

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7932630

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	LICENSE
CONVEYING PARTY DATA	
Name	Execution Date
ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE	11/30/2022
RECEIVING PARTY DATA	
Name:	DOLBY LABORATORIES LICENSING CORPORATION
Street Address:	1275 MARKET STREET
City:	SAN FRANCISCO
State/Country:	CALIFORNIA
Postal Code:	94103
PROPERTY NUMBERS Total: 10	
Property Type	Number
Application Number:	16664731
Application Number:	17163218
Application Number:	17965667
Application Number:	14001204
Application Number:	17377057
Application Number:	18108342
Application Number:	16374685
Application Number:	17009692
Application Number:	17138426
Application Number:	17733182
CORRESPONDENCE DATA	
Fax Number:	(415)645-4000
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	4156455000
Email:	jackie.lum@dolby.com
Correspondent Name:	JACKIE LUM
Address Line 1:	DOLBY LABORATORIES, INC.
Address Line 2:	1275 MARKET STREET
Address Line 4:	SAN FRANCISCO, CALIFORNIA 94103
ATTORNEY DOCKET NUMBER:	A17009-A17013-A17014

PATENT

NAME OF SUBMITTER:	JACQUELYN MANGGANA-LUM
SIGNATURE:	/JACQUELYN MANGGANA-LUM/
DATE SIGNED:	05/02/2023
Total Attachments: 14 source=ETRI Exclusive License Agreement 113022#page1.tif source=ETRI Exclusive License Agreement 113022#page2.tif source=ETRI Exclusive License Agreement 113022#page3.tif source=ETRI Exclusive License Agreement 113022#page4.tif source=ETRI Exclusive License Agreement 113022#page5.tif source=ETRI Exclusive License Agreement 113022#page6.tif source=ETRI Exclusive License Agreement 113022#page7.tif source=ETRI Exclusive License Agreement 113022#page8.tif source=ETRI Exclusive License Agreement 113022#page9.tif source=ETRI Exclusive License Agreement 113022#page10.tif source=ETRI Exclusive License Agreement 113022#page11.tif source=ETRI Exclusive License Agreement 113022#page12.tif source=ETRI Exclusive License Agreement 113022#page13.tif source=ETRI Exclusive License Agreement 113022#page14.tif	

EXCLUSIVE LICENSE AGREEMENT

This EXCLUSIVE LICENSE AGREEMENT (together with Schedule 1 and Schedule 2 attached hereto, the "Agreement") is effective as of November 30, 2022 (the "Effective Date") by and between Electronics and Telecommunications Research Institute, a company formed under the laws of The Republic of Korea ("ETRI"), and Dolby Laboratories Licensing Corporation, a corporation existing and organized under the laws of New York ("DLLC" and each of DLLC and ETRI, a "Party" and collectively, the "Parties").

WITNESSETH:

WHEREAS, pursuant to that certain Patent License and Option Agreement, dated December 14, 2017, and Amendment to Patent License and Option Agreement, dated November 30, 2022 between the Parties (collectively the "2017 Option Agreement"), ETRI agreed to grant DLLC an exclusive license under (i) those patents and patent applications set forth on Schedule 1 attached hereto (the "2017 Listed Licensed Patents"), (ii) all provisional patent applications, patent applications, patents or other similar governmental grants or issuances worldwide (A) from which any one or more of the 2017 Listed Licensed Patents directly or indirectly claims priority and/or (B) for which any one or more of the 2017 Listed Licensed Patents directly or indirectly forms a basis for priority, (iii) all reissues, reexaminations, extensions, continuations, continuations in part, continuing prosecution applications, substitutions, requests for continuing examinations, divisions and counterparts, worldwide, of any items set forth in the foregoing subsections (i) or (ii), and (iv) all provisional patent applications, patent applications, patents or other similar governmental grants or issuances that are terminally disclaimed over any items set forth in the foregoing subsections (i), (ii) or (iii) as of December 14, 2017, or over which any items set forth in the foregoing subsections (i), (ii) or (iii) is terminally disclaimed as of December 14, 2017 ((i) through (iv) collectively, the "2017 Licensed Patents");

