

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5997914

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BLACKBERRY LIMITED	02/28/2020

RECEIVING PARTY DATA

Name:	NXP USA, INC.
Street Address:	6501 WILLIAM CANNON DRIVE WEST
City:	AUSTIN
State/Country:	TEXAS
Postal Code:	78735

PROPERTY NUMBERS Total: 352

Property Type	Number
Application Number:	12887467
Application Number:	13788780
Application Number:	11789015
Application Number:	11637529
Application Number:	13168529
Application Number:	13693388
Application Number:	11940309
Application Number:	14716014
Application Number:	16372838
Application Number:	13551248
Application Number:	13542686
Application Number:	11361513
Application Number:	12286012
Application Number:	11353930
Application Number:	60653162
Application Number:	11245898
Application Number:	11602114
Application Number:	10938898
Application Number:	12952395
Application Number:	13302617

PATENT

Property Type	Number
Application Number:	13302649
Application Number:	13745610
Application Number:	13745624
Application Number:	14149849
Application Number:	14521799
Application Number:	15218857
Application Number:	10455901
Application Number:	11336566
Application Number:	11708286
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Application Number:	12077136
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Application Number:	14573297
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Application Number:	11653639
Application Number:	60758862
Application Number:	11890901
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Application Number:	13963221
Application Number:	12313491
Application Number:	12217239
Application Number:	10952964
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Application Number:	10161483
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Application Number:	15978650
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Application Number:	60452508
Application Number:	15218752
Application Number:	16572113
Application Number:	15218845

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email: Tracy.Buffett@nxp.com

Correspondent Name: NXP USA, INC.

Address Line 1: 6501 WILLIAM CANNON DRIVE WEST

Address Line 4: AUSTIN, TEXAS 78735

ATTORNEY DOCKET NUMBER: BLACKBERRY TO NXP USA

NAME OF SUBMITTER: TRACY BUFFETT

SIGNATURE:	/Tracy Buffett/
DATE SIGNED:	03/05/2020
Total Attachments: 25 source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page1.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page2.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page3.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page4.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page5.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page6.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page7.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page8.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page9.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page10.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page11.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page12.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page13.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page14.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page15.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page16.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page17.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page18.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page19.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page20.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page21.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page22.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page23.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page24.tif source=Blackberry-to-NXP-USA-Patent-Assignment-20200228#page25.tif	

PATENT ASSIGNMENT

WHEREAS, **BLACKBERRY LIMITED** ("Seller") is the owner of certain United States and/or foreign patents and/or patent applications listed in Exhibit A annexed hereto (collectively referred to as the "**Patents**"); and

WHEREAS **NXP USA, INC.**, ("Purchaser") is desirous of acquiring Sellers's right, title and interest in, to and under the said Patents (and all foreign counterparts and related foreign patents).

Now, Therefore,

For good and valuable consideration, the receipt of which is hereby acknowledged, Seller hereby sells, assigns, transfers and sets over to Purchaser the Patents aforesaid, and any inventions claimed in said Patent, any reissue or reissues of said Patents already granted and which may be granted, any certificates of reexamination already granted and which may be granted the same to be held and enjoyed by Purchaser as fully and entirely as the same would have been held and enjoyed by Seller, if this assignment had not been made; together with all claims for damages by reason of past, current, and future infringement and/or provisional rights under said Patents, with the right to sue for, and collect the same for its own use and behalf, and for the use and behalf of its successors, assigns or other legal representatives.

And, Seller, hereby authorizes and requests the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Patents in the name of the Purchaser.

INTENTIONALLY LEFT BLANK

In Witness Whereof, the parties have executed this Assignment by their duly authorized representative.

Seller

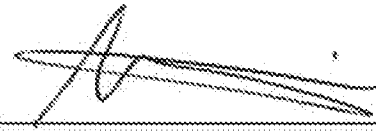
This document has been sworn to at:

Waterloo

in the Province of:

Ontario

On this date: February 28, 2020

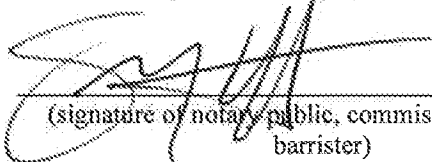
By: 

Name: Steve Rai

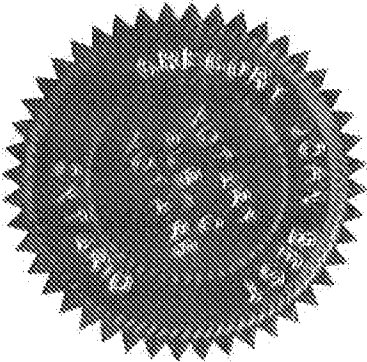
Title: Chief Financial Officer

Gregory John Best

(print name or provide stamp)


(signature of notary public, commissioner of oaths,
barrister)

A Notary Public for the Province of Ontario
(title of notary public, commissioner of oaths, barrister)



This document has been sworn to at:

State of Texas

in the Province of:

Travis County

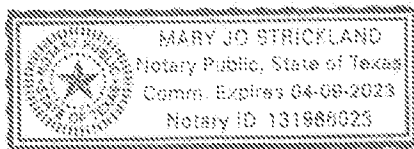
On this date: Feb 28, 2020

Mary Jo Strickland
(print name or provide stamp)

Mary Jo Strickland
(signature of notary public, commissioner of oaths,
barrister)

Notary
(title of notary public, commissioner of oaths, barrister)

(affix seal)



Buyer

By:

Jennifer Wuamett
Name:

President, NXP USA, Inc.
Title:

