

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4258888

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	ONCOBIOLOGICS, INC.	12/22/2016
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	NAILESH BHATT	
<b>Street Address:</b>	23 CORNFLOWER COURT	
<b>City:</b>	BELLE MEAD	
<b>State/Country:</b>	NEW JERSEY	
<b>Postal Code:</b>	08502	
<b>Name:</b>	SCOTT CANUTE	
<b>Street Address:</b>	3 GLEN LANE	
<b>City:</b>	SUDBURY	
<b>State/Country:</b>	MASSACHUSETTS	
<b>Postal Code:</b>	01776	
<b>Name:</b>	AJITESH RAI	
<b>Street Address:</b>	4 MARBROOKE LANE	
<b>City:</b>	ST. LOUIS	
<b>State/Country:</b>	MISSOURI	
<b>Postal Code:</b>	63132	
<b>Name:</b>	DENNIS O'DONNELL	
<b>Street Address:</b>	66 S. STONE HEDGE DRIVE	
<b>City:</b>	BASKING RIDGE	
<b>State/Country:</b>	NEW JERSEY	
<b>Postal Code:</b>	07920	
<b>Name:</b>	ARUNKUMAR B VYAS	
<b>Street Address:</b>	65 CAITLIN COURT	
<b>City:</b>	FRANKLIN PARK	
<b>State/Country:</b>	NEW JERSEY	
<b>Postal Code:</b>	08823	
<b>Name:</b>	ALBERT DYRNESS	
<b>Street Address:</b>	116 WOODVIEW CIRCLE	
<b>City:</b>	SAN RAMON	

PATENT

<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94582
<b>Name:</b>	SIMON WOODHOUSE
<b>Street Address:</b>	239 DOUGLAS ROAD
<b>City:</b>	FAR HILLS
<b>State/Country:</b>	NEW JERSEY
<b>Postal Code:</b>	07931
<b>Name:</b>	SABBY HEALTHCARE MASTER FUND, LTD.
<b>Street Address:</b>	10 MOUNTAINVIEW ROAD, SUITE 205
<b>Internal Address:</b>	C/O SABBY MANAGEMENT, LLC
<b>City:</b>	UPPER SADDLE RIVER
<b>State/Country:</b>	NEW JERSEY
<b>Postal Code:</b>	07458
<b>Name:</b>	SABBY VOLATILITY WARRANT MASTER FUND, LTD.
<b>Street Address:</b>	10 MOUNTAINVIEW ROAD, SUITE 205
<b>Internal Address:</b>	C/O SABBY MANAGEMENT, LLC
<b>City:</b>	UPPER SADDLE RIVER
<b>State/Country:</b>	NEW JERSEY
<b>Postal Code:</b>	07458
<b>Name:</b>	POINTSTATE FUND LP
<b>Street Address:</b>	40 WEST 57TH STREET, 25TH FLOOR
<b>City:</b>	NEW YORK
<b>State/Country:</b>	NEW YORK
<b>Postal Code:</b>	10019

**PROPERTY NUMBERS Total: 14**

<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15025088
<b>Application Number:</b>	61891485
<b>Application Number:</b>	62105890
<b>Application Number:</b>	62275384
<b>Application Number:</b>	62275386
<b>Application Number:</b>	62272116
<b>Application Number:</b>	62290654
<b>Application Number:</b>	62276378
<b>Application Number:</b>	62291216
<b>Application Number:</b>	61529364
<b>Application Number:</b>	61561479
<b>Application Number:</b>	61577282

**PATENT**

**REEL: 041169 FRAME: 0404**

Property Type	Number
Application Number:	13826656
Application Number:	61748537

#### CORRESPONDENCE DATA

**Fax Number:** (212)370-7889

*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:** 2123701300

**Email:** IP@EGSLLP.COM

**Correspondent Name:** JOHN C. STELLABOTTE

**Address Line 1:** 1345 AVENUE OF THE AMERICAS, 11TH FLOOR

**Address Line 2:** ELLENOFF GROSSMAN & SCHOLE LLP

**Address Line 4:** NEW YORK, NEW YORK 10105

<b>ATTORNEY DOCKET NUMBER:</b>	13596.001
<b>NAME OF SUBMITTER:</b>	JOHN C STELLABOTTE
<b>SIGNATURE:</b>	/John C. Stellabotte/
<b>DATE SIGNED:</b>	02/03/2017

