

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

EPAS ID: PAT8313599

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

**CONVEYING PARTY DATA**

Name	Execution Date
NOVARTIS PHARMACEUTICALS CORPORATION	09/29/2023

**RECEIVING PARTY DATA**

<b>Name:</b>	BAUSCH + LOMB IRELAND LIMITED
<b>Street Address:</b>	3013 LAKE DRIVE
<b>Internal Address:</b>	CITYWEST BUSINESS CAMPUS
<b>City:</b>	DUBLIN
<b>State/Country:</b>	IRELAND
<b>Postal Code:</b>	D24

**PROPERTY NUMBERS Total: 32**

Property Type	Number
Patent Number:	7314938
Patent Number:	7790743
Patent Number:	7745460
Patent Number:	7928122
Patent Number:	8071617
Patent Number:	7989626
Patent Number:	9248126
Patent Number:	9216174
Patent Number:	10124000
Patent Number:	8080562
Patent Number:	8367701
Patent Number:	8871935
Patent Number:	9447077
Patent Number:	11028077
Patent Number:	9085553
Patent Number:	9708303
Patent Number:	10214517
Patent Number:	10906892
Patent Number:	11058677

PATENT

Property Type	Number
Patent Number:	8378105
Patent Number:	8927574
Patent Number:	9353088
Patent Number:	9890141
Patent Number:	8168655
Patent Number:	8084047
Patent Number:	8771715
Patent Number:	8758776
Patent Number:	8592450
Patent Number:	9045457
Patent Number:	10188641
Patent Number:	9045458
Patent Number:	9051297

**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.*

**Phone:** 5852311342

**Email:** slucarelli@hselaw.com

**Correspondent Name:** ANDREW J. ANDERSON

**Address Line 1:** 1600 BAUSCH & LOMB PLACE

**Address Line 2:** HARTER SECREST & EMERY LLP

**Address Line 4:** ROCHESTER, NEW YORK 14604-2711

<b>ATTORNEY DOCKET NUMBER:</b>	13799.001402
<b>NAME OF SUBMITTER:</b>	ANDREW J. ANDERSON
<b>SIGNATURE:</b>	/Andrew J. Anderson/
<b>DATE SIGNED:</b>	12/06/2023

**Total Attachments: 53**

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**PATENT ASSIGNMENT AGREEMENT**

This Patent Assignment Agreement (this “**Assignment**”), dated as of September 29, 2023 (the “**Effective Date**”), is entered into by and among Novartis AG, a company incorporated in Switzerland whose address is Lichtstrasse 35, 4056 Basel, Switzerland (“**Novartis AG**”), Novartis Pharmaceuticals Corporation, a company incorporated in Delaware whose address is 59 Route 10, East Hanover, NJ 07936 (“**Novartis Pharmaceuticals**” and together with Novartis AG, “**Assignors**” and each individually an “**Assignor**”), and Bausch + Lomb Ireland Limited, a private company limited by shares under the laws of the Republic of Ireland whose address is Citywest Business Campus, 3013 Lake Drive, Dublin, Ireland 24 (“**Assignee**”). Assignors and Assignee may be referred to herein individually as a “**Party**” and collectively as the “**Parties**”.

Capitalized terms used but not defined in this Assignment shall have the respective meanings ascribed to them in that certain Stock and Asset Purchase Agreement, by and among Novartis Pharma AG, a company incorporated in Switzerland (“**Swiss Seller**”), Novartis Finance Corporation, a company incorporated in New York (“**US Seller**”), and Assignee, dated as of June 30, 2023 (the “**Purchase Agreement**”).

**WITNESSETH:**

**WHEREAS**, pursuant to the terms and subject to the conditions of the Purchase Agreement, Swiss Seller and US Seller have agreed to cause Assignors to sell and assign to Assignee all of its rights, title and interest in, and Assignee has agreed to purchase and assume, among other things, the Purchased Patents (other than the transfer of Purchased Patents held by the Purchased Subsidiary, which shall be effected indirectly through the transfer of the Purchased Shares) (such Purchased Patents, other than those owned or held by the Purchased Subsidiary, including those set forth on Schedule A, the “**Assigned Patents**”), which are owned by and registered to the Assignors; and

**WHEREAS**, in connection with the transactions contemplated by the Purchase Agreement, each Assignor desires to assign to Assignee, and Assignee desires to acquire from each Assignor, all of such Assignor’s rights, title and interests in, to and under the Assigned Patents.

**NOW, THEREFORE**, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and as more fully set forth in the Purchase Agreement, the Parties, intending to be legally bound, hereby agree as follows:

1. Each Assignor hereby sells, transfers, conveys, assigns and delivers to Assignee, all of such Assignor’s rights, title and interests in, to and under, arising in any jurisdiction throughout the world: (i) the Assigned Patents, and any and all patents and patent applications claiming priority from any Assigned Patent, in each case to be held and enjoyed by Assignee for its own use and enjoyment as fully and entirely as the same would have been held and enjoyed by Assignor if this assignment and sale had not been made, (ii) any and all royalties, fees, income, payments and other proceeds now or hereafter due or payable with respect to any of the Assigned Patents, (iii) all rights to sue, claim and recover, including all rights to and claims for damages, restitution, and injunctive and other legal and equitable relief, for past,

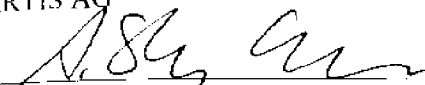
present and future infringement or other violation of any Assigned Patents, and to collect, or otherwise recover, any such damages, and (iv) all rights to claim priority, file foreign counterparts, make applications for reissue and reexamination and all other similar legal protections with respect to the Assigned Patents.

2. This Assignment is governed by the terms and conditions of the Purchase Agreement. The delivery of this Assignment shall not amend, affect, enlarge, diminish, supersede, modify, replace, rescind, waive or otherwise impair any of the representations, warranties, covenants, terms or provisions of the Purchase Agreement or any of the rights, remedies or obligations of US Seller, Swiss Seller or Assignee provided for therein or arising therefrom in any way, all of which shall remain in full force and effect in accordance with their terms. The representations, warranties, covenants, terms and provisions contained in the Purchase Agreement shall not be merged with or into this Assignment but shall survive the execution and delivery of this Assignment to the extent, and in the manner, set forth in the Purchase Agreement. In the event of any conflict or inconsistency between the terms of the Purchase Agreement and the terms of this Assignment, the terms of the Purchase Agreement shall control.
3. Promptly (and in any event within six months) following the Effective Date, subject to Assignor's prompt compliance with this Section 3, Assignee shall file this Assignment or such confirmatory assignment and other accompanying documents as may be required to record with the relevant patent offices the assignment of each Assigned Patent to Assignee. Each Assignor agrees to sign all necessary papers and do all lawful acts reasonably required to give effect to and record the assignment to Assignee under this Assignment, with Assignee bearing all out-of-pocket costs and expenses associated therewith.
4. This Assignment will be governed by, and enforced and construed in accordance with, the Law of the State of Delaware, including its statute of limitations, without regard to the conflict of Laws rules of such state that would result in the application of the Laws of another jurisdiction. This Assignment will be binding upon, inure to the benefit of, and be enforceable by, the Parties and their respective successors and permitted assigns. No waiver, modification or amendment of any provision of this Assignment shall be effective unless set forth in a written instrument executed by or on behalf of the Party against whom such claimed waiver, modification or amendment is sought to be enforced.
5. This Assignment may be executed in any number of counterparts and manually or electronically, and each such counterpart hereof shall be deemed to be an original, but all such counterparts together shall constitute but one agreement. Delivery of an executed counterpart of a signature page of this Assignment by electronic mail or other electronic transmission shall be effective as delivery of a manually executed original counterpart of this Assignment.

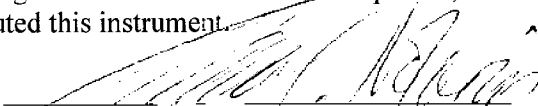
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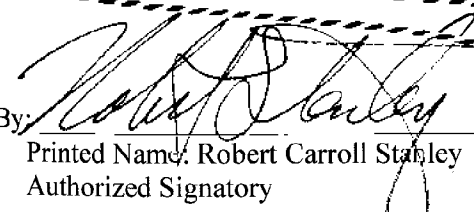
IN WITNESS WHEREOF, the Parties have caused this Assignment to be duly executed by their respective authorized officers as of the Effective Date.

NOVARTIS AG

By:   
Printed Name: Isabelle Andrea Schubert Santana  
Authorized Signatory

On this 29<sup>th</sup> day of September, 2023, before me personally, **Isabelle Andrea Schubert Santana**, proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he or she executed the same in his or her authorized capacity, and that by his or her signature on the instrument the person, or the entity upon behalf of which the person acted, executed this instrument.

  
Notary Public **Andrea Schmutz**  
Notarin

By:   
Printed Name: Robert Carroll Stanley  
Authorized Signatory

On this 29<sup>th</sup> day of September, 2023, before me personally, **Robert Carroll Stanley**, proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he or she executed the same in his or her authorized capacity, and that by his or her signature on the instrument the person, or the entity upon behalf of which the person acted, executed this instrument.

  
Notary Public

[Signature Page to Patent Assignment Agreement]

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PATENT  
REEL: 065789 FRAME: 0858

**APOSTILLE**

(Convention de la Haye du 5 octobre 1961)

1. Country **Swiss Confederation, Canton of Basel-City**  
Land **Schweizerische Eidgenossenschaft, Kanton Basel-Stadt**

This public document  
Diese öffentliche Urkunde

2. has been signed by **lic. iur. Andrea Schmutz**  
ist unterschrieben von

3. acting in the capacity of **Notary Public**  
in seiner Eigenschaft als

4. bears the stamp/seal of **Schmutz Andrea**  
Sie ist versehen mit dem  
Stempel/Siegel des/der

**Certified / Bestätigt**

5. at / in **Basel** 6. the / am **29.09.2023**

7. by the **Legalisation Office of the Canton of Basel-City**  
durch das **Beglaubigungsbüro des Kantons Basel-Stadt**

8. No. / Nr. **261584** tax / Taxe **CHF 20.00**

9. stamp/seal **Stempel/Siegel** 10. Signature **Fabio Marzo**  
Unterschrift



*[Handwritten signature of Fabio Marzo]*

IN WITNESS WHEREOF, the Parties have caused this Assignment to be duly executed by their respective authorized officers as of the Effective Date.