Patent Assignment

EXHIBIT A

Patents

Index	Patent No.	Serial No.	Jurisdiction	Grant Date	File Date	Status
1	2722302	2722302	CA	2016-07-05	2008-04-21	Granted
2		08743111.0	EP		2008-04-21	Abandoned
3	1235048	10-2009-7024366	KR	2013-02-07	2008-04-21	Granted
4	8620236	12/887467	US	2013-12-31	2010-09-21	Granted
5	9698748	13/788780	US	2017-07-04	2013-03-07	Granted
6	7917104	11/789015	US	2011-03-29	2007-04-23	Granted
7		PCT/US2008/005085	WO		2008-04-21	National Phase Entered
8	7813777	11/637529	US	2010-10-12	2006-12-12	Granted
9	8428523	13/168529	US	2013-04-23	2011-06-24	Granted
10	8798555	13/693388	US	2014-08-05	2012-12-04	Granted
11	7991363	11/940309	US	2011-08-02	2007-11-14	Granted
12	RE47412	14/716014	US	2019-05-28	2015-05-19	Granted
13		16/372838	US		2019-04-02	Filing
14		PCT/US2008/083529	WO		2008-11-14	No Further Filings
15	2821190	2821190	CA	2017-01-17	2013-07-16	Granted
16	201310300532.2	201310300532.2	CN	2016-05-18	2013-07-17	Granted
17	602012023963.8	12176789.1	DE	2016-10-12	2012-07-17	Granted
18	2688144	12176789.1	EP	2016-10-12	2012-07-17	Validated
19		16188956.3	EP		2016-09-15	Publication of Application
20	2688144	12176789.1	FR	2016-10-12	2012-07-17	Granted
21	2688144	12176789.1	GB	2016-10-12	2012-07-17	Granted
22	305765	3160/CHE/2013	IN	2019-01-16	2013-07-15	Granted
23	9246223	13/551248	US	2016-01-26	2012-07-17	Granted
24	602013017873.9	13174923.6	DE	2017-03-01	2013-07-03	Granted
25	2683027	13174923.6	EP	2017-03-01	2013-07-03	Validated
26	2683027	13174923.6	FR	2017-03-01	2013-07-03	Granted
27	2683027	13174923.6	GB	2017-03-01	2013-07-03	Granted

28	9853363	13/542686	US	2017-12-26	2012-07-06	Granted
29		11/361513	US		2006-02-24	Abandoned
30		12/286012	US		2008-09-27	Abandoned
31	7471146	11/353930	US	2008-12-30	2006-02-14	Granted
32		60/653162	US		2005-02-15	Converted
33	7865154	11/245898	US	2011-01-04	2005-10-08	Granted
34	8064188	11/602114	US	2011-11-22	2006-11-20	Reissued (Inactive Parent)
35		10/938898	US		2004-09-10	Abandoned
36	8744384	12/952395	US	2014-06-03	2010-11-23	Granted
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38		13/302649	US		2011-11-22	Abandoned
39	8896391	13/745610	US	2014-11-25	2013-01-18	Granted
40	8693963	13/745624	US	2014-04-08	2013-01-18	Granted
41	9431990	14/149849	US	2016-08-30	2014-01-08	Granted
42	9768752	14/521799	US	2017-09-19	2014-10-23	Granted
43	9948270	15/218857	US	2018-04-17	2016-07-25	Granted
44	6864757	10/455901	US	2005-03-08	2003-06-06	Granted
45		11/336566	US		2006-01-20	Abandoned
46		11/708286	US		2007-02-20	Abandoned
47	6759918	10/456683	US	2004-07-06	2003-06-06	Granted
48	7728693	12/077136	US	2010-06-01	2008-03-17	Granted
49	7714678	12/077137	US	2010-05-11	2008-03-17	Granted
50	7969257	12/077139	US	2011-06-28	2008-03-17	Granted
51	7795990	12/077140	US	2010-09-14	2008-03-17	Granted
52	6590468	09/909187	US	2003-07-08	2001-07-19	Granted
53		60/219500	US		2000-07-20	Converted
54	RE44998	13/416810	US	2014-07-08	2012-03-09	Granted
55		PCT/US2001/022 675	WO		2001-07-19	National Phase Entered
56	8463218	12/718615	US	2013-06-11	2010-03-05	Granted
57	8620246	13/293544	US	2013-12-31	2011-11-10	Granted
58	8620247	13/293550	US	2013-12-31	2011-11-10	Granted

59	8942657	13/889806	US	2015-01-27	2013-05-08	Granted
60	9853622	14/573297	US	2017-12-26	2014-12-17	Granted
61	10177731	15/813206	US	2019-01-08	2017-11-15	Granted
62	7711337	11/653639	US	2010-05-04	2007-01-16	Granted
63		60/758862	US		2006-01-14	Converted
64		08742966.8	EP		2008-04-16	Publication of Application
65	8467169	11/890901	US	2013-06-18	2007-08-08	Granted
66	8400752	13/069434	US	2013-03-19	2011-03-23	Granted
67	8953299	13/752708	US	2015-02-10	2013-01-29	Granted
68	9142355	13/895774	US	2015-09-22	2013-05-16	Granted
69	9269496	14/509352	US	2016-02-23	2014-10-08	Granted
70	7936553	11/726458	US	2011-05-03	2007-03-22	Granted
71		PCT/US2008/004 919	WO		2008-04-16	National Phase Entered
72		PCT/US2008/004 935	WO		2008-04-17	No Further Filings
73	9246022	13/963221	US	2016-01-26	2013-08-09	Granted
74	8530948	12/313491	US	2013-09-10	2008-11-20	Granted
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76		10/952964	US		2004-09-29	Abandoned
77	7807477	12/012901	US	2010-10-05	2008-02-06	Granted
78	8787845	13/904321	US	2014-07-22	2013-05-29	Granted
79	9020446	14/312900	US	2015-04-28	2014-06-24	Granted
80	8472888	12/547411	US	2013-06-25	2009-08-25	Granted
81		PCT/US2010/046 241	WO		2010-08-20	No Further Filings
82	8260213	12/560115	US	2012-09-04	2009-09-15	Granted
83		61/192091	US		2008-09-15	Converted
84		01094207.7	EP		2001-06-08	Abandoned
85		02074178.6	EP		2002-05-31	Abandoned
86	6774077	09/768690	US	2004-08-10	2001-01-24	Granted
87	6905989	10/161483	US	2005-06-14	2002-05-31	Granted
88	7056468	10/301981	US	2006-06-06	2002-11-22	Granted

