

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4009836

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	SECURITY INTEREST

**CONVEYING PARTY DATA**

Name	Execution Date
MONOSOL RX, LLC	08/16/2016
MONOSOL RX, INC.	08/16/2016
MSRX US, LLC	08/16/2016

**RECEIVING PARTY DATA**

<b>Name:</b>	PERCEPTIVE CREDIT HOLDINGS, LP
<b>Street Address:</b>	51 ASTOR PLACE, 19TH FLOOR
<b>City:</b>	NEW YORK
<b>State/Country:</b>	NEW YORK
<b>Postal Code:</b>	10003

**PROPERTY NUMBERS Total: 65**

Property Type	Number
Patent Number:	6337083
Patent Number:	8603514
Patent Number:	8652378
Patent Number:	7910031
Patent Number:	8906277
Patent Number:	7357891
Patent Number:	8685437
Patent Number:	7425292
Patent Number:	8017150
Patent Number:	7666337
Patent Number:	7897080
Patent Number:	8900497
Patent Number:	8900498
Patent Number:	9108340
Patent Number:	8765167
Patent Number:	7500984
Patent Number:	7972618
Patent Number:	8663687

PATENT

<b>Property Type</b>	<b>Number</b>
<b>Patent Number:</b>	7910641
<b>Patent Number:</b>	8393255
<b>Patent Number:</b>	9150341
<b>Patent Number:</b>	8568777
<b>Patent Number:</b>	8298583
<b>Patent Number:</b>	8663696
<b>Patent Number:</b>	8282954
<b>Patent Number:</b>	9095577
<b>Patent Number:</b>	9095495
<b>Patent Number:</b>	8577488
<b>Patent Number:</b>	8956685
<b>Patent Number:</b>	8936825
<b>Patent Number:</b>	8974826
<b>Patent Number:</b>	9149959
<b>Patent Number:</b>	8790704
<b>Patent Number:</b>	9346601
<b>Patent Number:</b>	8241661
<b>Patent Number:</b>	8617589
<b>Patent Number:</b>	9303918
<b>Application Number:</b>	14572173
<b>Application Number:</b>	13853290
<b>Application Number:</b>	14945181
<b>Application Number:</b>	14980836
<b>Application Number:</b>	15144191
<b>Application Number:</b>	15058056
<b>Application Number:</b>	12686531
<b>Application Number:</b>	12915849
<b>Application Number:</b>	14814461
<b>Application Number:</b>	15069875
<b>Application Number:</b>	14929848
<b>Application Number:</b>	13084681
<b>Application Number:</b>	12702668
<b>Application Number:</b>	14597593
<b>Application Number:</b>	14617413
<b>Application Number:</b>	14872672
<b>Application Number:</b>	14048286
<b>Application Number:</b>	15160606
<b>Application Number:</b>	13844775

Property Type	Number
Application Number:	13843718
Application Number:	14196082
Application Number:	13844689
Application Number:	13843114
Application Number:	14926227
Application Number:	15157147
Application Number:	15090350
Application Number:	62331993
Application Number:	62331996

**CORRESPONDENCE DATA**

**Fax Number:**

*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.*

**Email:** TDinh@mofo.com

**Correspondent Name:** MORRISON & FOERSTER LLP

**Address Line 1:** 425 MARKET STREET

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<b>ATTORNEY DOCKET NUMBER:</b>	72295-12
<b>NAME OF SUBMITTER:</b>	TUAN DINH
<b>SIGNATURE:</b>	/Tuan Dinh/
<b>DATE SIGNED:</b>	08/16/2016

**Total Attachments: 11**

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**PATENT SECURITY AGREEMENT**

This PATENT SECURITY AGREEMENT, dated as of August 16, 2016 ("*Patent Security Agreement*"), made by each of the signatories hereto (together with any other entity that may become a party hereto as provided herein, the "*Patent Grantors*"), is in favor of Perceptive Credit Holdings, LP, as collateral agent (in such capacity, the "*Collateral Agent*") for the Secured Parties.