NOVARTIS PHARMACEUTICALS CORPORATION

By: *Robert M. Gleeson*  
Printed Name: *Robert M Gleeson*  
Authorized Signatory

On this 29<sup>th</sup> day of Sept, 2023, before me personally, Robert M. Gleeson, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he or she executed the same in his or her authorized capacity, and that by his or her signature on the instrument the person, or the entity upon behalf of which the person acted, executed this instrument.

*Lila E Freeman*  
Notary Public

LILA E FREEMAN  
Notary Public  
State of New Jersey  
My Commission Expires November 8, 2023  
No. 50093703



IN WITNESS WHEREOF, the Parties have caused this Assignment to be duly executed by their respective authorized officers as of the Effective Date.

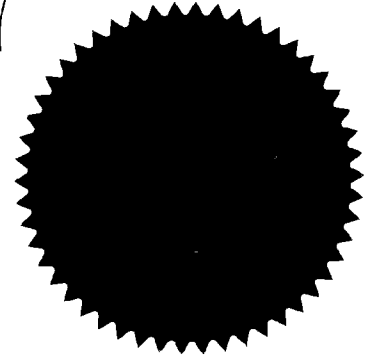
BAUSCH + LOMB IRELAND LIMITED

By: Breda Furlong  
Printed Name: Breda Furlong  
Authorized Signatory

On this 29 day of Sept, 2023, before me personally, Breda Furlong, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he or she executed the same in his or her authorized capacity, and that by his or her signature on the instrument the person, or the entity upon behalf of which the person acted, executed this instrument.

Colin Byrne  
Notary Public

Colin Byrne  
Notary Public  
Dublin, Ireland  
Commissioned For Life



[Signature Page to Patent Assignment Agreement]

PATENT  
REEL: 065789 FRAME: 0861

## ASSIGNED PATENTS

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	Austria	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	Australia	05 Nov 2004	2004287875		2004287875	Novartis AG
	Belgium	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	Bulgaria	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	Canada	05 Nov 2004	2544678	2544678	2544678	Novartis AG
	Switzerland	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	China	05 Nov 2004	ZL200480039802.8	1902195A	ZL200480039802.8	Novartis AG
	China	05 Nov 2004	201610157969.9	CN105820160A	ZL201610157969.9	Novartis AG
	Cyprus (Republic)	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	Czech Republic	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	Germany	05 Nov 2004	04810406.1	EPI682537	602004037140.8	Novartis AG
	Denmark	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	Estonia	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	European Procedure	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	Spain	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	Finland	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	France	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	United Kingdom	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	Greece	05 Nov 2004	20120401349	EPI682537	20120401349	Novartis AG
	Hong Kong	05 Nov 2004	07102904.4	HK1095815	HK1095815	Novartis AG
	Hong Kong	05 Nov 2004	17101127.5	1227405A	HK1227405	Novartis AG
	Hungary	05 Nov 2004	04810406.1	EPI682537	E014814	Novartis AG
	Ireland	05 Nov 2004	04810406.1	EPI682537	EPI682537	Novartis AG
	India	05 Nov 2004	1233/KOLNP/06	EPI682537	250181	Novartis AG
	India	05 Nov 2004	459/KOLNP/11		348854	Novartis AG

PATENT

REEL: 065789 FRAME: 0862

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	India	05 Nov 2004	3759/KOLNP/10		279168	Novartis AG
	Iceland	05 Nov 2004	04810406.1	EP1682537	EP1682537	Novartis AG
	Italy	05 Nov 2004	04810406.1	EP1682537	502012902058705	Novartis AG
	Japan	05 Nov 2004	2006-539668	5105578	5105578	Novartis AG
	Japan	05 Nov 2004	2016-100392	2016-100392		Novartis AG
	Japan	05 Nov 2004	2014-145040			Novartis AG
	Japan	05 Nov 2004	2018-121772	2018-145201		Novartis AG
	Japan	05 Nov 2004	2012-191869	2013-10778	5840582	Novartis AG
	Japan	18 Nov 2019	2019-208326	2020-23584		Novartis AG
	Liechtenstein	05 Nov 2004	04810406.1	EP1682537	EP1682537	Novartis AG
	Luxembourg	05 Nov 2004	04810406.1	EP1682537	EP1682537	Novartis AG
	Monaco	05 Nov 2004	04810406.1	EP1682537	EP1682537	Novartis AG
	Netherlands	05 Nov 2004	04810406.1	EP1682537	EP1682537	Novartis AG
	Poland	05 Nov 2004	04810406.1	EP1682537	EP1682537	Novartis AG
	Portugal	05 Nov 2004	04810406.1	EP1682537	EP1682537	Novartis AG
	Romania	05 Nov 2004	04810406.1	EP1682537	EP1682537	Novartis AG
	Sweden	05 Nov 2004	04810406.1	EP1682537	EP1682537	Novartis AG
	Slovenia	05 Nov 2004	04810406.1	EP1682537	EP1682537	Novartis AG
	Slovakia	05 Nov 2004	04810406.1	EP1682537	EP1682537	Novartis AG
	Turkey	05 Nov 2004	04810406.1	EP1682537	EP1682537	Novartis AG
	United States Of America	29 Oct 2007	11/978388	US 2008-0176896	7745460	Novartis Pharmaceuticals Corporation
	United States Of America	06 Aug 2009	12/537147	US 2010-0093693	7928122	Novartis Pharmaceuticals Corporation
	United States Of America	04 Feb 2011	13/020992	US 2011-0124669	8071617	Novartis Pharmaceuticals Corporation
	United States Of America	04 Feb 2011	13/021013	US-2011-0124625	7989626	Novartis Pharmaceuticals Corporation

PATENT

REEL: 065789 FRAME: 0863

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	United States Of America	01 Sep 2011	13/223557	2012-0035154		Novartis Pharmaceuticals Corporation
	United States Of America	19 Aug 2013	13/969968	US 2014-0066476	9216174	Novartis Pharmaceuticals Corporation
	United States Of America	12 Nov 2015	16/172197	US2019-0134022		Novartis Pharmaceuticals Corporation
	United States Of America	19 Aug 2013	13/969915	US 2014-0051675	9248126	Novartis Pharmaceuticals Corporation
	United States Of America	27 Jul 2020	16/939627			Novartis Pharmaceuticals Corporation
	United States Of America	01 Nov 2007	11/934049	US 2008-0182839	7790743	Novartis Pharmaceuticals Corporation
	United States Of America	12 Nov 2015	14/939600	US 2016-0074381	10124000	Novartis Pharmaceuticals Corporation
	United States Of America	05 Nov 2004	10/982463	US 2005-0267098	7314938	Novartis Pharmaceuticals Corporation
	United States Of America	15 Apr 2002	60/372,672			Novartis Pharmaceuticals Corporation
	United States Of America	21 Jun 2002	60/390,527			Novartis Pharmaceuticals Corporation
	United States Of America	14 Apr 2003	60/462,640			Novartis Pharmaceuticals Corporation
	United States Of America	05 Nov 2003	60/517,535			Novartis Pharmaceuticals Corporation

PATENT

REEL: 065789 FRAME: 0864

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	United States Of America	08 Apr 2004	60/560,517			Novartis Pharmaceuticals Corporation
	International Procedure	05 Nov 2004	PCT/US04/36942	WO2005/044817		Novartis AG
	Switzerland	15 Apr 2009	09733509.5	EP2265125	EP2265125	Novartis AG
	China	15 Apr 2009	200980121630.1	102056485		Novartis AG
	China	15 Apr 2009	201610115732.4	105943534		Novartis AG
	Germany	15 Apr 2009	09733509.5	EP2265125	602009059456.7	Novartis AG
	European Procedure	15 Apr 2009	09733509.5	EP2265125	EP2265125	Novartis AG
	European Procedure	13 Aug 2019	19191575.0	EP3632444		Novartis AG
	Spain	15 Apr 2009	09733509.5	EP2265125	EP2265125	Novartis AG
	France	15 Apr 2009	09733509.5	EP2265125	EP2265125	Novartis AG
	United Kingdom	15 Apr 2009	09733509.5	EP2265125	EP2265125	Novartis AG
	Hong Kong	15 Apr 2009	11103771.6	HK1149454		Novartis AG
	Italy	15 Apr 2009	09733509.5	EP2265125	502019000091546	Novartis AG
	Japan	15 Apr 2009	2011-505028			Novartis AG
	Japan	15 Apr 2009	2014-80832	2014-132032		Novartis AG
	Netherlands	15 Apr 2009	09733509.5	EP2265125	EP2265125	Novartis AG
	United States Of America	07 Aug 2013	13/961117	US-2014-0051722		Novartis AG
	United States Of America	15 Apr 2009	12/386359			Novartis AG
	United States Of America	15 Apr 2008	61/045,240			Novartis AG
	International Procedure	15 Apr 2009	PCT/US2009/02389	WO2009128934		Novartis AG
	United States Of America	04 Nov 2011	13/289172	US 2012-0107404	8367701	Novartis Pharmaceuticals Corporation

