Street Address:	C/O INTERTRUST CORPORATE SERVICES (CAYMAN) LIMITED	
Internal Address:	190 ELGIN AVENUE	
City:	GEORGETOWN, GRAND CAYMAN KY1-9005	
State/Country:	CAYMAN ISLANDS	
PROPERTY NUMBERS Total: 38		
Property Type	Number	
Patent Number:	6868289	
Patent Number:	7016725	
Patent Number:	7089054	
Patent Number:	7136699	
Patent Number:	7146210	
Patent Number:	7467011	
Patent Number:	7519420	
Patent Number:	7565205	
Patent Number:	7565206	
Patent Number:	7599745	
Patent Number:	7599746	
Patent Number:	7706890	
Patent Number:	7715921	
Patent Number:	7805201	
Patent Number:	7890183	
Patent Number:	7912540	
Patent Number:	7917227	
Patent Number:	8019414	
Patent Number:	8027738	
Patent Number:	8170684	

PATENT

Property Type	Number
Patent Number:	8175698
Patent Number:	8229555
Patent Number:	8244345
Patent Number:	RE43618
Patent Number:	7333852
Patent Number:	8406870
Patent Number:	8447395
Patent Number:	8447396
Patent Number:	8465533
Patent Number:	8706261
Patent Number:	8715203
Patent Number:	8718756
Patent Number:	8764675
Application Number:	13782418
Application Number:	13782579
Application Number:	13788154
Application Number:	13788159
Application Number:	14269784

CORRESPONDENCE DATA

Fax Number: (202)887-4288

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: 202-887-4000

Email: dc_ipdocketing@akingump.com

Correspondent Name: DAVID C. LEE

Address Line 1: 1333 NEW HAMPSHIRE AVENUE NW

Address Line 4: WASHINGTON, D.C. 20036

ATTORNEY DOCKET NUMBER: 687747.0026

NAME OF SUBMITTER: DAVID C. LEE

SIGNATURE: /David C. Lee/

DATE SIGNED: 02/02/2015

Total Attachments: 14

source=BioPharma -- Novocure -- Patent Security Agreement (EXECUTION COPY)#page1.tif
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PATENT SECURITY AGREEMENT

THIS PATENT SECURITY AGREEMENT, dated as of January 30, 2015, is made by Novocure Limited ("Grantor"), in favor of BioPharma Secured Investments III Holdings Cayman LP, as lender (in such capacity, together with its successors and permitted assigns, "Lender") on behalf of itself and the other Secured Parties (as defined in the Credit Agreement referred to below).

W I T N E S S E T H:

WHEREAS, pursuant to the Loan and Security Agreement, dated as of January 7, 2015 (as the same may be amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), by and between Novocure Limited ("Borrower") and Lender, Lender has agreed to make extensions of credit to Borrower upon the terms and subject to the conditions set forth therein;

WHEREAS, Grantor has agreed, pursuant to a Guaranty and Security Agreement dated as of January 30, 2015 in favor of Lender (as such agreement may be amended, restated, supplemented or otherwise modified from time to time, the "Guaranty and Security Agreement"), to guarantee the Obligations (as defined in the Credit Agreement) of Borrower; and

WHEREAS, Grantor is party to the Guaranty and Security Agreement pursuant to which Grantor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce Lender to enter into the Credit Agreement and to induce Lender to make its extensions of credit to Borrower thereunder, Grantor hereby agrees with Lender as follows:

Section 1. Defined Terms. Capitalized terms used herein without definition are used as defined in the Guaranty and Security Agreement.

Section 2. Grant of Security Interest in Patent Collateral. Grantor, as collateral security for the prompt and complete payment and performance when due (whether at stated maturity, by acceleration or otherwise) of the Secured Obligations of Grantor, hereby mortgages, pledges and hypothecates to Lender, for the benefit of itself and the other Secured Parties, and grants to Lender, for the benefit of itself and the other Secured Parties, a Lien on and security interest in, all of its right, title and interest in, to and under the following Collateral of Grantor (the "Patent Collateral"):

(a) all of its Patents and all IP Licenses and IP Ancillary Rights providing for the grant by or to Grantor of any right under any Patent, including, without limitation, those referred to on Schedule 1 hereto;

(b) all reissues, reexaminations, continuations, continuations-in-part, divisionals, renewals and extensions of the foregoing; and

(c) all income, royalties, proceeds and liabilities at any time due or payable or asserted under and with respect to any of the foregoing, including, without limitation, all rights to sue and recover at law or in equity for any past, present and future infringement, misappropriation, dilution, violation or other impairment thereof.

