

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7219972

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	SECURITY INTEREST	
CONVEYING PARTY DATA		
Name		Execution Date
ACER THERAPEUTICS INC.		03/04/2022
RECEIVING PARTY DATA		
Name:	SWK FUNDING LLC	
Street Address:	14755 PRESTON ROAD, SUITE 105	
City:	DALLAS	
State/Country:	TEXAS	
Postal Code:	75254	
PROPERTY NUMBERS Total: 29		
Property Type	Number	
Patent Number:	11154521	
Patent Number:	11202767	
Application Number:	16746186	
Application Number:	17196416	
Application Number:	17196599	
Patent Number:	9078865	
Patent Number:	9737499	
Patent Number:	10092532	
PCT Number:	US2021040760	
Application Number:	63173098	
Application Number:	63232011	
Application Number:	63218211	
PCT Number:	US2021044016	
PCT Number:	US2021044018	
Patent Number:	11083726	
Application Number:	63306216	
Application Number:	63305209	
Application Number:	63306215	
Application Number:	63305207	
Patent Number:	10314835	

PATENT

Property Type	Number
Application Number:	16676030
Application Number:	16930208
Application Number:	16879511
Application Number:	17542165
PCT Number:	US2021024399
PCT Number:	US2021061867
Patent Number:	10555942
Patent Number:	10940188
Application Number:	16718343

CORRESPONDENCE DATA

Fax Number: (617)523-6850

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: 617-523-2700

Email: susan.dinicola@hklaw.com

Correspondent Name: HOLLAND & KNIGHT LLP

Address Line 1: 10 ST. JAMES AVENUE

Address Line 4: BOSTON, MASSACHUSETTS 02116

ATTORNEY DOCKET NUMBER:	136144.00070
NAME OF SUBMITTER:	SUSAN C. DINICOLA
SIGNATURE:	/Susan C. DiNicola/
DATE SIGNED:	03/11/2022

Total Attachments: 19

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INTELLECTUAL PROPERTY SECURITY AGREEMENT

This INTELLECTUAL PROPERTY SECURITY AGREEMENT, dated as of March 4, 2022 (as may be amended, restated, amended and restated, waived, supplemented, or otherwise modified from time to time, this “**Agreement**”), made by ACER THERAPEUTICS INC., a Delaware corporation (“**Grantor**”), in favor of SWK FUNDING LLC, a Delaware limited liability company as agent (in such capacity, “**Agent**”) for the Lenders (as defined below) party to the Credit Agreement (as defined below).

W I T N E S S E T H:

WHEREAS, pursuant to that certain Credit Agreement, dated on or about the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the “**Credit Agreement**”), by and among Grantor, as the borrower, Agent and the financial institutions party thereto from time to time as lenders (each a “**Lender**” and collectively, the “**Lenders**”), Agent and Lenders have agreed to make certain financial accommodations available to Grantor, and pursuant to that certain Guarantee and Collateral Agreement, dated on or about the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the “**Guarantee and Collateral Agreement**”), by and among Grantor, the other grantors party thereto from time to time, and Agent, Grantor has granted a security interest to Agent, for the benefit of Agent and Lenders, in, among other things, all right, title and interest of Grantor in, to and under all of Grantor’s Intellectual Property (as defined in the Credit Agreement), whether now existing or hereafter arising or acquired as security for the Obligations; and

WHEREAS, Grantor is the owner of the entire right, title and interest in, to and under the Intellectual Property listed on Schedule I hereto, as applicable.

NOW, THEREFORE, in consideration of the premises and to induce Agent and Lenders to enter into the Credit Agreement, Grantor hereby agrees with Agent as follows:

1. Defined Terms.

(a) Definitions. Unless otherwise defined herein or the context otherwise requires, terms used in this Agreement, including its preamble and recitals, have the meanings provided in the Guarantee and Collateral Agreement.

(b) Other Definitional Provisions.

(i) The words “hereof,” “herein” and “hereunder” and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement, and section and paragraph references are to this Agreement unless otherwise specified.

(ii) The meanings given to terms defined herein shall be equally applicable to both the singular and plural forms of such terms.

