## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4346564

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
LANTHEUS MEDICAL IMAGING, INC.	03/30/2017

## **RECEIVING PARTY DATA**

Name:	JPMORGAN CHASE BANK, N.A., AS COLLATERAL AGENT
Street Address:	MAIL CODE NY1-C413, 4 CMC
City:	BROOKLYN
State/Country:	NEW YORK
Postal Code:	11245-0001

## **PROPERTY NUMBERS Total: 18**

Property Type	Number
Application Number:	15304082
Application Number:	15203725
Application Number:	14774714
Application Number:	14845320
Application Number:	14977249
Application Number:	15153502
Application Number:	15170848
Application Number:	15186328
Application Number:	15198378
Application Number:	14357555
Application Number:	14774944
Application Number:	15359675
Application Number:	15364678
Application Number:	15374147
Application Number:	15433387
Application Number:	62331968
Application Number:	62332462
Application Number:	62359181

### **CORRESPONDENCE DATA**

PATENT REEL: 042118 FRAME: 0986

504299883

**Fax Number:** (800)914-4240

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:** 800-713-0755

Email: Michael.Violet@wolterskluwer.com

Correspondent Name: MICHAEL VIOLET

Address Line 1: 4400 EASTON COMMONS WAY

Address Line 2: SUITE 125

Address Line 4: COLUMBUS, OHIO 43219

NAME OF SUBMITTER:	ELAINE CARRERA
SIGNATURE:	/Elaine Carrera/
DATE SIGNED:	03/31/2017

#### **Total Attachments: 7**

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#### PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT, dated as of March 30, 2017 ("Patent Security Agreement"), made by LANTHEUS MEDICAL IMAGING, INC, a Delaware corporation (the "Grantor"), is in favor of JPMORGAN CHASE BANK, N.A., as collateral agent (in such capacity, the "Collateral Agent") for the Secured Parties.

#### WITNESSETH:

WHEREAS, the Grantor is party to that certain Amended and Restated Guarantee and Collateral Agreement, dated as of March 30, 2017 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Guarantee and Collateral Agreement"), in favor of the Collateral Agent, pursuant to which the Grantor is required to execute and deliver this Patent Security Agreement (capitalized terms used but not otherwise defined herein shall have the meanings given to them in the Guarantee and Collateral Agreement); and

WHEREAS, pursuant to the terms of the Guarantee and Collateral Agreement, the Grantor has created in favor of the Collateral Agent a security interest in the Patent Collateral (as defined below);

NOW, THEREFORE, in consideration of the premises and to induce the Agents and the Lenders to enter into the Credit Agreement and to induce the Lenders to make their respective extensions of credit to the Borrower thereunder and to induce the Qualified Counterparties to enter into the Specified Hedge Agreements and the Specified Cash Management Agreements and provide financial accommodation, the Grantor hereby agrees with the Collateral Agent, for the benefit of the Secured Parties, as follows:

The Grantor hereby grants to the Collateral Agent, for the benefit of the Secured Parties, a security interest in all of the following property now owned or at any time hereafter acquired by such Grantor or in which the Grantor now has or at any time in the future may acquire any right, title or interest (collectively, the "Patent Collateral"), as collateral security for the complete payment and performance when due (whether at the stated maturity, by acceleration or otherwise) of all Secured Obligations:

- (a) the registered and applied-for Patents of the Grantor listed on <u>Schedule 1</u> attached hereto; and
  - (b) all Proceeds of any of the foregoing;

provided, that (i) this Patent Security Agreement shall not constitute a grant of a security interest in any property to the extent that and for as long as such grant of a security interest would be prohibited by the terms of the Guarantee and Collateral Agreement; and (ii) the security interest granted hereby (A) shall attach at all times to all proceeds of such property, (B) shall attach to such property immediately and automatically (without need for any further grant or act) at such time as the condition described in clause (i) ceases to exist and (C) to the extent severable, shall, in any event, attach to all rights in respect of such property that are not subject to the applicable condition described in clause (i).

The security interest granted pursuant to this Patent Security Agreement is granted concurrently and in conjunction with security interest granted to the Collateral Agent pursuant to the Guarantee and Collateral Agreement and the Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Guarantee and Collateral Agreement. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Guarantee and Collateral Agreement, the provisions of the Guarantee and Collateral Agreement shall govern.

The term of this Patent Security Agreement shall be co-terminus with the Guarantee and Collateral Agreement.

The Grantor hereby authorizes and requests that the Commissioner of Patents and Trademarks record this Patent Security Agreement.

THIS PATENT SECURITY AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES UNDER THIS PATENT SECURITY AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK WITHOUT REGARD TO CONFLICT OF LAW PRINCIPLES THAT WOULD RESULT IN THE APPLICATION OF ANY LAW OTHER THAN THE LAW OF THE STATE OF NEW YORK.