Section 3. Guaranty and Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to Lender pursuant to the Guaranty and Security Agreement and Grantor hereby acknowledges and agrees that the obligations, rights and remedies of Grantor and of Lender with respect to the security interest in the Patent Collateral

made and granted hereby are more fully set forth in the Guaranty and Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

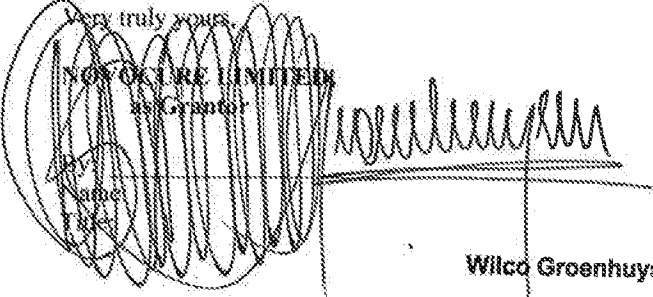
Section 4. Grantor Remains Liable. Grantor hereby agrees that, anything herein to the contrary notwithstanding, Grantor shall assume full and complete responsibility for the prosecution, defense, enforcement or any other necessary or desirable actions in connection with their Patents and IP Licenses subject to a security interest hereunder.

Section 5. Counterparts. This Patent Security Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart.

Section 6. Governing Law. This Patent Security Agreement and the rights and obligations of the parties hereto shall be governed by, and construed and interpreted in accordance with, the law of the State of New York.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Very truly yours,


Wilco Groenhuysen
NovoCure Limited
Chief Financial Officer

[SIGNATURE PAGE TO PATENT SECURITY AGREEMENT]

ACCEPTED AND AGREED
as of the date first above written:

**BIOPHARMA SECURED INVESTMENTS III HOLDINGS CAYMAN LP,
as Lender**

By: Pharmakon Advisors, LP,
its Investment Manager

By: Pharmakon Management I, LLC,
its General Partner

By: 
Name: Pedro Gonzalez de Cosio
Title: Managing Member

[ACKNOWLEDGEMENT OF GRANTOR FOR PATENT SECURITY AGREEMENT]

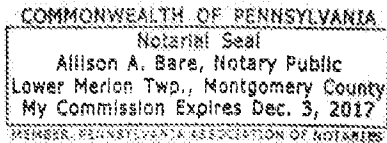
ACKNOWLEDGMENT OF GRANTOR

State of Pennsylvania)
County of Montgomery)

ss.

On this 29 day of January, 2015 before me personally appeared Wilhelmus C. Groenhuisen, proved to me on the basis of satisfactory evidence to be the person who executed the foregoing instrument on behalf of NOVOLUX LIMITED, who being by me duly sworn did depose and say that he is an authorized officer of said corporation, that the said instrument was signed on behalf of said corporation as authorized by its Board of Directors and that he acknowledged said instrument to be the free act and deed of said corporation.

Allison A. Bare
Notary Public



[ACKNOWLEDGEMENT OF GRANTOR FOR PATENT SECURITY AGREEMENT]

SCHEDULE I
TO
PATENT SECURITY AGREEMENT

[See Attached]

