

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6606957

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT SUPPLEMENT (REVOLVING)
CONVEYING PARTY DATA	
Name	Execution Date
RADIUS HEALTH, INC.	01/07/2021
RADIUS PHARMACEUTICALS, INC.	01/07/2021
RECEIVING PARTY DATA	
Name:	MIDCAP FUNDING IV TRUST, AS AGENT
Street Address:	7255 WOODMONT AVE., SUITE 200
City:	BETHESDA
State/Country:	MARYLAND
Postal Code:	20814
PROPERTY NUMBERS Total: 16	
Property Type	Number
Application Number:	14724351
Application Number:	14815936
Application Number:	15166476
Application Number:	15253010
Application Number:	15499178
Application Number:	15712515
Application Number:	16870637
Application Number:	16874225
Application Number:	16874300
PCT Number:	US2015032955
PCT Number:	US2016034565
PCT Number:	US2017029843
PCT Number:	US2017052897
PCT Number:	IB2020000365
PCT Number:	IB2020000610
PCT Number:	IB2020000474
CORRESPONDENCE DATA	
Fax Number:	(703)610-6200
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent</i>	
PATENT	

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 7036106100
Email: boxip@hoganlovells.com
Correspondent Name: GRETA D. FELDMAN OF HOGAN LOVELLS US LLP
Address Line 1: 8350 BROAD STREET, 17TH FLOOR
Address Line 2: ATTN: BOX INTELLECTUAL PROPERTY
Address Line 4: TYSONS, VIRGINIA 22102

ATTORNEY DOCKET NUMBER:	036639.000111
NAME OF SUBMITTER:	GRETA D. FELDMAN OF HOGAN LOVELLS US LLP
SIGNATURE:	/Greta D. Feldman/
DATE SIGNED:	03/17/2021

Total Attachments: 14

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INTELLECTUAL PROPERTY SECURITY AGREEMENT SUPPLEMENT

This Intellectual Property Security Agreement Supplement is entered into as of the 7th day of January, 2021 by **RADIUS HEALTH, INC.**, a Delaware corporation ("Radius Health") and **RADIUS PHARMACEUTICALS, INC.**, a Delaware corporation ("Radius Pharma", together with Radius Health each, a "Grantor" and collectively, the "Grantors").

RECITALS

A. Grantors are party to that certain Intellectual Property Security Agreement, by and between MidCap Funding IV Trust, a Delaware statutory trust (in such capacity, together with its successors and assigns, "Agent") and the Grantors, dated as of January 10, 2020 (as the same may have been amended, modified or supplemented from time to time prior to the date hereof, the "Existing IP Security Agreement"; capitalized terms used herein are used as defined in the Existing IP Security Agreement);

B. Grantors wish to amend the Existing IP Security Agreement by supplementing the Intellectual Property Collateral therein with the Intellectual Property listed on the exhibits hereto.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Credit Agreement, each Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure its obligations under the Credit Agreement, each Grantor grants and pledges to Agent, for the ratable benefit of the Lenders, a security interest in all of such Grantor's right, title and interest in, to and under its Intellectual Property (as defined in the Credit Agreement), including, without limitation, the following:

- (a) Any and all Copyrights, including without limitation those set forth on Exhibit A attached hereto, as such exhibit may be further amended, modified or supplemented from time to time;
- (b) Any and all Patents, including without limitation those set forth on Exhibit B attached hereto, as such exhibit may be further amended, modified or supplemented from time to time);
- (c) Any and all Trademarks, including without limitation those set forth on Exhibit C attached hereto, as such exhibit may be further amended, modified or supplemented from time to time;
- (f) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.

Grantors hereby agree that the Intellectual Property listed on the exhibits hereto shall become a part of the Intellectual Property Collateral in the Existing IP Security Agreement and shall secure all Obligations in accordance with the terms of the Credit Agreement. The exhibits of the Existing IP Security Agreement shall be deemed amended to add the Intellectual Property listed on the exhibits to this IP Security Agreement Supplement. The rights and remedies of the Agent with respect to the security interests granted herein are without prejudice to, and are in addition to those set forth in the Credit Agreement and the Existing IP Security Agreement.

The provisions of the Existing IP Security Agreement regarding choice of law, jurisdiction, venue and jury trial waiver are incorporated herein and shall govern this Intellectual Property Security Agreement Supplement.

[Signature Page Follows]

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

GRANTORS:

RADIUS HEALTH, INC.

By: *Averi Price*
Averi Price (Jan 8, 2021 18:11 EST)
Name: Averi Price
Title: General Counsel, CCO, and Secretary

RADIUS PHARMACEUTICALS, INC.