2. Grant of Security Interest. To secure the payment and performance of the Secured Obligations, Grantor hereby confirms and acknowledges that it has granted (and, to the extent not previously granted under the Guarantee and Collateral Agreement, does hereby grant) to Agent, for the benefit of Agent and Lenders, a lien and security interest in Grantor’s entire right, title and interest in its Intellectual Property and all proprietary rights relating to or arising from such Intellectual Property, in each case whether now owned or hereafter acquired by Grantor, and including, without limitation, Grantor’s right, title and interest in and to the Intellectual Property and proprietary rights identified on Schedule I

attached hereto and made a part hereof, and the right to sue for past, present and future infringements and dilutions, and all rights corresponding thereto throughout the world, and the entire goodwill of Grantor's business connected with and symbolized by such Intellectual Property and all income, fees, royalties, proceeds and other payments at any time due or payable with respect to any of the foregoing (referred to collectively as the "**IP Collateral**"); provided, that the IP Collateral shall not include the Excluded Property. This Agreement is not to be construed as an assignment of any Intellectual Property.

3. **No Limitation; Loan Documents.** This Agreement has been executed and delivered by Grantor for the purpose of recording the security interest granted to Agent with respect to the IP Collateral with the United States Patent and Trademark Office, the United States Copyright Office, as well as with any similar office or department of any other foreign or domestic Governmental Authority. The security interest granted hereby has been granted as a supplement to, and not in limitation of, the security interest granted to Agent, for the benefit of Agent and Lenders, under the Guarantee and Collateral Agreement and the other Loan Documents, and Grantor hereby acknowledges and affirms that the rights and remedies of the Agent with respect to the security interest in the IP Collateral made and granted hereby are more fully set forth in the Guarantee and Collateral Agreement. The other Loan Documents (and all rights and remedies of Grantor, Agent, and Lenders thereunder) shall remain in full force and effect in accordance with their terms.

4. **Binding Effect; Benefits.** This Agreement shall be binding upon Grantor and its successors and assigns, and shall inure to the benefit of Agent, Lenders and their respective successors and assigns.

5. **GOVERNING LAW. THIS AGREEMENT SHALL BE A CONTRACT MADE UNDER AND GOVERNED BY THE INTERNAL LAWS OF THE STATE OF NEW YORK APPLICABLE TO CONTRACTS MADE AND TO BE PERFORMED ENTIRELY WITHIN SUCH STATE.**

6. **Counterparts; Electronic Signatures.** This Agreement may be executed in counterparts with the same effect as if all parties had executed the same document. All counterparts shall be construed together and shall constitute a single agreement. Further, the parties hereto consent and agree that this Agreement may be signed and/or transmitted by e-mail of any .pdf file, .jpeg file, or any other electronic or image file, or any "electronic signature" as defined under the U.S. Electronic Signatures in Global and National Commerce Act or the New York Electronic Signatures and Records Act, which includes any electronic signature provided using Orbit, Adobe Sign, DocuSign, or any other similar platform identified by the parties hereto and reasonably available at no undue burden or expense to the Agent), except to the extent the Agent requires otherwise. Any such electronic signatures shall be valid, effective and legally binding as if such electronic signatures were handwritten signatures and shall be deemed to have been duly and validly delivered for all purposes hereunder. No party hereto shall raise the use of e-mail or other electronic transmission to deliver a signature or the fact that any signature or agreement or amendment was transmitted or communicated through the use of e-mail or other electronic transmission as a defense to the formation or enforceability of a contract and each such party forever waives any such defense.

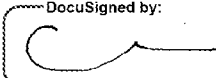
7. **Conflicting Terms.** In the event of any conflict or inconsistency between the terms of this Agreement and the terms of the Credit Agreement or the Guarantee and Collateral Agreement, as the case may be, the terms of the Credit Agreement or the Guarantee and Collateral Agreement, as applicable, shall control.

[Remainder of page intentionally blank; signature page follows.]

