

Doc. B/04

31 Jan 02

6 Dec 04

13 Mar 06

13 Dec 07

Formerly Doc. E/21

2 July 1986

1 Dec 1986

ADVANCED TELEVISION SYSTEMS COMMITTEE, Inc.

Patent Policy

1. **Inclusion of Patents in Specification Documents.** There is no objection in principle to drafting a Specification Document in terms that include the use of an Essential Claim, if it is considered that technical reasons justify this approach. It shall be the policy of the Advanced Television Systems Committee, Inc. (ATSC) that Essential Claims included in ATSC Specification Documents be available to implementers on reasonable and non-discriminatory terms. Prior to a vote on a Specification Document subject to a disclosed Essential Claim and no later than the time frames specified in Section 5, the ATSC shall receive from the person or entity that holds the Essential Claim written confirmation (using the attached form) that:
 - a. A license to the Essential Claim will be made available upon request without compensation to all applicants for the purpose of implementing the Specification Document, which license may be conditioned upon license reciprocity with respect to the same Specification Document; or
 - b. A license to the Essential Claim will be made available upon request under reasonable and nondiscriminatory terms and conditions to all applicants for the purpose of implementing the Specification Document, which conditions may include license reciprocity with respect to the same Specification Document; or
 - c. A license to the Essential Claim will not be provided under reasonable and nondiscriminatory terms and conditions to applicants for the purpose of implementing the Specification Document.

This written confirmation shall be submitted to the President of the ATSC for review and retained in the ATSC's files. After issuance of the ATSC Standard or Recommended Practice, the ATSC shall make the written confirmations available to Members, Observers and third parties upon request.

If a Participant submits a statement under Section 1(c), the technology group considering the Specification Document to which such Essential Claim pertains shall consider whether alternatives to including such Essential Claim are feasible. If there are no feasible alternatives, and the technology group considers that a Specification Document incorporating an Essential Claim identified by a statement under Section 1(c) is in the interests of the Membership, application shall be made to the ATSC Board of Directors for an exception to this policy. The application shall include all information supplied by the Participant, and reasons that an exception should be made. If the Board approves, work on the Specification Document may continue, but when the Specification Document is balloted to the ATSC Membership for approval, the ballot shall include information on the policy exception and the reasons for approval.

2. **Notice of Essential Claims upon a Standard or Recommended Practice.** When the ATSC receives a written confirmation as set forth in Section 1 with respect to a Proposed Standard or a Proposed Recommended Practice that becomes part of an ATSC Standard or ATSC Recommended Practice, the resulting document shall include a notice as follows:

NOTE: The user's attention is called to the possibility that compliance with this standard may require use of an invention covered by patent rights. By publication of this standard, no position is taken with respect to the validity of this claim or of any patent rights in connection therewith. One or more patent holders have, however, filed a statement regarding the terms on which such patent holder(s) may be willing to grant a license under these rights to individuals or entities desiring to obtain such a license. Details may be obtained from the ATSC Secretary and the patent holder.

3. **Disclosure of Patents.** A Participant shall disclose in writing, using the attached form, the existence of any Potential Claim of which any Representative of the Participant who is active in a technology group or specialist group has actual personal knowledge. No Participant, however, shall be required to disclose the existence of a Potential Claim owned by another entity if such a disclosure would cause that Participant to breach a contractual obligation of confidentiality. A Participant shall deliver any Disclosure Statement to the President of the ATSC. All submitted Disclosure Statements must be maintained in the ATSC's files.
4. **Contents of Patent Disclosures.** Disclosure Statements shall be submitted using the attached form and shall include (a) the name of the Participant making the Disclosure Statement and the name of the Representative responsible for the Disclosure Statement; (b) the name of the person or entity that holds the patent or patent application with the Potential Claim; (c) the patent number or published patent application number, if available, in which the Potential Claim is contained; (d) the Specification Document to which the Disclosure Statement applies; (e) an indication from the Participant that it, in good faith, believes the Potential Claim may be relevant to the implementation of the Specification Document, and (f) the written confirmation required by Section 1, if the Participant making the Disclosure Statement is the holder of the patent or patent application on which the Potential Claim is based. A Participant submitting a statement under Section 1(c) shall supply sufficient identifying information about the Potential Claim to permit it to be identified within a Specification Document.
5. **Timeframe for Patent Disclosures.** The patent disclosure obligation is an ongoing obligation that begins with participation by a Participant's Representative in the development of a Specification Document and extends through the life of the Specification Document. A Participant shall make a Disclosure Statement as soon as practically possible during the development of the Specification Document and, at the latest, within forty-five (45) business days after the Participant's Representative obtains actual knowledge of a Potential Claim relating to a Specification Document and in advance of any vote on the Specification Document. For a Participant's discovery of a Potential Claim subsequent to the adoption of the Specification Document, the Participant shall make a Disclosure Statement as soon as practically possible and, at the latest, within forty-five (45) business days after the Participant's Representative obtains

actual knowledge of the Potential Claim. ATSC shall provide notice of the patent disclosure obligations to Members in technology group and membership letter ballots.

6. **Failure to Disclose Patents.** Any Participant that (a) does not disclose its refusal to license a Potential Claim pursuant to Section 1(c), or (b) fails to submit a Disclosure Statement concerning a Potential Claim in conformance with Sections 3, 4 and 5, shall be deemed to agree to license any resulting Essential Claim to other Members and Observers and any requesting third party under reasonable and nondiscriminatory terms and conditions and shall not be entitled to make an election under Section 1(c). Any Participant's knowing failure to disclose a Potential Claim, whether by violation or manipulation of the provisions of this Policy, shall be deemed incompatible with such Participant's obligations toward ATSC and shall constitute a "failure to disclose" with consequences as defined in this paragraph. ATSC may in such a case terminate any such Participant's ability to participate in ATSC processes.
7. **No Patent Search Required.** Section 3 does not require a Representative or Participant to perform or conduct patent searches. Knowledge of Potential Claims of a Participant shall not be automatically imputed to any Representative.
8. **No Responsibility for Identifying Patents.** The ATSC shall not be responsible for identifying Essential Claims or for conducting inquiries into the legal validity or scope of Potential Claims.
9. **Non-Member Participants.** Each technology group and specialist group shall use reasonable and consistent efforts, within the discretion of its chair, to ensure that any non-Member who participates in any ATSC activity agrees to be bound by this Patent Policy. In particular, chairs of groups may require non-Member Participants to (a) execute declarations of their intention to comply with this Patent Policy, (b) to require the companies they represent to execute such declarations, or (c) to take other steps to demonstrate their knowledge of and agreement to be bound by this Patent Policy. In addition, chairs of groups shall use reasonable efforts to state at the commencement of meetings that this Patent Policy applies to all Members, Observers and non-Member Participants alike, and all email reflectors shall contain a similar message. Chairs of groups shall have the discretion to refuse input and contributions by non-Member Participants who refuse to comply with such measures.
10. **Claims in Documents Normatively Referenced.** Any patent or patent application with Essential Claims contained in a document that is normatively referenced by a Specification Document shall be subject to the disclosure requirements of this Policy. Any Participant that holds any Potential Claims in a document that is normatively referenced by a Specification Document shall make the submissions required by Sections 1 and 3 of this Policy as soon as commercially reasonable after a decision is made by a technical body to normatively reference the material on which the Potential Claims are based and in any event prior to a vote on the Specification Document at issue. No such requirements shall exist when the normatively referenced document is an ATSC document in respect of which the Participant has already made a disclosure pursuant to Section 1. No such requirements shall apply to references to materials contained in Specification Documents that are informative references rather than normative references. This section shall not imply any duty on the part of any technology group or specialist group to investigate the disclosure status of normatively referenced documents.

11. **Definitions.** Capitalized terms used herein shall have the meanings ascribed to them in this Section.
- a. “**Disclosure Statement**” means a written disclosure made pursuant to Sections 3 and 4.
 - b. “**Essential Claim**” means claims of all patents issued, and patent applications filed, under the laws of any country that are necessarily infringed by implementing the normative portion of a Specification Document. An Essential Claim is “necessarily infringed” only when there is no other technically reasonable noninfringing alternative for implementing a Specification Document.
 - c. “**Member**” means a voting member of the ATSC, or a voting member of a technology group, as defined in the ATSC Bylaws, or any member of a specialist group, as defined in the ATSC Bylaws.
 - d. “**Observer**” means an observing member of the ATSC or an observing member of a technology group, as defined in the ATSC Bylaws.
 - e. “**Participant**” means a Member, Observer, individual, or organization that participates in the development of a Specification Document within the ATSC, an ATSC technology group, or an ATSC specialist group.
 - f. “**Potential Claim**” means a claim in any patent issued or granted under the laws of any country, as well as a claim in, or supported by, any pending published patent application filed under the laws of any country, of which a Representative of a Participant has actual personal knowledge and that, in the good faith judgment of such Participant’s Representative, may be an Essential Claim.
 - g. “**Representative**” means a person employed by a Participant who is authorized by such Participant to represent such Participant in connection with the work of the ATSC, a technology group, as defined in the ATSC Bylaws, or a specialist group, as defined in the ATSC Bylaws.
 - h. “**Specification Document**” means an ATSC Standard, an ATSC Recommended Practice, a Proposed Standard, a Proposed Recommended Practice, a Candidate Standard, or a Working Draft, as defined in the ATSC Bylaws.