WHEREAS, pursuant to that certain Patent License and Option Agreement, dated December 14, 2018, and Amendment to Patent License and Option Agreement, dated November 30, 2022 between the Parties (collectively the "2018 Option Agreement", together with the 2017 Option Agreement, the "Option Agreements"), ETRI agreed to grant DLLC an exclusive license under (i) those patents and patent applications set forth on Schedule 2 attached hereto (the "2018 Listed Licensed Patents"), (ii) all provisional patent applications, patent applications, patents or other similar governmental grants or issuances worldwide (A) from which any one or more of the 2018 Listed Licensed Patents directly or indirectly claims priority and/or (B) for which any one or more of the 2018 Listed Licensed Patents directly or indirectly forms a basis for priority, (iii) all reissues, reexaminations, extensions, continuations, continuations in part, continuing prosecution applications, substitutions, requests for continuing examinations, divisions and counterparts, worldwide, of any items set forth in the foregoing subsections (i) or (ii), and (iv) all provisional patent applications, patent applications, patents or other similar governmental grants or issuances that are terminally disclaimed over any items set forth in the foregoing subsections (i), (ii) or (iii) as of December 14, 2018, or over which any items set forth in the foregoing subsections (i), (ii) or (iii) is terminally disclaimed as of December 14, 2018 ((i) through (iv) collectively, the "2018 Licensed Patents", together with the 2017 Licensed Patents, the "Licensed Patents")); and

WHEREAS, ETRI and DLLC desire to have this Agreement recorded with the appropriate government agency to serve as notice of the exclusive license to the Licensed Patents from ETRI to DLLC.

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, and upon the terms set forth in this Agreement and the Option Agreements, the Parties, intending to be legally bound, agree as follows:

1.1 Exclusive License. ETRI hereby grants to DLLC, effective on the Effective Date, an exclusive, irrevocable, transferable, worldwide license (with the right to sublicense through multiple tiers) to make, have made, use, sell, offer for sale, import and otherwise dispose of any and all products and services, and to practice any and all methods and processes without payment of any further license or fee to ETRI (subject to ETRI's Retained Right to License (as defined in the Option Agreements), Section 3.3 of the Option Agreements, Section 4.4 of the Option Agreements, and the grant-back license pursuant to Section 4.5 of the Option Agreements) with respect to the Licensed Patents.

1.2 Governing Law. This Agreement shall be deemed to be made in and in all respects shall be interpreted, construed and governed by and in accordance with the law of the state of California without regard to the conflict of law principles thereof to the extent that such principles would direct a matter to another jurisdiction.

1.3 Authorization. The parties hereby authorize and request that the United States Patent and Trademark Office (or any foreign equivalent thereto), record this Agreement.

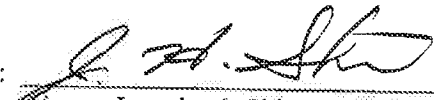
* * * * *

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties have executed or caused this Agreement to be executed as of the Effective Date.

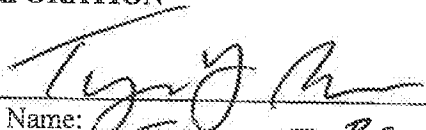
LICENSOR:

ELECTRONICS AND
TELECOMMUNICATIONS RESEARCH
INSTITUTE

By: 
Name: Jung-hyuk Shin
Title: Vice President

LICENSEE:

