

PATENT ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT
CONVEYING PARTY DATA	
Name	Execution Date
Semafore Pharmaceuticals, Inc.	02/27/2009
RECEIVING PARTY DATA	
Name:	Park Funding, LLC
Street Address:	7653 Park Drive
City:	St. Louis
State/Country:	MISSOURI
Postal Code:	63117
PROPERTY NUMBERS Total: 22	
Property Type	Number
PCT Number:	US0410399
Patent Number:	6949537
Application Number:	11111201
Patent Number:	7396828
Application Number:	11962612
Application Number:	61031308
Application Number:	61044780
PCT Number:	US0935148
Application Number:	10599748
Application Number:	61023320
Application Number:	61110745
PCT Number:	US0931864
Application Number:	61146747
Application Number:	61146780
Application Number:	10573938

CH \$880.00 US0410399

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PATENT
REEL: 022746 FRAME: 0638

Application Number:	10817622
Application Number:	12183813
Application Number:	10817728
Application Number:	12181963
PCT Number:	US0410286
PCT Number:	US0410285
PCT Number:	US0511626

CORRESPONDENCE DATA

Fax Number: (314)259-2020

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Email: ncollora@bryancave.com

Correspondent Name: Daniel A. Crowe

Address Line 1: 211 North Broadway, Ste 3600

Address Line 4: St. Louis, MISSOURI 63102

ATTORNEY DOCKET NUMBER:	0190032
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NAME OF SUBMITTER:	Daniel A. Crowe
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Total Attachments: 11

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PATENT SECURITY AGREEMENT

THIS PATENT SECURITY AGREEMENT ("Agreement") is made as of February 27, 2009, by SEMAFORE PHARMACEUTICALS, INC., an Indiana corporation ("Grantor"), in favor of Park Funding, LLC, a Missouri limited liability company (the "Agent"), for its benefit and the ratable benefit of each Lender under that certain Credit and Security Agreement dated as of this date by and among the Grantor, the Agent and the lenders specified therein.

WITNESSETH:

WHEREAS, Grantor, the Agent and the Lenders are parties to that certain Credit and Security Agreement dated as of this date (as the same may hereafter be modified, amended, restated or supplemented from time to time, the "Credit Agreement");

WHEREAS, pursuant to the terms of the Credit Agreement, the Lenders have requested that the Grantor execute and deliver this Agreement in order to further secure the prompt and complete payment, observance and performance of all of the Obligations (as defined in the Credit Agreement) of Grantor;

NOW, THEREFORE, in consideration of the premises set forth herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor agrees as follows:

1. Defined Terms. Unless otherwise defined herein, each capitalized term used herein that is defined in the Credit Agreement shall have the meaning specified for such term in the Credit Agreement.

1. Incorporation of Premises. The premises set forth above are incorporated into this Agreement by this reference thereto and are made a part hereof.

3. Grant of Security Interest. For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, to secure all of the Obligations, the Grantor does hereby mortgage, pledge and hypothecate to the Agent, as agent for the Lenders, and grants to the Agent, as agent for the Lenders, a security interest in, for its benefit and the benefit of the Lenders, all of the following property (the "**Patent Collateral**"), whether now owned or hereafter acquired or existing:

(a) all letters patent and applications for letters patent throughout the world, including all patent applications in preparation for filing anywhere in the world and including each patent and patent application referred to in Schedule A attached hereto;

(b) all patent licenses, including each patent license referred to in Schedule A attached hereto;

(c) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the items described in the foregoing clauses (a) and (b); and

(d) all proceeds of, and rights associated with, the foregoing (including license royalties and proceeds of infringement suits), the right to sue third parties for past, present or future infringements of any patent or patent application, including any patent application referred to in Schedule A attached hereto, and for breach or enforcement of any patent license, including any patent license referred to in Schedule A attached hereto, and all rights corresponding thereto throughout the world.

4. Security Agreement. This Agreement has been executed and delivered by the Grantor for the purpose of registering the security interest of the Agent in the Patent Collateral with the United States Patent and Trademark Office and corresponding offices in other countries of the world. The security interest granted hereby has been granted as a supplement to, and not in limitation of, the security interest granted to the Agent, as agent for the Lenders under the Credit Agreement. The Credit Agreement (and all rights and remedies of the Agent and the Lender thereunder) shall remain in full force and effect in accordance with its terms.