WITNESSETH:

WHEREAS, the Patent Grantors are party to a Security Agreement dated as of August 16, 2016 (the "*Security Agreement*") in favor of the Collateral Agent, pursuant to which the Patent Grantors are 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 Security Agreement);

WHEREAS, pursuant to the terms of the Security Agreement, each Patent Grantor has created in favor of the Collateral Agent a security interest in, and the Collateral Agent has become a secured creditor with respect to, the Patent Collateral (as defined below);

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent 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, each Patent 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 Patent Grantor or in which such Patent 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) all Patents of such Patent Grantor, including, without limitation, the registered and applied-for Patents of such Grantor listed on **Schedule 1** attached hereto;

(b) to the extent not covered by **clause (a)**, all Proceeds of any of the foregoing;  
and

(c) to the extent not covered by **clause (a)**, all causes of action arising prior to or after the date hereof for infringement of any of the Patents.

The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement, and the Patent Grantors hereby acknowledge and affirm 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 Security Agreement. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall govern.

Each Patent 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.**

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 format) shall be effective as delivery of a manually executed counterpart hereof.

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

**MONOSOL RX, LLC**

By: 

Name: Keith Kenman  
Title: CEO

**MONOSOL RX, INC.**

By: 

Name: Keith Kenman  
Title: CEO

**MSRX US, LLC**

By: 

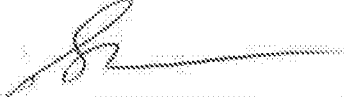
Name: Keith Kenman  
Title: CEO

Accepted and Agreed:

**PERCEPTIVE CREDIT HOLDINGS, LP, as Collateral Agent**

**By: PERCEPTIVE CREDIT OPPORTUNITIES GP, LLC, its general partner**

By   
Name: Sandeep Dixit  
Title: Chief Credit Officer

By   
Name: Sam Chawla  
Title: Portfolio Manager

[Signature Page to Patent Security Agreement]

## PATENTS

Patent Registrations

Patent	Reg. No.	Reg. Date	Owner
Oral delivery method and composition for solid medications or dietary supplements	6,337,083	01/08/2002	MonoSol Rx, LLC
Process For Making An Ingestible Film	7,357,891	04/15/2008	MonoSol Rx, LLC
Uniform Films For Rapid Dissolve Dosage Form Incorporating Taste-Masking Compositions	8,603,514	12/10/2013	MonoSol Rx, LLC
Uniform Films For Rapid Dissolve Dosage Form Incorporating Taste-Masking Compositions	8,652,378	02/18/2014	MonoSol Rx, LLC
Thin Film With Non-Self-Aggregating Uniform Heterogeneity And Drug Delivery Systems Made Therefrom	7,910,031	03/22/2011	MonoSol Rx, LLC
PROCESS FOR MANUFACTURING A RESULTING PHARMACEUTICAL FILM	8,906,277	12/09/2014	MonoSol Rx, LLC
Process For Making An Ingestible Film	7,357,891	08/21/2012	MonoSol Rx, LLC
Thin Film With Non-Self-Aggregating Uniform Heterogeneity And Drug Delivery Systems Made Therefrom	8,685,437	04/01/2014	MonoSol Rx, LLC