Disclosure Statement and Licensing Declaration
This declaration does not represent an implied license grant

Please return to:
President - ATSC
1776 K Street NW
Suite 800
Washington, DC 20006
202-872-9160 – Office
202-872-9161 – Fax

Discloser:	
Name of Participant	<u>LG ELECTRONICS INC.</u>
Contact Information For Participant's Representative :	
Name of Representative	<u>HWIJAE CHO</u>
Address	<u>19, Yangjae-daero 11gil, Seocho-gu, Seoul 137-130, Korea</u>
Tel.	<u>+82-2-6912-6540</u>
Fax	<u>+82-2-6912-6046</u>
E-mail	<u>hwijae.cho@lge.com</u>
URL (optional)	<u></u>
Identification of ATSC Specification Document relevant to the Disclosure Statement	
Number	<u>A/321, A/322, A/330, A/331, A/332, A/336, A/337, A/338</u> <u>A/341, A/342, A/343, A/344, A/327</u>
Title	<u>System Discovery and Signaling(A/321), Physical Layer Protocol(A/322)</u> <u>Link-Layer Protocol(A/330), Signaling, Delivery, Synchronization, and Error Protection(A/331)</u> <u>Service Announcement(A/332), Content Recovery in Redistribution Scenarios(A/336)</u> <u>Application Event Delivery(A/337), Companion Device(A/338),</u> <u>Video-HEVC(A/341), Audio(A/342), Captions and Subtitles(A/343)</u> <u>ATSC 3.0 Interactive Content(A/344), Guidelines for the Physical Layer Protocol(A/327)</u>

Licensing Declaration

If the Discloser is the holder of a patent and/or pending patent application that is the subject of an Essential Claim, i.e., the use of which it believes would be required to implement the identified ATSC Specification Document, the Discloser hereby declares, in accordance with the Statement on ATSC Patent Policy (see ATSC website), that (check one box only).

a. The Discloser agrees to make a license to the Essential Claim available without compensation upon request to all applicants for the purpose of implementing the Specification Document, which license may be conditioned upon license reciprocity with respect to the same Specification Document. Negotiations are left to the parties concerned and are performed outside of ATSC.

Mark here if the Discloser's willingness to license is conditioned on reciprocity for the above ATSC Standard.

✓ b. The Discloser agrees to make a license to the Essential Claim available upon request under reasonable and nondiscriminatory terms and conditions to all applicants for the purpose of implementing the Specification Document, which conditions may include license reciprocity with respect to the same Specification Document. Negotiations are left to the parties concerned and are performed outside of ATSC.

Mark here if the Discloser's willingness to license is conditioned on reciprocity for the above ATSC Standard.

c. The Discloser will not make a license to the Essential Claim under reasonable and nondiscriminatory terms and conditions to applicants for the purpose of implementing the Specification Document.

Without Compensation: The phrase "without compensation" does not mean that the Discloser is waiving all of its rights with respect to each patent or patent application that is the subject matter of the Essential Claim. Rather, "without compensation" refers to the issue of monetary compensation; *i.e.*, that the Discloser will not seek any monetary compensation as part of the licensing arrangement (whether such compensation is called a royalty, a one-time licensing fee, etc.). However, while the Discloser in this situation is committing to not charging any monetary amount, the Discloser is still entitled to require that the implementer of the ATSC Specification Document sign a license agreement that contains other reasonable terms and conditions such as those relating to governing law, field of use, reciprocity, warranties, etc.

Reciprocity: As used herein, the word "reciprocity" means that the Discloser shall only be required to license any prospective licensee under the stated terms (without compensation or under reasonable and nondiscriminatory terms and conditions) if such prospective licensee will commit to license its patent(s) or patent application(s) forming the subject matter of an Essential Claim under similar (without compensation or under reasonable and nondiscriminatory) terms and conditions.

Disclosure of Patents

In accordance with Sections 3 and 4 of the ATSC Patent Policy, please identify each patent or patent application forming the subject matter of any Potential Claim of which any Representative of the Discloser who is active in an ATSC technology group or specialist group has actual personal knowledge. The Discloser, in good faith, believes that the Potential Claim may be relevant to the implementation of the Specification Document identified by this Disclosure Statement.

No.	Patent / Application No.	Country	Patent/Applicaton Holder	Status [granted/ pending]
1	9729373	US	LG ELECTRONICS INC.	Granted
2	10-1853051	KR	LG ELECTRONICS INC.	Granted
3	9722838	US	LG ELECTRONICS INC.	Granted
4	10-1798873	KR	LG ELECTRONICS INC.	Granted
5	202010118742.X	CN	LG ELECTRONICS INC.	Pending
6	202010118739.8	CN	LG ELECTRONICS INC.	Pending
7	10090950	US	LG ELECTRONICS INC.	Granted
8	EP03096499	EP	LG ELECTRONICS INC.	Granted
9	2637115	RU	LG ELECTRONICS INC.	Granted
10	EP03096499	DE	LG ELECTRONICS INC.	Granted
11	10090859	US	LG ELECTRONICS INC.	Granted
12	10367534	US	LG ELECTRONICS INC.	Granted
13	9413577	US	LG ELECTRONICS INC.	Granted
14	EP03075160	EP	LG ELECTRONICS INC.	Granted
15	ZL201480064338.1	CN	LG ELECTRONICS INC.	Granted
16	JP6204607	JP	LG ELECTRONICS INC.	Granted
17	9641293	US	LG ELECTRONICS INC.	Granted
18	9941985	US	LG ELECTRONICS INC.	Granted
19	10103829	US	LG ELECTRONICS INC.	Granted
20	10-2133852	KR	LG ELECTRONICS INC.	Granted
21	10-2133853	KR	LG ELECTRONICS INC.	Granted
22	10158515	US	LG ELECTRONICS INC.	Granted
23	JP6657310	JP	LG ELECTRONICS INC.	Granted
24	10-1860889	KR	LG ELECTRONICS INC.	Granted
25	10020904	US	LG ELECTRONICS INC.	Granted
26	10-1853672	KR	LG ELECTRONICS INC.	Granted
27	9813275	US	LG ELECTRONICS INC.	Granted
28	9979578	US	LG ELECTRONICS INC.	Granted
29	16/390128	US	LG ELECTRONICS INC.	Pending
30	9699778	US	LG ELECTRONICS INC.	Granted
31	9954709	US	LG ELECTRONICS INC.	Granted
32	10057101	US	LG ELECTRONICS INC.	Granted
33	2617993	RU	LG ELECTRONICS INC.	Granted
34	10237590	US	LG ELECTRONICS INC.	Granted
35	16/459870	US	LG ELECTRONICS INC.	Pending
36	9780981	US	LG ELECTRONICS INC.	Granted
37	EP03244619	EP	LG ELECTRONICS INC.	Granted
38	ZL201580072541.8	CN	LG ELECTRONICS INC.	Granted
39	JP6405051	JP	LG ELECTRONICS INC.	Granted

40	JP2018-171495	JP	LG ELECTRONICS INC.	Pending
41	MX361435	MX	LG ELECTRONICS INC.	Granted
42	201727023861	IN	LG ELECTRONICS INC.	Pending
43	2973073	CA	LG ELECTRONICS INC.	Granted
44	10-2004835	KR	LG ELECTRONICS INC.	Granted
45	10601625	US	LG ELECTRONICS INC.	Granted
46	10263822	US	LG ELECTRONICS INC.	Granted
47	9722846	US	LG ELECTRONICS INC.	Granted
48	3068513	CA	LG ELECTRONICS INC.	Pending
49	3069685	CA	LG ELECTRONICS INC.	Pending
50	10855507	US	LG ELECTRONICS INC.	Granted
51	202011077115.2	CN	LG ELECTRONICS INC.	Pending
52	10116480	US	LG ELECTRONICS INC.	Granted
53	EP03244620	EP	LG ELECTRONICS INC.	Granted
54	ZL201580072361.X	CN	LG ELECTRONICS INC.	Granted
55	JP6404479	JP	LG ELECTRONICS INC.	Granted
56	MX361014	MX	LG ELECTRONICS INC.	Granted
57	IN353564	IN	LG ELECTRONICS INC.	Granted
58	2972953	CA	LG ELECTRONICS INC.	Granted
59	10-1964653	KR	LG ELECTRONICS INC.	Granted
60	10057009	US	LG ELECTRONICS INC.	Granted
61	9832056	US	LG ELECTRONICS INC.	Granted
62	10-2221303	KR	LG ELECTRONICS INC.	Granted
63	10-2221304	KR	LG ELECTRONICS INC.	Granted
64	10-1759957	KR	LG ELECTRONICS INC.	Granted
65	ZL201810111438.5	CN	LG ELECTRONICS INC.	Granted
66	10079663	US	LG ELECTRONICS INC.	Granted
67	9992003	US	LG ELECTRONICS INC.	Granted
68	10250400	US	LG ELECTRONICS INC.	Granted
69	10-1625071	KR	LG ELECTRONICS INC.	Granted
70	10181929	US	LG ELECTRONICS INC.	Granted
71	10-1788068	KR	LG ELECTRONICS INC.	Granted
72	10298270	US	LG ELECTRONICS INC.	Granted
73	10637507	US	LG ELECTRONICS INC.	Granted
74	201810735633.5	CN	LG ELECTRONICS INC.	Pending
75	JP6513858	JP	LG ELECTRONICS INC.	Granted
76	9813271	US	LG ELECTRONICS INC.	Granted
77	10057098	US	LG ELECTRONICS INC.	Granted
78	10686617	US	LG ELECTRONICS INC.	Granted
79	10158455	US	LG ELECTRONICS INC.	Granted
80	10587368	US	LG ELECTRONICS INC.	Granted
81	ZL201580021000.2	CN	LG ELECTRONICS INC.	Granted
82	JP6567548	JP	LG ELECTRONICS INC.	Granted
83	10-1875665	KR	LG ELECTRONICS INC.	Granted
84	201911345719.8	CN	LG ELECTRONICS INC.	Pending
85	16/809412	US	LG ELECTRONICS INC.	Pending
86	9992656	US	LG ELECTRONICS INC.	Granted
87	10-1832785	KR	LG ELECTRONICS INC.	Granted
88	9755873	US	LG ELECTRONICS INC.	Granted
89	10097392	US	LG ELECTRONICS INC.	Granted