PATENT

REEL: 065789 FRAME: 0865

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	United States Of America	12 Aug 2016	15/235572	US-2016-0368902	11028077	Novartis Pharmaceuticals Corporation
	United States Of America	11 Dec 2012	13/710651	US-2013-0144063	8871935	Novartis Pharmaceuticals Corporation
	United States Of America	19 Sep 2014	14/491333	US 2015-0218135	9447077	Novartis Pharmaceuticals Corporation
	United States Of America	18 May 2021	17/323693	2022-0073500		Novartis AG
	United States Of America	20 Jun 2023	18/337565			Novartis Pharmaceuticals Corporation
	United States Of America	15 Apr 2009	12/386361	US-2009-0298869	8080562	Novartis Pharmaceuticals Corporation
	United States Of America	15 Apr 2008	61/045142			Novartis Pharmaceuticals Corporation
	United States Of America	21 Oct 2009	61/253828			Novartis Pharmaceuticals Corporation
	International Procedure	15 Apr 2009	PCT/US2009/02391	WO/2009/139817		Novartis AG
	China	15 Apr 2009	200980121698	102065893		Novartis AG
	European Procedure	15 Apr 2009	09732599.7	2276508		Novartis AG
	Hong Kong	15 Apr 2009	11103772.5	1149495A		Novartis AG
	Japan	15 Apr 2009	2011-505026	11-516607		Novartis AG
	Japan	15 Apr 2009	2014-80740	2014-133751		Novartis AG
	Japan	15 Apr 2009	2016-105884	2016-153432		Novartis AG
	Japan	15 Apr 2009	2018-81289	2018-127485		Novartis AG
	Japan	17 Oct 2019	2019-190144	2020-23546		Novartis AG

PATENT

REEL: 065789 FRAME: 0866

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	United States Of America	18 May 2015	14/714790			Novartis AG
	United States Of America	15 Apr 2009	12/386347	US-2009-0258069		Novartis AG
	United States Of America	15 Apr 2008	61/045,165			Novartis AG
	International Procedure	15 Apr 2009	PCT/US2009/02385	WO/2009/128932		Novartis AG
	Australia	25 Jul 2013	2013295706			Novartis AG
	Australia	25 Jul 2013	2017265071		2017265071	Novartis AG
	Australia	30 Jul 2019	2019210525		2019210525	Novartis AG
	Australia	02 Dec 2020	2020281063			Novartis AG
	Australia	04 Jul 2023	2023204287			Novartis AG
	Bosnia-Herzegovina	25 Jul 2013	13823367.1	EP2877465		Novartis AG
	Brazil	25 Jul 2013	BR1120150016081		1120150016081	Novartis AG
	Canada	25 Jul 2013	2879982		2879982	Novartis AG
	China	25 Jul 2013	201380048592.8	104797574A	201380048592.8	Novartis AG
	China	07 Nov 2019	201911035155.8	110922393		Novartis AG
	European Procedure	25 Jul 2013	13823367.1	EP2877465		Novartis AG
	European Procedure	24 Jan 2020	20153723.0	EP3715345		Novartis AG
	Hong Kong	25 Jul 2013	15110817.3	1210145	1210145	Novartis AG
	Hong Kong	25 Jul 2013	15111648.6	1210782		Novartis AG
	India	25 Jul 2013	847/DELNP/2015		366469	Novartis AG
	India	07 Feb 2019	201918026395			Novartis AG
	Japan	25 Jul 2013	2015-524447		6607780	Novartis AG
	Japan	25 Jul 2013	2018-135758			Novartis AG
	Japan	03 Jun 2020	2020-96854		7008750	Novartis AG
	South Korea / Republic Of Korea	25 Jul 2013	2015-7004283		2157608	Novartis AG

PATENT

REEL: 065789 FRAME: 0867

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	South Korea / Republic Of Korea	14 Sep 2020	2020-7026445			Novartis AG
	Montenegro	25 Jul 2013	13823367.1	EP2877465		Novartis AG
	Macau	18 Feb 2020	J/004034		J/004034	Novartis AG
	Mexico	25 Jul 2013	MX/a/2015/001098		371711	Novartis AG
	Mexico	10 Feb 2020	MX/a/2020/001602			Novartis AG
	Russian Federation	25 Jul 2013	2015102926		2658015	Novartis AG
	Russian Federation	25 Jul 2013	2018121523		2778771	Novartis AG
	United States Of America	13 Jun 2017	15/621141	US-2018-0118726	10214517	Novartis Pharmaceuticals Corporation
	United States Of America	15 Jan 2019	16/247843	2019-0382389	10906892	Novartis Pharmaceuticals Corporation
	United States Of America	23 Jun 2015	14/747745	US 2015-0336939	9708303	Novartis Pharmaceuticals Corporation
	United States Of America	25 Jul 2013	13/950807	US 2014-0031387	9085553	Novartis Pharmaceuticals Corporation
	United States Of America	25 Jul 2012	61/675663			Novartis Pharmaceuticals Corporation
	United States Of America	06 Aug 2012	61/680099			Novartis Pharmaceuticals Corporation
	United States Of America	21 Nov 2012	61/729294			Novartis Pharmaceuticals Corporation
	International Procedure	25 Jul 2013	PCT/US13/52044	WO2014018748		Novartis AG
	Australia	17 Oct 2008	2008317473	2008317473	2008317473	Novartis AG
	Australia	29 Jul 2014	2014208186			Novartis AG



Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	Canada	17 Oct 2008	2702984	2702984	2702984	Novartis AG
	Canada	17 Oct 2008	2958665		2958665	Novartis AG
	Canada	18 Jan 2021	3105972			Novartis AG
	China	17 Oct 2008	200880117716.2	101873797A		Novartis AG
	Germany	17 Oct 2008	08842113.6	EP2209371	602008048275.8	Novartis AG
	Germany	17 Oct 2008	16204718.7	EP3167886	EP3167886	Novartis AG
	European Procedure	17 Oct 2008	08842113.6	EP2209371	EP2209371	Novartis AG
	European Procedure	17 Oct 2008	16204718.7	EP3167886	EP3167886	Novartis AG
	European Procedure	03 Aug 2020	20189143.9	EP3797775		Novartis AG
	Spain	17 Oct 2008	08842113.6		2209371	Novartis AG
	Spain	17 Oct 2008	16204718.7	EP3167886	EP3167886	Novartis AG
	France	17 Oct 2008	08842113.6		2209371	Novartis AG
	France	17 Oct 2008	16204718.7	EP3167886	EP3167886	Novartis AG
	United Kingdom	17 Oct 2008	08842113.6		2209371	Novartis AG
	United Kingdom	17 Oct 2008	16204718.7	EP3167886	EP3167886	Novartis AG
	Hong Kong	17 Oct 2008	16204718.7		EP3167886	Novartis AG
	Hong Kong	17 Oct 2008	11104189.0	1149902A		Novartis AG
	Hong Kong	31 Oct 2017	17111087.2	1236853	1236853	Novartis AG
	Hong Kong	16 Jun 2021	42021033192.2			Novartis AG
	Italy	17 Oct 2008	08842113.6	EP2209371	502017000032186	Novartis AG
	Italy	17 Oct 2008	16204718.7	EP3167886	502020000100225	Novartis AG
	Japan	17 Oct 2008	2010-529955		5808037	Novartis AG
	Japan	17 Oct 2008	2014-144595			Novartis AG
	Mexico	17 Oct 2008	MX/a/2010/004281		335045	Novartis AG
	Netherlands	17 Oct 2008	08842113.6		2209371	Novartis AG
	United States Of America	17 Mar 2015	14/659789	US-2016-0220702	10960087	Novartis AG
	United States Of America	22 Feb 2021	17/181187	2021-0338839		Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	United States Of America	17 Oct 2008	12/288330	US-2009-0155176		Novartis AG
	United States Of America	19 Oct 2007	60/999,571			Novartis AG
	International Procedure	17 Oct 2008	PCT/US2008/11878	WO2009054914		Novartis AG
	Austria	17 May 2006	06770607.7	EP1881823	E698954	Novartis AG
	Austria	17 May 2006	11181066.9	EP2444079	E849143	Novartis AG
	Australia	17 May 2006	2006247136		2006247136	Novartis AG
	Belgium	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Belgium	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Bulgaria	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Bulgaria	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Canada	17 May 2006	2609053	2609053	2609053	Novartis AG
	Canada	17 May 2006	2960117	2960117	2960117	Novartis AG
	Canada	17 May 2006	2985444		2985444	Novartis AG
	Switzerland	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Switzerland	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Switzerland	17 May 2006				Novartis AG
	Switzerland	11 Jun 2019	C02444079/01		C02444079/01	Novartis AG
	China	17 May 2006	200680017188.4	101175488	ZL200680017188	Novartis AG
	China	17 May 2006	201210031431.5	102617557		Novartis AG
	Cyprus (Republic)	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Cyprus (Republic)	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Czech Republic	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Czech Republic	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Germany	17 May 2006	06770607.7	EP1881823	602006043888.5	Novartis AG
	Germany	17 May 2006	11181066.9	EP2444079	602006051117.5	Novartis AG
	Denmark	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG

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REEL: 065789 FRAME: 0870

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	Denmark	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Estonia	17 May 2006	06770607.7	EP1881823	E010232	Novartis AG
	Estonia	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	European Procedure	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	European Procedure	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	European Procedure	17 May 2006	16201157.1	EP3195861		Novartis AG
	Spain	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Spain	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Finland	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Finland	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	France	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	France	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	United Kingdom	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	United Kingdom	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Greece	17 May 2006	06770607.7	EP1881823	3085479	Novartis AG
	Greece	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Hong Kong	17 May 2006	12112124.0	HK1171441		Novartis AG
	Hong Kong	17 May 2006	08112183.4		1117083B	Novartis AG
	Hong Kong	17 May 2006	18101329.0	1241744		Novartis AG
	Hungary	17 May 2006	06770607.7	EP1881823	E024255	Novartis AG
	Hungary	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Ireland	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Ireland	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	India	17 May 2006	8114/DELNP/2007		284595	Novartis AG
	India	17 May 2006	7863/DELNP/2014	7863/DELNP/2014		Novartis AG
	Iceland	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Iceland	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Italy	17 May 2006	06770607.7	EP1881823	502015000006776	Novartis AG