89	7297650	11/105124	US	2007-11-20	2005-04-13	Granted
90	8562899	10/687506	US	2013-10-22	2003-10-16	Granted
91	8609017	11/707816	US	2013-12-17	2007-02-17	Granted
92	6514895	09/594837	US	2003-02-04	2000-06-15	Granted
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95		PCT/US2002/017 194	WO		2002-05-31	National Phase Entered
96	7960302	12/322849	US	2011-06-14	2009-02-07	Granted
97		12/286841	US		2008-10-02	Abandoned
98	7557055	10/991924	US	2009-07-07	2004-11-18	Granted
99		60/611454	US		2004-09-20	Converted
100		60/624390	US		2004-11-02	Converted
101		11/377722	US		2006-03-16	Abandoned
102	7048992	10/760875	US	2006-05-23	2004-01-20	Granted
103		60/445337	US		2003-02-05	Converted
104		PCT/US2004/003 421	WO		2004-02-05	No Further Filings
105	7652546	11/494066	US	2010-01-26	2006-07-27	Granted
106	7268643	11/045957	US	2007-09-11	2005-01-28	Granted
107		60/539771	US		2004-01-28	Converted
108	8217731	12/722162	US	2012-07-10	2010-03-11	Granted
109	8008982	12/722156	US	2011-08-30	2010-03-11	Granted
110	8217732	12/722164	US	2012-07-10	2010-03-11	Granted
111	8564381	13/217748	US	2013-10-22	2011-08-25	Granted
112	8558633	13/425626	US	2013-10-15	2012-03-21	Granted
113	9130543	14/030439	US	2015-09-08	2013-09-18	Granted
114	9722577	14/816233	US	2017-08-01	2015-08-03	Granted
115	10050598	15/629820	US	2018-08-14	2017-06-22	Granted
116	7714676	11/594308	US	2010-05-11	2006-11-08	Granted
117	8680934	12/939110	US	2014-03-25	2010-11-03	Granted
118	9419581	14/169599	US	2016-08-16	2014-01-31	Granted
119	7852170	12/287599	US	2010-12-14	2008-10-10	Granted

120	10020828	15/205595	US	2018-07-10	2016-07-08	Granted
121	7535312	11/594309	US	2009-05-19	2006-11-08	Granted
122	8299867	11/594310	US	2012-10-30	2006-11-08	Granted
123	2794262	2794262	CA	2016-12-13	2012-11-05	Granted
124		12191338.8	EP		2012-11-05	Publication of Application
125	9406444	13/289194	US	2016-08-02	2011-11-04	Granted
126	10163574	15/207171	US	2018-12-25	2016-07-11	Granted
127	8627556	12/321897	US	2014-01-14	2009-01-27	Granted
128	7869186	11/598354	US	2011-01-11	2006-11-13	Granted
129		60/736366	US		2005-11-14	Converted
130	8269683	12/454148	US	2012-09-18	2009-05-13	Granted
131	8405563	13/404456	US	2013-03-26	2012-02-24	Granted
132	8325097	11/653643	US	2012-12-04	2007-01-16	Granted
133	8125399	11/653644	US	2012-02-28	2007-01-16	Granted
134		60/758865	US		2006-01-14	Converted
135	8535875	13/613022	US	2013-09-17	2012-09-13	Granted
136	8859193	13/967724	US	2014-10-14	2013-08-15	Granted
137	8283108	11/725313	US	2012-10-09	2007-03-19	Granted
138		10/736467	US		2003-12-15	Abandoned
139		60/445350	US		2003-02-05	Converted
140	7937120	11/788479	US	2011-05-03	2007-04-21	Granted
141	7877066	11/800571	US	2011-01-25	2007-05-07	Granted
142	8457569	13/484343	US	2013-06-04	2012-05-31	Granted
143	8781417	13/886361	US	2014-07-15	2013-05-03	Granted
144	9119152	14/294492	US	2015-08-25	2014-06-03	Granted
145	8213886	11/800592	US	2012-07-03	2007-05-07	Granted
146		PCT/US2008/005801	WO		2008-05-06	No Further Filings
147	7869187	11/899062	US	2011-01-11	2007-09-04	Granted
148	7777369	12/004864	US	2010-08-17	2007-12-22	Granted
149		11/246768	US		2005-10-07	Abandoned
150		11/333183	US		2006-01-17	Abandoned
151	7689390	12/012310	US	2010-03-30	2008-02-02	Granted

152		11/178041	US		2005-07-09	Abandoned
153	7034636	10/912284	US	2006-04-25	2004-08-05	Granted
154		11/068453	US		2005-02-25	Abandoned
155	6801102	10/252139	US	2004-10-05	2002-09-20	Granted
156		60/323729	US		2001-09-20	Converted
157		PCT/US2006/006 624	WO		2006-02-24	No Further Filings
158	7875956	11/734798	US	2011-01-25	2007-04-17	Granted
159	8883606	14/035195	US	2014-11-11	2013-09-24	Granted
160	9305709	14/506976	US	2016-04-05	2014-10-06	Granted
161	8569142	11/736408	US	2013-10-29	2007-04-17	Granted
162	7224040	10/997344	US	2007-05-29	2004-11-24	Granted
163		60/525897	US		2003-11-28	Converted
164	8361811	12/325683	US	2013-01-29	2008-12-01	Granted
165	8461637	12/731990	US	2013-06-11	2010-03-25	Granted
166	8822235	13/723327	US	2014-09-02	2012-12-21	Granted
167	8664704	13/888471	US	2014-03-04	2013-05-07	Granted
168		14/475038	US		2014-09-02	Abandoned
169		11/767559	US		2007-06-25	Abandoned
170		60/817033	US		2006-06-28	Converted
171	9424993	14/495489	US	2016-08-23	2014-09-24	Granted
172	8867189	13/435392	US	2014-10-21	2012-03-30	Granted
173	8154850	12/117099	US	2012-04-10	2008-05-08	Granted
174		60/917371	US		2007-05-11	Converted
175	7981759	11/776116	US	2011-07-19	2007-07-11	Granted
176	2777137	2777137	CA	2016-09-13	2010-11-11	Granted
177	201080045689.X	201080045689.X	CN	2017-05-17	2010-11-11	Granted
178	602010054285.8	10822849.5	DE	2018-10-10	2010-11-11	Granted
179	2499877	10822849.5	EP	2018-10-10	2010-11-11	Validated
180	2499877	10822849.5	FR	2018-10-10	2010-11-11	Granted
181	2499877	10822849.5	GB	2018-10-10	2010-11-11	Granted