DOLBY LABORATORIES LICENSING
CORPORATION

By: 
Name: TYRONE BROWN
Title: VP, Chief Patent
Counsel

SCHEDULE 1

2017 LISTED LICENSED PATENTS

Family	Country	Application Date	Application Number	Registration Date	Registration Number
N20	KOREA	2013-09-12	2013-0109449	2015-04-02	1510115
N20	KOREA	2013-09-12	2013-0109450		
N20	KOREA	2013-09-12	2013-0109451		
N20	JAPAN	2014-06-13	2014-122758		
N20	JAPAN	2014-06-13	2014-122768		
N20	USA	2016-02-26	15/055150	2017-05-09	9648327
N20	CHINA	2016-09-21	201610837076 9		
N20	CHINA	2016-09-21	201610838863 5		
N20	CHINA	2016-09-21	201610838882 8		
N20	CHINA	2016-09-21	201610837065 0		
N20	USA	2017-04-03	15/477714	2017-12-05	9838689
N20	USA	2017-10-31	15/99086		
N20	KOREA	2011-02-24	2011-001 6610		
N20	KOREA	2010-12-21	2010-0131086		
N20	KOREA	2011-05-18	2011-0046785		
N20	KOREA	2011-12-21	2011-0139469	2015-03-10	1502758
N20	PCT	2011-12-21	PCT/KR2011/009957		
N20	USA	2013-05-22	13/988958	2016-05-24	9350993
N20	EPO	2013-05-29	11850654 2		
N20	CHINA	2013-08-21	201180068084 7	2016-10-26	ZL201180068084 7
N20	JAPAN	2013-05-24	2013-540907		
N21	KOREA	2014-07-31	2014-0098242	2014-12-23	1477771
N21	BRAZIL	2014-07-25	BR1220140181400		
N21	JAPAN	2016-02-08	2016-021985	2017-09-08	6203678
N21	JAPAN	2017-08-29	2017-164566		
N21	KOREA	2011-01-31	2011-0009636		
N21	KOREA	2011-03-03	2011-0019166		
N21	KOREA	2011-05-27	2011-0050853		
N21	KOREA	2011-07-01	2011-0065707		
N21	KOREA	2012-01-31	2012-0010096	2014-08-01	1428030
N21	KOREA	2011-07-15	2013-0082551	2014-03-21	1378888
N21	KOREA	2013-07-15	2013-0082552	2014-11-07	1461498

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Family	Country	Application Date	Application Number	Registration Date	Registration Number
N21	KOREA	2013-07-15	2013-0082553	2014-11-07	1461499
N21	PCT	2012-01-31	PCT/KR2012/0000770		
N21	USA	2013-07-11	13/979214		
N21	EPO	2013-07-24	127423044		
N21	JAPAN	2013-07-30	2013-551919	20160-04-08	5911890
N21	CHINA	2013-09-27	2012800157098		
N21	INDIA	2013-07-11	5514/CHENP/2013		
N21	INDONESIA	2013-08-30	W-00201303958		
N21	BRAZIL	2013-07-31	BR1120130194952		
N21	RUSSIA	2013-08-30	2013140464	2016-06-10	2586017
N21	CANADA	2013-07-30	2826157		
N27	KOREA	2012-01-18	2012-0005950		
N27	PCT	2013-01-18	PCT/KR2013/000417		
N27-1	JAPAN	2017-02-27	2017-035446		
N27-1	KOREA	2017-09-28	2017-0126207		
N27-1	USA	2017-09-27	15/717329		
N27-1	KOREA	2013-01-18	2013-0005653	2014-02-18	1366649
N27-1	KOREA	2013-08-06	2013-0093272	2014-08-22	1435558
N27-1	KOREA	2013-08-06	2013-0093273	2014-09-15	1442785
N27-1	KOREA	2013-08-06	2013-0093274	2014-11-07	1461500
N27-1	KOREA	2014-05-07	2014-0054303	2014-11-07	1461501
N27-1	USA	2014-07-15	14/372278	2017-10-31	9807412
N27-1	EPO	2014-08-14	137380119		
N27-1	JAPAN	2014-07-17	2014-553257	2017-03-03	6101709
N27-1	CHINA	2014-08-18	2013800098770		
N27-2	USA	2014-07-30	14/446447	2016-06-21	9374595
N27-2	EPO	2014-08-14	141810648		
N27-2	JAPAN	2014-12-01	2014-243486		
N27-2	CHINA	2014-09-16	2014104717530		
N27-2	USA	2016-05-10	15/151097	2017-04-11	9621912
N27-2	USA	2016-05-10	15/151125	2017-04-11	9621913
N27-2	USA	2016-05-10	15/151142	2017-04-25	9635379
N27-2	USA	2016-05-10	15/151163	2017-04-25	9635380
N27-2	KOREA	2013-08-06	2013-0093305	2014-08-22	1435557
N27-2	KOREA	2013-08-06	2013-0093306		
N27-2	KOREA	2013-08-06	2013-0093307		