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	Italy	17 May 2006	11181066.9	EP2444079	502017000017457	Novartis AG
	Japan	17 May 2006	2008-512519	2008-545656	5794721	Novartis AG
	Japan	17 May 2006	2012-225028	2013-006880	6288907	Novartis AG
	Japan	17 May 2006	2012-040330	2012-107057		Novartis AG
	Japan	17 May 2006	2015-137500	2015-187165		Novartis AG
	Japan	17 May 2006	2017-99005	2017-141297		Novartis AG
	Japan	17 May 2006	2019-22433	2019-081785	6816180	Novartis AG
	Japan	26 Feb 2020	2020-30710	2020-79312		Novartis AG
	Liechtenstein	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Lithuania	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Lithuania	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Luxembourg	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Luxembourg	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Latvia	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Latvia	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Monaco	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Monaco	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Netherlands	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Netherlands	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Poland	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Poland	17 May 2006	11181066.9	EP2444079	EP1881823	Novartis AG
	Portugal	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Portugal	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Romania	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Romania	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Sweden	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Sweden	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Slovenia	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Slovenia	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG
	Slovakia	17 May 2006	06770607.7	EP1881823	EP1881823	Novartis AG
	Slovakia	17 May 2006	11181066.9	EP2444079	EP2444079	Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	Turkey	17 May 2006	11181066.9	EP2444079	2017/01772	Novartis AG
	Turkey	17 May 2006	06770607.7	EP1881823	TR 2015/02086 T4	Novartis AG
	United States Of America	21 Nov 2016	15/357237	2017-0143690		Novartis Pharmaceuticals Corporation
	United States Of America	30 Nov 2016	15/364935	2017-0143691		Novartis Pharmaceuticals Corporation
	United States Of America	08 Dec 2016	15/372863	2017-0143692		Novartis Pharmaceuticals Corporation
	United States Of America	09 Dec 2016	15/373604	2017-0143693		Novartis Pharmaceuticals Corporation
	United States Of America	25 Jan 2019	16/257699			Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/610346	2015-0175578		Novartis Pharmaceuticals Corporation
	United States Of America	17 May 2006	12/508311	2010-0092541		Novartis Pharmaceuticals Corporation
	United States Of America	23 Jul 2009	12/508367	2010-0092542	8084047	Novartis Pharmaceuticals Corporation
	United States Of America	21 Jan 2011	13/011760	2011-0165228	8771715	Novartis Pharmaceuticals Corporation
	United States Of America	21 Jan 2011	13/011775	2011-0165229	8758776	Novartis Pharmaceuticals Corporation
	United States Of America	16 Feb 2012	13/398542	US 2012-0232019	8592450	Novartis Pharmaceuticals Corporation

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REEL: 065789 FRAME: 0873

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	United States Of America	08 Aug 2013	13/962369	US-2014-0073666		Novartis Pharmaceuticals Corporation
	United States Of America	08 Aug 2013	13/962440	2014-0099387		Novartis Pharmaceuticals Corporation
	United States Of America	12 May 2014	14/275159	US 2014-0378506	9045458	Novartis Pharmaceuticals Corporation
	United States Of America	12 May 2014	14/275241	2014-0371265	9051297	Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/609743	2015-0140075		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/609770	2015-0140076		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/609795	2015-0216857		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/609967	2015-0182520		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/609998	2015-0140077		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/610043	2015-0140078		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/610182	US 2015-0140079		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/610251	US 2015-0152090		Novartis Pharmaceuticals Corporation

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REEL: 065789 FRAME: 0874

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	United States Of America	30 Jan 2015	14/610291	2015-0140080		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/610318	2015-0175577		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/610338	2015-0140081		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/610370	2015-0175579		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/610401	US 2015-0140082		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/610414	US-2015-0175580		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/610464	US 2015-0174119		Novartis Pharmaceuticals Corporation
	United States Of America	30 Jan 2015	14/610465	US 2015-0175581		Novartis Pharmaceuticals Corporation
	United States Of America	18 Jan 2022	17/577575			Novartis Pharmaceuticals Corporation
	United States Of America	27 Jul 2022	17/815256	2023-0233551		Novartis Pharmaceuticals Corporation
	United States Of America	03 Oct 2013	14/045131	2014-0141062	9045457	Novartis Pharmaceuticals Corporation
	United States Of America	03 Oct 2013	14/045159	US-2014-0161872	10188641	Novartis Pharmaceuticals Corporation

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REEL: 065789 FRAME: 0875

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	United States Of America	17 May 2006	11/436906	2006-0281739	8168655	Novartis Pharmaceuticals Corporation
	United States Of America	17 May 2005	60/681684			Novartis Pharmaceuticals Corporation
	United States Of America	17 May 2005	60/681722			Novartis Pharmaceuticals Corporation
	United States Of America	17 May 2005	60/681723			Novartis Pharmaceuticals Corporation
	United States Of America	17 May 2005	60/681772			Novartis Pharmaceuticals Corporation
	International Procedure	17 May 2006	PCT/US2006/019327	WO/2006/125119		Novartis Pharmaceuticals Corporation
	China	15 Apr 2009	200980121684.8	102065564		Novartis AG
	European Procedure	15 Apr 2009	09733386.8	2265124		Novartis AG
	Hong Kong	15 Apr 2009	11103770.7	1149453A		Novartis AG
	Japan	15 Apr 2009	2011-505027	2011-51855		Novartis AG
	Japan	10 Apr 2014	2014-80837	2014-132033		Novartis AG
	Japan	01 Apr 2016	2016-74257	2016-128515		Novartis AG
	Japan	30 May 2017	2017-106334	2017-141310		Novartis AG
	United States Of America	07 Aug 2013	13/960915	20140079784		Novartis AG
	United States Of America	15 Apr 2009	12/386363			Novartis AG
	United States Of America	15 Apr 2008	61/045,257			Novartis AG
	International Procedure	15 Apr 2009	PCT/US2009/02388	WO2009128933		Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	United Arab Emirates	18 Dec 2013	829/2015		4636	Novartis AG
	Albania					Novartis AG
	Armenia	18 Dec 2013	201591180		028008	Novartis AG
	Austria	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Australia	18 Dec 2013	PCT/US2013/076041		2013361579	Novartis AG
	Azerbaijan	18 Dec 2013	201591180		028008	Novartis AG
	Bosnia-Herzegovina					Novartis AG
	Belgium	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Bulgaria	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Brazil	18 Dec 2013	1120150143679	2515	1120150143679	Novartis AG
	Belarus	18 Dec 2013	201591180		028008	Novartis AG
	Canada	18 Dec 2013	2894170	2894170	2894170	Novartis AG
	Switzerland	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	China	18 Dec 2013	201380071760.5	104955453A	ZL201380071760.5	Novartis AG
	Cyprus (Republic)					Novartis AG
	Czech Republic	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Germany	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Denmark	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Eurasian Procedure	18 Dec 2013	PCT/US2013/076041	201591180	028008	Novartis AG
	Eurasian Procedure	18 Dec 2013	201791321			Novartis AG
	Estonia					Novartis AG
	European Procedure	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	European Procedure	27 Oct 2020	20204080.4	EP3827823		Novartis AG
	Spain	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Finland	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	France	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG

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REEL: 065789 FRAME: 0877

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	United Kingdom	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Greece	18 Dec 2013	13865757.2	EP2934510	3106092	Novartis AG
	Hong Kong	18 Dec 2013	16102642.0	1214536A	HK1214536	Novartis AG
	Hong Kong	18 Dec 2013	16102972.0	1214963	1214963	Novartis AG
	Croatia					Novartis AG
	Hungary	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Ireland	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Israel	18 Dec 2013	239490		239490	Novartis AG
	Iceland					Novartis AG
	Italy	18 Dec 2013	13865757.2	EP2934510	50202100006008	Novartis AG
	Japan	18 Dec 2013	2015-549612		6373867	Novartis AG
	Kyrgyzstan	18 Dec 2013	201591180		028008	Novartis AG
	South Korea / Republic Of Korea	18 Dec 2013	2015-7019352		10-1891144	Novartis AG
	Kazakhstan	18 Dec 2013	201591180		028008	Novartis AG
	Lithuania					Novartis AG
	Luxembourg					Novartis AG
	Latvia					Novartis AG
	Moldova (Rep)	18 Dec 2013	201591180		028008	Novartis AG
	Montenegro					Novartis AG
	North Macedonia					Novartis AG
	Malta					Novartis AG
	Mexico	18 Dec 2013	PCT/US2013/076041		368876	Novartis AG
	Mexico	02 Oct 2019	MX/a/2019/012375		391620	Novartis AG
	Netherlands	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Norway	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	New Zealand	18 Dec 2013	PCT/US2013/076041		708821	Novartis AG
	Poland	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Portugal	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG

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REEL: 065789 FRAME: 0878

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	Romania	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Serbia					Novartis AG
	Russian Federation	18 Dec 2013	201591180		028008	Novartis AG
	Saudi Arabia	18 Dec 2013	515360637			Novartis AG
	Sweden	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Slovenia	18 Dec 2013	13865757.2	EP2934510	EP2934510	Novartis AG
	Slovakia	18 Dec 2013	13865757.2		028008	Novartis AG
	Tajikistan	18 Dec 2013	201591180		028008	Novartis AG
	Turkmenistan	18 Dec 2013	201591180		028008	Novartis AG
	Turkey	18 Dec 2013	13865757.2	EP2934510	2021/00133	Novartis AG
	United States Of America	09 Jun 2021	17/342631	2022-0000859		Novartis Pharmaceuticals Corporation
	United States Of America	18 Dec 2013	14/650,955	2015-0320737	11058677	Novartis Pharmaceuticals Corporation
	United States Of America	19 Dec 2012	61/739609			Novartis Pharmaceuticals Corporation
	United States Of America	29 Jan 2013	61/758147			Novartis AG
	International Procedure	18 Dec 2013	PCT/US2013/076041	WO2014100135		Novartis AG
	South Africa	18 Dec 2013	PCT/US2013/076041		2015/04404	Novartis AG
	South Africa	18 Dec 2013	2016/08069		2016/08069	Novartis AG
	United Arab Emirates	25 Sep 2015	P6000328/2017			Novartis AG
	Australia	25 Sep 2015	2015320349		2015320349	Novartis AG
	Belgium	25 Sep 2015	15844846.4	EP3197454	EP3197454	Novartis AG
	Brazil	25 Sep 2015	1120170058561			Novartis AG
	Canada	25 Sep 2015	2960392			Novartis AG
	Switzerland	25 Sep 2015	15844846.4	EP3197454	EP3197454	Novartis AG
	China	25 Sep 2015	201580050837.X	CN106714801A	201580050837.X	Novartis AG