This Patent Security Agreement may be executed by one or more of the parties to this Patent Security Agreement on any number of separate counterparts, and all of said counterparts taken together shall be deemed to constitute one and the same instrument. Delivery of an executed signature page of this Patent Security Agreement by facsimile transmission or electronic transmission (in ".pdf" or similar format) shall be effective as delivery of a manually executed counterpart hereof. A set of the copies of this Patent Security Agreement signed by all the parties shall be lodged with the Borrower, the Administrative Agent and the Collateral Agent.

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IN WITNESS WHEREOF, each Grantor has caused this PATENT SECURITY AGREEMENT to be executed and delivered by its duly authorized officer as of the date first above written.

LANTHEUS MEDICAL IMAGING, INC.

By:

Name: Jack Crowley

Title: Chief Financial Officer and Treasurer

[SIGNATURE PAGE TO PATENT SECURITY AGREEMENT]

Accepted and Agreed:

JPMORGAN CHASE BANK, N.A., as Collateral Agent

Ву: \_\_\_

Namé: Justin Back

Title: Vice President

[SIGNATURE PAGE TO PATENT SECURITY AGREEMENT]

# Schedule 1

# **PATENTS**

## **Issued Patents**

Patent METHODS AND DEVICES FOR ISOLATING LEAD 203	<b>Reg. No.</b> ( <b>App. No.</b> ) (15/304,082)	<b>Reg. Date</b> ( <b>App. date</b> ) (10/14/2016)	Owner Lantheus Medical Imaging, Inc.
LIPID-ENCAPSULATED GAS MICROSPHERE COMPOSITIONS AND RELATED METHODS	(15/203,725)	(07/06/2016)	Lantheus Medical Imaging, Inc.
CONTROL SYSTEM FOR RADIOPHARMACEUTICALS	(14/774,714)	(09/11/2015)	Lantheus Medical Imaging, Inc.
CONTRAST AGENTS FOR MYOCARDIAL PERFUSION IMAGING	(14/845,320)	(09/04/2015)	Lantheus Medical Imaging, Inc.
N-ALKOXYAMIDE CONJUGATES AS IMAGING AGENTS	(14/977,249)	(12/21/2015)	Lantheus Medical Imaging, Inc.
CONTRAST AGENTS FOR APPLICATIONS INCLUDING PERFUSION IMAGING	(15/153,502)	(05/12/2016)	Lantheus Medical Imaging, Inc.
COMPOSITIONS, METHODS, AND SYSTEMS FOR THE SYNTHESIS AND USE OF IMAGING AGENTS	(15/170,848)	(06/01/2016)	Lantheus Medical Imaging, Inc.
	(15/186328)	(06/17/2016)	Lantheus Medical
	(15/198378)	(06/30/2016)	Imaging, Inc. Lantheus Medical Imaging, Inc.
EVALUATION OF PRESENCE OF AND VULNERABILITY TO ATRIAL FIBRILLATION AND OTHER INDICATIONS USING MATRIX METALLOPROTEINASE-BASED IMAGING	(14/357,555)	(05/09/2014)	Yale University and Lantheus Medical Imaging, Inc.
PROCESS FOR MANUFACTURE OF GADOFOSVESET TRISODIUM MONOHYDRATE	(14/774,944)	(09/11/2015)	Lantheus Medical Imaging, Inc.
COMPOSITIONS, METHODS, AND SYSTEMS FOR THE SYNTHESIS AND USE OF IMAGING AGENTS	(15/359675)	(11/23/2016)	Lantheus Medical Imaging, Inc.
COMPOSITIONS, METHODS, AND	(15/364678)	(11/30/2016)	Lantheus Medical

SYSTEMS FOR THE SYNTHESIS AND USE OF IMAGING AGENTS			Imaging, Inc.
PREPARATION OF A LIPID BLEND AND A PHOSPHOLIPID SUSPENSION CONTAINING THE LIPID BLEND	(15/374147)	(12/09/2016)	Lantheus Medical Imaging, Inc.
METHODS AND APPARATUS FOR SYNTHESIZING IMAGING AGENTS, AND INTERMEDIATES THEREOF	(15/433387)	(02/15/2017)	Lantheus Medical Imaging, Inc.
	(62/331968)	(05/04/2016)	Lantheus Medical Imaging, Inc.
	(62/332462)	(05/05/2016)	Lantheus Medical Imaging, Inc.
	(62/359181)	(07/06/2016)	Lantheus Medical Imaging, Inc.

PATENT REEL: 042118 FRAME: 0993

**RECORDED: 03/31/2017**