5. Release of Security Interest. Upon the payment in full of all Obligations (other than indemnification obligations as to which no claim has been asserted), the Agent shall, at the Grantor's expense, execute and deliver to the Grantor all instruments and other documents as may be necessary or proper to release the lien on and security interest in the Patent Collateral which has been granted hereunder.

6. Acknowledgement. The Grantor does hereby further acknowledge and affirm that the rights and remedies of the Agent with respect to the security interest in the Patent Collateral granted hereby are more fully set forth in the Credit Agreement, and terms and provisions of which (including the remedies provided for therein) are incorporated by reference herein as if fully set forth herein. This Agreement is executed pursuant to the Credit Agreement and shall (unless otherwise expressly indicated herein) be construed, administered and applied in accordance with the terms and provisions of the Credit Agreement.

7. Waivers. The Agent's failure, at any time or times hereafter, to require strict performance by Grantor of any provision of this Agreement shall not waive, affect or diminish any right of the Agent thereafter to demand strict compliance and performance therewith nor shall any course of dealing between Grantor and the Agent have such effect. No single or partial exercise of any right hereunder shall preclude any other or further exercise thereof or the exercise of any other right. None of the undertakings, agreements, warranties, covenants and representations of Grantor contained in this Agreement shall be deemed to have been suspended or waived by the Agent unless such suspension or waiver is in writing signed by an officer of the Agent and directed to Grantor specifying such suspension or waiver.

9. Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but the provisions of this Agreement are severable, and if any clause or provision shall be held invalid and unenforceable in whole or in part in any jurisdiction, then such invalidity or unenforceability shall affect only such clause or provision, or part hereof, in such jurisdiction, and shall not in any manner affect such clause or provision in any other jurisdiction, or any other clause or provision of this Agreement in any jurisdiction.

10. Modification. This Agreement cannot be altered, amended or modified in any way, except by a writing signed by the parties hereto.

11. Successors and Assigns. This Agreement shall be binding upon Grantor and its successors and assigns, and shall inure to the benefit of the Agent, as agent for the Lenders and their respective nominees, successors and permitted assigns. Grantor's successors and assigns shall include, without limitation, a receiver, trustee or debtor-in-possession of or for Grantor; provided, however, that Grantor shall not voluntarily assign or transfer its rights or obligations hereunder without the Agent's prior written consent.

12. Governing Law. This Agreement shall be construed and enforced and the rights and duties of the parties shall be governed by in all respects in accordance with the internal laws (as opposed to conflict of laws provisions) and decisions of the State of Indiana.

13. Notices. All notices or other communications hereunder shall be given in the manner and to the addresses set forth in the Loan Agreement.

14. Section Titles. The section titles herein are for convenience of reference only, and shall not affect in any way the interpretation of any of the provisions hereof.

15. Execution in Counterparts. This Agreement may be executed in any number of counterparts and by different parties hereto 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.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

SEMAFORE PHARMACEUTICALS, INC.

By: 

Name: John S. Sima

Title: President and Chief Operating Officer

PARK FUNDING, LLC, as Agent for benefit of the Lenders under the Credit Agreement

By: _____

Chris Garlich, Managing Member

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SEMAFORE PHARMACEUTICALS, INC.

By: _____
Name: John S. Sima
Title: President and Chief Operating Officer

PARK FUNDING, LLC, as Agent for benefit of the Lenders under
the Credit Agreement

By:  _____
Chris Garlich, Managing Member

ACKNOWLEDGMENT

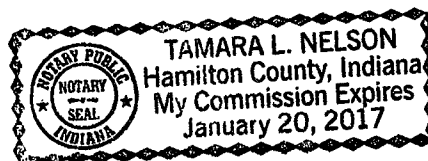
STATE OF INDIANA)
) SS:
COUNTY OF MARION)

Before me, a Notary Public in and for the State of Indiana, personally appeared John S. Sima, President and Chief Operating Officer of Semafore Pharmaceuticals, Inc., an Indiana corporation, who, first being duly sworn, acknowledged the execution of the foregoing instrument for and on behalf of said corporation as its duly authorized officer.