90	10367668	US	LG ELECTRONICS INC.	Granted
91	10-1853671	KR	LG ELECTRONICS INC.	Granted
92	10623221	US	LG ELECTRONICS INC.	Granted
93	202010065643.X	CN	LG ELECTRONICS INC.	Pending
94	202010064078.5	CN	LG ELECTRONICS INC.	Pending
95	10911277	US	LG ELECTRONICS INC.	Granted
96	17/148049	US	LG ELECTRONICS INC.	Pending
97	9735923	US	LG ELECTRONICS INC.	Granted
98	9998316	US	LG ELECTRONICS INC.	Granted
99	JP6267358	JP	LG ELECTRONICS INC.	Granted
100	10-1867833	KR	LG ELECTRONICS INC.	Granted
101	202010081534.7	CN	LG ELECTRONICS INC.	Pending
102	202010081550.6	CN	LG ELECTRONICS INC.	Pending
103	9806930	US	LG ELECTRONICS INC.	Granted
104	10225200	US	LG ELECTRONICS INC.	Granted
105	10764197	US	LG ELECTRONICS INC.	Granted
106	10-1850312	KR	LG ELECTRONICS INC.	Granted
107	ZL201811294685.X	CN	LG ELECTRONICS INC.	Granted
108	10250424	US	LG ELECTRONICS INC.	Granted
109	10708621	US	LG ELECTRONICS INC.	Granted
110	16/884152	US	LG ELECTRONICS INC.	Pending
111	9705718	US	LG ELECTRONICS INC.	Granted
112	10172129	US	LG ELECTRONICS INC.	Granted
113	9806852	US	LG ELECTRONICS INC.	Granted
114	10158453	US	LG ELECTRONICS INC.	Granted
115	9979498	US	LG ELECTRONICS INC.	Granted
116	10009206	US	LG ELECTRONICS INC.	Granted
117	2951010	CA	LG ELECTRONICS INC.	Granted
118	ZL201580027613.7	CN	LG ELECTRONICS INC.	Granted
119	201627038632	IN	LG ELECTRONICS INC.	Pending
120	MX370053	MX	LG ELECTRONICS INC.	Granted
121	10-1891116	KR	LG ELECTRONICS INC.	Granted
122	10-2082704	KR	LG ELECTRONICS INC.	Granted
123	9847899	US	LG ELECTRONICS INC.	Granted
124	10-2121851	KR	LG ELECTRONICS INC.	Granted
125	10541783	US	LG ELECTRONICS INC.	Granted
126	10693593	US	LG ELECTRONICS INC.	Granted
127	10050743	US	LG ELECTRONICS INC.	Granted
128	EP03151568	EP	LG ELECTRONICS INC.	Granted
129	ZL201580029471.8	CN	LG ELECTRONICS INC.	Granted
130	2951012	CA	LG ELECTRONICS INC.	Granted
131	10-1875668	KR	LG ELECTRONICS INC.	Granted
132	10992418	US	LG ELECTRONICS INC.	Granted
133	EP03151568	DE	LG ELECTRONICS INC.	Granted
134	10104404	US	LG ELECTRONICS INC.	Granted
135	9723340	US	LG ELECTRONICS INC.	Granted
136	10999112	US	LG ELECTRONICS INC.	Granted
137	10498577	US	LG ELECTRONICS INC.	Granted
138	9882755	US	LG ELECTRONICS INC.	Granted
139	10-1807673	KR	LG ELECTRONICS INC.	Granted

140	10-2031097	KR	LG ELECTRONICS INC.	Granted
141	ZL201580060362.2	CN	LG ELECTRONICS INC.	Granted
142	JP6392463	JP	LG ELECTRONICS INC.	Granted
143	2966980	CA	LG ELECTRONICS INC.	Granted
144	201727015205	IN	LG ELECTRONICS INC.	Pending
145	1-2017-02072	VN	LG ELECTRONICS INC.	Pending
146	3079690	CA	LG ELECTRONICS INC.	Pending
147	3079698	CA	LG ELECTRONICS INC.	Pending
148	202010669424.2	CN	LG ELECTRONICS INC.	Pending
149	202010668655.1	CN	LG ELECTRONICS INC.	Pending
150	9948426	US	LG ELECTRONICS INC.	Granted
151	EP03253062	EP	LG ELECTRONICS INC.	Granted
152	ZL201580069792.0	CN	LG ELECTRONICS INC.	Granted
153	JP6453462	JP	LG ELECTRONICS INC.	Granted
154	10-1899830	KR	LG ELECTRONICS INC.	Granted
155	202010259196.1	CN	LG ELECTRONICS INC.	Pending
156	JP6453463	JP	LG ELECTRONICS INC.	Granted
157	201580069725.9	CN	LG ELECTRONICS INC.	Pending
158	10-1971970	KR	LG ELECTRONICS INC.	Granted
159	9929785	US	LG ELECTRONICS INC.	Granted
160	10-1737853	KR	LG ELECTRONICS INC.	Granted
161	10555013	US	LG ELECTRONICS INC.	Granted
162	10841631	US	LG ELECTRONICS INC.	Granted
163	16/522284	US	LG ELECTRONICS INC.	Pending
164	10848799	US	LG ELECTRONICS INC.	Granted
165	16/525107	US	LG ELECTRONICS INC.	Pending
166	16/526506	US	LG ELECTRONICS INC.	Pending
167	17/196706	US	LG ELECTRONICS INC.	Pending
168	10158510	US	LG ELECTRONICS INC.	Granted
169	9935736	US	LG ELECTRONICS INC.	Granted
170	10-1774325	KR	LG ELECTRONICS INC.	Granted
171	9800444	US	LG ELECTRONICS INC.	Granted
172	10142147	US	LG ELECTRONICS INC.	Granted
173	10103919	US	LG ELECTRONICS INC.	Granted
174	10063332	US	LG ELECTRONICS INC.	Granted
175	10454616	US	LG ELECTRONICS INC.	Granted
176	9949094	US	LG ELECTRONICS INC.	Granted
177	10278032	US	LG ELECTRONICS INC.	Granted
178	10715966	US	LG ELECTRONICS INC.	Granted
179	ZL201580026557.5	CN	LG ELECTRONICS INC.	Granted
180	10-2016-7029161	KR	LG ELECTRONICS INC.	Pending
181	202010090020.8	CN	LG ELECTRONICS INC.	Pending
182	EP15897258.8	EP	LG ELECTRONICS INC.	Pending
183	10652700	US	LG ELECTRONICS INC.	Granted
184	ZL201580081293.3	CN	LG ELECTRONICS INC.	Granted
185	JP6629888	JP	LG ELECTRONICS INC.	Granted
186	10-2065423	KR	LG ELECTRONICS INC.	Granted
187	10880695	US	LG ELECTRONICS INC.	Granted
188	17/133242	US	LG ELECTRONICS INC.	Pending
189	9735902	US	LG ELECTRONICS INC.	Granted

190	10367673	US	LG ELECTRONICS INC.	Granted
191	ZL201580012521.1	CN	LG ELECTRONICS INC.	Granted
192	JP6462001	JP	LG ELECTRONICS INC.	Granted
193	10237108	US	LG ELECTRONICS INC.	Granted
194	9866420	US	LG ELECTRONICS INC.	Granted
195	ZL201580009801.7	CN	LG ELECTRONICS INC.	Granted
196	202010081556.3	CN	LG ELECTRONICS INC.	Pending
197	9985712	US	LG ELECTRONICS INC.	Granted
198	ZL201580027164.6	CN	LG ELECTRONICS INC.	Granted
199	10-1890629	KR	LG ELECTRONICS INC.	Granted
200	9998265	US	LG ELECTRONICS INC.	Granted
201	10396951	US	LG ELECTRONICS INC.	Granted
202	ZL201580027183.9	CN	LG ELECTRONICS INC.	Granted
203	10-1890630	KR	LG ELECTRONICS INC.	Granted
204	9906388	US	LG ELECTRONICS INC.	Granted
205	10243770	US	LG ELECTRONICS INC.	Granted
206	ZL201580071458.9	CN	LG ELECTRONICS INC.	Granted
207	10-2108073	KR	LG ELECTRONICS INC.	Granted
208	202010088126.4	CN	LG ELECTRONICS INC.	Pending
209	202010089193.8	CN	LG ELECTRONICS INC.	Pending
210	9923746	US	LG ELECTRONICS INC.	Granted
211	ZL201580071690.2	CN	LG ELECTRONICS INC.	Granted
212	10-2112008	KR	LG ELECTRONICS INC.	Granted
213	10-2221302	KR	LG ELECTRONICS INC.	Granted
214	9924206	US	LG ELECTRONICS INC.	Granted
215	10070160	US	LG ELECTRONICS INC.	Granted
216	10244274	US	LG ELECTRONICS INC.	Granted
217	10644918	US	LG ELECTRONICS INC.	Granted
218	10-1975344	KR	LG ELECTRONICS INC.	Granted
219	JP6480562	JP	LG ELECTRONICS INC.	Granted
220	2946773	CA	LG ELECTRONICS INC.	Granted
221	ZL201580027387.2	CN	LG ELECTRONICS INC.	Granted
222	JP6480569	JP	LG ELECTRONICS INC.	Granted
223	ZL201580043737.4	CN	LG ELECTRONICS INC.	Granted
224	EP15899750.2	EP	LG ELECTRONICS INC.	Pending
225	10-2036116	KR	LG ELECTRONICS INC.	Granted
226	10382239	US	LG ELECTRONICS INC.	Granted
227	10547482	US	LG ELECTRONICS INC.	Granted
228	10158513	US	LG ELECTRONICS INC.	Granted
229	10812308	US	LG ELECTRONICS INC.	Granted
230	202010263695.8	CN	LG ELECTRONICS INC.	Pending
231	17/007864	US	LG ELECTRONICS INC.	Pending
232	ZL201580043957.7	CN	LG ELECTRONICS INC.	Granted
233	JP6317522	JP	LG ELECTRONICS INC.	Granted
234	10-1911274	KR	LG ELECTRONICS INC.	Granted
235	ZL201580043958.1	CN	LG ELECTRONICS INC.	Granted
236	JP6367472	JP	LG ELECTRONICS INC.	Granted
237	10-1899829	KR	LG ELECTRONICS INC.	Granted
238	202010310681.7	CN	LG ELECTRONICS INC.	Pending
239	202010310332.5	CN	LG ELECTRONICS INC.	Pending