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Family	Country	Application Date	Application Number	Registration Date	Registration Number
N27-2	KOREA	2013-08-06	2013-0093308		
N27-2	KOREA	2014-05-07	2014-0054306		
N32	KOREA	2009-12-16	2009-0125576		
N32	KOREA	2010-12-14	2010-0127547		
N33	KOREA	2011-03-03	2011-0019155		
N33	KOREA	2012-03-05	2012-0022496		
N33	PCT	2012-03-05	PCT/KR2012/001618		
N33	USA	2013-08-23	14/001204		
N34	KOREA	2011-03-10	2011-0021170		
N34	KOREA	2012-03-12	2012-0025095		
N34	PCT	2012-03-12	PCT/KR2012/001791		
N34	USA	2013-08-30	14/002393		
N38	KOREA	2011-06-01	2011-0052610		
N38	KOREA	2011-05-04	2011-0042694		
N38	KOREA	2011-07-01	2011-0065713		
N38	KOREA	2012-04-16	2012-0039422		
N38	KOREA	2012-05-04	2012-0047758		
N38	PCT	2012-05-04	PCT/KR2012/003540		

SCHEDULE 2

2018 LISTED LICENSED PATENTS

Family	Country	Application Date	Application Number	Registration Date	Registration Number
12	U.S.A.	2018-04-16	15/954432		
12-1	CHINA	2012-06-18	2010800575 35.2	11/25/2015	ZL 201080057535.2
12-1	CHINA	2013-08-02	2013103341 75.1	3/9/2015	ZL 20131033417 5.1
12-1	CHINA	2015-10-26	2015107025 88.X	10/9/2018	ZL201510702 588.X
12-1	CHINA	2015-10-26	2015107035 79.2	7/10/2018	ZL 201510703579.2
12-1	CHINA	2015-10-26	2015107035 75.4	7/10/2018	ZL 201510703575.4
12-1	E.P.O.	2017-10-04	17194787.2		
12-1	JAPAN	2012-06-08	2012- 544386	8/8/2014	JP 5,593,397
12-1	JAPAN	2018-09-11	2018- 169870		
12-1	KOREA	2010-12-14	2010- 0127500	2/12/2013	KR 1,234,008
12-1	KOREA	2012-07-03	2012- 0072445	7/24/2014	KR 1,425,180
12-1	KOREA	2013-07-05	2013- 0078965	7/24/2014	KR 1,425,186
12-1	KOREA	2013-07-05	2013- 0078967	11/9/2015	KR 1,569,034
12-1	KOREA	2016-01-27	2016- 0010152	11/16/2016	KR 1,678,409
12-1	KOREA	2016-01-27	2016- 0010149	11/16/2016	KR 1,678,408
12-1	KOREA	2016-01-27	2018- 0080813		
12-1	KOREA	2016-01-27	2018- 0080815		
12-1	KOREA	2016-01-27	2018- 0080817		
12-1	KOREA	2016-01-27	2018- 0080818		
12-1	KOREA	2016-01-27	2018- 0080820		
12-1	U.S.A.	2012-06-18	13/516863		
12-2	CHINA	2013-08-02	2013103331 24.7	10/31/2017	ZL 20131033312 4.7
12-2	CHINA	2015-10-26	2015107025 66.3		
12-2	CHINA	2015-10-26	2015107032 72.2		
12-2	CHINA	2015-10-26	2015107035 72.0		
12-2	CHINA	2015-10-26	2015107013 67.0		