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REEL: 065789 FRAME: 0879

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	Czech Republic	25 Sep 2015	15844846.4	EP3197454	EP3197454	Novartis AG
	Germany	25 Sep 2015	15844846.4	EP3197454	602015064545.6	Novartis AG
	European Procedure	25 Sep 2015	15844846.4	EP3197454	EP3197454	Novartis AG
	Spain	25 Sep 2015	15844846.4	EP3197454	EP3197454	Novartis AG
	France	25 Sep 2015	15844846.4	EP3197454	EP3197454	Novartis AG
	United Kingdom	25 Sep 2015	15844846.4	EP3197454	EP3197454	Novartis AG
	Hong Kong	02 Jan 2018	18100017.9	1240501	1240501	Novartis AG
	Hungary	25 Sep 2015	15844846.4	EP3197454	EP3197454	Novartis AG
	Ireland	25 Sep 2015	15844846.4	EP3197454	EP3197454	Novartis AG
	Israel	25 Sep 2015	250958		250958	Novartis AG
	Israel	01 Aug 2019	268432		268432	Novartis AG
	Italy	25 Sep 2015	15844846.4	EP3197454	502021000022877	Novartis AG
	Japan	25 Sep 2015	2017-516101	2017-530125	6754356	Novartis AG
	Japan	16 Oct 2019	2019-189312	2020-45341		Novartis AG
	Mexico	25 Sep 2015	MX/a/2017/003505		365010	Novartis AG
	Netherlands	25 Sep 2015	15844846.4	EP3197454	EP3197454	Novartis AG
	Poland	25 Sep 2015	15844846.4	EP3197454	EP3197454	Novartis AG
	Portugal	25 Sep 2015	15844846.4	EP3197454	EP3197454	Novartis AG
	Saudi Arabia	25 Sep 2015	517381158		8013	Novartis AG
	United States Of America.	28 Jun 2017	15/635632	2018-0118689	10273212	Novartis AG
	United States Of America	09 Apr 2019	16/378868	2019-0300485	10899715	Novartis AG
	United States Of America	25 Sep 2015	14/866085	US 2016-0090361	9725413	Novartis AG
	United States Of America	25 Sep 2014	62/055,286			Novartis AG
	International Procedure	25 Sep 2015	PCT/US2015/052320	WO2016/049509		Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	Australia	15 Dec 2017	2017376961			Novartis AG
	Brazil	15 Dec 2017	112019012331-8			Novartis AG
	Canada	15 Dec 2017	3046960			Novartis AG
	China	15 Dec 2017	201780077774.6	110087636		Novartis AG
	European Procedure	15 Dec 2017	17880083.5	EP3554477		Novartis AG
	Hong Kong	10 Mar 2020	62020003976.1	40014128		Novartis AG
	Japan	15 Dec 2017	2019-531727	2020-502118		Novartis AG
	Russian Federation	15 Dec 2017	2019118904			Novartis AG
	United States Of America	15 Dec 2017	16/470005	2020-0009130		Novartis AG
	United States Of America	16 Dec 2016	62/435449			Novartis AG
	International Procedure	15 Dec 2017	PCT/US2017/66653	WO/2018/112331		Novartis AG
	United States Of America	13 Dec 2012	13/713238	US-2013-0150585	8927574	Novartis Pharmaceuticals Corporation
	United States Of America	01 Dec 2014	14/556715	US-2015-0183765	9353088	Novartis Pharmaceuticals Corporation
	United States Of America	03 May 2016	15/144892	US-2017-0029410	9890141	Novartis Pharmaceuticals Corporation
	United States Of America	29 Jan 2018	15/882543	US 2018-0251452		Novartis Pharmaceuticals Corporation
	United States Of America	14 May 2019	16/411598	2020-0087287		Novartis Pharmaceuticals Corporation
	United States Of America	21 Oct 2010	12/909241	US-2011-0092707	8378105	Novartis Pharmaceuticals Corporation