WITNESS my hand and Notarial Seal this 27 day of February, 2009.

Tamara Nelson
Notary Public
Tamara Nelson
Printed

I am a resident of
Hamilton County, IN
My commission expires:
January 20, 2017



SCHEDULE A
to
PATENT SECURITY AGREEMENT

A. SF1126

<i>Title</i>	Patent/Appn No. Issue/Filing Date	Country
<i>Treatment of Cancer with PI3 Kinase Inhibitors</i>	US 60/536,041 Filed: 1/13/2004	US
<i>PI-3 kinase inhibitors</i>	US 60/502,140 Filed: 9/11/2003	US
<i>Av Ingegrin Targeted PI3 Kinase Inhibitors Induce P53 Transcription and Apoptosis in Endothelial Cells</i>	US 60/511,590 Filed: 10/15/2003	US
<i>PI-3 kinase inhibitor prodrugs</i>	PCT/US2004/010399; Filed 4/3/2004	Int'l
<i>PI-3 kinase inhibitor prodrugs</i>	US 6,949,537; Filed: 4/5/2004 Granted: 9/27/2005	US
<i>PI-3 kinase inhibitor prodrugs</i>	US11/111,201 Filed 4/20/2005	US
<i>PI-3 kinase inhibitor prodrugs</i>	US 7,396,828 Filed: 4/20/2005 Granted: 7/8/2008	US
<i>PI-3 kinase inhibitor prodrugs</i>	US 11/962,612 Filed: 12/21/2007	US
<i>O-alkylated PI-3 kinase inhibitor prodrugs</i>	US 61/031,308 Filed: 2/25/2008	US
<i>O-alkylated PI-3 kinase inhibitor prodrug combination</i>	US 61/044,780 Filed: 4/14/2008	US
<i>PI-3 kinase inhibitor prodrugs</i>	EP 4758869.4 Filed: 10/5/2005	Europe
<i>PI-3 kinase inhibitor prodrugs</i>	2518916 Filed: 9/12/2005	Canada
<i>PI-3 kinase inhibitor prodrugs</i>	2006-509693	Japan

	Filed: 11/8/2005	
<i>PI-3 kinase inhibitor prodrugs</i>	4597/DELNP/2005 Filed: 10/10/2005	India
<i>PI-3 kinase inhibitor prodrugs</i>	AU2004228668 Filed: 9/15/2005	Australia
<i>PI-3 kinase inhibitor prodrugs</i>	2005/07954 Filed: 9/30/2005 Granted: 2/28/2007	South Africa
<i>PI-3 kinase inhibitor prodrugs</i>	120326 Filed: 4/3/2004 Granted: 10/31/2007	Singapore
<i>PI-3 kinase inhibitor prodrugs</i>	2007165442-2 Filed: 4/3/2004	Singapore
<i>PI-3 kinase inhibitor prodrugs</i>	PA/a/2005/010471 Filed: 9/29/2005	Mexico
<i>PI-3 kinase inhibitor prodrugs</i>	542475 Filed: 9/19/2005	New Zealand
<i>PI-3 kinase inhibitor prodrugs</i>	170906 Filed: 9/15/2005	Israel
<i>PI-3 kinase inhibitor prodrugs</i>	10-2005-7018781 Filed: 9/30/2005	South Korea
<i>PI-3 kinase inhibitor prodrugs</i>	PI0409063-2 Filed: 4/3/2004	Brazil
<i>PI-3 kinase inhibitor prodrugs</i>	200480009226.2 Filed: 4/3/2004	China
<i>PI-3 kinase inhibitor prodrugs</i>	200501563 Filed: 11/2/2005	Eurasia
<i>O-Alkylated PI-3 Kinase Inhibitor Prodrug Combination</i>	PCT/US09/35148 Filed: 2/25/2009	Int'l