240	9681416	US	LG ELECTRONICS INC.	Granted
241	ZL201580063768.6	CN	LG ELECTRONICS INC.	Granted
242	JP6615879	JP	LG ELECTRONICS INC.	Granted
243	10-1911275	KR	LG ELECTRONICS INC.	Granted
244	9917717	US	LG ELECTRONICS INC.	Granted
245	10158449	US	LG ELECTRONICS INC.	Granted
246	ZL201580063738.5	CN	LG ELECTRONICS INC.	Granted
247	JP6453460	JP	LG ELECTRONICS INC.	Granted
248	10-1911276	KR	LG ELECTRONICS INC.	Granted
249	10194197	US	LG ELECTRONICS INC.	Granted
250	10750232	US	LG ELECTRONICS INC.	Granted
251	16/994156	US	LG ELECTRONICS INC.	Pending
252	9918113	US	LG ELECTRONICS INC.	Granted
253	9787516	US	LG ELECTRONICS INC.	Granted
254	9917720	US	LG ELECTRONICS INC.	Granted
255	10044545	US	LG ELECTRONICS INC.	Granted
256	10-2138534	KR	LG ELECTRONICS INC.	Granted
257	JP6487054	JP	LG ELECTRONICS INC.	Granted
258	10-2216250	KR	LG ELECTRONICS INC.	Granted
259	10-2021-7003552	KR	LG ELECTRONICS INC.	Pending
260	10251029	US	LG ELECTRONICS INC.	Granted
261	10542388	US	LG ELECTRONICS INC.	Granted
262	10432372	US	LG ELECTRONICS INC.	Granted
263	16/556631	US	LG ELECTRONICS INC.	Pending
264	10-1889796	KR	LG ELECTRONICS INC.	Granted
265	ZL201580024480.8	CN	LG ELECTRONICS INC.	Granted
266	9832061	US	LG ELECTRONICS INC.	Granted
267	10091042	US	LG ELECTRONICS INC.	Granted
268	201580069700.9	CN	LG ELECTRONICS INC.	Pending
269	10348545	US	LG ELECTRONICS INC.	Granted
270	10-1889797	KR	LG ELECTRONICS INC.	Granted
271	2945944	CA	LG ELECTRONICS INC.	Granted
272	ZL201580028652.9	CN	LG ELECTRONICS INC.	Granted
273	201627033944	IN	LG ELECTRONICS INC.	Pending
274	VN27970	VN	LG ELECTRONICS INC.	Granted
275	JP6336621	JP	LG ELECTRONICS INC.	Granted
276	9935809	US	LG ELECTRONICS INC.	Granted
277	10193732	US	LG ELECTRONICS INC.	Granted
278	10554466	US	LG ELECTRONICS INC.	Granted
279	10-1889798	KR	LG ELECTRONICS INC.	Granted
280	EP03276972	EP	LG ELECTRONICS INC.	Granted
281	ZL201580028795.X	CN	LG ELECTRONICS INC.	Granted
282	JP6480469	JP	LG ELECTRONICS INC.	Granted
283	10931495	US	LG ELECTRONICS INC.	Granted
284	202010069544.9	CN	LG ELECTRONICS INC.	Pending
285	EP03276972	DE	LG ELECTRONICS INC.	Granted
286	EP03276972	FR	LG ELECTRONICS INC.	Granted
287	EP03276972	GB	LG ELECTRONICS INC.	Granted
288	17/164176	US	LG ELECTRONICS INC.	Pending
289	9923743	US	LG ELECTRONICS INC.	Granted

290	10193725	US	LG ELECTRONICS INC.	Granted
291	10-1901263	KR	LG ELECTRONICS INC.	Granted
292	ZL201580036101.7	CN	LG ELECTRONICS INC.	Granted
293	202010504967.9	CN	LG ELECTRONICS INC.	Pending
294	EP15881310.5	EP	LG ELECTRONICS INC.	Pending
295	ZL201580075386.5	CN	LG ELECTRONICS INC.	Granted
296	10-2109409	KR	LG ELECTRONICS INC.	Granted
297	10142146	US	LG ELECTRONICS INC.	Granted
298	10454731	US	LG ELECTRONICS INC.	Granted
299	10764098	US	LG ELECTRONICS INC.	Granted
300	10-2154532	KR	LG ELECTRONICS INC.	Granted
301	16/917105	US	LG ELECTRONICS INC.	Pending
302	10-1691841	KR	LG ELECTRONICS INC.	Granted
303	10-1728736	KR	LG ELECTRONICS INC.	Granted
304	RE47611	US	LG ELECTRONICS INC.	Granted
305	10-2124486	KR	LG ELECTRONICS INC.	Granted
306	ZL201580078166.8	CN	LG ELECTRONICS INC.	Granted
307	9985813	US	LG ELECTRONICS INC.	Granted
308	10270638	US	LG ELECTRONICS INC.	Granted
309	10680868	US	LG ELECTRONICS INC.	Granted
310	10972327	US	LG ELECTRONICS INC.	Granted
311	10-2179826	KR	LG ELECTRONICS INC.	Granted
312	202011085778.9	CN	LG ELECTRONICS INC.	Pending
313	9729375	US	LG ELECTRONICS INC.	Granted
314	9917718	US	LG ELECTRONICS INC.	Granted
315	10-2052378	KR	LG ELECTRONICS INC.	Granted
316	201580078262.2	CN	LG ELECTRONICS INC.	Pending
317	10158452	US	LG ELECTRONICS INC.	Granted
318	ZL201580071684.7	CN	LG ELECTRONICS INC.	Granted
319	10-2024611	KR	LG ELECTRONICS INC.	Granted
320	202010661339.1	CN	LG ELECTRONICS INC.	Pending
321	ZL201580071831.0	CN	LG ELECTRONICS INC.	Granted
322	10-2024612	KR	LG ELECTRONICS INC.	Granted
323	202010320830.8	CN	LG ELECTRONICS INC.	Pending
324	2819221	CA	LG ELECTRONICS INC.	Granted
325	RE48249	US	LG ELECTRONICS INC.	Granted
326	17/063547	US	LG ELECTRONICS INC.	Pending
327	10349382	US	LG ELECTRONICS INC.	Granted
328	16/447327	US	LG ELECTRONICS INC.	Pending
329	10-2127404	KR	LG ELECTRONICS INC.	Granted
330	10-2218923	KR	LG ELECTRONICS INC.	Granted
331	9979579	US	LG ELECTRONICS INC.	Granted
332	10862726	US	LG ELECTRONICS INC.	Granted
333	10-1901943	KR	LG ELECTRONICS INC.	Granted
334	ZL201580017496.6	CN	LG ELECTRONICS INC.	Granted
335	JP2019-074249	JP	LG ELECTRONICS INC.	Pending
336	2944569	CA	LG ELECTRONICS INC.	Granted
337	201627032098	IN	LG ELECTRONICS INC.	Pending
338	17/098722	US	LG ELECTRONICS INC.	Pending
339	10063289	US	LG ELECTRONICS INC.	Granted

340	10764103	US	LG ELECTRONICS INC.	Granted
341	10-1861693	KR	LG ELECTRONICS INC.	Granted
342	EP15776157.8	EP	LG ELECTRONICS INC.	Pending
343	ZL201580017105.0	CN	LG ELECTRONICS INC.	Granted
344	JP6466471	JP	LG ELECTRONICS INC.	Granted
345	2943822	CA	LG ELECTRONICS INC.	Granted
346	201627030941	IN	LG ELECTRONICS INC.	Pending
347	10728075	US	LG ELECTRONICS INC.	Granted
348	JP6510730	JP	LG ELECTRONICS INC.	Granted
349	ZL201680051881.7	CN	LG ELECTRONICS INC.	Granted
350	10-2017709	KR	LG ELECTRONICS INC.	Granted
351	202010511171.6	CN	LG ELECTRONICS INC.	Pending
352	202010510885.5	CN	LG ELECTRONICS INC.	Pending
353	16/928394	US	LG ELECTRONICS INC.	Pending
354	9794102	US	LG ELECTRONICS INC.	Granted
355	10587444	US	LG ELECTRONICS INC.	Granted
356	9578624	US	LG ELECTRONICS INC.	Granted
357	9750009	US	LG ELECTRONICS INC.	Granted
358	9973366	US	LG ELECTRONICS INC.	Granted
359	10129067	US	LG ELECTRONICS INC.	Granted
360	10-1853052	KR	LG ELECTRONICS INC.	Granted
361	ZL201580050364.3	CN	LG ELECTRONICS INC.	Granted
362	JP6352524	JP	LG ELECTRONICS INC.	Granted
363	1-2017-00568	VN	LG ELECTRONICS INC.	Pending
364	201727000521	IN	LG ELECTRONICS INC.	Pending
365	10135657	US	LG ELECTRONICS INC.	Granted
366	10778494	US	LG ELECTRONICS INC.	Granted
367	10-2024610	KR	LG ELECTRONICS INC.	Granted
368	ZL201580066045.1	CN	LG ELECTRONICS INC.	Granted
369	JP6396592	JP	LG ELECTRONICS INC.	Granted
370	10985963	US	LG ELECTRONICS INC.	Granted
371	202011390173.0	CN	LG ELECTRONICS INC.	Pending
372	10587367	US	LG ELECTRONICS INC.	Granted
373	10-2052379	KR	LG ELECTRONICS INC.	Granted
374	201580078326.9	CN	LG ELECTRONICS INC.	Pending
375	16/789745	US	LG ELECTRONICS INC.	Pending
376		CN	LG ELECTRONICS INC.	Granted
377		CN	LG ELECTRONICS INC.	Granted
378	10009147	US	LG ELECTRONICS INC.	Granted
379	10-2052380	KR	LG ELECTRONICS INC.	Granted
380	EP15888606.9	EP	LG ELECTRONICS INC.	Pending
381	JP6514358	JP	LG ELECTRONICS INC.	Granted
382	EP03255855	EP	LG ELECTRONICS INC.	Granted
383	10103915	US	LG ELECTRONICS INC.	Granted
384	10530620	US	LG ELECTRONICS INC.	Granted
385	ZL201580061673.0	CN	LG ELECTRONICS INC.	Granted
386	JP6437643	JP	LG ELECTRONICS INC.	Granted
387	10-2020242	KR	LG ELECTRONICS INC.	Granted
388	10911275	US	LG ELECTRONICS INC.	Granted
389	202010978837.9	CN	LG ELECTRONICS INC.	Pending