#### Total Attachments: 18

source=00490756#page1.tif  
source=00490756#page2.tif  
source=00490756#page3.tif  
source=00490756#page4.tif  
source=00490756#page5.tif  
source=00490756#page6.tif  
source=00490756#page7.tif  
source=00490756#page8.tif  
source=00490756#page9.tif  
source=00490756#page10.tif  
source=00490756#page11.tif  
source=00490756#page12.tif  
source=00490756#page13.tif  
source=00490756#page14.tif  
source=00490756#page15.tif  
source=00490756#page16.tif  
source=00490756#page17.tif  
source=00490756#page18.tif

## INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT is entered into as of December 22, 2016 by and between ONCOBIOLOGICS, INC., a Delaware corporation ("*Grantor*") and the secured parties listed on the signature pages hereto (each, a "*Secured Party*" and, collectively, the "*Secured Parties*").

### RECITALS

A. Secured Party has made and may in the future make certain advances of money to Grantor (the "*Loans*") in the amounts and manner set forth in those certain Secured Promissory Notes executed by Grantor in favor of each Secured Party (collectively, as the same may be amended, modified or supplemented from time to time, the "*Notes*") and that certain Note and Warrant Purchase Agreement, of even date hereof, by and between Grantor and the Secured Parties (as the same may be amended, modified or supplemented from time to time, the "*Purchase Agreement*"). Each Secured Party is willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to such Secured Party a security interest in all Intellectual Property of Grantor, including Copyrights, Trademarks and Patents to secure the obligations of Grantor under the Notes and Purchase Agreement.

B. Pursuant to the terms of that certain Security Agreement, dated of even date herewith, by and between Grantor and the Secured Parties (as the same may be amended, modified or supplemented from time to time, the "*Security Agreement*"), Grantor has granted to the Secured Parties a security interest in all of Grantor's right, title and interest in, to or under all of the Grantor's assets. All capitalized terms used but not otherwise defined herein shall have the respective meanings assigned to them in the Security Agreement.

### AGREEMENT

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, Grantor hereby represents, warrants, covenants and agrees as follows:

As collateral security for the full, prompt, complete and final payment and performance when due (whether at stated maturity, by acceleration or otherwise) of all the Secured Obligations and in order to induce the Secured Parties to cause the Loans to be made, Grantor hereby grants and pledges to each Secured Party a security interest in all of Grantor's right, title and interest in, to and under the following, whether now owned or hereafter acquired: All of Grantor's right, title and interest in, to and under its Intellectual Property (including without limitation those Copyrights, Patents and Trademarks listed on Schedules A, B and C hereto), and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement and other past or future causes of action), the right to sue for past, present and future infringement, dilution, misappropriation, violation, misuse, breach, or default and all rights corresponding thereto by applicable law of any jurisdiction, by international treaties and conventions throughout the world and all re-issues, reexaminations, divisions, continuations, renewals, extensions and continuations-in-part thereof.

Notwithstanding the foregoing, the grant, assignment and transfer of a security interest as provided herein shall not include (a) "intent-to-use" trademarks at all times prior to the first use

thereof, whether by the actual use thereof in commerce, the recording of a statement of use with the United States Patent and Trademark Office or otherwise or (b) any Account, Chattel Paper, General Intangible or Promissory Note in which Grantor has any right, title or interest if and to the extent such Account, Chattel Paper, General Intangible or Promissory Note includes a provision containing a restriction on assignment such that the creation of a security interest in the right, title or interest of Grantor therein would be prohibited and would, in and of itself, cause or result in a default thereunder enabling another person party to such Account, Chattel Paper, General Intangible or Promissory Note to enforce any remedy with respect thereto; *provided* that the foregoing exclusion shall not apply if (i) such prohibition has been waived or such other person has otherwise consented to the creation hereunder of a security interest in such Account, Chattel Paper, General Intangible or Promissory Note or (ii) such prohibition would be rendered ineffective pursuant to Sections 9-406(d), 9-407(a) or 9-408(a) of the UCC, as applicable and as then in effect in any relevant jurisdiction, or any other applicable law (including the Bankruptcy Code) or principles of equity); *provided further* that immediately upon the ineffectiveness, lapse or termination of any such provision, the Collateral shall include, and Grantor shall be deemed to have granted on the date hereof a security interest in, all its right, title and interest in and to such Account, Chattel Paper, General Intangible or Promissory Note as if such provision had never been in effect; and *provided further that* the foregoing exclusion shall in no way be construed so as to limit, impair or otherwise affect a Secured Party's unconditional continuing security interest in and to all rights, title and interests of Grantor in or to any payment obligations or other rights to receive monies due or to become due under any such Account, Chattel Paper, General Intangible or Promissory Note and in any such monies and other proceeds of such Account, Chattel Paper, General Intangible or Promissory Note.