182		3317/DELNP/2012	IN		2010-11-11	Publication of Application
183	1737657	10-2012-7011811	KR	2017-05-18	2010-11-11	Granted
184	9853663	14/684701	US	2017-12-26	2015-04-13	Granted
185		15/816450	US		2017-11-17	Allowed (Notice of Allowance)
186	9026062	12/577178	US	2015-05-05	2009-10-10	Granted
187		PCT/US2010/056413	WO		2010-11-11	National Phase Entered
188	8421548	13/297951	US	2013-04-16	2011-11-16	Granted
189	8395459	13/408624	US	2013-03-12	2012-02-29	Granted
190	8957742	13/762607	US	2015-02-17	2013-02-08	Granted
191	8674783	13/795930	US	2014-03-18	2013-03-12	Granted
192	9698758	14/596872	US	2017-07-04	2015-01-14	Granted
193	8072285	12/236662	US	2011-12-06	2008-09-24	Granted
194	6664867	10/199724	US	2003-12-16	2002-07-19	Granted
195		11/389920	US		2006-03-27	Abandoned
196	7843387	12/284516	US	2010-11-30	2008-09-23	Granted
197		10/850991	US		2004-05-22	Abandoned
198		60/472599	US		2003-05-22	Converted
199		PCT/US2004/016205	WO		2004-05-22	No Further Filings
200	8112852	12/152350	US	2012-02-14	2008-05-14	Granted
201	6686814	10/223745	US	2004-02-03	2002-08-19	Expired
202	6531936	09/419126	US	2003-03-11	1999-10-15	Expired
203		60/104504	US		1998-10-16	Converted
204	6642810	10/199732	US	2003-11-04	2002-07-19	Granted
205	6621377	09/847254	US	2003-09-16	2001-05-02	Granted
206		60/201203	US		2000-05-02	Converted
207		PCT/US2001/014165	WO		2001-05-02	National Phase Entered

208	6603367	09/908960	US	2003-08-05	2001-07-19	Granted
209		60/219567	US		2000-07-20	Converted
210		PCT/US2001/022 673	WO		2001-07-19	National Phase Entered
211	6597265	10/010891	US	2003-07-22	2001-11-13	Granted
212		60/248479	US		2000-11-14	Converted
213		PCT/US2001/047 049	WO		2001-11-13	National Phase Entered
214	6556102	09/712606	US	2003-04-29	2000-11-14	Granted
215		60/166267	US		1999-11-18	Converted
216		PCT/US2000/031 290	WO		2000-11-14	National Phase Entered
217	6525630	09/704850	US	2003-02-25	2000-11-02	Granted
218		60/163498	US		1999-11-04	Converted
219		PCT/US2000/030 269	WO		2000-11-02	National Phase Entered
220	6864840	10/060560	US	2005-03-08	2002-01-30	Granted
221	6377217	09/660719	US	2002-04-23	2000-09-13	Granted
222		60/153859	US		1999-09-14	Converted
223		PCT/US2000/025 016	WO		2000-09-13	National Phase Entered
224		20010057358	AU		2001-04-27	Abandoned
225		2404793	CA		2001-04-27	Abandoned
226		01930861.8	EP		2001-04-27	Abandoned
227	6404614	09/844832	US	2002-06-11	2001-04-27	Granted
228		60/201349	US		2000-05-02	Converted
229		PCT/US2001/013 638	WO		2001-04-27	National Phase Entered
230	6653912	10/268198	US	2003-11-25	2002-10-10	Granted
231	6492883	10/000490	US	2002-12-10	2001-11-02	Granted

232		60/245538	US		2000-11-03	Converted
233		PCT/US2001/045 560	WO		2001-11-02	National Phase Entered
234	6954118	10/646018	US	2005-10-11	2003-08-22	Granted
235	7154357	11/008536	US	2006-12-26	2004-12-09	Granted
236	6646522	09/644019	US	2003-11-11	2000-08-22	Granted
237		60/150618	US		1999-08-24	Converted
238		PCT/US2000/023 023	WO		2000-08-22	National Phase Entered
239	7123115	10/914424	US	2006-10-17	2004-08-09	Granted
240		60/493834	US		2003-08-08	Converted
241		PCT/US2004/025 879	WO		2004-08-09	No Further Filings
242	7107033	10/413265	US	2006-09-12	2003-04-14	Granted
243		60/373163	US		2002-04-17	Converted
244		60/452470	US		2003-03-06	Converted
245	6535076	09/855949	US	2003-03-18	2001-05-15	Granted
246		PCT/US2002/015 011	WO		2002-05-10	National Phase Entered
247	6674408	10/199680	US	2004-01-06	2002-07-19	Granted
248	6642890	10/199266	US	2003-11-04	2002-07-19	Granted
249	6710679	09/931503	US	2004-03-23	2001-09-16	Granted
250		PCT/US2002/025 420	WO		2002-08-12	National Phase Entered
251	7236068	10/051144	US	2007-06-26	2002-01-17	Granted
252	6960546	10/256974	US	2005-11-01	2002-09-27	Granted
253	6377440	09/660309	US	2002-04-23	2000-09-12	Granted
254	6727535	09/434433	US	2004-04-27	1999-11-04	Expired
255	6985050	09/838483	US	2006-01-10	2001-04-19	Granted
256		60/198690	US		2000-04-20	Converted
257		PCT/US2001/127 22	WO		2001-04-19	National Phase Entered
258	6737179	09/882605	US	2004-05-18	2001-06-15	Granted