390	17/148373	US	LG ELECTRONICS INC.	Pending
391	EP03255854	EP	LG ELECTRONICS INC.	Granted
392	10129061	US	LG ELECTRONICS INC.	Granted
393	ZL201580057034.7	CN	LG ELECTRONICS INC.	Granted
394	JP6437639	JP	LG ELECTRONICS INC.	Granted
395	10-2020243	KR	LG ELECTRONICS INC.	Granted
396	9584258	US	LG ELECTRONICS INC.	Granted
397	10075188	US	LG ELECTRONICS INC.	Granted
398	10784898	US	LG ELECTRONICS INC.	Granted
399	10171848	US	LG ELECTRONICS INC.	Granted
400	9894638	US	LG ELECTRONICS INC.	Granted
401	10-1617272	KR	LG ELECTRONICS INC.	Granted
402	10924314	US	LG ELECTRONICS INC.	Granted
403	9774925	US	LG ELECTRONICS INC.	Granted
404	9590795	US	LG ELECTRONICS INC.	Granted
405	9917715	US	LG ELECTRONICS INC.	Granted
406	9806861	US	LG ELECTRONICS INC.	Granted
407	10153872	US	LG ELECTRONICS INC.	Granted
408	9847898	US	LG ELECTRONICS INC.	Granted
409	EP03206352	EP	LG ELECTRONICS INC.	Granted
410	ZL201580055163.2	CN	LG ELECTRONICS INC.	Granted
411	10-2052974	KR	LG ELECTRONICS INC.	Granted
412	202010629929.6	CN	LG ELECTRONICS INC.	Pending
413	EP03206352	DE	LG ELECTRONICS INC.	Granted
414	EP03206404	EP	LG ELECTRONICS INC.	Granted
415	10263739	US	LG ELECTRONICS INC.	Granted
416	10673585	US	LG ELECTRONICS INC.	Granted
417	ZL201580055137.X	CN	LG ELECTRONICS INC.	Granted
418	JP6542372	JP	LG ELECTRONICS INC.	Granted
419	10-2057866	KR	LG ELECTRONICS INC.	Granted
420	10892862	US	LG ELECTRONICS INC.	Granted
421	17/107296	US	LG ELECTRONICS INC.	Pending
422	EP03206404	DE	LG ELECTRONICS INC.	Granted
423	9882763	US	LG ELECTRONICS INC.	Granted
424	2014202290	AU	LG ELECTRONICS INC.	Granted
425	10-1979854	KR	LG ELECTRONICS INC.	Granted
426	10-1984602	KR	LG ELECTRONICS INC.	Granted
427	9854412	US	LG ELECTRONICS INC.	Granted
428	10250426	US	LG ELECTRONICS INC.	Granted
429	10-2040625	KR	LG ELECTRONICS INC.	Granted
430	9635520	US	LG ELECTRONICS INC.	Granted
431	9906393	US	LG ELECTRONICS INC.	Granted
432	10135659	US	LG ELECTRONICS INC.	Granted
433	10277445	US	LG ELECTRONICS INC.	Granted
434	10491446	US	LG ELECTRONICS INC.	Granted
435	10721112	US	LG ELECTRONICS INC.	Granted
436	10-2017706	KR	LG ELECTRONICS INC.	Granted
437	ZL201680010345.2	CN	LG ELECTRONICS INC.	Granted
438	202011143203.8	CN	LG ELECTRONICS INC.	Pending
439	202011143195.7	CN	LG ELECTRONICS INC.	Pending

440	10116416	US	LG ELECTRONICS INC.	Granted
441	9935657	US	LG ELECTRONICS INC.	Granted
442	2950574	CA	LG ELECTRONICS INC.	Granted
443	ZL201580030810.4	CN	LG ELECTRONICS INC.	Granted
444	201627039890	IN	LG ELECTRONICS INC.	Pending
445	MX366500	MX	LG ELECTRONICS INC.	Granted
446	10-1929782	KR	LG ELECTRONICS INC.	Granted
447	10-2004274	KR	LG ELECTRONICS INC.	Granted
448	10-1899826	KR	LG ELECTRONICS INC.	Granted
449	10057008	US	LG ELECTRONICS INC.	Granted
450	10277254	US	LG ELECTRONICS INC.	Granted
451	EP15807342.9	EP	LG ELECTRONICS INC.	Pending
452	2951875	CA	LG ELECTRONICS INC.	Granted
453	ZL201580030831.6	CN	LG ELECTRONICS INC.	Granted
454	10263642	US	LG ELECTRONICS INC.	Granted
455	10009079	US	LG ELECTRONICS INC.	Granted
456	10116366	US	LG ELECTRONICS INC.	Granted
457	RE47856	US	LG ELECTRONICS INC.	Granted
458	9923747	US	LG ELECTRONICS INC.	Granted
459	10-1838082	KR	LG ELECTRONICS INC.	Granted
460	10652598	US	LG ELECTRONICS INC.	Granted
461	JP6697034	JP	LG ELECTRONICS INC.	Granted
462	16/871627	US	LG ELECTRONICS INC.	Pending
463	10103920	US	LG ELECTRONICS INC.	Granted
464	10142153	US	LG ELECTRONICS INC.	Granted
465	10-1759854	KR	LG ELECTRONICS INC.	Granted
466	JP6784725	JP	LG ELECTRONICS INC.	Granted
467	16/866128	US	LG ELECTRONICS INC.	Pending
468		US	LG ELECTRONICS INC.	Granted
469	10-2163920	KR	LG ELECTRONICS INC.	Granted
470	10469189	US	LG ELECTRONICS INC.	Granted
471	16/597088	US	LG ELECTRONICS INC.	Pending
472	10-2020-7027489	KR	LG ELECTRONICS INC.	Pending
473	10264300	US	LG ELECTRONICS INC.	Granted
474	9948444	US	LG ELECTRONICS INC.	Granted
475	10-1871730	KR	LG ELECTRONICS INC.	Granted
476	10-1799276	KR	LG ELECTRONICS INC.	Granted
477	10027999	US	LG ELECTRONICS INC.	Granted
478	10334295	US	LG ELECTRONICS INC.	Granted
479	RE48276	US	LG ELECTRONICS INC.	Granted
480	EP16824559.5	EP	LG ELECTRONICS INC.	Pending
481	10505675	US	LG ELECTRONICS INC.	Granted
482	JP6640982	JP	LG ELECTRONICS INC.	Granted
483	10-2065425	KR	LG ELECTRONICS INC.	Granted
484	16/702033	US	LG ELECTRONICS INC.	Pending
485	10-2065426	KR	LG ELECTRONICS INC.	Granted
486	10498489	US	LG ELECTRONICS INC.	Granted
487	10-2096405	KR	LG ELECTRONICS INC.	Granted
488	10-2225953	KR	LG ELECTRONICS INC.	Granted
489	10491332	US	LG ELECTRONICS INC.	Granted

490	10-2088024	KR	LG ELECTRONICS INC.	Granted
491	ZL201680041124.1	CN	LG ELECTRONICS INC.	Granted
492	10-2202339	KR	LG ELECTRONICS INC.	Granted
493	202110428776.3	CN	LG ELECTRONICS INC.	Pending
494	202110428978.8	CN	LG ELECTRONICS INC.	Pending
495	16/260646	US	LG ELECTRONICS INC.	Pending
496		US	LG ELECTRONICS INC.	Granted
497	10666390	US	LG ELECTRONICS INC.	Granted
498	10924213	US	LG ELECTRONICS INC.	Granted
499	16/304573	US	LG ELECTRONICS INC.	Pending
500	PCT/KR2016/005499	PC	LG ELECTRONICS INC.	Pending
501	16/509012	US	LG ELECTRONICS INC.	Pending
502	10602238	US	LG ELECTRONICS INC.	Granted
503	10225626	US	LG ELECTRONICS INC.	Granted
504	10187703	US	LG ELECTRONICS INC.	Granted
505	10-1781889	KR	LG ELECTRONICS INC.	Granted
506	10070188	US	LG ELECTRONICS INC.	Granted
507	10676922	US	LG ELECTRONICS INC.	Granted
508	10-1727049	KR	LG ELECTRONICS INC.	Granted
509	10-1759958	KR	LG ELECTRONICS INC.	Granted
510	9756366	US	LG ELECTRONICS INC.	Granted
511	10136169	US	LG ELECTRONICS INC.	Granted
512	10609520	US	LG ELECTRONICS INC.	Granted
513	9860016	US	LG ELECTRONICS INC.	Granted
514	10097312	US	LG ELECTRONICS INC.	Granted
515	9948960	US	LG ELECTRONICS INC.	Granted
516	9730088	US	LG ELECTRONICS INC.	Granted
517	10405205	US	LG ELECTRONICS INC.	Granted
518	10959116	US	LG ELECTRONICS INC.	Granted
519	10045078	US	LG ELECTRONICS INC.	Granted
520	10193575	US	LG ELECTRONICS INC.	Granted
521	10790856	US	LG ELECTRONICS INC.	Granted
522	16/533503	US	LG ELECTRONICS INC.	Pending
523	10044453	US	LG ELECTRONICS INC.	Granted
524	9755849	US	LG ELECTRONICS INC.	Granted
525	10084568	US	LG ELECTRONICS INC.	Granted
526	9924220	US	LG ELECTRONICS INC.	Granted
527	9716921	US	LG ELECTRONICS INC.	Granted
528	9980015	US	LG ELECTRONICS INC.	Granted
529	2902381	CA	LG ELECTRONICS INC.	Granted
530	10244289	US	LG ELECTRONICS INC.	Granted
531	10200728	US	LG ELECTRONICS INC.	Granted
532	10165336	US	LG ELECTRONICS INC.	Granted
533	10-1674965	KR	LG ELECTRONICS INC.	Granted
534	10-1680678	KR	LG ELECTRONICS INC.	Granted
535	10-1746544	KR	LG ELECTRONICS INC.	Granted
536	10-1664427	KR	LG ELECTRONICS INC.	Granted
537	10-1709512	KR	LG ELECTRONICS INC.	Granted
538	10-1649530	KR	LG ELECTRONICS INC.	Granted
539	10-1680679	KR	LG ELECTRONICS INC.	Granted