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

GRANTOR:

ACER THERAPEUTICS INC.,
a Delaware corporation

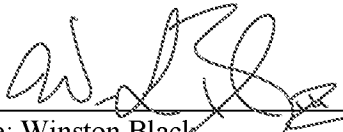
By: 
Name: Chris Schelling COO:
Title: Chief Executive Officer

CLO Review: 


AGENT:

SWK FUNDING LLC, a Delaware limited liability company, as Agent and a Lender

By: SWK Holdings Corporation, a Delaware corporation, its sole Manager

By: 
Name: Winston Black
Title: Chief Executive Officer

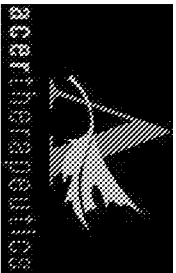
Schedule I

Intellectual Property

(See Attached)

Trademarks - January 2022

C&E Reference	Next Upcoming Action Due	Deadline	Country	Mark	Status	Serial No.	Filing Date	Publication No.	Publication Date	Registration No.	Registration Date	Renewal date
51078-T02BR2	Renewal Fee	12/4/2028	BR - Brazil	EDSIVO	Registered	913319473	8/31/2017	913319473	9/19/2017	913319473	12/4/2018	12/4/2028
51078-T02CA2	Renewal Fee	7/29/2030	CA - Canada	EDSIVO	Registered	1,855,144	8/30/2017	1,855,144	10/24/2018	1,080,814	7/29/2020	7/29/2030
51078-T08001	File Statement of Use/Re-file	4/23/2022	US - United States	EDSIVO	Allowed	88/169,217	10/25/2018	-	2/26/2019	-	-	-
51078-T14WO2	Renewal Fee	8/25/2030	WIPO - Madrid Protocol (Designations: AU - Australia, BR - Brazil, CA - Canada, CH - Switzerland, CO - Columbia, EM - European Union, GB - United Kingdom, JP - Japan, KR - Korea, MX - Mexico, and TR - Turkey)	OLPRUVA	Registered in WIPO (Not yet registered in all designated countries/regions)	A0095587	8/25/2020	-	-	1553914	8/25/2020	8/25/2030
51078-T12001	File Extension/Statement of Use	2/16/2022	US - United States	OLPRUVA	Allowed	88/814,846	2/28/2020	-	6/23/2020	-	-	-
51078-T13001	File Extension/Statement of Use	2/16/2022	US - United States	ZEVVEZ	Allowed	88/814,853	2/28/2020	-	6/23/2020	-	-	-
51078-T14001	File Extension/Statement of Use	7/4/2022	US - United States	MIX-AID	Allowed	80/559,398	3/4/2021	-	11/9/2021	-	-	-
51078-T14WO2	Renewal Fee	9/2/2031	WIPO - Madrid Protocol (Designations: AU - Australia, BR - Brazil, CA - Canada, CH - Switzerland, CN - China, CO - Columbia, EM - European Union, GB - United Kingdom, JP - Japan, KR - Korea, MX - Mexico, NZ - New Zealand, and TR - Turkey)	MIX-AID	Registered in WIPO (Not yet registered in all designated countries/regions)	A0113167	9/2/2021	-	-	1619736	9/2/2021	9/2/2031