By: *Averi Price*
Averi Price (Jan 8, 2021 18:11 EST)
Name: Averi Price
Title: Secretary

EXHIBIT B

Patents

APPLICATION NO.	PUBLICATION NO.	PATENT NO.	COUNTRY	FILING DATE	TITLE	STATUS	COVERAGE
62/004,495			United States	5/29/2014	Cannabidiol Formulations	Expired	
62/154,660			United States	4/29/2015	Stable Cannabinoid Formulations	Expired	
PCT/US15/32955	WO 2015/184127		International	5/28/2015	Stable Cannabinoid Formulations	Entered National Stage 11/24/2016	Aqueous formulation Hydroalcoholic formulation Lipid formulation Methods of use for various indications (No PWS)
2015266897	AU 2015266897	AU2015266897	Australia	5/28/2015	Stable cannabinoid formulations	Granted	Hydroalcoholic formulation Methods of use for various indications (No PWS)
2950424	CA 2950424		Canada	5/28/2015	Stable cannabinoid formulations	Pending	Aqueous formulation Hydroalcoholic formulation Lipid formulation Methods of use for various indications (No PWS)

APPLICATION NO.	PUBLICATION NO.	PATENT NO.	COUNTRY	FILING DATE	TITLE	STATUS	COVERAGE
201580041466	CN 106999598		China	5/28/2015	Stable cannabinoid formulations	Pending	Lipid formulation Methods of use for various indications (No PWS)
15800669	EP 3148589		Europe	5/28/2015	Stable cannabinoid formulations	Pending	Aqueous formulation (No PWS)
2016569911	JP 2017519742	JP6659933B2	Japan	5/28/2015	Stable cannabinoid formulations	Granted	Hydroalcoholic formulation Methods of use for various indications (No PWS)
249197	IL 249197		Israel	5/28/2015	Stable cannabinoid formulations	Pending	Hydroalcoholic formulation Methods of use for various indications (No PWS)
2016015636	MX 2016/015636		Mexico	5/28/2015	Stable cannabinoid formulations	Pending	Hydroalcoholic formulation Methods of use for various indications (No PWS)
726746	NZ 726746	NZ726746	New Zealand	5/28/2015	Stable cannabinoid formulations	Accepted	MCT formulation Methods of use for various indications (No PWS)

APPLICATION NO.	PUBLICATION NO.	PATENT NO.	COUNTRY	FILING DATE	TITLE	STATUS	COVERAGE
763449 (DIV of 726746)			New Zealand	4/9/2020	Stable cannabinoid formulations	Pending	Aqueous formulation Hydroalcoholic formulation Lipid formulation Methods of use for various indications (No PWS)
2016/08209			South Africa	5/28/2015	Stable cannabinoid formulations	Pending	Aqueous formulation Hydroalcoholic formulation Lipid formulation Methods of use for various indications (No PWS)
14/724,351	US 20150343071		United States	5/28/2015	Stable cannabinoid formulations	Pending	Hydroalcoholic formulation (No PWS)
14/815,936	US 20150342902		United States	7/31/2015	Stable cannabinoid formulations	Pending	MCT formulation (No PWS)
15/166,476	US 20160271252		United States	5/27/2016	Stable cannabinoid formulations	Pending	MCT formulation MCT formulation with ethanol (PWS disclosed)

APPLICATION NO.	PUBLICATION NO.	PATENT NO.	COUNTRY	FILING DATE	TITLE	STATUS	COVERAGE
PCT/US2016/034565	WO 2016/191651		International	5/27/2016	Stable cannabinoid formulations	Entered National Stage 06/11/2017	Lipid formulation MCT formulation Method of use for various indications (PWS disclosed)
15/253,010	US 20160367496		United States	8/31/2016	Stable cannabinoid formulations	Pending	MCT formulation Treatment resistant seizure disorders pk data from clinical trial (PWS disclosed)
2016267585	AU 2016267585		Australia	11/28/2017	Stable cannabinoid formulations	Pending	Lipid formulation MCT formulation Methods of use for various indications (PWS disclosed)
2986268	CA 2986268		Canada	4/27/2017	Stable cannabinoid formulations	Pending	Lipid formulation MCT formulation Methods of use for various indications (PWS disclosed)