B. PTEN

<i>Title</i>	Patent/Appn No. Issue/Filing Date	Country
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<i>PTEN Inhibitors and Compositions for Therapeutic Utility in Treating Disease in mammals</i>	US 60/460,290 Filed: 4/30/2003	US
<i>PTEN Inhibitors and Compositions for Therapeutic Utility in Treating Disease in mammals</i>	US 60/559,802 Filed: 4/6/2004	US
<i>PTEN Inhibitors</i>	US 60/625,871 Filed: 11/8/2004	US
<i>PTEN Inhibitors</i>	PCT/US2005/011626 Filed: 4/6/2005	Int'l
<i>PTEN inhibitors for sensitization of cancer cells</i>	Unknown Appn No Docket 01656.0010.PZUS00 Filed: 7/20/2004	US
<i>PTEN Inhibitors</i>	US 10/599,748 Filed: 10/6/2006	US
<i>PTEN Inhibitors</i>	EP 1755574 Filed: 10/6/2006	Europe
<i>PTEN Inhibitors</i>	CA 2,563,316 Filed: 10/6/2006	Canada
<i>PTEN Inhibitors</i>	JP 2007-507462	Japan

C. Thienopyranones

Title	Patent/Appn No. Issue/Filing Date	Country
<i>Thienopyranones as PI3 kinase inhibitors</i>	US 61/023320 Filed: 1/24/2008	US
<i>Thienopyranones as kinase inhibitors</i>	US 61/110745 Filed: 11/3/2008	US
<i>Thienopyranones as kinase inhibitors</i>	PCT/US09/31864 Filed: 1/23/2009	Int'l
<i>Novel heterocyclic compound classes for signaling modulation</i>	US 61/146,747 Filed: 1/23/2009	US
<i>Dual target inhibitors</i>	US 61/146,780 Filed: 1/23/2009	US

D. Other

Title	Patent/Appn No. Issue/Filing Date	Country
<i>Chelate based scaffolds in tumor targeting</i>	WO 2005/032599 Filed: 9/30/2004	Int'l

<i>Chelate based scaffolds in tumor targeting</i>	US 10/573,938 Filed: 3/30/2006	US
<i>Targeted bone marrow protection agents</i>	PCT/US2004/010286 Filed: 4/2/2004	Int'l
<i>Targeted bone marrow protection agents</i>	US 10/817,622 Filed: 4/2/2004	US
<i>Targeted bone marrow protection agents</i>	US 12/183,813 Filed: 7/31/2008	US
<i>Bone targeting of degradable drug filed nanoparticles</i>	PCT/US2004/010285 Filed: 4/2/2004	Int'l
<i>Bone targeting of degradable drug filed nanoparticles</i>	US 10/817,728 Filed: 4/2/2004	US
<i>Bone targeting of degradable drug filed nanoparticles</i>	US 12/181,963 Filed: 7/31/2008	US

II. In-Licensed Patents

Title	Patent/Appn No. Issue/Filing Date	Country
<i>Compositions and methods for identifying agents which modulate PTEN function and PI-3 kinase pathways</i>	PCT/US2001/017358 Filed: 5/30/2001	Int'l
<i>Compositions and methods for identifying agents which modulate PTEN function and PI-3 kinase pathways</i>	US 6,777,439 Filed: 5/30/2001 Granted: 8/17/2004	US
<i>Compositions and methods for identifying agents which modulate PTEN function and PI-3 kinase pathways</i>	US 10/770,725 Filed: 2/3/2003	US
<i>Compositions and methods for identifying agents which modulate PTEN function and PI-3 kinase pathways</i>	US 7,470,721 Filed: 11/13/2003 Granted: 12/30/2008	US
<i>Compositions and methods for identifying agents which modulate PTEN function and PI-3 kinase pathways</i>	US 12/342,848 Filed: 12/23/2008	US
<i>Compositions and methods for identifying agents which modulate PTEN function and PI-3 kinase pathways</i>	EP 01939641.5 Filed: 10/5/2005	Europe

<i>Compositions and methods for identifying agents which modulate PTEN function and PI-3 kinase pathways</i>	2410514 Filed: 4/3/2004	Canada
<i>Compositions and methods for identifying agents which modulate PTEN function and PI-3 kinase pathways</i>	2001/1265137 Filed: 5/30/2001 Granted: 9/26/2007	Australia
<i>Compositions and methods for identifying agents which modulate PTEN function and PI-3 kinase pathways</i>	2007/216738 Filed: 9/12/2007	Australia

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