540	10-1689615	KR	LG ELECTRONICS INC.	Granted
541	10-1669973	KR	LG ELECTRONICS INC.	Granted
542	10-1680681	KR	LG ELECTRONICS INC.	Granted
543	10-1752433	KR	LG ELECTRONICS INC.	Granted
544	10-1634195	KR	LG ELECTRONICS INC.	Granted
545	10-1617271	KR	LG ELECTRONICS INC.	Granted
546	10-1680683	KR	LG ELECTRONICS INC.	Granted
547	10-1619507	KR	LG ELECTRONICS INC.	Granted
548	10-1737850	KR	LG ELECTRONICS INC.	Granted
549	10-1697602	KR	LG ELECTRONICS INC.	Granted
550	10-1672290	KR	LG ELECTRONICS INC.	Granted
551	10-1680682	KR	LG ELECTRONICS INC.	Granted
552	10-1759951	KR	LG ELECTRONICS INC.	Granted
553	10439757	US	LG ELECTRONICS INC.	Granted
554	16/525443	US	LG ELECTRONICS INC.	Pending
555	3068668	CA	LG ELECTRONICS INC.	Pending
556	10827216	US	LG ELECTRONICS INC.	Granted
557	10334310	US	LG ELECTRONICS INC.	Granted
558	16/998996	US	LG ELECTRONICS INC.	Pending
559	10-1861695	KR	LG ELECTRONICS INC.	Granted
560	10728369	US	LG ELECTRONICS INC.	Granted
561	16/901304	US	LG ELECTRONICS INC.	Pending
562	10-1857673	KR	LG ELECTRONICS INC.	Granted
563	16/950108	US	LG ELECTRONICS INC.	Pending
564	10362450	US	LG ELECTRONICS INC.	Granted
565	10952035	US	LG ELECTRONICS INC.	Granted
566	10-1752437	KR	LG ELECTRONICS INC.	Granted
567	17/188398	US	LG ELECTRONICS INC.	Pending
568	10848332	US	LG ELECTRONICS INC.	Granted
569	10-1880467	KR	LG ELECTRONICS INC.	Granted
570	17/078434	US	LG ELECTRONICS INC.	Pending
571	16/807417	US	LG ELECTRONICS INC.	Pending
572	RE47958	US	LG ELECTRONICS INC.	Granted
573	16/852176	US	LG ELECTRONICS INC.	Pending
574	10-1857666	KR	LG ELECTRONICS INC.	Granted
575	9712892	US	LG ELECTRONICS INC.	Granted
576	10771600	US	LG ELECTRONICS INC.	Granted
577	17/012978	US	LG ELECTRONICS INC.	Pending
578	10574798	US	LG ELECTRONICS INC.	Granted
579	10-1799278	KR	LG ELECTRONICS INC.	Granted
580	16/781361	US	LG ELECTRONICS INC.	Pending
581	202011043918.6	CN	LG ELECTRONICS INC.	Pending
582	202011039590.0	CN	LG ELECTRONICS INC.	Pending
583	10511876	US	LG ELECTRONICS INC.	Granted
584	10848812	US	LG ELECTRONICS INC.	Granted
585	10-2225948	KR	LG ELECTRONICS INC.	Granted
586	17/076260	US	LG ELECTRONICS INC.	Pending
587	10-2021-7006363	KR	LG ELECTRONICS INC.	Pending
588	10-2021-7006364	KR	LG ELECTRONICS INC.	Pending
589	10939149	US	LG ELECTRONICS INC.	Granted

590	17/173576	US	LG ELECTRONICS INC.	Pending
591	10778580	US	LG ELECTRONICS INC.	Granted
592	ZL201680000887.1	CN	LG ELECTRONICS INC.	Granted
593	10-1801595	KR	LG ELECTRONICS INC.	Granted
594	16/882070	US	LG ELECTRONICS INC.	Pending
595	9929820	US	LG ELECTRONICS INC.	Granted
596	10171192	US	LG ELECTRONICS INC.	Granted
597	10615896	US	LG ELECTRONICS INC.	Granted
598	16/806725	US	LG ELECTRONICS INC.	Pending
599		US	LG ELECTRONICS INC.	Granted
600	10893304	US	LG ELECTRONICS INC.	Granted
601	17/097599	US	LG ELECTRONICS INC.	Pending
602	10-1814398	KR	LG ELECTRONICS INC.	Granted
603	ZL201580025850.X	CN	LG ELECTRONICS INC.	Granted
604	2947833	CA	LG ELECTRONICS INC.	Granted
605	10-1814403	KR	LG ELECTRONICS INC.	Granted
606	10516771	US	LG ELECTRONICS INC.	Granted
607	10-2034593	KR	LG ELECTRONICS INC.	Granted
608	ZL201680016916.3	CN	LG ELECTRONICS INC.	Granted
609	202010701565.8	CN	LG ELECTRONICS INC.	Pending
610	202010696875.5	CN	LG ELECTRONICS INC.	Pending
611	10-2044702	KR	LG ELECTRONICS INC.	Granted
612	10609102	US	LG ELECTRONICS INC.	Granted
613	16/813266	US	LG ELECTRONICS INC.	Pending
614	10212478	US	LG ELECTRONICS INC.	Granted
615	10-1956037	KR	LG ELECTRONICS INC.	Granted
616	10728306	US	LG ELECTRONICS INC.	Granted
617	10779053	US	LG ELECTRONICS INC.	Granted
618	17/020456	US	LG ELECTRONICS INC.	Pending
619	10727964	US	LG ELECTRONICS INC.	Granted
620	10-1899827	KR	LG ELECTRONICS INC.	Granted
621	10985852	US	LG ELECTRONICS INC.	Granted
622	17/192581	US	LG ELECTRONICS INC.	Pending
623	10-1814404	KR	LG ELECTRONICS INC.	Granted
624	10412443	US	LG ELECTRONICS INC.	Granted
625	10848817	US	LG ELECTRONICS INC.	Granted
626	EP03267689	EP	LG ELECTRONICS INC.	Granted
627	ZL201680000809.1	CN	LG ELECTRONICS INC.	Granted
628	202011089909.0	CN	LG ELECTRONICS INC.	Pending
629	202011088826.X	CN	LG ELECTRONICS INC.	Pending
630	10362345	US	LG ELECTRONICS INC.	Granted
631	10749917	US	LG ELECTRONICS INC.	Granted
632	10609103	US	LG ELECTRONICS INC.	Granted
633	15/555385	US	LG ELECTRONICS INC.	Pending
634	10645203	US	LG ELECTRONICS INC.	Granted
635	16/853091	US	LG ELECTRONICS INC.	Pending
636	10721538	US	LG ELECTRONICS INC.	Granted
637	10469919	US	LG ELECTRONICS INC.	Granted
638	ZL201580023596.X	CN	LG ELECTRONICS INC.	Granted
639	10-1823482	KR	LG ELECTRONICS INC.	Granted

640	10623691	US	LG ELECTRONICS INC.	Granted
641	10-1837485	KR	LG ELECTRONICS INC.	Granted
642	10-1875672	KR	LG ELECTRONICS INC.	Granted
643	ZL201580021561.2	CN	LG ELECTRONICS INC.	Granted
644	16/847090	US	LG ELECTRONICS INC.	Pending
645	10492100	US	LG ELECTRONICS INC.	Granted
646	EP03242457	EP	LG ELECTRONICS INC.	Granted
647	16/530255	US	LG ELECTRONICS INC.	Pending
648	10-1853669	KR	LG ELECTRONICS INC.	Granted
649	10-1812186	KR	LG ELECTRONICS INC.	Granted
650	10419792	US	LG ELECTRONICS INC.	Granted
651	ZL201580017070.0	CN	LG ELECTRONICS INC.	Granted
652	10-1823483	KR	LG ELECTRONICS INC.	Granted
653	16/923449	US	LG ELECTRONICS INC.	Pending
654	10827232	US	LG ELECTRONICS INC.	Granted
655	10-1801590	KR	LG ELECTRONICS INC.	Granted
656	202010086245.6	CN	LG ELECTRONICS INC.	Pending
657	202010085866.2	CN	LG ELECTRONICS INC.	Pending
658	17/031308	US	LG ELECTRONICS INC.	Pending
659	10-1871727	KR	LG ELECTRONICS INC.	Granted
660	10-1975343	KR	LG ELECTRONICS INC.	Granted
661	ZL201680001322.5	CN	LG ELECTRONICS INC.	Granted
662	10687121	US	LG ELECTRONICS INC.	Granted
663	16/397463	US	LG ELECTRONICS INC.	Pending
664	10887635	US	LG ELECTRONICS INC.	Granted
665	10743044	US	LG ELECTRONICS INC.	Granted
666	ZL201580016718.2	CN	LG ELECTRONICS INC.	Granted
667	10-1801594	KR	LG ELECTRONICS INC.	Granted
668	2941597	CA	LG ELECTRONICS INC.	Granted
669	3077439	CA	LG ELECTRONICS INC.	Pending
670	3077488	CA	LG ELECTRONICS INC.	Pending
671	16/916870	US	LG ELECTRONICS INC.	Pending
672	10284886	US	LG ELECTRONICS INC.	Granted
673	10848797	US	LG ELECTRONICS INC.	Granted
674	ZL201580016719.7	CN	LG ELECTRONICS INC.	Granted
675	10-1801593	KR	LG ELECTRONICS INC.	Granted
676	17/083101	US	LG ELECTRONICS INC.	Pending
677	10567815	US	LG ELECTRONICS INC.	Granted
678	ZL201580014179.9	CN	LG ELECTRONICS INC.	Granted
679	10-1801592	KR	LG ELECTRONICS INC.	Granted
680	10939147	US	LG ELECTRONICS INC.	Granted
681	16/666069	US	LG ELECTRONICS INC.	Pending
682	10-1804926	KR	LG ELECTRONICS INC.	Granted
683		US	LG ELECTRONICS INC.	Granted
684	JP6556890	JP	LG ELECTRONICS INC.	Granted
685	10972527	US	LG ELECTRONICS INC.	Granted
686	17/188778	US	LG ELECTRONICS INC.	Pending
687	10-1788067	KR	LG ELECTRONICS INC.	Granted
688	10887353	US	LG ELECTRONICS INC.	Granted
689	17/140359	US	LG ELECTRONICS INC.	Pending