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Family	Country	Application Date	Application Number	Registration Date	Registration Number
12-2	E.P.O	2013-07-24	13177767.4		
12-2	JAPAN	2018-09-11	2018-169897		
12-2	KOREA	2012-11-16	2012-0130490	7/21/2014	KR 1,423,735
12-2	KOREA	2013-07-05	2013-0078931	7/21/2014	KR 1,423,738
12-2	KOREA	2013-07-05	2013-0078940	12/27/2016	KR 1,691,902
12-2	KOREA	2013-07-05	2013-0078944	12/27/2016	KR 1,691,901
12-2	KOREA	2016-08-19	2016-0105475	3/29/2017	KR 1,722,988
12-2	KOREA	2017-03-28	2017-0039125	2/28/2018	KR 1,835,834
12-2	KOREA	2018-02-28	0024800	N/A	N/A
12-2	U.S.A.	2013-08-06	13/959885		
12-3	KOREA	2018-05-30	2018-0062006		
12-3	KOREA	2018-10-10	2018-0120346		
12-3	KOREA	2018-10-10	2018-0120366		
12-3	KOREA	2018-10-10	2018-0120385		
12-3	KOREA	2018-10-10	2018-0120404		
12-3	JAPAN	2018-09-11	2018-169955		
12-4	KOREA	2018-07-11	2018-0080821		
12-4	JAPAN	2018-09-11	2018-169970		
14	E.P.O	2012-11-08	11766200.7		
14	E.P.O	2018-09-13	18194204.6		
14	E.P.O	2018-09-13	18194210.3		
14	E.P.O	2018-09-13	18194215.2		
14	KOREA	2011-04-08	2011-0032766	6/11/2015	KR 1,529,475
14	KOREA	2013-09-12	2013-0109457	10/11/2016	KR 1,666,862
14	KOREA	2013-09-12	2013-0109458	3/17/2017	KR 1,719,346
14	KOREA	2013-09-12	2013-0109459	3/17/2017	KR 1,719,347
14	KOREA	2017-03-14	2017-0031892	10/23/2017	KR 1,791,076
14	KOREA	2017-10-18	2017-0135214	7/31/2018	KR 1,885,772
14	KOREA	2018-07-04	2018-0077798	11/21/2018	KR 1,922,459
14	KOREA	2018-11-20	2018-0143407		
14	KOREA	2018-11-20	2018-0143420		

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Family	Country	Application Date	Application Number	Registration Date	Registration Number
14-1	CHINA	2012-12-10	2011800285 39.2	8/24/2016	ZL 20118002853 9.2
14-1	CHINA	2015-06-19	2015103455 73.2		
14-1	CHINA	2015-06-19	2015103453 70.3	11/6/2018	ZL 20151034537 0.3
14-1	CHINA	2016-07-20	2016105761 84.5		
14-1	JAPAN	2018-03-22	2018- 055343		
14-1	JAPAN	2018-03-22	2018- 055349		
14-1	JAPAN	2017-03-16	2017- 051719	3/30/2018	JP 6,313,497
14-1	JAPAN	2017-03-16	2018- 055350		
14-1	JAPAN	2017-03-16	2018- 055348		
14-1	JAPAN	2017-03-16	2018- 055352		
14-1	U.S.A.	2012-10-08	13/640014	1/17/2017	US 9,549,204
14-1	U.S.A.	2015-08-13	14/825825	10/3/2017	US 9,781,448
14-1	U.S.A.	2016-02-15	15/433890	12/5/2017	US 9,838,711
14-1	U.S.A.	2017-10-30	15/798024	9/11/2018	US 10,075,734
14-1	U.S.A.	8/7/2018	16/057459		
14-1	U.S.A.	8/7/2018	16/057551		
14-1	U.S.A.	9/4/2018	16/129522		
14-2	CHINA	2015-06-19	2015103453 66.7	6/1/2018	ZL 20151034536 6.7
14-2	JAPAN	2012-10-05	2013- 503701	7/25/2014	JP 5,583,840
14-2	U.S.A.	2015-08-11	14/823638	5/23/2017	US 9,661,345
14-2	U.S.A.	2018-08-08	16/058487		
14-2	U.S.A.	2018-08-09	16/059378		
14-2	U.S.A.	2018-09-10	16/126988		
14-2	U.S.A.	2018-09-10	16/127039		
14-2	U.S.A.	2018-09-04	16/127892		
18	BRAZIL	2014-03-27	BR1120140 074348		
18	BRAZIL	2014-09-26	BR1220140 239912		
18	CHINA	2014-05-28	2012800585 38.7	9/14/2016	ZL 20128005853 8.7
18	CHINA	2015-06-19	2015103460 45.9		
18	CHINA	2015-06-19	2015103458 65.6	10/9/2018	ZL 20151034586 5.6
18	CHINA	2015-06-25	2015103590 35.9		