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	United States Of America	21 Oct 2009	61/253828			Novartis Pharmaceuticals Corporation
	International Procedure	21 Oct 2010	PCT/US2010/53571	WO/2011/050175		Novartis AG
DEVICES AND METHODS FOR DETECTING DOSAGE ADMINISTRATION	China	16 Nov 2018	201880085099.6			Novartis AG
DEVICES AND METHODS FOR DETECTING DOSAGE ADMINISTRATION	European Procedure	16 Nov 2018	18816372.9	EP3709949		Novartis AG
DEVICES AND METHODS FOR DETECTING DOSAGE ADMINISTRATION	Japan	16 Nov 2018	2020-526892			Novartis AG
DEVICES AND METHODS FOR DETECTING DOSAGE ADMINISTRATION	United States Of America	16 Nov 2018	16/764794			Novartis AG
DEVICES AND METHODS FOR DETECTING DOSAGE ADMINISTRATION	United States Of America	16 Nov 2017	62/587422			Novartis AG
DEVICES AND METHODS FOR DETECTING DOSAGE ADMINISTRATION	International Procedure	16 Nov 2018	PCT/US2018/061469	WO/2019/099793		Novartis AG
Topical Ocular Delivery Methods and Methods for Use in the Same	United States Of America	18 Jun 2019	16/444894	2019-0314195		Novartis AG
Topical Ocular Delivery Methods and Methods for Use in the Same	United States Of America	18 Jun 2019	16/444897	2019-0314196		Novartis AG
Topical Ocular Delivery Methods and Methods for Use in the Same	United States Of America	18 Aug 2019	16/444904	2019-0314197		Novartis AG
Topical Ocular Delivery Methods and Methods for Use in the Same	United States Of America	18 Jun 2019	16/444912	2019-0314198		Novartis AG
	United States Of America	13 Oct 2020	17/069404			Novartis AG
Topical Ocular Delivery Methods and Methods for Use in the Same	United States Of America	12 Apr 2018	62/656552			Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Topical Ocular Delivery Methods and Methods for Use in the Same	International Procedure	11 Apr 2019	PCT/US2019/027018	WO/2019/200121		Novartis AG
Fluid Delivery Alignment System	Australia	07 Dec 2018	2018380433			Novartis AG
Fluid Delivery Alignment System	Canada	07 Dec 2018	3083219			Novartis AG
Fluid Delivery Alignment System	China	07 Dec 2018	201880079354.6			Novartis AG
Fluid Delivery Alignment System	European Procedure	07 Dec 2018	18884966.5	EP3720397		Novartis AG
Fluid Delivery Alignment System	Japan	07 Dec 2018	2020-530664			Novartis AG
Fluid Delivery Alignment System	South Korea / Republic Of Korea	07 Dec 2018	2020-7019443			Novartis AG
Fluid Delivery Alignment System	United States Of America	11 Feb 2022	17/670215			Novartis AG
Fluid Delivery Alignment System	United States Of America	07 Dec 2018	16/463137		11278448	Novartis AG
Fluid Delivery Alignment System	United States Of America	08 Dec 2017	62/596668			Novartis AG
Fluid Delivery Alignment System	International Procedure	07 Dec 2018	PCT/US2018/064529			Novartis AG
Fluid Delivery System	United States Of America	05 Jan 2018	62/613908			Novartis AG
Micro-Droplet Delivery Device And Methods	Australia	11 Jan 2016	2016207010			Novartis AG
Micro-Droplet Delivery Device And Methods	Canada	11 Jan 2016	2973471			Novartis AG
Micro-Droplet Delivery Device And Methods	China	11 Jan 2016	201680005036		107106325	Novartis AG
Micro-Droplet Delivery Device And Methods	China	24 May 2021	202110516413.5			Novartis AG
Micro-Droplet Delivery Device And Methods	European Procedure	11 Jan 2016	16737682.1	EP3244851		Novartis AG
Micro-Droplet Delivery Device And Methods	Japan	11 Jan 2016	2017-532607			Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Micro-Droplet Delivery Device And Methods	South Korea / Republic Of Korea	11 Jan 2016	2017-7022269		10-1984116	Novartis AG
	United States Of America	17 Apr 2020	16/852123	2020-0246182		Novartis AG
	United States Of America	11 Jan 2016	14/992975		10624781	Novartis AG
Micro-Droplet Delivery Device And Methods	United States Of America	12 Jan 2015	62/125073			Novartis AG
Micro-Droplet Delivery Device And Methods	International Procedure	11 Jan 2016	PCT/US2016/012903	WO/2016/115050		Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	Australia	08 Apr 2016	2016246060		2016246060	Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	Canada	08 Apr 2016	2981070			Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	China	08 Apr 2016	201680020848			Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	European Procedure	08 Apr 2016	16777429.8	EP3253433		Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	Japan	08 Apr 2016	2017-546889			Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	South Korea / Republic Of Korea	08 Apr 2016	2017-7029568			Novartis AG
	United States Of America	28 Feb 2020	16/805188			Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	United States Of America	08 Apr 2016	15/094849		10583038	Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	United States Of America	10 Apr 2015	62/178464			Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	International Procedure	08 Apr 2016	PCT/US2016/026795			Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	Australia	18 Jan 2018	2018209932			Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Piezoelectric Dispenser With Replaceable Ampoule	Canada	18 Jan 2018	3039106			Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	China	18 Jan 2018	201880004097			Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	European Procedure	18 Jan 2018	18741786.0	EP3570986		Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	Japan	18 Jan 2018	2019-536575			Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	South Korea / Republic Of Korea	18 Jan 2018	2019-7016112		2412086	Novartis AG
	South Korea / Republic Of Korea	16 Jun 2022	2022-7020487			Novartis AG
	South Korea / Republic Of Korea	28 Jun 2023	10-2023-7021850			Novartis AG
	United States Of America	12 Jan 2021	17/147196			Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	United States Of America	18 Jan 2018	15/874377		10888454	Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	United States Of America	20 Jan 2017	62/448791			Novartis AG
Piezoelectric Dispenser With Replaceable Ampoule	International Procedure	18 Jan 2018	PCT/US2018/014211			Novartis AG
Piezoelectric Clamping Dispenser With Replaceable Ampoule	United States Of America	01 May 2017	62/492624			Novartis AG
Topical Ocular Delivery Devices And Methods For Using The Same	Australia	02 Jul 2019	2019297326			Novartis AG
Topical Ocular Delivery Devices And Methods For Using The Same	Canada	02 Jul 2019	3102410			Novartis AG
Topical Ocular Delivery Devices And Methods For Using The Same	China	02 Jul 2019	2019800043269.9			Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Topical Ocular Delivery Devices And Methods For Using The Same	European Procedure	02 Jul 2019	19830367.9	EP3817696		Novartis AG
Topical Ocular Delivery Devices And Methods For Using The Same	Japan	02 Jul 2019	2020-573039			Novartis AG
Topical Ocular Delivery Devices And Methods For Using The Same	South Korea / Republic Of Korea	02 Jul 2019	2021-7003258			Novartis AG
Topical Ocular Delivery Devices And Methods For Using The Same	United States Of America	02 Jul 2019	16/972085	2021-0220169		Novartis AG
Topical Ocular Delivery Devices And Methods For Using The Same	United States Of America	03 Jul 2018	62/693818			Novartis AG
Topical Ocular Delivery Devices And Methods For Using The Same	International Procedure	02 Jul 2019	PCT/US2019/040354			Novartis AG
Fluid Delivery System	United States Of America	05 Apr 2018	62/653446			Novartis AG
Piezoelectric Clamping Dispenser With Replaceable Ampoule	United States Of America	15 Jun 2017	62/520270			Novartis AG
Piezoelectric Clamping Dispenser With Replaceable Ampoule (Ii)	United States Of America	21 Jun 2017	62/523071			Novartis AG
	Australia	06 Mar 2020	2020231242			Novartis AG
	Canada	06 Mar 2020	3128133			Novartis AG
	China	06 Mar 2020	202080018699			Novartis AG
	European Procedure	06 Mar 2020	20767093.6	EP3934596		Novartis AG
	Japan	06 Mar 2020	2021-552645			Novartis AG
	South Korea / Republic Of Korea	06 Mar 2020	2021-7031799			Novartis AG
	United States Of America	03 May 2023	18/311673			Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	United States Of America	06 Mar 2020	16/811879	2020-0281768		Novartis AG
	United States Of America	06 Mar 2019	62/814773			Novartis AG
	International Procedure	06 Mar 2020	PCT/US2020/021504			Novartis AG
	United States Of America	18 Jul 2017	62/534083			Novartis AG
Topical Ocular Cholinergic Agent Micro-dose Delivery Methods And Devices For Use In The Same	United States Of America	06 Mar 2019	62/814764			Novartis AG
Electromagnetic Dispenser of Fluid to Ocular Surface	Australia	18 Dec 2020	2020407652			Novartis AG
Electromagnetic Dispenser of Fluid to Ocular Surface	Canada	18 Dec 2020	3161060	3161060		Novartis AG
Electromagnetic Dispenser of Fluid to Ocular Surface	China	18 Dec 2020	202080087896.5			Novartis AG
Electromagnetic Dispenser of Fluid to Ocular Surface	European Procedure	18 Dec 2020	20903757.1	EP4076303		Novartis AG
Electromagnetic Dispenser of Fluid to Ocular Surface	Hong Kong	11 Apr 2023	620230712965	40082171		Novartis AG
Electromagnetic Dispenser of Fluid to Ocular Surface	Japan	18 Dec 2020	2022-537238	023-534570		Novartis AG
Electromagnetic Dispenser of Fluid to Ocular Surface	South Korea / Republic Of Korea	18 Dec 2020	10-2022-7024834			Novartis AG
Electromagnetic Dispenser of Fluid to Ocular Surface	United States Of America	18 Dec 2020	17/127584			Novartis AG
Electromagnetic Dispenser of Fluid to Ocular Surface	United States Of America	20 Dec 2019	62/951903			Novartis AG
Electromagnetic Dispenser of Fluid to Ocular Surface	United States Of America	07 Aug 2020	63/049582			Novartis AG
Electromagnetic Dispenser of Fluid to Ocular Surface	International Procedure	18 Dec 2020	PCT/US2020/066169	WO/2021/127535		Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Smart Topical Ocular Delivery Methods And Devices For Use In The Same	United States Of America	10 Oct 2019	62/913498			Novartis AG
	United States Of America	11 Dec 2020	17/096348			Novartis AG
	United States Of America	12 Nov 2019	62/934225			Novartis AG
Multi-Dose Ocular Fluid Delivery System	United States Of America	17 Apr 2020	63/011800			Novartis AG
	United States Of America	07 Jul 2020	63/049110			Novartis AG
Multi-Dose Ocular Fluid Delivery System	Australia	16 Apr 2021	PCT/US2021/027773			Novartis AG
	Brazil	16 Apr 2021	BR112022020948-7			Novartis AG
	Canada	16 Apr 2021	3,180,199			Novartis AG
	China	16 Apr 2021	202180029216.9	115768384		Novartis AG
	European Procedure	16 Apr 2021	21788931.0	EP4120974		Novartis AG
	Israel	16 Apr 2021	297215			Novartis AG
	Japan	16 Apr 2021	2022-562678			Novartis AG
	South Korea / Republic Of Korea	16 Apr 2021	10-2022-7040058			Novartis AG
	Russian Federation	16 Apr 2021	2022129637			Novartis AG
	United States Of America	25 Oct 2021	17/509383			Novartis AG
	United States Of America	11 Mar 2022	17/692991			Novartis AG
	United States Of America	16 Apr 2021	17/233105			Novartis AG
	United States Of America	17 Apr 2020	63/011808			Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
	International Procedure	16 Apr 2021	PCT/US2021/027773	WO/2021/212033		Novartis AG
Hydrodynamically Actuated Preservative Free Dispensing System Having a Collapsible Fluid Chamber	European Procedure	16 Apr 2021	21788707.4	EP4120973		Novartis AG
Hydrodynamically Actuated Preservative Free Dispensing System Having a Collapsible Fluid Chamber	United States Of America	16 Apr 2021	17/233135			Novartis AG
	United States Of America	26 Mar 2021	63/166754			Novartis AG
Hydrodynamically Actuated Preservative Free Dispensing System Having a Collapsible Fluid Chamber	International Procedure	16 Apr 2021	PCT/US2021/027779	WO/2021/212038		Novartis AG
Hydrodynamically Actuated Fluid Dispensing Apparatus with Replaceable Reservoir	United States Of America	11 Mar 2021	63/159830			Novartis AG
Hydrodynamically Actuated Preservative Free Dispensing System having a Magnetically Attached Reservoir Assembly	United States Of America	18 Jun 2021	63/212545			Novartis AG
Membrane Actuated Hydrodynamic Dispensing System	United States Of America	25 Mar 2022	63/323859			Novartis AG
Membrane Actuated Hydrodynamic Dispensing System	United States Of America	24 Mar 2023	PCT/US2023/064927			Novartis AG
Vented Multi-Dose Ocular Fluid Delivery System having an Anti-Clog System	United States Of America	02 May 2022	63/337372			Novartis AG
Vented Multi-Dose Ocular Fluid Delivery System having an Anti-Clog System	International Procedure	01 May 2023	PCT/US2023/066423			Novartis AG
Fractionated Drug Delivery of Biological or Chemical Agents	United States Of America	07 Mar 2022	63/317381			Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Fractionated Drug Delivery of Biological or Chemical Agents	United States Of America	17 Mar 2022	63/321028			Novartis AG
Liquid Dispensing Systems And Methods	United States Of America	12 May 2023	63/501790			Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	United Arab Emirates	08 Jun 2005	P886/06		3515	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Austria	08 Jun 2005	05750584.4	EPE376833	EPI755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Australia	08 Jun 2005	2005251476	2005251476		Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Australia	06 Nov 2009	2009233684			Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Belgium	08 Jun 2005	05750584.4	EPI755606	EPI755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Bulgaria	08 Jun 2005	05750584.4	EPI755606	EPI755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Brazil	08 Jun 2005	PI0511933-2	PI0511933-2	PI0511933-2	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Canada	08 Jun 2005	2567821		2567821	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Switzerland	08 Jun 2005	05750584.4	EPI755606	EPI755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	China	08 Jun 2005	200580016187.3	1956721	200580016187.3	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Colombia	08 Jun 2005	06122177	834	2862	Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Cyprus (Republic)	08 Jun 2005	05750584.4	EP1755606	CY1107846	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Czech Republic	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Germany	08 Jun 2005	05750584.4	EP1755606	602005003128.6	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Denmark	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Algeria	08 Jun 2005	070010			Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Ecuador	08 Jun 2005	06-7067PCT	503		Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Ecuador	14 Feb 2012	SP-06-7067-D1	SP-06-7067-D1		Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Estonia	08 Jun 2005	05750584.4	EP1755606	E001764	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Egypt	08 Jun 2005	1167/2006			Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	European Procedure	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Spain	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Finland	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	France	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	United Kingdom	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	United Kingdom	08 Jun 2004	0412769.2			Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Greece	08 Jun 2005	05750584.4	EP1755606	3064122	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Hong Kong	18 Jul 2007	07107754.4	1105577	1105577	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Croatia	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Hungary	08 Jun 2005	05750584.4	EP1755606	E003186	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Indonesia	08 Jun 2005	W00200603466	0471412	ID0027224	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Ireland	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Israel	08 Jun 2005	179532		179532	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	India	08 Jun 2005	6935/DELNP/2006		270076	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Iceland	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Italy	08 Jun 2005	05750584.4	EP1755606	502011901976853	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Japan	08 Jun 2005	2007-526311	2008-501763	4703650	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Japan	21 Jan 2011	2011-010997	2011-105738	5400812	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	South Korea / Republic Of Korea	08 Jun 2005	2006-7025788		1018607	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	South Korea / Republic Of Korea	26 Aug 2010	2010-7019024	2010-101017		Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Lithuania	08 Jun 2005	05750584.4	EP1755606	EPI755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Luxembourg	08 Jun 2005	05750584.4	EP1755606	EPI755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Morocco	08 Jun 2005	PV29565		28685	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Mexico	08 Jun 2005	PA/A/06/014249	PA/A/06/014249	261743	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Netherlands	08 Jun 2005	05750584.4	EP1755606	EPI755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Norway	08 Jun 2005	20070122		338181	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	New Zealand	08 Jun 2005	551630		551630	Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Philippines	08 Jun 2005	1-2006-502393	WO2005/120510	1-2006-502393	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Poland	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Portugal	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Romania	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Russian Federation	08 Jun 2005	2006146632		2396261	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Russian Federation	31 Mar 2010	2010112450		2449995	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Sweden	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Singapore	08 Jun 2005	200608207.7			Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Singapore	08 Jun 2009	200903909.0	153811	153811	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Slovenia	08 Jun 2005	05750584.4	EP1755606	EP1755606	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Slovakia	08 Jun 2005	05750584.4	EP1755606	E2881	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Tunisia	08 Jun 2005	SN06405			Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Turkey	08 Jun 2005	05750584.4	EP1755606	TR200708968	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	United States Of America	19 Apr 2011	13/089943	2011-0195983	8211902	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	United States Of America	29 Mar 2012	13/434248	2012-0184571	8809528	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	United States Of America	02 Jul 2014	14/322165	2014-0315932	9102653	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	United States Of America	08 Jun 2005	11/569802	2008-0194595	7960399	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	International Procedure	08 Jun 2005	PCT/EP2005/006253	WO2005/120510		Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	South Africa	08 Jun 2005	2006/09634		2006/09634	Novartis AG
QUINAZOLINONE DERIVATIVES USEFUL AS VANILLOID ANTAGONISTS	Argentina	11 Jan 2010	P100100055	AR075006A1		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Austria	12 Jan 2010	10701640.4	EP2387440	E843334	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Australia	12 Jan 2010	2010206233		2010206233	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Australia	12 Oct 2012	2012241083			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Belgium	12 Jan 2010	10701640.4	EP2387440	EP2387440	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Brazil	12 Jan 2010	PI1006909-7			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Brazil	14 May 2021	122021009382-2			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Canada	12 Jan 2010	2749529		2749529	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Canada	25 Oct 2016	2946304			Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Quinazolinone derivatives useful as vanilloid antagonists	Switzerland	12 Jan 2010	10701640.4	EP2387440	EP2387440	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Chile	12 Jan 2010	1695/2011			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	China	12 Jan 2010	201080004395.2	CN102281920A		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Colombia	12 Jan 2010	11092089	202		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Costa Rica	12 Jan 2010	369	2011-369		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Cuba	12 Jan 2010	2011-0148			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Germany	12 Jan 2010	10701640.4	EP2387440	602010037807.1	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Algeria	12 Jan 2010	110540		8016	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Eurasian Procedure	12 Jan 2010	201101063			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Ecuador	12 Jan 2010	SP-11-11195			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Egypt	12 Jan 2010	PCT/1173/2011			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	European Procedure	12 Jan 2010	10701640.4	EP2387440	EP2387440	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Spain	12 Jan 2010	10701640.4	EP2387440	EP2387440	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	France	12 Jan 2010	10701640.4	EP2387440	EP2387440	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	United Kingdom	12 Jan 2010	10701640.4	EP2387440	EP2387440	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Gulf Cooperation Council	13 Jan 2010	GCC/P/2010/15116			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Greece	12 Jan 2010	10701640.4	EP2387440	3091481	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Guatemala	12 Jan 2010	PI-2011-00196			Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Quinazolinone derivatives useful as vanilloid antagonists	Hong Kong	12 Jan 2012	12100367.1	1160051A		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Honduras	12 Jan 2010	2011-001953			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Indonesia	12 Jan 2010	W00201102513	2012/01425 A		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Israel	12 Jan 2010	213869			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	India	12 Jan 2010	5020/DELNP/11			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Iraq	01 Feb 2011	16/2010		3530	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Iran (Islamic Republic)	13 Jan 2010	388100592		67560	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Italy	12 Jan 2010	10701640.4	EP2387440	502017000010819	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Jordan	13 Jan 2010	4/2010			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Japan	12 Jan 2010	2011-544886	2012-515150		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	South Korea / Republic Of Korea	12 Jan 2010	2011-7018823			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Lebanon	12 Jan 2010	8881		8881	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Sri Lanka	12 Jan 2010	16338			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Morocco	12 Jan 2010	PV34004			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Mexico	12 Jan 2010	MX/A/11/007444	MX/A/11/007444	317287	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Malaysia	12 Jan 2010	PI2011003160			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Netherlands	12 Jan 2010	10701640.4	EP2387440	EP2387440	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	New Zealand	12 Jan 2010	593877	593877	593877	Novartis AG