IP Status Chart

Prepared: February 10th, 2022
PRIVILEGED & CONFIDENTIAL

I. ACER-001

A. Formulation / Composition of Matter

Case Description and Number	Next Upcoming Action Due	Deadline	Country	Application Type	Status	Serial No.	Filing Date	Publication Date	Patent No.	Issue Date	Expiration date
PALATABLE COMPOSITIONS INCLUDING SODIUM PHENYLBUTYRATE AND USES THEREOF											
51078-003003	Maintenance Fee	10/16/2024	US - United States		Issued				11,154,521	10/26/2021	2036
51078-003005	Maintenance Fee	12/21/2024	US - United States		Issued				11,202,767	12/21/2021	2036
51078-003AU2	Annuitiy Payment	10/17/2021	AU - Australia	National Stage	Published	2016398029	10/17/2016	10/11/2018	-	-	-
51078-003AU2 51078-003BH2	Request Examination	10/17/2021	AU - Australia BH - Bahrain	National Stage	Published	2016398029	10/17/2016	10/11/2018	-	-	-
	Awaiting action by Bahraini Patent Office	-		National Stage	Pending	166/2018	10/17/2016	-	-	-	-
51078-003BR2	Awaiting response by Brazilian Patent Office	-	BR - Brazil	National Stage	Published	BR112018068665-4	10/17/2016	2/5/2019	-	-	-
51078-003BR2 51078-003CA2	Annuitiy Payment	10/17/2021	BR - Brazil CA - Canada	National Stage	Published	BR112018068665-4	10/17/2016	2/5/2019	-	-	-
	Annuitiy Payment	10/17/2021		National Stage	Published	3,017,573	10/17/2016	9/21/2017	-	-	-
51078-003CA2 51078-003EP2	Request Examination	10/17/2021	CA - Canada EP - Europe	National Stage	Published	3,017,573	10/17/2016	9/21/2017	-	-	-
	Reply to Office Action	5/5/2021		National Stage	Published	16894786.9	10/17/2016	1/23/2019	-	-	-
51078-003EP2 51078-003IL2	Annuitiy Payment	10/17/2021	EP - Europe IL - Israel	National Stage	Published	16894786.9 261777	10/17/2016 10/17/2016	1/23/2019 10/31/2018	- -	- -	- -

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	Awaiting response by Israeli Patent Office	-		National Stage							
Case Description and Number	Next Upcoming Action Due	Deadline	Country	Application Type	Status	Serial No.	Filing Date	Publication Date	Patent No.	Issue Date	Expiration date
51078-003JP2	Reply to Office Action	7/6/2021	JP - Japan	National Stage	Published	2019-500212	10/17/2016	4/4/2019	-	-	-
51078-003KR2	Request Examination	10/17/2021	KR - Republic of Korea	National Stage	Published	10-2018-7029452	10/17/2016	1/25/2019	-	-	-
51078-003KW2	Annuity Payment	1/1/2021	KW - Kuwait	National Stage	Pending	PCT/139/2018	10/17/2016	-	-	-	-
51078-003MX2	Awaiting response by Mexican Patent Office	1/24/2021	MX - Mexico	National Stage	Published	MX/a2018/011229	10/17/2016	6/13/2019	-	-	-
51078-003NZ2	Annuity Payment	10/17/2021	NZ - New Zealand	National Stage	Pending	746866	10/17/2016	-	-	-	-
51078-003NZ2	Request Examination	10/17/2021	NZ - New Zealand	National Stage	Pending	746866	10/17/2016	-	-	-	-
51078-003OM2	Annuity Payment	10/17/2021	OM - Oman	National Stage	Pending	OM/P/2018/00274	10/17/2016	-	-	-	-
51078-003QA2	Annuity Payment	10/17/2021	QA - Qatar	National Stage	Pending	QA/201809/00400	10/17/2016	-	-	-	-
51078-003SA2	Reply to Office Action	6/8/2021	SA - Saudi Arabia	National Stage	Pending	518400020	10/17/2016	-	-	-	-
51078-003AE2	Annuity Payment	10/17/2021	AE - United Arab Emirates	National Stage	Pending	P6001296/2018	10/17/2016	-	-	-	-
51078-003001	Expired	-	US - United States	Provisional	Expired	62/308,614	3/15/2016	-	-	-	-
51078-003WO2	Expired	-	WO - Patent Cooperation Treaty	PCT	National Phase	PCT/US2016/057415	10/17/2016	9/21/2017	-	-	-
51078-003003	Awaiting action by US Patent Office	-	US - United States	Continuation	Published	16/746,186	1/17/2020	8/20/2020	-	-	-
51078-003004	Awaiting action by US Patent Office	-	US - United States	Continuation	Pending	17/196,416	3/9/2021	-	-	-	-
51078-003005	Awaiting action by US Patent Office	-	US - United States	Continuation	Pending	17/196,599	3/9/2021	-	-	-	-

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B. Methods of Use – MSUD (Licensed from Baylor College of Medicine)