Thin Film With Non-Self Aggregating Uniform Heterogeneity And Drug Delivery Made Therefrom	7,425,292	09/16/2008	MonoSol Rx, LLC
"Thin Film With Non-Self Aggregating Uniform Heterogeneity And Drug Delivery Made Therefrom	7,425,292	07/03/2012	MonoSol Rx, LLC
Patent Owner: MonoSol Rx, LLC (P#7,425,292)"	8,017,150	09/13/2011	MonoSol Rx, LLC
Polyethylene Oxide-Based Films and Drug Delivery Systems Made Therefrom	7,666,337	02/23/2010	MonoSol Rx, LLC
Polyethylene Oxide-Based Films and Drug Delivery Systems Made Therefrom	7,897,080	03/01/2011	MonoSol Rx, LLC
Polyethylene Oxide-Based Films and Drug Delivery Systems Made Therefrom	8,900,497	12/02/2014	MonoSol Rx, LLC
PROCESS FOR MAKING A FILM HAVING A SUBSTANTIALLY UNIFORM DISTRIBUTION OF COMPONENTS	8,900,498	12/02/2014	MonoSol Rx, LLC
Films and Drug Delivery Systems Made Therefrom	9,108,340	08/18/2015	MonoSol Rx, LLC
Films and Drug Delivery Systems Made Therefrom	8,765,167	07/01/2014	MonoSol Rx, LLC
Uniform Films For Rapid-Dissolve Dosage Form Incorporating Anti-Tacking Compositions	7,500,984	03/10/2009	MonoSol Rx, LLC
PACIFIER WITH	7,972,618	07/05/2011	MonoSol Rx, LLC

THIN-FILM RESERVOIR AND METHOD FOR USE THEREOF			
Edible Water-Soluble Film Containing A Foam Reducing Flavoring Agent	8,663,687	03/04/2014	MonoSol Rx, LLC
Film Compositions For Delivery Of Actives	7,910,641	03/22/2011	MonoSol Rx, LLC
pH Modulated Films For Delivery Of Actives	8,393,255	03/12/2013	MonoSol Rx, LLC
Pouch Cutter	9,150,341	10/06/2015	MonoSol Rx, LLC
Unit Assembly And Method Of Making Same	8,568,777	10/29/2013	MonoSol Rx, LLC
Packaged Film Dosage Unit Containing A Complexate	8,298,583	10/30/2012	MonoSol Rx, LLC
Film Delivery System For Tetrahydrolipstatin	8,663,696	03/04/2014	MonoSol Rx, LLC
Film Delivery System For Tetrahydrolipstatin	8,282,954	10/09/2012	MonoSol Rx, LLC
Method For Manufacturing Edible Film	9,095,577	08/04/2015	MonoSol Rx, LLC
Stabilized Amine-Containing Activities In Oral Film Compositions	9,095,495	08/04/2015	MonoSol Rx, LLC
Device And System For Determining, Preparing And Administering Therapeutically Effective Doses	8,577,488	11/05/2013	MonoSol Rx, LLC
Method And System For Optimizing Film Production And Minimizing Film Scrap	8,956,685	02/17/2015	MonoSol Rx, LLC
USE OF DAMS TO	8,936,825	01/20/2015	MonoSol Rx, LLC

<b>IMPROVE YIELD IN FILM PROCESSING</b>			
Method And System For Forming A Phamaceutical Product Directly Onto A Packaging Surface	8,974,826	03/10/2015	MonoSol Rx, LLC
<b>NANOPARTICLE FILM DELIVERY SYSTEMS</b>	9,149,959	10/06/2015	MonoSol Rx, LLC
Manufacturing Of Small Film Strips	8,790,704	07/29/2014	MonoSol Rx, LLC
Combination Peptide-Nanoparticles And Delivery Systems Incorporating Same	9,346,601	05/24/2016	MonoSol Rx, LLC
Reduction In Stress Cracking Of Films	8,241,661	08/14/2012	MonoSol Rx, LLC
Biocompatible Film With Variable Cross-Sectional Properties	8,617,589	12/31/2013	MonoSol Rx, LLC
Biocompatible Film With Variable Cross-Sectional Properties	9,303,918	04/05/2016	MonoSol Rx, LLC