259		60/211788	US		2000-06-16	Converted
260		PCT/US2001/019 116	WO		2001-06-15	National Phase Entered
261	6683513	10/000471	US	2004-01-27	2001-10-24	Granted
262		60/243962	US		2000-10-26	Converted
263		PCT/US2001/051 363	WO		2001-10-25	National Phase Entered
264	6794950	10/025311	US	2004-09-21	2001-12-19	Granted
265		60/257312	US		2000-12-21	Converted
266		PCT/US2001/049 092	WO		2001-12-19	National Phase Entered
267	6724280	10/097319	US	2004-04-20	2002-03-14	Granted
268		60/278962	US		2001-03-27	Converted
269		PCT/US2002/007 850	WO		2002-03-14	National Phase Entered
270	6717491	10/123498	US	2004-04-06	2002-04-16	Granted
271		60/284369	US		2001-04-17	Converted
272		PCT/US2002/011 918	WO		2002-04-16	National Phase Entered
273	6771216	10/223709	US	2004-08-03	2002-08-19	Granted
274		60/314368	US		2001-08-23	Converted
275		PCT/US2002/028 383	WO		2002-08-19	National Phase Entered
276	6686873	10/223576	US	2004-02-03	2002-08-19	Granted
277		60/314369	US		2001-08-23	Converted
278		PCT/US2002/026 956	WO		2002-08-19	National Phase Entered
279	6801160	10/226746	US	2004-10-05	2002-08-23	Granted
280		60/315199	US		2001-08-27	Converted

281		PCT/US2002/027 109	WO		2002-08-26	National Phase Entered
282	6987493	10/413317	US	2006-01-17	2003-04-14	Granted
283		60/372742	US		2002-04-15	Converted
284	6864843	10/641835	US	2005-03-08	2003-08-14	Granted
285		60/403848	US		2002-08-15	Converted
286	6949982	10/794167	US	2005-09-27	2004-03-05	Granted
287		60/452508	US		2003-03-06	Converted
288		PCT/US2004/006 625	WO		2004-03-04	No Further Filings
289	6967540	10/794168	US	2005-11-22	2004-03-05	Granted
290		60/452422	US		2003-03-06	Converted
291	7042316	10/837100	US	2006-05-09	2004-04-30	Granted
292		60/467060	US		2003-05-01	Converted
293	7019697	10/914544	US	2006-03-28	2004-08-09	Granted
294	7109926	10/914430	US	2006-09-19	2004-08-09	Granted
295	7106255	10/914580	US	2006-09-12	2004-08-09	Granted
296		60/493832	US		2003-08-08	Converted
297		PCT/US2004/025 875	WO		2004-08-09	No Further Filings
298	7151411	10/980394	US	2006-12-19	2004-11-03	Granted
299		60/554025	US		2004-03-17	Converted
300	7397329	11/265459	US	2008-07-08	2005-11-02	Granted
301		60/624339	US		2004-11-02	Converted
302	6903633	10/682650	US	2005-06-07	2003-10-09	Granted
303	6686817	09/734969	US	2004-02-03	2000-12-12	Granted
304		PCT/US2001/043 571	WO		2001-11-21	National Phase Entered
305	7477116	11/698547	US	2009-01-13	2007-01-27	Granted
306		11/178099	US		2005-07-08	Abandoned
307		60/586266	US		2004-07-08	Converted

308	7519340	11/333743	US	2009-04-14	2006-01-17	Granted
309	7379711	11/193739	US	2008-05-27	2005-07-29	Granted
310		60/592654	US		2004-07-30	Converted
311	6683516	10/068707	US	2004-01-27	2002-02-06	Expired
312	6876279	10/068512	US	2005-04-05	2002-02-06	Expired
313	6794960	10/068355	US	2004-09-21	2002-02-06	Expired
314	6683517	10/068734	US	2004-01-27	2002-02-06	Expired
315	6377142	09/419047	US	2002-04-23	1999-10-15	Expired
316		60/104503	US		1998-10-16	Converted
317		10/388788	US		2003-03-14	Abandoned
318	7496329	10/716147	US	2009-02-24	2004-05-17	Granted
319		10/858016	US		2004-06-01	Abandoned
320	7183922	10/959562	US	2007-02-27	2004-10-06	Granted
321		10/959559	US		2004-10-06	Abandoned
322	7187288	10/959633	US	2007-03-06	2004-10-06	Granted
323	8204438	12/313128	US	2012-06-19	2008-11-17	Granted
324		60/365383	US		2002-03-18	Converted
325		10/952264	US		2004-09-28	Abandoned
326	6801104	09/932749	US	2004-10-05	2001-08-17	Granted
327		60/227438	US		2000-08-22	Converted
328	7369828	10/767363	US	2008-05-06	2004-01-29	Granted
329		60/445348	US		2003-02-05	Converted
330		PCT/US2004/003 524	WO		2004-02-05	National Phase Entered
331		10/636868	US		2003-08-07	Abandoned
332	6617062	09/834327	US	2003-09-09	2001-04-13	Granted
333		PCT/US2002/011 361	WO		2002-04-11	National Phase Entered
334	6759980	10/361271	US	2004-07-06	2003-02-10	Granted
335	6756939	10/361272	US	2004-06-29	2003-02-10	Granted
336	6538603	09/621183	US	2003-03-25	2000-07-21	Granted
337	7145415	10/979001	US	2006-12-05	2004-11-01	Expired