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REEL: 065789 FRAME: 0897

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Quinazolinone derivatives useful as vanilloid antagonists	New Zealand	26 Oct 2012	603257			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Peru	12 Jan 2010	001336/2011-DIN	001336/2011-DIN		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Philippines	12 Jan 2010	1-2011-501401			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Pakistan	11 Jan 2010	23/10			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Poland	12 Jan 2010	10701640.4	EP2387440	EP2387440	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Portugal	12 Jan 2010	10701640.4		EP2387440	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Paraguay	13 Jan 2010	01033			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Singapore	12 Jan 2010	201104779.2			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	El Salvador	12 Jan 2010	2011003971	20110011436		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Thailand	12 Jan 2010	1101001117	118553		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Tunisia	12 Jan 2010	TN/2011.0326			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Turkey	12 Jan 2010	10701640.4	EP2387440	TR201618661	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Taiwan	12 Jan 2010	099100721	201036951		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Ukraine	12 Jan 2010	201108819/M			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	United States Of America					Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	United States Of America	12 Sep 2012	13/612259	2013-0060029		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	United States Of America	06 Jan 2010	12/683317	2010-0197705	8349852	Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	United States Of America	13 Jan 2009	61/144250			Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Quinazolinone derivatives useful as vanilloid antagonists	Uruguay	13 Jan 2010	32381	32381		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Uzbekistan	12 Jan 2010	IAP2011-0355			Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Venezuela	13 Jan 2010	2010/37	2010/37		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	Vietnam	12 Jan 2010	1-2011-02114	28555		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	International Procedure	12 Jan 2010	PCT/EP10/050243	WO2010/084050		Novartis AG
Quinazolinone derivatives useful as vanilloid antagonists	South Africa	12 Jan 2010	2011/04873		2011/04873	Novartis AG
Methods for treating ocular surface pain	United Arab Emirates	13 Feb 2020	P6001425/21			Novartis AG
Methods for treating ocular surface pain	Australia	13 Feb 2020	2020222348			Novartis AG
Methods for treating ocular surface pain	Australia	14 Jun 2023	2023203716			Novartis AG
Methods for treating ocular surface pain	Brazil	13 Feb 2020	112021015998-3	112021015998-3		Novartis AG
Methods for treating ocular surface pain	Canada	13 Feb 2020	3130038			Novartis AG
Methods for treating ocular surface pain	Chile	13 Feb 2020	2152-2021	2152-2021		Novartis AG
Methods for treating ocular surface pain	China	13 Feb 2020	202080013685.7	CN113453686		Novartis AG
Methods for treating ocular surface pain	Algeria	13 Feb 2020	210536		11551	Novartis AG
Methods for treating ocular surface pain	European Procedure	13 Feb 2020	20708629.9	EP3923909		Novartis AG
Methods for treating ocular surface pain	Gulf Cooperation Council	13 Feb 2020	GC2020-39175			Novartis AG
Methods for treating ocular surface pain	Hong Kong	05 Jan 2022	62022045708.4	40056606		Novartis AG
Methods for treating ocular surface pain	Israel	13 Feb 2020	284629			Novartis AG

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REEL: 065789 FRAME: 0899

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Methods for treating ocular surface pain	Jordan	13 Feb 2020	PCT/JO/2021/217			Novartis AG
Methods for treating ocular surface pain	Japan	13 Feb 2020	2021-547546	2022-520832		Novartis AG
Methods for treating ocular surface pain	South Korea / Republic Of Korea	13 Feb 2020	2021-7028994			Novartis AG
Methods for treating ocular surface pain	Lebanon	13 Feb 2020	11860			Novartis AG
Methods for treating ocular surface pain	Mexico	13 Feb 2020	MX/E/2021/009702			Novartis AG
Methods for treating ocular surface pain	New Zealand	13 Feb 2020	778172			Novartis AG
Methods for treating ocular surface pain	Philippines	13 Feb 2020	12021551968			Novartis AG
Methods for treating ocular surface pain	Russian Federation	13 Feb 2020	2021126673	2021126673		Novartis AG
Methods for treating ocular surface pain	Saudi Arabia	13 Feb 2020	521430052			Novartis AG
Methods for treating ocular surface pain	Singapore	13 Feb 2020	11202107260V			Novartis AG
Methods for treating ocular surface pain	Taiwan	13 Feb 2020	109104537	202045179		Novartis AG
	United States Of America	08 Apr 2021	17/225290	2021-0275529	11234982	Novartis AG
	United States Of America	08 Mar 2022	17/653982	2020-0193078		Novartis AG
Methods for treating ocular surface pain	United States Of America	13 Feb 2020	16/789963	2020-0261456		Novartis AG
Methods for treating ocular surface pain	United States Of America	13 Feb 2020	PCT/IB2020/051210			Novartis AG
Methods for treating ocular surface pain	United States Of America	15 Feb 2019	62/806682			Novartis AG
Methods for treating ocular surface pain	International Procedure	13 Feb 2020	PCT/IB2020/051210	WO/2020/165838		Novartis AG