Patent Applications

Patent	App. No.	App. Date	Owner
UNIFORM FILMS FOR RAPID DISSOLVE DOSAGE FORM INCORPORATING TASTE-MASKING COMPOSITIONS	14/572,173	12/16/2014	MonoSol Rx, LLC
Thin Film With Non-Self-Aggregating Uniform Heterogeneity And Drug Delivery Systems Made Therefrom	13/853,290	03/29/2013	MonoSol Rx, LLC
THIN FILM WITH NON-SELF AGGREGATING UNIFORM HETEROGENEITY AND DRUG DELIVERY SYSTEMS MADE THEREFROM	14/945,181	11/18/2015	MonoSol Rx, LLC
FILMS AND DRUG DELIVERY SYSTEM MADE THEREFROM	14/980,836	12/28/2015	MonoSol Rx, LLC
UNIFORM FILMS FOR RAPID-DISSOLVE DOSAGE FORM INCORPORATING ANTI-TACKING COMPOSITIONS	15/144,191	05/02/2016	MonoSol Rx, LLC
FILMS AND DRUG DELIVERY SYSTEMS MADE THEREFROM	15/058,056	03/01/2016	MonoSol Rx, LLC
Unit Assembly For Multiple Film Dosages, Apparatus, and Methods	12/686,531	01/13/2010	MonoSol Rx, LLC



Process For Analyzing And Establishing Dosage Size In An Ingestible Film	12/915,849	10/29/2010	MonoSol Rx, LLC
Sublingual And Buccal Film Compositions	14/814,461	07/30/2015	MonoSol Rx, LLC
Sublingual And Buccal Film Compositions	15/069,875	03/14/2016	MonoSol Rx, LLC
Stabilized Amine-Containing Activities In Oral Film Compositions	14/929,848	11/02/2015	MonoSol Rx, LLC
Dual Lane Coating	13/084,681	04/12/2011	MonoSol Rx, LLC
Method For Guided Tearing Of Pouch Laminate To Enable Product Removal	12/702,668	02/09/2010	MonoSol Rx, LLC
METHOD AND SYSTEM FOR FORMING A PHARMACEUTICAL PRODUCT DIRECTLY ONTO A PACKAGING SURFACE	14/597,593	01/15/2015	MonoSol Rx, LLC
NANOPARTICLE FILM DELIVERY SYSTEMS	14/617,413	02/09/2015	MonoSol Rx, LLC
MANUFACTURING OF SMALL FILM STRIPS	14/872,672	10/01/2015	MonoSol Rx, LLC
Combination Peptide-Nanoparticles And Delivery Systems Incorporating Same	14/048,286	10/08/2013	MonoSol Rx, LLC
Reduction In Stress Cracking Of Films	15/160,606	05/02/2016	MonoSol Rx, LLC
Reduction In Stress Cracking Of Films	13/844,775	03/15/2013	MonoSol Rx, LLC
Anti-Pain And Anti-Nausea And/Or Vomitting Combinatorial Compositions	13/843,718	03/15/2013	MonoSol Rx, LLC



Sublingual And Buccal Film Compositions	14/196,082	03/04/2014	MonoSol Rx, LLC
Films And Drug Delivery Systems For Rizatriptan	13/844,689	03/15/2013	MonoSol Rx, LLC
Multi-Layer Films Having Uniform Content	13/843,114	03/15/2013	MonoSol Rx, LLC
FILM DELIVERY SYSTEM FOR ACTIVE INGREDIENTS	14/926,227	10/29/2015	MonoSol Rx, LLC
FILM DELIVERY SYSTEM FOR ACTIVE INGREDIENTS	15/157,147	05/17/2016	MonoSol Rx, LLC
A Process For Drying A Wet-Film With Control Of Loss On Drying	15/090,350	04/04/2016	MonoSol Rx, LLC
ENHANCED DELIVERY PHARMACEUTICAL COMPOSITIONS	62/331,993	05/05/2016	MonoSol Rx, LLC
ENHANCED DELIVERY EPINEPHRINE COMPOSITIONS	62/331,996	05/05/2016	MonoSol Rx, LLC