I. US Issued Patents

<u>Name of Entity</u>	<u>Title</u>	<u>Filing Date/Issued Date</u>	<u>Status</u>	<u>Application/Registration No.</u>
NovoCure Limited	Apparatus for Treating a Tumor or the Like and Articles Incorporating the Apparatus for Treatment of the Tumor	12-10-2002 / 03-15-2005	Issued	6,868,289
NovoCure Limited	Method and Apparatus for Destroying Dividing Cells	11-05-2002 / 03-21-2006	Issued	7,016,725
NovoCure Limited	Apparatus and Method for Treating a Tumor or the Like	10-31-2002 / 08-08-2006	Issued	7,089,054
NovoCure Limited	Apparatus for Destroying Dividing Cells	10-02-2002 / 11-14-2006	Issued	7,136,699
NovoCure Limited	Apparatus and Method for Optimizing Tumor Treatment Efficiency by Electric Fields	03-28-2003 / 12-05-2006	Issued	7,146,210
NovoCure Limited	Hat for Treating a Tumor or the Like	06-14-2006 / 12-16-2008	Issued	7,467,011
NovoCure Limited	Apparatus For Selectively Destroying Dividing Cells	09-06-2006 / 04-14-2009	Issued	7,519,420
NovoCure Limited	Treating a Tumor or the Like with Electric Fields at Different Orientations	04-21-2005 / 07-21-2009	Issued	7,565,205
NovoCure Limited	Treating a Tumor or the Like with Electric Fields at Different Orientations	12-27-2005 / 07-21-2009	Issued	7,565,206
NovoCure Limited	Treating a Tumor or the Like with an Electric Field	04-21-2005 / 10-06-2009	Issued	7,599,745
NovoCure Limited	Apparatus and Method for Preventing the Spread of Cancerous Metastases and for Elimination of Metastases	06-07-2006 / 10-06-2009	Issued	7,599,746
NovoCure Limited	Treating a Tumor or the Like with an Electric Field that is Focused at a	03-07-2005	Issued	7,706,890

<u>Name of Entity</u>	<u>Title</u>	<u>Filing Date/Issued Date</u>	<u>Status</u>	<u>Application/Registration No.</u>
	Target Region	04-27-2010		
NovoCure Limited	Electrodes for Applying an Electric Field In-Vivo Over an Extended Period of Time	12-05-2005 / 05-11-2010	Issued	7,715,921
NovoCure Limited	Treating a Tumor or the Like with an Electric Field	04-21-2005 / 09-28-2010	Issued	7,805,201
NovoCure Limited	Treating Parasites With Electric Fields	08-13-2008 / 02/15/2011	Issued	7,890,183
NovoCure Limited	Article of Clothing for Treating a Tumor or the Like	06-14-2006 / 03-22-2011	Issued	7,912,540
NovoCure Limited	Optimizing An Electric Field Waveform To Increase Its Effect On Proliferating Cells	09-29-2006 / 03-29-2011	Issued	7,917,227
NovoCure Limited	Treating Cancer Using Electromagnetic Fields In Combination With Other Treatment Regimens	04-02-2007 / 09-13-2011	Issued	8,019,414
NovoCure Limited	Probe for Treating a Tumor or the Like	06-14-2006 / 09-27-2011	Issued	8,027,738
NovoCure Limited	Electrodes For Applying an Electric Field In-Vivo Over an Extended Period of Time	03-23-2010 / 05-01-2012	Issued	8,170,684
NovoCure Limited	Treating Bacteria With Electric Fields	06-26-2008 / 05-08-2012	Issued	8,175,698
NovoCure Limited	Probe for Treating a Tumor or the Like	09-02-2011 / 07-24-2012	Issued	8,229,555
NovoCure Limited	Treating a Tumor or the Like with Electric Fields at Different Frequencies	04-21-2005 / 08-14-2012	Issued	8,244,345
NovoCure Limited	Method and Apparatus for Destroying Dividing Cells	08-27-2008 / 08-28-2012 (for RE) and	Issued	RE43,618 12/199,498 based on

<u>Name of Entity</u>	<u>Title</u>	<u>Filing Date/Issued Date</u>	<u>Status</u>	<u>Application/Registration No.</u>
		02-06-2001 / 02-19-2008 (for orig.) based on PCT/IB01/00202		7,333,852
NovoCure Limited	Treating Cancer Using Electromagnetic Fields in Combination with Other Treatment Regimens	08-24-2011 / 03-26-2013	Issued	8,406,870
NovoCure Limited	Treating Bacteria with Electric Fields	12-02-2010 / 05-21-2013	Issued	8,447,395
NovoCure Limited	Treating Bacteria With Electric Fields	03-23-2012 / 05-21-2013	Issued	8,447,396
NovoCure Limited	Treating Cancer Using Electromagnetic Fields In Combination With Photodynamic Therapy	03-05-2008 / 06-18-2013	Issued	8,465,533
NovoCure Limited	Treating a Tumor or the Like with Electric Fields at Different Frequencies	07-11-2012 / 04-22-2014	Issued	8,706,261
NovoCure Limited	Composite Electrode	09-17-2007 / 05-06-2014	Issued	8,715,203
NovoCure Limited	Optimizing Characteristics of an Electric Field to Increase the Field Effect on Proliferating Cells	08-10-2010 / 05-06-2014	Issued	8,718,756
NovoCure Limited	Composite Electrode	03-08-2013 / 07-01-2014	Issued	8,764,675