338		09/457943	US		1999-12-09	Abandoned
339		60/111888	US		1998-12-11	Converted
340	6992638	10/811706	US	2006-01-31	2004-03-29	Granted
341		10/673033	US		2003-09-27	Abandoned
342	6411494	09/544550	US	2002-06-25	2000-04-06	Granted
343	8693162	13/467641	US	2014-04-08	2012-05-09	Granted
344	9318266	14/190353	US	2016-04-19	2014-02-26	Granted
345	8194387	12/407802	US	2012-06-05	2009-03-20	Granted
346	6549396	09/838412	US	2003-04-15	2001-04-19	Granted
347	9608591	14/332451	US	2017-03-28	2014-07-16	Granted
348	9548716	14/332458	US	2017-01-17	2014-07-16	Granted
349	9742375	15/367753	US	2017-08-22	2016-12-02	Granted
350	10/263595	15/673613	US	2019-04-16	2017-08-10	Granted
351		16/295657	US		2019-03-07	Allowed (Notice of Allowance)
352	8803631	12/729221	US	2014-08-12	2010-03-22	Granted
353	8067858	12/287807	US	2011-11-29	2008-10-14	Granted
354	2011242798	2011242798	AU	2015-04-30	2011-04-20	Granted
355	2797074	2797074	CA	2018-08-14	2011-04-20	Granted
356	201180030495.7	201180030495.7	CN	2015-05-27	2011-04-20	Granted
357		11772625.7	EP		2011-04-20	Publication of Application
358		10030/DELNP/2012	IN		2011-04-20	Local Filing
359	5901612	2013-506269	JP	2016-03-18	2011-04-20	Granted
360	1504811	10-2012-7030387	KR	2015-03-16	2011-04-20	Granted
361	184929	201207749.1	SG	2013-11-29	2011-04-20	Granted
362	9564944	14/483809	US	2017-02-07	2014-09-11	Granted
363	9450637	14/483911	US	2016-09-20	2014-09-11	Granted
364	9941922	15/250351	US	2018-04-10	2016-08-29	Granted
365	8860525	13/090575	US	2014-10-14	2011-04-20	Granted

366	8860526	13/090583	US	2014-10-14	2011-04-20	Granted
367		61/326206	US		2010-04-20	Converted
368		PCT/US2011/033 228	WO		2011-04-20	National Phase Entered
369	2815672	2815672	CA	2016-12-13	2011-11-07	Granted
370	201180053811.2	201180053811.2	CN	2017-03-01	2011-11-07	Granted
371	602011026594.6	11840191.8	DE	2016-05-11	2011-11-07	Granted
372	602011056509.5	16155235.1	DE	2019-02-20	2016-02-11	Granted
373	2638640	11840191.8	EP	2016-05-11	2011-11-07	Validated
374	3035446	16155235.1	EP	2019-02-20	2016-02-11	Validated
375	2638640	11840191.8	FR	2016-05-11	2011-11-07	Granted
376	3035446	16155235.1	FR	2019-02-20	2016-02-11	Granted
377	2638640	11840191.8	GB	2016-05-11	2011-11-07	Granted
378	3035446	16155235.1	GB	2019-02-20	2016-02-11	Granted
379		3212/CHENP/201 3	IN		2011-11-07	Publication of Application
380	8432234	13/005122	US	2013-04-30	2011-01-12	Granted
381		15/167202	US		2016-05-27	Abandoned
382	9263806	13/856075	US	2016-02-16	2013-04-03	Granted
383	9379454	12/941972	US	2016-06-28	2010-11-08	Granted
384		PCT/US2011/059 620	WO		2011-11-07	National Phase Entered
385		2826573	CA		2012-02-17	Allowed (Notice of Allowance)
386	602012064244.0	16151299.1	DE	2019-09-18	2016-01-14	Granted
387	602012017360.2	12746567.2	DE	2016-04-20	2012-02-17	Granted
388	3026822	16151299.1	EP	2019-09-18	2016-01-14	Validated
389	2676375	12746567.2	EP	2016-04-20	2012-02-17	Validated
390	3026822	16151299.1	FR	2019-09-18	2016-01-14	Granted
391	2676375	12746567.2	FR	2016-04-20	2012-02-17	Granted
392	3026822	16151299.1	GB	2019-09-18	2016-01-14	Granted

393	2676375	12746567.2	GB	2016-04-20	2012-02-17	Granted
394	2676375	12746567.2	NL	2016-04-20	2012-02-17	Granted
395	9231643	14/200222	US	2016-01-05	2014-03-07	Granted
396	9698858	14/951946	US	2017-07-04	2015-11-25	Granted
397	9935674	15/606953	US	2018-04-03	2017-05-26	Granted
398	10447333	15/916340	US	2019-10-15	2018-03-09	Granted
399		16/557611	US		2019-08-30	Publication of Application
400	8712340	13/030177	US	2014-04-29	2011-02-18	Granted
401		PCT/US2012/025547	WO		2012-02-17	National Phase Entered
402	2828170	2828170	CA	2016-06-14	2012-02-24	Granted
403	602012052587.6	12749235.3	DE	2018-10-24	2012-02-24	Granted
404	2678945	12749235.3	EP	2018-10-24	2012-02-24	Validated
405	2678945	12749235.3	FR	2018-10-24	2012-02-24	Granted
406	2678945	12749235.3	GB	2018-10-24	2012-02-24	Granted
407	9473216	14/149259	US	2016-10-18	2014-01-07	Granted
408	8655286	13/035417	US	2014-02-18	2011-02-25	Granted
409		PCT/US2012/026458	WO		2012-02-24	National Phase Entered
410		13153848.0	EP		2013-02-04	Publication of Application
411	9404175	13/757999	US	2016-08-02	2013-02-04	Granted
412	602012034658.2	12199273.9	DE	2017-07-19	2012-12-21	Granted
413	2747294	12199273.9	EP	2017-07-19	2012-12-21	Validated
414	2747294	12199273.9	FR	2017-07-19	2012-12-21	Granted
415	2747294	12199273.9	GB	2017-07-19	2012-12-21	Granted
416	10404295	15/609834	US	2019-09-03	2017-05-31	Granted
417	9768810	15/161966	US	2017-09-19	2016-05-23	Granted
418		16/512885	US		2019-07-16	Publication of Application
419	9374113	13/724040	US	2016-06-21	2012-12-21	Granted
420	2835432	2835432	CA	2016-09-13	2012-05-15	Granted
421	2836419	2836419	CA	2016-11-29	2012-05-15	Granted