690	9699623	US	LG ELECTRONICS INC.	Granted
691	10028034	US	LG ELECTRONICS INC.	Granted
692	JP6204502	JP	LG ELECTRONICS INC.	Granted
693	10-2129800	KR	LG ELECTRONICS INC.	Granted
694	ZL201480007226.2	CN	LG ELECTRONICS INC.	Granted
695	EP02953279	EP	LG ELECTRONICS INC.	Granted
696	10-2129804	KR	LG ELECTRONICS INC.	Granted
697	10-2221300	KR	LG ELECTRONICS INC.	Granted
698	16/922842	US	LG ELECTRONICS INC.	Pending
699	10848795	US	LG ELECTRONICS INC.	Granted
700	10-1829845	KR	LG ELECTRONICS INC.	Granted
701	ZL201680000945.0	CN	LG ELECTRONICS INC.	Granted
702	16/736059	US	LG ELECTRONICS INC.	Pending
703	202010081366.1	CN	LG ELECTRONICS INC.	Pending
704	202010081367.6	CN	LG ELECTRONICS INC.	Pending
705	17/245893	US	LG ELECTRONICS INC.	Pending
706	10-1789640	KR	LG ELECTRONICS INC.	Granted
707	10687096	US	LG ELECTRONICS INC.	Granted
708	ZL201580020521.6	CN	LG ELECTRONICS INC.	Granted
709	10972771	US	LG ELECTRONICS INC.	Granted
710	10075747	US	LG ELECTRONICS INC.	Granted
711	10-1861692	KR	LG ELECTRONICS INC.	Granted
712	10-1880468	KR	LG ELECTRONICS INC.	Granted
713	9948986	US	LG ELECTRONICS INC.	Granted
714	10743072	US	LG ELECTRONICS INC.	Granted
715	10-1898493	KR	LG ELECTRONICS INC.	Granted
716	ZL201580031202.5	CN	LG ELECTRONICS INC.	Granted
717	202010101451.X	CN	LG ELECTRONICS INC.	Pending
718	202010101476.X	CN	LG ELECTRONICS INC.	Pending
719	16/919322	US	LG ELECTRONICS INC.	Pending
720	10405046	US	LG ELECTRONICS INC.	Granted
721	10863241	US	LG ELECTRONICS INC.	Granted
722	ZL201580031203.X	CN	LG ELECTRONICS INC.	Granted
723	JP6423016	JP	LG ELECTRONICS INC.	Granted
724	10-1904946	KR	LG ELECTRONICS INC.	Granted
725	17/091491	US	LG ELECTRONICS INC.	Pending
726	10-1792519	KR	LG ELECTRONICS INC.	Granted
727	ZL201680000833.5	CN	LG ELECTRONICS INC.	Granted
728	10616124	US	LG ELECTRONICS INC.	Granted
729	10887242	US	LG ELECTRONICS INC.	Granted
730	10-1844237	KR	LG ELECTRONICS INC.	Granted
731	10666476	US	LG ELECTRONICS INC.	Granted
732	10250421	US	LG ELECTRONICS INC.	Granted
733	9929888	US	LG ELECTRONICS INC.	Granted
734	10-1788065	KR	LG ELECTRONICS INC.	Granted
735	10880339	US	LG ELECTRONICS INC.	Granted
736	17/135121	US	LG ELECTRONICS INC.	Pending
737	10-1960317	KR	LG ELECTRONICS INC.	Granted
738	10681426	US	LG ELECTRONICS INC.	Granted
739	10129602	US	LG ELECTRONICS INC.	Granted

740	10659191	US	LG ELECTRONICS INC.	Granted
741	EP03223519	EP	LG ELECTRONICS INC.	Granted
742	3074965	CA	LG ELECTRONICS INC.	Pending
743	10938511	US	LG ELECTRONICS INC.	Granted
744	17/156165	US	LG ELECTRONICS INC.	Pending
745	10856021	US	LG ELECTRONICS INC.	Granted
746	10728590	US	LG ELECTRONICS INC.	Granted
747	16/922652	US	LG ELECTRONICS INC.	Pending
748	10721502	US	LG ELECTRONICS INC.	Granted
749	16/387216	US	LG ELECTRONICS INC.	Pending
750	201680039024.5	CN	LG ELECTRONICS INC.	Pending
751	10939145	US	LG ELECTRONICS INC.	Granted
752	17/157415	US	LG ELECTRONICS INC.	Pending
753	10171852	US	LG ELECTRONICS INC.	Granted
754	10193723	US	LG ELECTRONICS INC.	Granted
755	10659265	US	LG ELECTRONICS INC.	Granted
756	16/877351	US	LG ELECTRONICS INC.	Pending
757	10264553	US	LG ELECTRONICS INC.	Granted
758	10-1877154	KR	LG ELECTRONICS INC.	Granted
759	10-2004837	KR	LG ELECTRONICS INC.	Granted
760	10694259	US	LG ELECTRONICS INC.	Granted
761	ZL201580017936.8	CN	LG ELECTRONICS INC.	Granted
762	JP6262880	JP	LG ELECTRONICS INC.	Granted
763	16/890708	US	LG ELECTRONICS INC.	Pending
764	10567851	US	LG ELECTRONICS INC.	Granted
765	10-1758882	KR	LG ELECTRONICS INC.	Granted
766	10-1758882	KR	LG ELECTRONICS INC.	Granted
767	16/731616	US	LG ELECTRONICS INC.	Pending
768	10320669	US	LG ELECTRONICS INC.	Granted
769	10389855	US	LG ELECTRONICS INC.	Granted
770	10582029	US	LG ELECTRONICS INC.	Granted
771	16/774522	US	LG ELECTRONICS INC.	Pending
772	10454885	US	LG ELECTRONICS INC.	Granted
773	10887277	US	LG ELECTRONICS INC.	Granted
774	JP6301497	JP	LG ELECTRONICS INC.	Granted
775	10-1823486	KR	LG ELECTRONICS INC.	Granted
776	10-1861696	KR	LG ELECTRONICS INC.	Granted
777	16/829474	US	LG ELECTRONICS INC.	Pending
778	10440448	US	LG ELECTRONICS INC.	Granted
779	10674233	US	LG ELECTRONICS INC.	Granted
780	10334294	US	LG ELECTRONICS INC.	Granted
781	10623786	US	LG ELECTRONICS INC.	Granted
782	10-1753595	KR	LG ELECTRONICS INC.	Granted
783	16/811594	US	LG ELECTRONICS INC.	Pending
784	16/413042	US	LG ELECTRONICS INC.	Pending
785	10-1789641	KR	LG ELECTRONICS INC.	Granted
786	10911800	US	LG ELECTRONICS INC.	Granted
787	ZL201580004456.8	CN	LG ELECTRONICS INC.	Granted
788	JP6466951	JP	LG ELECTRONICS INC.	Granted
789	10-1788066	KR	LG ELECTRONICS INC.	Granted

790	17/164310	US	LG ELECTRONICS INC.	Pending
791	ZL201580002817.5	CN	LG ELECTRONICS INC.	Granted
792	ZL201580009960.7	CN	LG ELECTRONICS INC.	Granted
793	10-1805537	KR	LG ELECTRONICS INC.	Granted
794	10-1838083	KR	LG ELECTRONICS INC.	Granted
795	17/152438	US	LG ELECTRONICS INC.	Pending
796	10701110	US	LG ELECTRONICS INC.	Granted
797	10-1802765	KR	LG ELECTRONICS INC.	Granted
798	ZL201580019939.5	CN	LG ELECTRONICS INC.	Granted
799	16/913584	US	LG ELECTRONICS INC.	Pending
800	10212461	US	LG ELECTRONICS INC.	Granted
801	10674186	US	LG ELECTRONICS INC.	Granted
802	16/862312	US	LG ELECTRONICS INC.	Pending
803	10470240	US	LG ELECTRONICS INC.	Granted
804	16/593368	US	LG ELECTRONICS INC.	Pending
805	10-1832780	KR	LG ELECTRONICS INC.	Granted
806	9948417	US	LG ELECTRONICS INC.	Granted
807	ZL201580039054.1	CN	LG ELECTRONICS INC.	Granted
808	MX367680	MX	LG ELECTRONICS INC.	Granted
809	10-1779434	KR	LG ELECTRONICS INC.	Granted
810	9955220	US	LG ELECTRONICS INC.	Granted
811	10-1844235	KR	LG ELECTRONICS INC.	Granted
812	10003678	US	LG ELECTRONICS INC.	Granted
813	10594417	US	LG ELECTRONICS INC.	Granted
814	10944492	US	LG ELECTRONICS INC.	Granted
815	17/166442	US	LG ELECTRONICS INC.	Pending
816	10498792	US	LG ELECTRONICS INC.	Granted
817	10855738	US	LG ELECTRONICS INC.	Granted
818	17/107477	US	LG ELECTRONICS INC.	Pending
819	10305722	US	LG ELECTRONICS INC.	Granted
820	10574504	US	LG ELECTRONICS INC.	Granted
821	10873495	US	LG ELECTRONICS INC.	Granted
822	16/952871	US	LG ELECTRONICS INC.	Pending
823	10659281	US	LG ELECTRONICS INC.	Granted
824	10-2197968	KR	LG ELECTRONICS INC.	Granted
825	16/824694	US	LG ELECTRONICS INC.	Pending
826	10-2238541	KR	LG ELECTRONICS INC.	Granted
827	10-2241085	KR	LG ELECTRONICS INC.	Granted
828	10-2021-7009098	KR	LG ELECTRONICS INC.	Pending
829	10356451	US	LG ELECTRONICS INC.	Granted
830	10638172	US	LG ELECTRONICS INC.	Granted
831	ZL201680039890.4	CN	LG ELECTRONICS INC.	Granted
832	10-2014800	KR	LG ELECTRONICS INC.	Granted
833	16/816485	US	LG ELECTRONICS INC.	Pending
834	202010960183.7	CN	LG ELECTRONICS INC.	Pending
835	202010960659.7	CN	LG ELECTRONICS INC.	Pending
836	10070162	US	LG ELECTRONICS INC.	Granted
837	10440447	US	LG ELECTRONICS INC.	Granted
838	10945050	US	LG ELECTRONICS INC.	Granted
839	10171849	US	LG ELECTRONICS INC.	Granted