Appl. No.	Appl. Date	Matter No.	Title	Case Status (Internal)	Reg. No.	Reg. Date	Country
10803013.1	7/26/2010	1000340505	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Austria
10803013.1	7/26/2010	1000342292	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Belgium
10803013.1	7/26/2010	1000208589	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Switzerland
10803013.1	7/26/2010	1000208588	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Germany
10803013.1	7/26/2010	1000175619	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Denmark
10803013.1	7/26/2010	1000354396	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Spain
10803013.1	7/26/2010	1000204918	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	France
10803013.1	7/26/2010	1000204917	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	United Kingdom
10803013.1	7/26/2010	1000342293	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Ireland
10803013.1	7/26/2010	1000340517	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Italy
10803013.1	7/26/2010	1000362920	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Luxembourg
10803013.1	7/26/2010	1000175630	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Monaco

10803013.1	7/26/2010	1000204919	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Netherlands
10803013.1	7/26/2010	1000317155	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	EP Granted - Nationalized	2456304	8/19/2015	European Patent Office
15173016.5	7/26/2010	1000354395	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Abandoned			European Patent Office
16174310.9	7/26/2010	1000198683	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Abandoned			European Patent Office
10803013.1	7/26/2010	1000342295	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Portugal
10803013.1	7/26/2010	1000208590	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Sweden
10803013.1	7/26/2010	1000354397	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	2456304	8/19/2015	Turkey
13/386549	7/26/2010	1000003157	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	9078865	7/14/2015	United States of America
14/745205	7/26/2010	1000204261	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	9737499	8/22/2017	United States of America
15/653155	7/18/2017	1000173420	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Issued	10092532	10/9/2018	United States of America
16/134558	9/18/2018	1001047360	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Abandoned			United States of America
16/740131	1/10/2020	1001108069	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Application Filed			United States of America
61/228485	7/24/2009	11007293	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Expired			United States of America
PCT/US2010/043240	7/26/2010	11007293	METHODS OF MODULATION OF BRANCHED CHAIN ACIDS AND USES THEREOF	Expired			Patent Cooperation Treaty

C. ACER-001 Methods of Use

C&E Reference	Next Upcoming Action Due	Deadline	Country	Application Type	Status	Serial No.	Filing Date	Publication No.	Publication Date	Patent No.	Issue Date	Expiration date
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ADMINISTRATION OF SODIUM PHENYLBUTYRATE IN A FASTED STATE TO TREAT UREA CYCLE DISORDERS

51078-011001	PCT deadline	7/7/2021	US - United States	Provisional	Expired	63/048,892	7/7/2020	-	-	-	-	-
51078-011WO2	Reply to International Search Report	5/7/2022	WO - Patent Cooperation Treaty	PCT	Pending	PCT/US2021/040760	7/7/2021					

METHODS OF ADMINISTERING TASTE MASKED PHENYLBUTYRATE

51078-012001	PCT deadline	8/13/2021	US - United States	Provisional	Expired	63/065,272	8/13/2020	-	-	-	-	-
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METHODS OF TREATING NITROGEN RETENTION AND OTHER DISORDERS

51078-015001	PCT deadline	4/9/2022	US - United States	Provisional	Pending	63/173,098	4/9/2021	-	-	-	-	-
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DOSAGE FORM FOR IMPROVING PALATABILITY OF DRUG SUBSTANCE – China Specific

51078-16CN2	Awaiting action by Chinese Patent Office		CN – China	Utility Model	Pending	202122004991.9	8/24/2021					
51078-16001	PCT deadline		US - United States	Provisional	Pending	63/232,011	8/11/2021					

II. Osanetant

A. Composition of Matter

Case Description and Number	Country	Upcoming Due Dates	Action Due	Application Status	App Number	Filing Date	Priority Dates	Assignee	Notes
SOLID FORMS OF OSANETANT) 60BB-332184-P	US	7/02/2022	File PCT/Utility Application	Provisional	63218211	7/02/2021		Acer Therapeutics, Inc.	Covers novel polymorphs and salts of osanetant