II. Pending US Patent Applications

<u>Name of Entity</u>	<u>Title</u>	<u>Filing Date/Issued Date</u>	<u>Status</u>	<u>Application/ Registration No.</u>
NovoCure Limited	Treating Bacteria with Electric Fields	03-01-2013	pending	13/782,418
NovoCure Limited	Treating Bacteria with Electric Fields	03-01-2013	pending	13/782,579
NovoCure Limited	Treating Cancer Using Electromagnetic Fields in Combination with Photodynamic Therapy	03-07-2013	pending	13/788,154
NovoCure Limited	Treating Cancer Using Electromagnetic Fields in Combination with Photodynamic Therapy	03-07-2013	pending	13/788,159
NovoCure Limited	Optimizing Treatment Using TTFields by Changing the Frequency During the Course of Long Term Tumor Treatment	05-05-2013	pending	14/269,784

III. Non-US Patents and Patent Applications

<u>Name of Entity</u>	<u>Country</u>	<u>Title</u>	<u>Date Filed</u>	<u>Status</u>	<u>Application No. / Registered No.</u>
NovoCure Limited	Austria	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	Belgium	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	Canada	Selectively / Destroying Dividing Cells	16/02/2001	Granted / Registered	2400526
NovoCure Limited	Canada	Apparatus for Treating a Tumor	01/10/2003	Pending	2499845

<u>Name of Entity</u>	<u>Country</u>	<u>Title</u>	<u>Date Filed</u>	<u>Status</u>	<u>Application No. / Registered No.</u>
NovoCure Limited	Canada	Electrode Re-Positioning	05/12/2005	Pending	2590342
NovoCure Limited	Canada	Phase-Shifting Rotation	27/12/2005	Pending	2594231
NovoCure Limited	Canada	Field Guides	08/06/2006	Pending	2611398
NovoCure (Israel) Limited	Canada	Treating Bacteria	27/06/2008	Pending	2697012
NovoCure (Israel) Ltd.	Canada	Treating a Tumor or the Like	21/04/2005	Pending	2563817
NovoCure (Israel) Ltd.	Canada	Optimizing Characteristics	29/09/2006	Pending	2624624
NovoCure (Israel) Ltd.	Canada	Chemotherapeutic Treatment	03/04/2007	Pending	2648388
NovoCure (Israel) Ltd.	Canada	Treating Parasites	13/08/2008	Pending	2696352
NovoCure Limited	China	Electrode Re-Positioning	05/12/2005	Granted / Registered	ZL200580046784.0
NovoCure Limited	China	Phase-Shifting Rotation	27/12/2005	Granted / Registered	ZL200580048335.X
NovoCure Limited	China	Field Guides	08/06/2006	Granted / Registered	ZL200680026027.1
NovoCure (Israel) Ltd.	China	Treating Bacteria	27/06/2008	Pending	200880105086.7
NovoCure Limited	China	Electrode Re-Positioning	05/12/2005	Pending	201010599490.3
NovoCure Limited	China	Phase-Shifting Rotation	27/12/2005	Granted / Registered	201110226148.3
NovoCure (Israel) Ltd.	China	Treating a Tumor or the Like	21/04/2005	Granted / Registered	ZL200580018206.6
NovoCure (Israel) Ltd.	China	Optimizing Characteristics	29/09/2006	Pending	200680043421.6
NovoCure (Israel) Ltd.	China	Treating Parasites	13/08/2008	Pending	200880111479.9
NovoCure Limited	Czech Republic	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552