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Family	Country	Application Date	Application Number	Registration Date	Registration Number
18	E.P.O	2016-09-13	16188610.6		
18	E.P.O	2016-10-05	16192441.0		
18	INDIA	2014-04-24	3108/CHEN P/2014		
18	INDIA	2014-05-27	3980/CHEN P/2014		
18	JAPAN	2017-01-19	2017-007873		
18	KOREA	2012-09-27	2012-0107639	1/22/2014	KR 1,356,450
18	KOREA	2013-08-06	2013-0093113	2/18/2014	KR 1,366,650
18	KOREA	2014-05-07	2014-0054258	5/31/2017	KR 1,744,024
18	KOREA	2017-05-23	2017-0063276	6/8/2018	KR 1,868,121
18	KOREA	2018-06-08	2018-0066355		
18	KOREA	2018-06-08	2018-0066356		
18	KOREA	2018-06-08	2018-0066357		
18	KOREA	2018-06-08	2018-0066358		
18	U.S.A.	2014-03-27	14/347709	2/23/2016	US 9,270,990
18	U.S.A.	2014-04-11	14/251113	9/29/2015	US 9,148,663
18	U.S.A.	2015-08-07	14/820842	12/1/2015	US 9,204,171
18	U.S.A.	2015-08-07	14/820880	12/1/2015	US 9,204,148
18	VIETNAM	2014-04-28	1-2014-01401		
18	VIETNAM	2014-06-06	1-2014-01862		
18	VIETNAM	2018-01-02	1-2018-00013		
18	VIETNAM	2018-01-02	1-2018-00012		
18	VIETNAM	2018-01-02	1-2018-00014		
29	BRAZIL	2014-07-16	BR1 120140175004		
29	CHINA	2014-09-17	201380014811.0	8/3/2018	ZL 201380014811.0
29	CHINA	2017-05-12	201710336010.6		
29	CHINA	2018-07-11	201810756997.1		
29	CHINA	2018-07-11	201810756996.7		
29	CHINA	2018-07-11	201810756616.X		
29	CHINA	2018-07-11	201810756273.7		
29	CHINA	2018-07-11	201810756275.6		
29	E.P.O	2014-07-24	13738659.5		
29	INDIA	2014-08-05	5988/CHEN P/2014		
29	JAPAN	2014-07-09	2014-	2/19/2016	JP 5,886,446