B. Methods of Use (Acer, Univ. Washington and Kansas)

Case Description and Number	Country	Upcoming Due Dates	Action Due	Application Status	App Number	Filing Date	Priority Dates	Assignee	Patent Number	Notes

Osanetant for treating Cancer Patients 60BB-310111-P/P2	US	7/30/2021	File PCT/Utility Application	Completed	63/059,086 63/134,542	7/30/2020 1/6/2021	7/30/2020	Acer Therapeutics Inc.	Co-owned with Univ. Washington
NK RECEPTOR ANTAGONISTS FOR CANCER PATIENTS 60BB-310111-WO	WO	02/03/2022	Utility - ORG	Published	PCT/US2021/044016 WO 2022/026900	7/30/2021	7/30/2020	Acer Therapeutics, Inc.	Co-owned with Univ. Washington
Osanetant for Contraception 60BB-314373-P	US	7/30/2021	File PCT/Utility Application	Completed	63/059,062	7/30/2020	7/30/2020	Acer Therapeutics Inc.	Acer Only
Osanetant for Contraception 60BB-314373-WO	WO	2/3/2022	Utility - ORG	Published	PCT/US2021/044018	7/30/2021	7/30/2020	Acer Therapeutics Inc.	
Osanetant for VMS	US	7/6/2021	Pay issue fee; file no fee continuation	Issued	16/114661	8/28/2018	12/3/12	University of Washington	Negotiating license. Claims currently directed to menopausal patients having short term estrogen therapy.

METHODS FOR TREATING PATIENTS HAVING LOW ESTROGEN WITH NK3	US	1/31/2023	File PCT/Utility Application	Pending	63/306,216	02/03/2022		Acer Therapeutics Inc.	Added more data/information to original filing of 1/31/22
60BB-337801-P2									
METHODS FOR TREATING PATIENTS WITH NK3 ANTAGONISTS	US	1/31/2023	File PCT/Utility Application	Pending	63/305,209	01/31/2022		Acer Therapeutics Inc.	

HAVING LOW ESTROGEN									
60BB-337801-P									
NK RECEPTOR ANTAGONISTS FOR TREATMENT OF PROSTATE CANCER	US	1/31/2023	File PCT/Utility Application	Pending	63/306,215	02/03/2022		Co-owned between Acer Therapeutics Inc. and University of Kansas	Co-owned with Kansas. Negotiating license
60BB-342333-P2									Added additional subject matter from Kansas to original filing of 1/31/22
NK RECEPTOR ANTAGONISTS FOR TREATMENT OF PROSTATE CANCER	US	1/31/2023	File PCT/Utility Application	Pending	63/305,207	01/31/2022		Acer Therapeutics Inc.	

A. Emory Univ License: Use of Osanetant PTSD

Case Description and Number	Country	Upcoming Due Dates	Action Due	Application Status	App Number/Patent Number	Filing Date/Issue Date	Priority Date	Assignee	Notes
Osanetant for PTSD	US	None	N/A	Granted	10,314,835	6/11/2019	06/25/14	Emory University	
Osanetant for conditioned fear	US	None	N/A	Pending	16/676,030	11/6/2019	06/25/14	Emory University	Response just filed; awaiting next action or Notice of Allowance
Osanetant for PTSD	EP	8/16/2020 (Real Deadline is 10/16/2020)		Granted	EP3160469	04/28/21	06/25/14	Emory University	Validated in France, UK, Germany, Italy, Spain, Switzerland, Ireland and the Netherlands

III. Celiprolol (EDSIVO®)

A. Methods of Use (Licensed from AP-HP)

Case Description and Number	Country	Upcoming Due Dates	Action Due	Application Status	App Number	Filing Date	Priority Dates	Assignee	Notes
Dosing Regimen									
Dosing Regimen 60BB-287147-AR	AR	None		Pending	20180103795	12/21/18	12/21/17	Assistance Publique-Hopitaux de Paris (AP-HP) Universite de Paris	
Dosing Regimen 60BB-287147-US2	US	07/15/2021	Assignment and Declaration Due	Published	16/930,208	07/15/20	12/21/17	Assistance Publique-Hopitaux de Paris (AP-HP)	Filed Track 1
Dosing Regimen 60BB-287147-BR	BR	12/19/2021 12/19/2021	Annuity Due Request Examination - Final	Published	BR112020012095-2	12/19/18	12/21/17	Assistance Publique-Hopitaux de Paris (AP-HP)	
Dosing Regimen	CA	12/19/2021 12/19/2023	Maintenance Fee	Pending	3083432	12/19/18	12/21/17	Assistance Publique-	