422	201280032976.6	201280032976.6	CN	2016-10-26	2012-05-15	Granted
423	201280032857.0	201280032857.0	CN	2016-08-31	2012-05-15	Granted
424	602012034418.0	12724250.1	DE	2017-07-12	2012-05-15	Granted
425		12723569.5	EP		2012-05-15	Abandoned Decision
426	2710669	12724250.1	EP	2017-07-12	2012-05-15	Validated
427		17155774.7	EP		2017-02-13	Publication of Application
428	2710669	12724250.1	FR	2017-07-12	2012-05-15	Granted
429	2710669	12724250.1	GB	2017-07-12	2012-05-15	Granted
430		9844/DELNP/2013	IN		2012-05-15	Publication of Application
431		9845/DELNP/2013	IN		2012-05-15	Publication of Application
432	I552535	101117467	TW	2016-10-01	2012-05-16	Granted
433	I568073	101117468	TW	2017-01-21	2012-05-16	Granted
434	9716311	14/060155	US	2017-07-25	2013-10-22	Granted
435	10218070	15/632021	US	2019-02-26	2017-06-23	Granted
436	8594584	13/108463	US	2013-11-26	2011-05-16	Granted
437	8626083	13/108589	US	2014-01-07	2011-05-16	Granted
438		PCT/US2012/037942	WO		2012-05-15	National Phase Entered
439		PCT/US2012/037943	WO		2012-05-15	National Phase Entered
440	602012061428.5	12750926.3	DE	2019-06-26	2012-08-06	Granted
441	2740221	12750926.3	EP	2019-06-26	2012-08-06	Validated
442	2740221	12750926.3	FR	2019-06-26	2012-08-06	Granted
443	2740221	12750926.3	GB	2019-06-26	2012-08-06	Granted

444		15/679685	US		2017-08-17	Allowed (Notice of Allowance)
445	9769826	14/235994	US	2017-09-19	2012-08-06	Granted
446		61/515424	US		2011-08-05	Converted
447		PCT/US2012/049723	WO		2012-08-06	National Phase Entered
448	2820612	2820612	CA	2016-10-04	2013-07-10	Granted
449	602012033369.3	12177191.9	DE	2017-06-14	2012-07-19	Granted
450	2688212	12177191.9	EP	2017-06-14	2012-07-19	Validated
451	2688212	12177191.9	FR	2017-06-14	2012-07-19	Granted
452	2688212	12177191.9	GB	2017-06-14	2012-07-19	Granted
453	9941910	15/136549	US	2018-04-10	2016-04-22	Granted
454	9350405	13/552804	US	2016-05-24	2012-07-19	Granted
455	2820251	2820251	CA	2016-12-13	2013-07-04	Granted
456	2688141	12177197.6	DE	2020-01-01	2012-07-19	Granted
457	2688141	12177197.6	EP	2020-01-01	2012-07-19	Validated
458	2688141	12177197.6	FR	2020-01-01	2012-07-19	Granted
459	2688141	12177197.6	GB	2020-01-01	2012-07-19	Granted
460	9413066	13/552806	US	2016-08-09	2012-07-19	Granted
461	2829165	2829165	CA	2016-11-01	2013-10-03	Granted
462	602012004335.0	12189423.2	DE	2014-12-17	2012-10-22	Granted
463	2722996	12189423.2	EP	2014-12-17	2012-10-22	Validated
464	2722996	12189423.2	FR	2014-12-17	2012-10-22	Granted
465	2722996	12189423.2	GB	2014-12-17	2012-10-22	Granted
466	2722996	12189423.2	NL	2014-12-17	2012-10-22	Granted
467	9793610	15/289259	US	2017-10-17	2016-10-10	Granted
468	9496901	13/659245	US	2016-11-15	2012-10-24	Granted
469	2821173	2821173	CA	2018-04-24	2013-07-16	Granted
470	602012033639.0	12178126.4	DE	2017-06-21	2012-07-26	Granted
471	2690794	12178126.4	EP	2017-06-21	2012-07-26	Validated
472	2690794	12178126.4	FR	2017-06-21	2012-07-26	Granted
473	2690794	12178126.4	GB	2017-06-21	2012-07-26	Granted
474	9362891	13/558716	US	2016-06-07	2012-07-26	Granted
475	2815900	2815900	CA	2016-04-26	2013-05-15	Granted

