

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

EPAS ID: PAT6023894

<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>
ALKERMES, INC.	03/17/2020
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MORGAN STANLEY SENIOR FUNDING, INC.
<b>Street Address:</b>	1585 BROADWAY
<b>City:</b>	NEW YORK
<b>State/Country:</b>	NEW YORK
<b>Postal Code:</b>	10036
<b>PROPERTY NUMBERS Total: 11</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	62932808
Application Number:	16519231
Patent Number:	10407481
Application Number:	62965578
Application Number:	62883816
Application Number:	62883852
Application Number:	62883863
Application Number:	62883823
Application Number:	62883870
Application Number:	62883837
Application Number:	62969841
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)787-5520
<i>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.</i>	
<b>Phone:</b>	2027875523
<b>Email:</b>	ilona@morriskamlay.com
<b>Correspondent Name:</b>	MORRIS & KAMLAY LLP
<b>Address Line 1:</b>	1911 FORT MYER DRIVE
<b>Address Line 2:</b>	SUITE 1050
<b>Address Line 4:</b>	ARLINGTON, VIRGINIA 22209

PATENT

<b>ATTORNEY DOCKET NUMBER:</b>	505200-500402
<b>NAME OF SUBMITTER:</b>	ILONA WORMACK
<b>SIGNATURE:</b>	/Ilona Wormack/
<b>DATE SIGNED:</b>	03/20/2020

**Total Attachments: 7**

source=401983244\_2(Alkermes - IP - Alkermes Patent Security Agreement (March 17, 2020) [EXECUTED])#page1.tif

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## PATENT SECURITY AGREEMENT

This PATENT SECURITY AGREEMENT, dated as of March 17, 2020 ("Patent Security Agreement"), made by ALKERMES, INC., a corporation organized under the laws of the Commonwealth of Pennsylvania located at 852 Winter Street Waltham, Massachusetts (the "Grantor"), is in favor of MORGAN STANLEY SENIOR FUNDING, INC., as collateral agent (in such capacity, the "Collateral Agent") for the Secured Parties.

### WITNESSETH:

WHEREAS, the Grantor is party to a First Lien Guarantee and Collateral Agreement, dated as of September 16, 2011, as amended on September 25, 2012 (the "Guarantee and Collateral Agreement") in favor of the Collateral Agent and MORGAN STANLEY SENIOR FUNDING, INC., as administrative agent (in such capacity, the "Administrative 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);

WHEREAS, pursuant to the terms of the Guarantee and Collateral Agreement, 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 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 provide financial accommodation, Grantor hereby agrees with the Collateral Agent, for the benefit of the Secured Parties, as follows:

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 Grantor or in which 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, patent applications, certificates of inventions, industrial designs (whether issued or applied for in the United States or any other country or any political subdivision thereof), including, without limitation, each issued patent and patent application identified on Schedule 1 attached hereto, together with any and all (i) inventions and improvements described and claimed therein, (ii) reissues, divisions, continuations, extensions and continuations-in-part thereof and amendments thereto, (iii) income, fees, royalties, damages, and payments now and hereafter due and/or payable under or with respect to any of the foregoing, including, without limitation, damages, claims and payments for past, present and future infringements, misappropriations and other violations thereof, (iv) rights and remedies to sue for past, present and future infringements, misappropriations and other violations of any of the foregoing and (v) rights, priorities, and privileges corresponding to any of the foregoing throughout the world ("Patents") of such Grantor, including, without limitation, the registered and applied for Patents of such Grantor listed on Schedule 1 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 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.

Grantor hereby authorizes and requests that, with respect to the Intellectual Property listed on Part 1 of Schedule 1, the Commissioner of Patents and Trademarks record this Patent Security Agreement and that, with respect to the Intellectual Property listed on Part 2 of Schedule 1, the appropriate filing office in the Republic of Ireland 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 LAWS 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. 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.

ALKERMES, INC.

By: David J. Gaffin  
Name: David J. Gaffin  
Title: Chief Legal Officer

Accepted and Agreed:

MORGAN STANLEY SENIOR FUNDING,  
INC., as Collateral Agent

By: \_\_\_\_\_  
Name:  
Title:

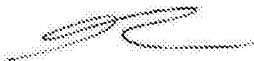
IN WITNESS WHEREOF, each Grantor has caused this PATENT SECURITY AGREEMENT to be executed and delivered by its duly authorized officer as of the date first above written.

ALKERMES, INC.