This security interest is granted in conjunction with the security interest granted to the Secured Parties under the Security Agreement. The rights and remedies of the Secured Parties with respect to the security interest granted hereby are subject to the terms of the Security Agreement and are in addition to those set forth in the Security Agreement and the other Loan Documents, and those that are now or hereafter available to each Secured Party as a matter of law or equity. Each right, power and remedy of the Secured Parties provided for herein or in the Security Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by such Secured Party of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Security Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including the Secured Parties, of any or all other rights, powers or remedies.

Grantor represents and warrants that Schedules A, B, and C attached hereto set forth any and all Intellectual Property rights in connection to which Grantor has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, or comparable authority in any other jurisdiction, as applicable.

Grantor authorizes the Commissioner for Patents, the Commissioner for Trademarks and the Register of Copyrights and any other foreign patent, trademark, or copyright office and government officials to record and register this IP Security Agreement upon request of the Secured Parties.

This IP Security Agreement will be binding on the parties hereto and shall inure to the benefit of the Secured Parties and their successors and assigns.

In all respects, including all matters of construction, validity and performance, this Security Agreement shall be governed by, and construed and enforced in accordance with, the laws of the State of New York applicable to contracts made and performed in such state, without regard to the principles thereof regarding conflict of laws, except to the extent that the UCC provides for the application of the law of a different jurisdiction.

This IP Security Agreement has been entered into pursuant to and in conjunction with the Security Agreement, which is hereby incorporated by reference. The provisions of the Security Agreement shall supersede and control over any conflicting or inconsistent provision herein. The rights and remedies of the Secured Parties with respect to the IP Collateral are as provided by the Purchase Agreement, the Security Agreement and related documents, and nothing in this IP Security Agreement shall be deemed to limit such rights and remedies.

This Intellectual Property Security Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

ONCOBIOLOGICS, INC.

By: 

Print Name: Lawrence A. Kenyon

Title: Chief Financial Officer

*Signature page to IP Security Agreement*

**SECURED PARTIES:**

**Sabby Healthcare Master Fund, Ltd.**

By: 

Print Name:

Robert Grundstein

Title:

COO of Investment Manager

**Sabby Volatility Warrant Master Fund, Ltd.**

By: 

Print Name:

Robert Grundstein

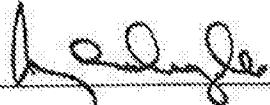
Title:

COO of Investment Manager



**SECURED PARTIES:**

**PointState Fund LP**

By: \_\_\_\_\_

Alfred J. Barbagallo

Managing Director & General Counsel

SECURED PARTIES:

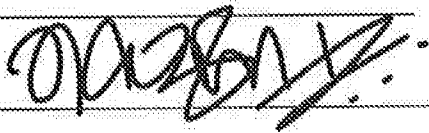
By: Simon Woodhouse

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

170700050-5

SECURED PARTIES:

By: 

(On behalf of)

Name: Arunkumar Vyas & Tara Vyas

Title: \_\_\_\_\_

SECURED PARTIES:

Ajitesh Rai

By: Ajitesh Rai

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

SECURED PARTIES:

DENNIS M. O'DONNELL

By: D M O'Donnell

Print Name: DENNIS M. O'DONNELL

Title: BENEFICIAL OWNER

SECURED PARTIES:

By: Albert D.  
Print Name: Albert Dyrness  
Title: \_\_\_\_\_

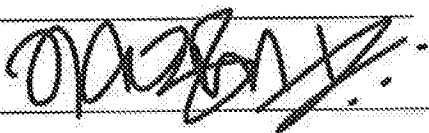
139708062 v8

SECURED PARTIES:

By: Scott C. S.  
Print Name: Scott Cambs  
Title: \_\_\_\_\_

139708008 v8

SECURED PARTIES:

By: 