476	201310214494.9	201310214494.9	CN	2016-08-10	2013-05-31	Granted
477	602013054202.3	13169120.6	DE	2019-04-24	2013-05-24	Granted
478	2670052	13169120.6	EP	2019-04-24	2013-05-24	Validated
479	2670052	13169120.6	FR	2019-04-24	2013-05-24	Granted
480	2670052	13169120.6	GB	2019-04-24	2013-05-24	Granted
481		2132/CHE/2013	IN		2013-05-15	Publication of Application
482	9671765	14/609512	US	2017-06-06	2015-01-30	Granted
483	8948889	13/486914	US	2015-02-03	2012-06-01	Granted
484		201310464020.X	CN		2013-10-08	Abandoned
485		13187638.5	EP		2013-10-08	Abandoned
486	9331381	14/740584	US	2016-05-03	2015-06-16	Granted
487	9077069	13/647959	US	2015-07-07	2012-10-09	Granted
488	602013045105.2	13155479.2	DE	2018-10-17	2013-02-15	Granted
489	2768147	13155479.2	EP	2018-10-17	2013-02-15	Validated
490	2768147	13155479.2	FR	2018-10-17	2013-02-15	Granted
491	2768147	13155479.2	GB	2018-10-17	2013-02-15	Granted
492	1201104	15101388.1	HK	2019-11-29	2015-02-06	Granted
493	9673844	15/077101	US	2017-06-06	2016-03-22	Granted
494	9325355	13/767200	US	2016-04-26	2013-02-14	Granted
495	602013052536.6	13178281.5	DE	2019-03-20	2013-07-26	Granted
496	2806585	13178281.5	EP	2019-03-20	2013-07-26	Validated
497	2806585	13178281.5	FR	2019-03-20	2013-07-26	Granted
498	2806585	13178281.5	GB	2019-03-20	2013-07-26	Granted
499	9203500	13/900151	US	2015-12-01	2013-05-22	Granted
500	2820441	2820441	CA	2017-01-03	2013-06-19	Granted
501	9337875	14/022765	US	2016-05-10	2013-09-10	Granted
502		61/831575	US		2013-06-05	Converted
503	9876269	14/015088	US	2018-01-23	2013-08-30	Granted
504	602014044820.8	14192544.6	DE	2019-04-17	2014-11-10	Granted
505	2892152	14192544.6	EP	2019-04-17	2014-11-10	Validated
506	2892152	14192544.6	FR	2019-04-17	2014-11-10	Granted
507	2892152	14192544.6	GB	2019-04-17	2014-11-10	Granted
508	9520904	14/078686	US	2016-12-13	2013-11-13	Granted

509		2898060	CA		2015-07-22	Publication of Application
510	201510437005.5	201510437005.5	CN	2018-09-28	2015-07-23	Granted
511	602015003089.6	15178050.9	DE	2017-06-14	2015-07-23	Granted
512	2978198	15178050.9	EP	2017-06-14	2015-07-23	Validated
513	2978198	15178050.9	FR	2017-06-14	2015-07-23	Granted
514	2978198	15178050.9	GB	2017-06-14	2015-07-23	Granted
515	9350835	14/338974	US	2016-05-24	2014-07-23	Granted
516		2914562	CA		2015-12-11	Publication of Application
517		201510941292.3	CN		2015-12-16	Allowed (Notice of Allowance)
518	602015041545.0	15198585.0	DE	2019-11-13	2015-12-09	Granted
519	3035542	15198585.0	EP	2019-11-13	2015-12-09	Validated
520	3035542	15198585.0	FR	2019-11-13	2015-12-09	Granted
521	3035542	15198585.0	GB	2019-11-13	2015-12-09	Granted
522	10003393	15/233538	US	2018-06-19	2016-08-10	Granted
523		15/978650	US		2018-05-14	Allowed (Notice of Allowance)
524	9438319	14/571928	US	2016-09-06	2014-12-16	Granted
525		15189010.0	EP		2015-10-08	Publication of Application
526	9847807	14/877979	US	2017-12-19	2015-10-08	Granted
527		62/061750	US		2014-10-09	Converted
528	3007269	15189006.8	DE	2020-01-01	2015-10-08	Granted
529	3007269	15189006.8	EP	2020-01-01	2015-10-08	Validated
530	3007269	15189006.8	FR	2020-01-01	2015-10-08	Granted
531	3007269	15189006.8	GB	2020-01-01	2015-10-08	Granted

532	9853684	14/877983	US	2017-12-26	2015-10-08	Granted
533		62/061745	US		2014-10-09	Converted
534	2922956	2922956	CA	2019-04-02	2016-03-04	Granted
535	105957714	201610133072.2	CN	2019-03-12	2016-03-09	Granted
536		16159278.7	EP		2016-03-08	Publication of Application
537	10115527	14/642222	US	2018-10-30	2015-03-09	Granted
538			DE			Designated
539		16164335.8	EP		2016-04-07	Notification date R.71(3) (former R.51(4))
540			FR			Designated
541			GB			Designated
542	9749031	14/681665	US	2017-08-29	2015-04-08	Granted
543		2931814	CA		2016-05-31	Publication of Application
544	602016002704.6	16170072.9	DE	2018-05-02	2016-05-18	Granted
545	3101154	16170072.9	EP	2018-05-02	2016-05-18	Validated
546	3101154	16170072.9	FR	2018-05-02	2016-05-18	Granted
547	3101154	16170072.9	GB	2018-05-02	2016-05-18	Granted
548		17104408.9	HK		2017-05-02	Abandoned
549	9490314	14/727088	US	2016-11-08	2015-06-01	Granted
550		2968643	CA		2017-05-26	Publication of Application
551		17176281.8	EP		2017-06-15	Publication of Application
552	10297658	15/184081	US	2019-05-21	2016-06-16	Granted

553		2973921	CA		2017-07-17	Publication of Application
554		17183167.0	EP		2017-07-25	Publication of Application
555	10128885	15/218752	US	2018-11-13	2016-07-25	Granted
556		2973923	CA		2017-07-17	Publication of Application
557		17183166.2	EP		2017-07-25	Publication of Application
558		16/572113	US		2019-09-16	Publication of Application
559	10461782	15/218845	US	2019-10-29	2016-07-25	Granted
560		2973926	CA		2017-07-17	Publication of Application
561		17183168.8	EP		2017-07-25	Publication of Application
562	10536943	15/218798	US	2020-01-14	2016-07-25	Granted
563		2996563	CA		2018-02-27	Filing
564		18158656.1	EP		2018-02-26	Publication of Application
565		15/901498	US		2018-02-21	Publication of Application
566		62/464168	US		2017-02-27	Converted

567		3021501	CA		2018-10-19	Publication of Application
568		18202148.5	EP		2018-10-23	Publication of Application
569		16/672151	US		2019-11-01	Filing
570	10497774	15/791177	US	2019-12-03	2017-10-23	Granted
571		3021465	CA		2018-10-19	Publication of Application
572		18202149.3	EP		2018-10-23	Publication of Application
573		16/409188	US		2019-05-10	Publication of Application
574	10332687	15/791176	US	2019-06-25	2017-10-23	Granted