60BB-287147-CA			Request Examination - Final					Hopitaux de Paris (AP-HP)	
Dosing Regimen 60BB-287147-MX	MX			Pending	MX/a/2020/006351	12/19/18	12/21/17	Assistance Publique- Hopitaux de Paris (AP-HP)	

Methods of Use: Pregnancy

Pregnancy 60BB-287148-AR	AR			Published	20180103794	12/21/18	12/21/17	Assistance Publique- Hopitaux de Paris (AP-HP) Universite de Paris	
Pregnancy 60BB-287148-US2	US	5/20/2021	Assignment and Declaration Due	Pending	16/879,511	05/20/20	12/21/17	Assistance Publique- Hopitaux de Paris (AP-HP) Universite de Paris	Awaiting Office Action, SMRH to handle deadline
Pregnancy 60BB-287148-BR	BR	12/19/2021	Annuity Due Request Examination - Final	Pending	BR112020012529-6	12/19/18	12/21/17	Assistance Publique- Hopitaux de Paris (AP-HP) Universite de Paris	
Pregnancy 60BB-287148-CA	CA	12/19/2021 12/19/2023	Maintenance Fee Request Examination - Final	Pending	3083407	12/19/18	12/21/17	Assistance Publique- Hopitaux de Paris (AP-HP) Universite de Paris	
Pregnancy 60BB-287148-MX	MX			Pending	MX/a/2020/006344	12/19/18	12/21/17	Assistance Publique- Hopitaux de Paris (AP-HP) Universite de Paris	

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IV. Emetine

A. Covid and Composition of Matter

Case Description and Number	Country	Upcoming Due Dates	Action Due	Application Status	App Number	Filing Date	Priority Date	Assignee	Notes
60BB-314393-WO	US	9/26/2022	Deadline for National Phase Filing	Pending	PCT/US2021/024399	3/26/2021	3/26/2020	Acer Therapeutics Inc. The United States Of America, As Represented By The Secretary, Department Of Health And Human Services	Emetine for Sars-Cov2 Uses
SOLID FORMS OF EMETINE 60BB-322499-P	US	12/4/2021	Deadline for filing US and PCT applications	Completed	63/121,743	12/4/2020	12/4/2020	Acer Therapeutics, Inc.	Polymorph application
60BB-322499-WO	WO			Pending	PCT/US2021/061867	12/03/2021	12/4/2020	Acer Therapeutics Inc.	Polymorph application
60BB-322499-US	US			Pending	17/542,165	12/03/2021	12/4/2020	Acer Therapeutics Inc.	Polymorph application

B. Other Viruses, e.g. Zika

Case Description and Number	Country	Upcoming Due Dates	Action Due	Application Status	App Number/Patent Number	Filing Date/Issue Date	Priority Dates	Assignee	Notes
	US	None	N/A	Granted	10,555,942	2/11/2020	10/10/2017	Florida State University Research Foundation The John Hopkins University The United States of America, as Represented by the Secretary, Department of Health and Human Services	Claims to using cephaeline for Zika Virus
	US	None	N/A	Granted	10,940,188	3/9/2021	7/16/2016	Florida State University Research Foundation The John Hopkins University The United States of America, as Represented by the Secretary, Department of Health and Human Services	Claims to using emetine for Zika Virus
60BB-318882-US	US	5/8/2021	Response to Office Action	Pending	16/718,343	1/31/2020	10/10/17	Florida State University Research Foundation The John Hopkins University The United States of America, as Represented by the Secretary, Department of Health and Human Services	

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