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Family	Country	Application Date	Application Number	Registration Date	Registration Number
			553264		
29	JAPAN	2016-02-03	2016-019070	6/23/2017	JP 6,163,574
29	JAPAN	2016-02-03	2016-019105	6/23/2017	JP 6,163,575
29	JAPAN	2016-02-03	2016-019127	6/23/2017	JP 6,163,576
29	JAPAN	2017-06-19	2017-119853		
29	JAPAN	2018-11-28	2018-222081		
29	JAPAN	2018-11-28	2018-222100		
29	JAPAN	2018-11-28	2018-222109		
29	KOREA	2013-01-21	2013-0006736	5/30/2016	KR 1,627,085
29	KOREA	2014-07-11	2014-0087706	6/3/2015	KR 1,527,442
29	KOREA	2014-07-11	2014-0087714	6/29/2018	KR 1,875,206
29	KOREA	2014-07-11	2014-0087725		
29	KOREA	2018-06-29	2018-0076051		
29	KOREA	2018-06-29	2018-0076058		
29	KOREA	2018-06-29	2018-0076063		
29	U.S.A.	2014-07-18	14/373270	1/9/2018	US 9,866,839
29	U.S.A.	2017-10-24	15/792086		
29	VIETNAM	2014-08-20	1-2014-02799		
29	VIETNAM	2017-12-14	1-2017-05070		
31-1	CHINA	2014-11-17	2013800258 24.8	5/22/2018	ZL 201380025824.8
31-1	CHINA	2018-04-26	2018103841 12.X		
31-1	CHINA	2018-04-26	2018103842 81.3		
31-1	CHINA	2018-04-26	2018103841 11.5		
31-1	CHINA	2018-04-26	2018103847 05.6		
31-1	CHINA	2018-04-26	2018103841 14.9		
31-1	E.P.O.	2014-10-10	13777676.1		
31-1	JAPAN	2014-10-15	2015-506892	5/13/2016	JP 5,933,815
31-1	JAPAN	2016-05-02	2016-092743	10/13/2017	JP 6,224,162
31-1	JAPAN	2016-05-02	2016-092745	6/23/2017	JP 6,163,229
31-1	JAPAN	2016-05-02	2016-	6/23/2017	JP 6,163,230

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			092749		
31-1	JAPAN	2016-05-02	2016-092752	10/13/2017	JP 6,224,163
31-1	JAPAN	2018-04-26	2018-085564		
31-1	JAPAN	2018-04-26	2018-085588		
31-1	JAPAN	2018-04-26	2018-085608		
31-1	JAPAN	2018-04-26	2018-085624		
31-1	JAPAN	2018-04-26	2018-085634		
31-1	KOREA	2013-04-16	2013-0041862	3/21/2014	KR 1,378,861
31-1	KOREA	2013-10-22	2013-0125869	7/12/2016	KR 1,640,583
31-1	KOREA	2014-05-07	2014-0054445	1/26/2015	KR 1,488,496
31-1	KOREA	2016-07-12	2016-0088205	5/19/2017	KR 1,739,748
31-1	KOREA	2016-07-12	2016-0088204	3/17/2017	KR 1,719,345
31-1	KOREA	2016-07-12	2016-0088203	3/17/2017	KR 1,719,344
31-1	KOREA	2017-02-02	2017-0015044	3/23/2018	KR 1,843,566
31-1	KOREA	2017-03-23	2018-0034040	9/27/2018	KR 1,904,258
31-1	KOREA	2017-03-23	2018-0034057	9/27/2018	KR 1,904,255
31-1	KOREA	2017-03-23	2018-0034089	9/27/2018	KR 1,904,242
31-1	KOREA	2017-03-23	2018-0034107	9/27/2018	KR 1,904,234
31-1	U.S.A.	2014-10-07	14/391061		
31-2	CHINA	2018-04-26	2018103842 64.X		
31-2	CHINA	2018-04-26	2018103841 13.4		
31-2	CHINA	2018-04-26	2018103841 23.8		
31-2	CHINA	2018-04-26	2018103841 48.8		
31-2	CHINA	2018-04-26	2018103841 24.2		
31-2	CHINA	2018-04-26	2018103842 65.4		
31-2	E.P.O.	2016-04-05	16163783.0		
31-2	JAPAN	2016-02-22	2016-031335	8/4/2017	JP 6,186,026
31-2	JAPAN	2017-07-28	2017-146933		
31-2	JAPAN	2018-04-26	2018-087395		
31-2	JAPAN	2018-04-26	2018-		