By: \_\_\_\_\_  
Name:  
Title:

Accepted and Agreed:

MORGAN STANLEY SENIOR FUNDING,  
INC., as Collateral Agent

By:  \_\_\_\_\_  
Name: Graham Robertson  
Title: Authorized Signatory

**Schedule 1**

**Part 1**

**Case Number:**4000.3080

**Invention Title:**COMPOSITIONS AND METHODS FOR IL-10 IMMUNOTHERAPY

**Division:** Alkermes, Inc.

Country	Sub Case	Case Type	Status	Application Number	Filing Date	Patent Number	Issue Date	Expiration Date
United States of America	1	PRO	Pending	62/952,808	08-Nov-2019			06-Nov-2020

**Case Number:**4165.3067

**Invention Title:**Ligands Modified by Circular Permutation as Agonists and Antagonists

**Division:** Alkermes, Inc.

Country	Sub Case	Case Type	Status	Application Number	Filing Date	Patent Number	Issue Date	Expiration Date
United States of America	5	CON	Pending	16/518,231	23-Jul-2019			

**Case Number:** 4165.3067

**Invention Title:** Ligands Modified by Circular Permutation as Agonists and Antagonists

**Division:** Alkermes, Inc.

Country	Sub Case	Case Type	Status	Application Number	Filing Date	Patent Number	Issue Date	Expiration Date
United States of America	4	CON	Granted	15/218,193	25-Jul-2016	10,407,481	10-Sep-2019	06-Jun-2033

**Case Number:**

**ALT-028**

**Invention Title:**METHODS OF PURIFICATION

**Division:** Alkermes, Inc.

Country	Sub Case	Case Type	Status	Application Number	Filing Date	Patent Number	Issue Date	Expiration Date
United States of America	1	PRO	Pending	62/965,578	24-Jan-2020			24-Jan-2021

**Case Number:**ALT-032-1

**Invention Title:**BENZOTRIAZOLE COMPOUNDS FOR THE TREATMENT OF PAIN

**Division:** Alkermes, Inc.

Country	Sub Case	Case Type	Status	Application Number	Filing Date	Patent Number	Issue Date	Expiration Date
United States of America		PRO	Pending	62/883,816	07-Aug-2019			07-Aug-2020

**Case Number:**ALT-033-1

**Invention Title:**LACTAM-CONTAINING COMPOUNDS FOR THE TREATMENT OF PAIN

**Division:** Alkermes, Inc.

Country	Sub Case	Case Type	Status	Application Number	Filing Date	Patent Number	Issue Date	Expiration Date
United States of America		PRO	Pending	62/883,852	07-Aug-2019			07-Aug-2020

**Case Number:**ALT-034-1

**Invention Title:**BENZIMIDAZOLE COMPOUNDS FOR THE TREATMENT OF PAIN

**Division:** Alkermes, Inc.

Country	Sub Case	Case Type	Status	Application Number	Filing Date	Patent Number	Issue Date	Expiration Date
United States of America		PRO	Pending	62/883,863	07-Aug-2019			07-Aug-2020

**Case Number:**ALT-035-1

**Invention Title:**INDAZOLE COMPOUNDS FOR THE TREATMENT OF PAIN

**Division:** Alkermes, Inc.

Country	Sub Case	Case Type	Status	Application Number	Filing Date	Patent Number	Issue Date	Expiration Date
United States of America		PRO	Pending	62/883,823	07-Aug-2019			07-Aug-2020

**Case Number:**ALT-036-1

**Invention Title:**INDOLE COMPOUNDS FOR THE TREATMENT OF PAIN

**Division:** Alkermes, Inc.

Country	Sub Case	Case Type	Status	Application Number	Filing Date	Patent Number	Issue Date	Expiration Date
United States of America		PRO	Pending	62/883,870	07-Aug-2019			07-Aug-2020

**Case Number:**ALT-037-1

**Invention Title:**PHENYLTRIAZOLE COMPOUNDS FOR THE TREATMENT OF PAIN

**Division:** Alkermes, Inc.

Country	Sub Case	Case Type	Status	Application Number	Filing Date	Patent Number	Issue Date	Expiration Date
United States of America		PRO	Pending	62/883,837	07-Aug-2019			07-Aug-2020

**Case Number:**ALT-038-1

**Invention Title:**CRYSTALLINE FORMS OF 3-((1R,5S,9r)-9-ETHOXY-3-AZABICYCLO[3.3.1]NONAN-9-YL)-BENZAMIDE AND SALT FORMS THEREOF

**Division:** Alkermes, Inc.

Country	Sub Case	Case Type	Status	Application Number	Filing Date	Patent Number	Issue Date	Expiration Date
United States of America		PRO	Pending	62/888,841	04-Feb-2020			04-Feb-2021



**Part 2**

**Case Number:** 4165.3067

**Invention Title:** Ligands Modified by Circular Permutation as Agonists and Antagonists

**Division:** Alkermes, Inc.

<b>Country</b>	<b>Sub Case</b>	<b>Case Type</b>	<b>Status</b>	<b>Application Number</b>	<b>Filing Date</b>	<b>Patent Number</b>	<b>Issue Date</b>	<b>Expiration Date</b>
Ireland		EPP	Granted	13801437.8	06-Jan-2015	EP2859015	21-Mar-2018	08-Jun-2033