<u>Name of Entity</u>	<u>Country</u>	<u>Title</u>	<u>Date Filed</u>	<u>Status</u>	<u>Application No. / Registered No.</u>
NovoCure Limited	Denmark	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	European Patent Office	Electrode Re-Positioning	05/12/2005	Pending	2364747
NovoCure Limited	European Patent Office	Electrode Re-Positioning	05/12/2005	Pending	2364748
NovoCure Limited	European Patent Office	Electrode Re-Positioning	05/12/2005	Pending	2345451
NovoCure Limited	European Patent Office	Selectively / Destroying Dividing Cells	16/02/2001	Pending	01906036.7
NovoCure Limited	European Patent Office	Apparatus for Treating a Tumor	01/10/2003	Pending	03799042.1
NovoCure Limited	European Patent Office	Phase-Shifting Rotation	27/12/2005	Pending	1833554
NovoCure Limited	European Patent Office	Field Guides	08/06/2006	Pending	06765476.4
NovoCure (Israel) Ltd.	European Patent Office	Treating Bacteria	27/06/2008	Pending	08788839.2
NovoCure Limited	European Patent Office	Electrode Re-Positioning	05/12/2005	Pending	09014785.1
NovoCure Limited	European Patent Office	Selectively / Destroying Dividing Cells	16/02/2001	Pending	2335776
NovoCure Limited	European Patent Office	Apparatus for Treating a Tumor	01/10/2003	Pending	10012702.6
NovoCure Limited	European Patent Office	Apparatus for Treating a Tumor	01/10/2003	Pending	10012716.6
NovoCure Limited	European Patent Office	Apparatus for Treating a Tumor	01/10/2003	Pending	2281603
NovoCure Limited	European Patent Office	Apparatus for Treating a Tumor	01/10/2003	Pending	2281605

<u>Name of Entity</u>	<u>Country</u>	<u>Title</u>	<u>Date Filed</u>	<u>Status</u>	<u>Application No. / Registered No.</u>
NovoCure (Israel) Ltd.	European Patent Office	Optimizing Characteristics	29/09/2006	Pending	06820767.9
NovoCure (Israel) Ltd.	European Patent Office	Chemotherapeutic Treatment	03/04/2007	Pending	07872062.0
NovoCure (Israel) Ltd.	European Patent Office	Treating Parasites	13/08/2008	Pending	08789083.6
NovoCure (Israel) Ltd.	European Patent Office	Photodynamic Therapy	05/03/2008	Pending	08835357.8
NovoCure Limited	WIPO	Changing Frequency	06/05/2014	Pending	PCT/IB2014/000688
NovoCure Limited	Finland	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	France	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	Germany	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	Greece	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure (Israel) Ltd.	Hong Kong	Treating Bacteria	27/06/2008	Pending	10106421.4
NovoCure Limited	Hong Kong	Electrode Re-Positioning	05/12/2005	Pending	10108508.6
NovoCure Limited	Hong Kong	Apparatus for Treating a Tumor	01/10/2003	Pending	1153962A
NovoCure Limited	Hong Kong	Apparatus for Treating a Tumor	01/10/2003	Pending	1153963A
NovoCure Limited	Hong Kong	Apparatus for Treating a Tumor	01/10/2003	Pending	1153964A
NovoCure Limited	Hong Kong	Apparatus for Treating a Tumor	01/10/2003	Pending	1153965A
NovoCure (Israel) Ltd.	Hong Kong	Treating Parasites	13/08/2008	Pending	10105140.6
NovoCure Limited	Ireland	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	Italy	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	Japan	Apparatus for Treating a Tumor	01/10/2003	Granted / Registered	4350042

<u>Name of Entity</u>	<u>Country</u>	<u>Title</u>	<u>Date Filed</u>	<u>Status</u>	<u>Application No. / Registered No.</u>
NovoCure Limited	Japan	Selectively / Destroying Dividing Cells	16/02/2001	Granted / Registered	5280600
NovoCure Limited	Japan	Electrode Re-Positioning	05/12/2005	Granted / Registered	5260056
NovoCure Limited	Japan	Electrode Re-Positioning	05/12/2005	Granted / Registered	5653954
NovoCure Limited	Japan	Phase-Shifting Rotation	27/12/2005	Granted / Registered	5559460
NovoCure Limited	Japan	Field Guides	08/06/2006	Granted / Registered	5451067
NovoCure (Israel) Ltd.	Japan	Treating a Tumor or the Like	21/04/2005	Granted / Registered	4750784
NovoCure (Israel) Ltd.	Japan	Treating Parasites	13/08/2008	Granted / Registered	5485153
NovoCure Limited	Netherlands	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	Portugal	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	Spain	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	Sweden	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	Switzerland / Lichtenstein	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552
NovoCure Limited	United Kingdom	Electrode Re-Positioning	05/12/2005	Granted / Registered	1833552