Print Name: Nailesh A. Bhatt

Title: \_\_\_\_\_



**SCHEDULE A**  
**COPYRIGHTS**

**None.**

# SCHEDULE B

## PATENTS

Title	Application No.	Application Date	Registration No.	Registration Date	Status	Country
BUFFER FORMULATIONS FOR ENHANCED ANTIBODY STABILITY	PCT/US2014/060810	10/16/2014			Nationalized	PCT
BUFFER FORMULATIONS FOR ENHANCED ANTIBODY STABILITY	2014337263	10/16/2014			Pending	Australia
BUFFER FORMULATIONS FOR ENHANCED ANTIBODY STABILITY	2926588	10/16/2014			Pending	Canada
BUFFER FORMULATIONS FOR ENHANCED ANTIBODY STABILITY	201480068235.2	10/16/2014			Pending	China
BUFFER FORMULATIONS FOR ENHANCED ANTIBODY STABILITY	14654535.3	10/16/2014			Pending	Europe
BUFFER FORMULATIONS FOR ENHANCED ANTIBODY STABILITY	201627012619	10/16/2014			Pending	India
BUFFER FORMULATIONS FOR ENHANCED ANTIBODY STABILITY	2016-549199	10/16/2014			Pending	Japan
BUFFER FORMULATIONS FOR ENHANCED ANTIBODY STABILITY	MX/a/2016/004926	10/16/2014			Pending	Mexico
BUFFER FORMULATIONS FOR ENHANCED ANTIBODY STABILITY	15/025,088	10/16/2014			Pending	U.S.
BUFFER FORMULATIONS OF ADALIMUMAB	61/891,485	10/16/2013			Expired	U.S.
MODULATION OF CHARGE VARIANTS IN A MONOCLONAL ANTIBODY COMPOSITION	PCT/US2016/014252	1/21/2016			Pending	PCT
MODULATION OF CHARGE VARIANTS IN A MONOCLONAL ANTIBODY COMPOSITION	62/105,890	1/21/2015			Expired	U.S.
MODULATION OF AFUCOSYLATED SPECIES IN A MONOCLONAL ANTIBODY COMPOSITION	62/275,364	1/6/2016			Pending	U.S.

Title	Application No	Application Date	Registration No.	Registration Date	Status	Country
REDUCTION OF HIGH MOLECULAR WEIGHT SPECIES, ACIDIC CHARGE SPECIES AND FRAGMENTS IN A MONOCLONAL ANTIBODY COMPOSITION	62/275,386	1/6/2016			Application Filed	U.S.
BUFFERED FORMULATIONS OF BEVACIZUMAB	62/272,116	12/29/2015			Pending	U.S.
BUFFER FORMULATIONS FOR ENHANCED ANTIBODY STABILITY	62/290,654	2/3/2016			Pending	U.S.
METHODS FOR SEPARATING ISOFORMS OF MONOCLONAL ANTIBODIES	62/276,378	1/8/2016			Pending	U.S.
METHODS FOR DETERMINING THE PROTEIN SEQUENCE OF MONOCLONAL ANTIBODIES	62/291,216	2/4/2016			Pending	U.S.
BISPECIFIC SINGLE CHAIN ANTIBODY-IgA1 SERUM ALBUMIN BINDING PEPTIDE FUSION PROTEINS AS DRUG DELIVERY VEHICLES FOR THE TREATMENT OF CANCER	61/529,364	8/31/2011			Expired	U.S.
BISPECIFIC SINGLE CHAIN ANTIBODY-IgA1 SERUM ALBUMIN BINDING PEPTIDE FUSION PROTEINS AS DRUG DELIVERY VEHICLES FOR THE TREATMENT OF CANCER	61/561,479	11/18/2011			Expired	U.S.
ANTIBODY CONSTRUCTS THAT BIND TO PD-1 AND HUMAN SERUM ALBUMIN	61/577,282	12/19/2011			Expired	U.S.
ANTIBODIES THAT SPECIFICALLY BIND TO SERUM ALBUMIN WITHOUT INTERFERING WITH ALBUMIN'S CAPABILITY TO INTERACT WITH THE FCRN	13/826,856	3/14/2013			Abandoned	U.S.
ANTIBODIES THAT SPECIFICALLY BIND TO SERUM ALBUMIN WITHOUT INTERFERING WITH ALBUMIN'S CAPABILITY TO INTERACT WITH THE FCRN	61/746,537	1/3/2013			Expired	U.S.



**SCHEDULE C**  
**TRADEMARKS**

Title/Mark	Application No.	Application Date	Registration No.	Registration Date	Case Status	Country
BIOSYMPHONY	86/402,855	9/23/2014	4,734,852	5/12/2015	Registered	U.S.
ONCOBIOLOGICS	86/402,840	9/23/2014	4,798,300	8/25/2015	Registered	U.S.
ONCOBIOLOGICS	1719889	3/18/2015	TMA951603	10/6/2016	Registered	Canada
ONCOBIOLOGICS	2015-019624	3/4/2015	5777975	7/10/2015	Registered	Japan