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REEL: 065789 FRAME: 0900



Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Methods for treating ocular surface pain	South Africa	13 Feb 2020	2021/04593			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	United Arab Emirates	13 Feb 2020	P6001424/21			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Argentina					Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Australia	13 Feb 2020	2020220957		2020220957	Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Australia	21 Jun 2023	2023203933			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Brazil	13 Feb 2020	112021015737-9	112021015737-9		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Canada	13 Feb 2020	3130237			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Chile	13 Feb 2020	2153-2021	2153-2021		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	China	08 Aug 2023	202310997308.7			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	China	13 Feb 2020	202010091672.3	111568906	202010091672.3	Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	China	13 Feb 2020	PCT/IB2020/051211			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Colombia	13 Feb 2020	NC2021/0010689	NC2021/0010689		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Costa Rica	13 Feb 2020	2021-0428	2021-0428		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Algeria	13 Feb 2020	210538		11545	Novartis AG

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REEL: 065789 FRAME: 0901

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Ecuador	13 Feb 2020	SENADI-2021-59628	SENADI-2021-59628		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Egypt	13 Feb 2020	1224/2021			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	European Procedure	13 Feb 2020	20708650.7	EP3923912		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Gulf Cooperation Council	13 Feb 2020	2020-39176			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Guatemala	13 Feb 2020	A-2021-00176	A-2021-00176		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Hong Kong	05 Jan 2022	62022045699.5	40056603		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Indonesia	13 Feb 2020	P-00202107394	2021/PID/08862		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Israel	13 Feb 2020	284628			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	India	13 Feb 2020	202014006322	202014006322	441821	Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Iraq	13 Feb 2020	94/2020		7853	Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Iran (Islamic Republic)	13 Feb 2020	140050140003003092			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Jordan	13 Feb 2020	PCT/JO/2021/224			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Japan	06 Oct 2021	2021-164372	2022-017260		Novartis AG

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REEL: 065789 FRAME: 0902

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Japan	12 Feb 2020	2020-021093	2020-132634	6994061	Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Japan	13 Feb 2020	2021-547131			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	South Korea / Republic Of Korea	13 Feb 2020	2021-7028995			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Kuwait	13 Feb 2020	KW/P/2021/000305			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Lebanon	13 Feb 2020	11861		11861	Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Mexico	13 Feb 2020	MX/a/2021/009704			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Malaysia	13 Feb 2020	PI 2021003795			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	New Zealand	13 Feb 2020	778179			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Panama	13 Feb 2020	93604-01	93604-01		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Peru	13 Feb 2020	001336-2021-DIN	2021-2106		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Philippines	13 Feb 2020	1-2021-551967			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotriazole	Pakistan	13 Feb 2020	94/2020			Novartis AG

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REEL: 065789 FRAME: 0903

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Qatar	13 Feb 2020	QA/202108/00451			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Russian Federation	13 Feb 2020	2021126674	2021126674		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Saudi Arabia	13 Feb 2020	521430043		11437	Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Singapore	13 Feb 2020	11202107259Q			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Thailand	13 Feb 2020	2101004824			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Taiwan	13 Feb 2020	109104510	202045178		Novartis AG
	United States Of America	24 Aug 2020	17000953	2020-0390767		Novartis AG
	United States Of America	08 Sep 2022	17/930578	2023-0139170		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	United States Of America	13 Feb 2020	16/789976	2020-0261457	11478480	Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	United States Of America	13 Feb 2020	PCT/IB2020/051211			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	United States Of America	15 Feb 2019	62/806705			Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Venezuela	13 Feb 2020	2020-000034	609		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzotrile	Vietnam	13 Feb 2020	1-2021-05589	82350		Novartis AG

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REEL: 065789 FRAME: 0904

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxazole	International Procedure	13 Feb 2020	PCT/IB2020/051211	WO/2020/165839		Novartis AG
Formulations of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxazole	South Africa	13 Feb 2020	2021/04594			Novartis AG
Polymorphs and Solvates of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxazole and formulations thereof	China	13 Feb 2020	202080013984.0	113423696		Novartis AG
Polymorphs and Solvates of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxazole and formulations thereof	European Procedure	13 Feb 2020	20708631.5	EP3924345		Novartis AG
Polymorphs and Solvates of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxazole and formulations thereof	Japan	13 Feb 2020	2021-547248	2022-520410		Novartis AG
Polymorphs and Solvates of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxazole and formulations thereof	United States Of America					Novartis AG
Polymorphs and Solvates of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxazole and formulations thereof	United States Of America	13 Feb 2020	17/430819	2022-0162170		Novartis AG
Polymorphs and Solvates of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxazole and formulations thereof	United States Of America	15 Feb 2019	62/806697			Novartis AG
Polymorphs and Solvates of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxazole and formulations thereof	International Procedure	13 Feb 2020	PCT/IB2020/051212	WO2020165840		Novartis AG
Crystalline forms of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxazole and formulations thereof	China	04 Aug 2021	202180066886.8	116419918		Novartis AG

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REEL: 065789 FRAME: 0905

Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
Crystalline forms of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxonitrile and formulations thereof	European Procedure	04 Aug 2021	21755574.7	EP4192466		Novartis AG
Crystalline forms of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxonitrile and formulations thereof	Japan	04 Aug 2021	2023-507688	2023-536938		Novartis AG
Crystalline forms of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxonitrile and formulations thereof	United States Of America	04 Aug 2021	18/040552	2023-0286924		Novartis AG
Crystalline forms of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxonitrile and formulations thereof	International Procedure	06 Aug 2020	PCT/CN2020/107444			Novartis AG
Crystalline forms of 4-(7-Hydroxy-2-isopropyl-4-oxo-4H-quinazolin-3-yl)-benzoxonitrile and formulations thereof	International Procedure	04 Aug 2021	PCT/IB2021/057165	WO/2022/029656		Novartis AG
TRPV1 Antagonists and Uses Thereof	Argentina	22 Mar 2022	P220100676	125196		Novartis AG
TRPV1 Antagonists and Uses Thereof	India	24 Mar 2022	202214016745	202214016745		Novartis AG
TRPV1 Antagonists and Uses Thereof	Iraq	24 Mar 2022	171/2022		8078	Novartis AG
TRPV1 Antagonists and Uses Thereof	Lebanon	24 Mar 2022	12490			Novartis AG
TRPV1 Antagonists and Uses Thereof	Pakistan	24 Mar 2022	195/2022			Novartis AG
TRPV1 Antagonists and Uses Thereof	Paraguay	23 Mar 2022	21203/2021			Novartis AG
TRPV1 Antagonists and Uses Thereof	Taiwan	24 Mar 2022	111111060	202304864		Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
TRPV1 Antagonists and Uses Thereof	United States of America	24 Mar 2022	17/656313	2022-0324811		Novartis AG
TRPV1 Antagonists and Uses Thereof	United States of America	26 Mar 2021	63/166289			Novartis AG
TRPV1 Antagonists and Uses Thereof	Uruguay	23 Mar 2022	39681			Novartis AG
TRPV1 Antagonists and Uses Thereof	Venezuela	23 Mar 2022	2022-000077			Novartis AG
TRPV1 Antagonists and Uses Thereof	International Procedure	24 Mar 2022	PCT/IB2022/052720	WO/2022/201097		Novartis AG
Solid forms of TRPV1 inhibitors	International Procedure	21 Sep 2022	PCT/CN2022/120270			Novartis AG
Solid forms of TRPV1 inhibitors	International Procedure	19 Sep 2023	PCT/IB2023/059285			Novartis AG
TRPV1 Antagonists and Uses Thereof	Australia	24 Mar 2022	PCT/IB2022/052720			Novartis AG
TRPV1 Antagonists and Uses Thereof	Brazil	24 Mar 2022	PCT/IB2022/052720			Novartis AG
TRPV1 Antagonists and Uses Thereof	Canada	24 Mar 2022	PCT/IB2022/052720			Novartis AG
TRPV1 Antagonists and Uses Thereof	China	24 Mar 2022	PCT/IB2022/052720			Novartis AG
TRPV1 Antagonists and Uses Thereof	Eurasian Procedure	24 Mar 2022	PCT/IB2022/052720			Novartis AG
TRPV1 Antagonists and Uses Thereof	European Procedure	24 Mar 2022	22714016.7			Novartis AG
TRPV1 Antagonists and Uses Thereof	Israel	24 Mar 2022	PCT/IB2022/052720			Novartis AG
TRPV1 Antagonists and Uses Thereof	Japan	24 Mar 2022	PCT/IB2022/052720			Novartis AG

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Title	Country	Filing Date	Filing Number	Publication Number	Grant Number	Legal Owner
TRPV1 Antagonists and Uses Thereof	South Korea / Republic Of Korea	24 Mar 2022	PCT/IB2022/052720			Novartis AG
TRPV1 Antagonists and Uses Thereof	Mexico	24 Mar 2022	PCT/IB2022/052720			Novartis AG
TRPV1 Antagonists and Uses Thereof	Russian Federation	24 Mar 2022	PCT/IB2022/052720			Novartis AG
TRPV1 Antagonists and Uses Thereof	Singapore	24 Mar 2022	PCT/IB2022/052720			Novartis AG