APPLICATION NO.	PUBLICATION NO.	PATENT NO.	COUNTRY	FILING DATE	TITLE	STATUS	COVERAGE
16800777	EP 3302437		Europe	4/27/2017	Stable cannabinoid formulations	Pending	MCT formulation Methods of use for various indications
2018513742	JP 2018-516281		Japan	11/28/2017	Stable cannabinoid formulations	Pending	(PWS disclosed) MCT formulation
							Methods of use for various indications (PWS disclosed)
15/499,178	US 20170224634		United States	4/27/2017	Stable cannabinoid formulations	Pending	MCT formulation Prader-Willi
PCT/US2017/029843	WO 2017/204986		International	4/27/2017	Stable cannabinoid formulations	Entered National Stage 11/26/201	MCT formulation Methods of use for various indications, including PWS
3025702	CA 3025702		Canada	11/28/2017	Stable cannabinoid formulations	Pending	MCT formulation Methods of use for various indications, including PWS
17803241	EP 3462885		Europe	11/28/2017	Stable cannabinoid formulations	Pending	MCT formulation Methods of use for various indications, including PWS
15/712,515	US 20180028489		United States	9/22/2017	Stable cannabinoid formulations	Pending	Methods of treating Prader-Willi MCT formulation (Infantile spasms & CAE disclosed)

APPLICATION NO.	PUBLICATION NO.	PATENT NO.	COUNTRY	FILING DATE	TITLE	STATUS	COVERAGE
PCT/US2017/052897	WO 2018/200024		International	9/22/2017	Stable cannabinoid formulations	Entered National Stage 10/25/2019	Methods of treating Prader-Willi Lipid formulation MCT formulation (Infantile spasms & CAE disclosed)
3,062,814	CA 3062814		Canada	10/25/2019	Stable cannabinoid formulations	Pending	Methods of treating Prader-Willi Lipid formulation MCT formulation (Infantile spasms & CAE disclosed)
2017907335	EP 3615079		Europe	10/28/2019	Stable cannabinoid formulations	Pending	Methods of treating Prader-Willi, Infantile spasms or CAE Aqueous formulation Hydroalcoholic formulation Lipid formulation MCT formulation

APPLICATION NO.	PUBLICATION NO.	PATENT NO.	COUNTRY	FILING DATE	TITLE	STATUS	COVERAGE
2019558668			Japan	11/27/2019	Stable cannabinoid formulations	Pending	Methods of treating Prader-Willi, Infantile Spasms or CAE Aqueous formulation Hydroalcoholic formulation Lipid formulation MCT formulation

APPLICATION NO.	PUBLICATION NO.	PATENT NO.	COUNTRY	FILING DATE	TITLE	STATUS	COVERAGE
62/846,279			United States	5/10/2019	Methods of manufacturing cannabidiol and intermediates of manufacturing cannabidiol	Expired	CBD Manufacturing process

APPLICATION NO.	PUBLICATION NO.	PATENT NO.	COUNTRY	FILING DATE	TITLE	STATUS	COVERAGE
16/870,637	US 20200354297		United States	5/8/2020	Methods of manufacturing cannabidiol or cannabidivarin and intermediates of manufacturing cannabidiol or cannabidivarin	Pending	CBD Manufacturing process
PCT/IB2020/000365	WO2020229891		International	5/8/2020	Methods of manufacturing cannabidiol or cannabidivarin and intermediates of manufacturing cannabidiol or cannabidivarin	Pending	CBD Manufacturing process
62/847,991			United States	5/15/2019	Self-emulsifying cannabidiol formulation	Expired	CBD composition
16/874,225	US 20200360286		United States	5/15/2020	Self-emulsifying cannabidiol formulation	Pending	Methods of use for various indications, including PWS
PCT/IB2020/000610			International	5/15/2020	Self-emulsifying cannabidiol formulation	Pending	CBD composition
							Methods of use for various indications, including PWS


APPLICATION NO.	PUBLICATION NO.	PATENT NO.	COUNTRY	FILING DATE	TITLE	STATUS	COVERAGE
62/856,526			United States	6/3/2019	Cannabidiol nanocrystal compositions	Expired	CBD composition A process for producing a CBD composition Method of use for a variety of indications, including PWS
16/874,300	US 2020037591.1		United States	5/14/2020	Cannabidiol nanocrystal compositions	Pending	CBD composition A process for producing a CBD composition Method of use for a variety of indications, including PWS
PCT/IB2020/000474	WO/2020/245662		International	5/14/2020	Cannabidiol nanocrystal compositions	Pending	CBD composition A process for producing a CBD composition Method of use for a variety of indications, including PWS

Created:	2021-01-08
By:	Carla Biaso-Falkenstein (cbiaso-falkenstein@radiuspharm.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAA6xKSFgbege6mGidox33n-LRswfwKyXP

"MidCap" History

 Document created by Carla Biaso-Falkenstein (cbiaso-falkenstein@radiuspharm.com)


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 Document emailed to Averil Price (Aprice@radiuspharm.com) for signature

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 Averil Price (Aprice@radiuspharm.com) verified identity with Adobe Sign authentication

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 Document e-signed by Averil Price (Aprice@radiuspharm.com)

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 Agreement completed.

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