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			087408		
31-2	JAPAN	2018-04-26	2018-087416		
31-2	JAPAN	2018-04-26	2018-087426		
31-2	KOREA	2017-03-23	2018-0034131	N/A	N/A
31-2	KOREA	2014-05-07	2014-0054446	1/26/2015	KR 1,488,495
31-2	KOREA	2014-05-07	2014-0054447	1/26/2015	KR 1,488,494
31-2	KOREA	2014-05-07	2014-0054448	1/26/2015	KR 1,488,493
31-2	KOREA	2014-05-07	2014-0054449	11/1/2016	KR 1,673,291
31-2	KOREA	2017-09-28	2017-0126210	3/23/2018	KR 1,843,565
31-2	KOREA	2017-03-23	2018-0034113	9/27/2018	KR 1,904,237
31-2	KOREA	2017-03-23	2018-0034120	9/27/2018	KR 1,904,247
31-2	KOREA	2017-03-23	2018-0034128	9/27/2018	KR 1,904,264
31-SHVC	E.P.O	2018-01-08	18150626.2		
31-SHVC	KOREA	2013-04-16	2013-0041863		
31-SHVC	U.S.A.	2014-10-07	14/391151		
1	E.P.O	2014-01-23	14152251.6		
1	E.P.O	2014-01-23	14152254.0		
1	E.P.O	2014-01-23	14152256.5		
1	JAPAN	2006-10-19	2008-536496	11/5/2014	JP 5,620,641
1	JAPAN	2012-11-11	2012-270597	1/9/2015	JP 5,674,752
1	JAPAN	2014-01-20	2014-007967	6/5/2015	JP 5,756,537
1	KOREA	2006-10-19	2006-0101828	11/6/2008	KR 868,476
1	KOREA	2008-09-22	2008-009738	12/13/2011	KR 1,095,938
1	U.S.A.	2006-10-19	12/090699	6/12/2012	us 8,199,819
1	U.S.A.	2012-05-11	13/469536	8/27/2013	us 8,520,729
1	U.S.A.	2013-06-05	13/910639	8/25/2015	US 9,118,892
1	U.S.A.	2015-06-25	14/750202	12/5/2017	US 9,838,714
1	U.S.A.	2017-10-26	15/794,568	N/A	N/A
1	U.S.A.	N/A	N/A		
6	KOREA	2008-07-07	2008-0065510	10/23/2014	KR 1,456,279
6	KOREA	2013-05-20	2013-0056594	1/26/2015	KR 1,488,499
6	KOREA	2013-05-20	2013-0056596	1/26/2015	KR 1,488,498
6	KOREA	2014-07-24	2014-0094262	2/12/2016	KR 1,595,420
6	KOREA	2015-06-30	2015-0093347	11/1/2016	KR 1,673,290
6	U.S.A.	2010-07-06	12/811765	4/15/2014	US 8,699,570
6	U.S.A.	2014-01-21	14/159953	12/30/2014	US 8,923,396

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6	U.S.A.	2014-12-02	14/558539	9/22/2015	US 9,143,798
28	BRAZIL	2014-07-21	BR1120140 178950		
28	CHINA	2017-02-24	2017101022 19.6		
28	CHINA	2017-09-14	2017108270 08.9		
28	CHINA	2017-09-14	2017108270 05.5		
28	CHINA	2018-02-14	2018101519 86.0		
28	CHINA	2018-02-14	2018101519 65.9		
28	CHINA	2018-02-14	2018101519 94.5		
28	CHINA	2018-02-14	2018101520 01.6		
28	CHINA	2018-02-14	2018101519 91.1		
28	E.P.O	2014-08-14	13738327.9		
28	INDIA	2014-08-08	6012/CHEN P/2014		
28	JAPAN	2014-07-18	2014-553258	9/16/2016	JP 6,005,762
28	JAPAN	2016-09-06	2016-173904		
28	JAPAN	2018-08-21	2018-154980		
28	KOREA	2013-01-18	2013-0005655	2/12/2016	KR 1,595,419
28	KOREA	2013-09-12	2013-0109752		
28	KOREA	2013-09-12	2013-0109753		
28	KOREA	2013-09-12	2013-0109754		
28	U.S.A.	2014-07-17	14/372816	N/A	N/A
28	VIETNAM	2014-08-18	1-2014-02758		