840	10-2023018	KR	LG ELECTRONICS INC.	Granted
841	10917186	US	LG ELECTRONICS INC.	Granted
842	EP03328019	EP	LG ELECTRONICS INC.	Granted
843	17/155948	US	LG ELECTRONICS INC.	Pending
844	10362371	US	LG ELECTRONICS INC.	Granted
845	10674234	US	LG ELECTRONICS INC.	Granted
846	2986763	CA	LG ELECTRONICS INC.	Granted
847	10-2017-7033465	KR	LG ELECTRONICS INC.	Pending
848	3078377	CA	LG ELECTRONICS INC.	Pending
849	16/859011	US	LG ELECTRONICS INC.	Pending
850	10341036	US	LG ELECTRONICS INC.	Granted
851	10-1757302	KR	LG ELECTRONICS INC.	Granted
852	10079649	US	LG ELECTRONICS INC.	Granted
853	10721535	US	LG ELECTRONICS INC.	Granted
854	10-1901944	KR	LG ELECTRONICS INC.	Granted
855	16/894119	US	LG ELECTRONICS INC.	Pending
856	10715845	US	LG ELECTRONICS INC.	Granted
857	16/900366	US	LG ELECTRONICS INC.	Pending
858	10750217	US	LG ELECTRONICS INC.	Granted
859	16/995415	US	LG ELECTRONICS INC.	Pending
860	10848798	US	LG ELECTRONICS INC.	Granted
861	17/102248	US	LG ELECTRONICS INC.	Pending
862	10667004	US	LG ELECTRONICS INC.	Granted
863	16/843192	US	LG ELECTRONICS INC.	Pending
864	10582255	US	LG ELECTRONICS INC.	Granted
865	ZL201580035879.6	CN	LG ELECTRONICS INC.	Granted
866	10-1875666	KR	LG ELECTRONICS INC.	Granted
867	16/781684	US	LG ELECTRONICS INC.	Pending
868	202010278136.4	CN	LG ELECTRONICS INC.	Pending
869	202010278138.3	CN	LG ELECTRONICS INC.	Pending
870	10277255	US	LG ELECTRONICS INC.	Granted
871	10389460	US	LG ELECTRONICS INC.	Granted
872	10826632	US	LG ELECTRONICS INC.	Granted
873	17/031591	US	LG ELECTRONICS INC.	Pending
874	10609459	US	LG ELECTRONICS INC.	Granted
875	16/834753	US	LG ELECTRONICS INC.	Pending
876		US	LG ELECTRONICS INC.	Granted
877	10659521	US	LG ELECTRONICS INC.	Granted
878	10951686	US	LG ELECTRONICS INC.	Granted
879	17/167306	US	LG ELECTRONICS INC.	Pending
880	16/462823	US	LG ELECTRONICS INC.	Pending
881	10-2019-7018044	KR	LG ELECTRONICS INC.	Pending
882	3045597	CA	LG ELECTRONICS INC.	Pending
883	PCT/KR2017/007217	PC	LG ELECTRONICS INC.	Pending
884	17/202938	US	LG ELECTRONICS INC.	Pending
885	16/302203	US	LG ELECTRONICS INC.	Pending
886	PCT/KR2017/006021	PC	LG ELECTRONICS INC.	Pending
887	16/826384	US	LG ELECTRONICS INC.	Pending
888	10448105	US	LG ELECTRONICS INC.	Granted
889	10904620	US	LG ELECTRONICS INC.	Granted

890	10-2145742	KR	LG ELECTRONICS INC.	Granted
891	10-2145744	KR	LG ELECTRONICS INC.	Granted
892	10-2145745	KR	LG ELECTRONICS INC.	Granted
893	10454602	US	LG ELECTRONICS INC.	Granted
894	16/569860	US	LG ELECTRONICS INC.	Pending
895	10721505	US	LG ELECTRONICS INC.	Granted
896	16/903506	US	LG ELECTRONICS INC.	Pending
897	10756835	US	LG ELECTRONICS INC.	Granted
898	10-2157657	KR	LG ELECTRONICS INC.	Granted
899	17/001226	US	LG ELECTRONICS INC.	Pending
900	10-2196319	KR	LG ELECTRONICS INC.	Granted
901	10-2196320	KR	LG ELECTRONICS INC.	Granted
902	16/757665	US	LG ELECTRONICS INC.	Pending
903	10-2020-7000610	KR	LG ELECTRONICS INC.	Pending
904	PCT/KR2018/013655	PC	LG ELECTRONICS INC.	Pending
905	201880072268.2	CN	LG ELECTRONICS INC.	Pending
906	MXa2020004441	MX	LG ELECTRONICS INC.	Pending
907	9800953	US	LG ELECTRONICS INC.	Granted
908	10405061	US	LG ELECTRONICS INC.	Granted
909	10904641	US	LG ELECTRONICS INC.	Granted
910	10917669	US	LG ELECTRONICS INC.	Granted
911	10-2018-7001683	KR	LG ELECTRONICS INC.	Pending
912	ZL201680051496.2	CN	LG ELECTRONICS INC.	Granted
913	17/162107	US	LG ELECTRONICS INC.	Pending
914	202110192071.6	CN	LG ELECTRONICS INC.	Pending
915	202110195349.5	CN	LG ELECTRONICS INC.	Pending
916	16/659472	US	LG ELECTRONICS INC.	Pending
917	9806851	US	LG ELECTRONICS INC.	Granted
918	10454614	US	LG ELECTRONICS INC.	Granted
919	10819761	US	LG ELECTRONICS INC.	Granted
920	10736080	US	LG ELECTRONICS INC.	Granted
921	10-2131835	KR	LG ELECTRONICS INC.	Granted
922	10-2196318	KR	LG ELECTRONICS INC.	Granted
923	10-2020-7010382	KR	LG ELECTRONICS INC.	Pending
924	16/907498	US	LG ELECTRONICS INC.	Pending
925	10659945	US	LG ELECTRONICS INC.	Granted
926	10-1789955	KR	LG ELECTRONICS INC.	Granted
927	10917777	US	LG ELECTRONICS INC.	Granted
928	17/143005	US	LG ELECTRONICS INC.	Pending
929	10742705	US	LG ELECTRONICS INC.	Granted
930	EP03223517	EP	LG ELECTRONICS INC.	Granted
931	16/989173	US	LG ELECTRONICS INC.	Pending
932	2703846	CA	LG ELECTRONICS INC.	Granted
933	10-1737852	KR	LG ELECTRONICS INC.	Granted
934	10-1733506	KR	LG ELECTRONICS INC.	Granted
935	ZL201510146588.6	CN	LG ELECTRONICS INC.	Granted
936	10-1706972	KR	LG ELECTRONICS INC.	Granted
937	10-1733505	KR	LG ELECTRONICS INC.	Granted
938	10-1731354	KR	LG ELECTRONICS INC.	Granted
939	10-1759949	KR	LG ELECTRONICS INC.	Granted

940	10-1757304	KR	LG ELECTRONICS INC.	Granted
941	10-1709513	KR	LG ELECTRONICS INC.	Granted
942	10-1725248	KR	LG ELECTRONICS INC.	Granted
943	10-1809957	KR	LG ELECTRONICS INC.	Granted
944	10637595	US	LG ELECTRONICS INC.	Granted
945	10841646	US	LG ELECTRONICS INC.	Granted
946	17/097693	US	LG ELECTRONICS INC.	Pending
947	ZL201510162217.7	CN	LG ELECTRONICS INC.	Granted
948	ZL201510232384.4	CN	LG ELECTRONICS INC.	Granted
949	10-1838084	KR	LG ELECTRONICS INC.	Granted
950	10-1805538	KR	LG ELECTRONICS INC.	Granted
951	10-1840203	KR	LG ELECTRONICS INC.	Granted
952	10-1841947	KR	LG ELECTRONICS INC.	Granted
953	10-1850723	KR	LG ELECTRONICS INC.	Granted
954	10-1865299	KR	LG ELECTRONICS INC.	Granted
955	10-1875664	KR	LG ELECTRONICS INC.	Granted
956	10-1875667	KR	LG ELECTRONICS INC.	Granted
957	10-1703866	KR	LG ELECTRONICS INC.	Granted
958	10-1727048	KR	LG ELECTRONICS INC.	Granted
959	10-1623022	KR	LG ELECTRONICS INC.	Granted
960	9794645	US	LG ELECTRONICS INC.	Granted
961	10-1868628	KR	LG ELECTRONICS INC.	Granted
962	9848251	US	LG ELECTRONICS INC.	Granted
963	10-1635889	KR	LG ELECTRONICS INC.	Granted
964	10-1635894	KR	LG ELECTRONICS INC.	Granted
965	10-2019-0139758	KR	LG ELECTRONICS INC.	Pending
966	16/672729	US	LG ELECTRONICS INC.	Pending
967	PCT/KR2019/014862	PC	LG ELECTRONICS INC.	Pending
968	BR1120210084304	BR	LG ELECTRONICS INC.	Pending
969	10-2127395	KR	LG ELECTRONICS INC.	Granted
970	3121MUMNP2015	IN	LG ELECTRONICS INC.	Pending

Disclosure of Information

In accordance with Sections 3 and 4 of the ATSC Patent Policy, if the Discloser has made a licensing declaration under paragraph (c) above, please provide the following information;

- an identification of each patent or patent application that is the subject matter of the Essential Claim;
- an identification of specific section(s) or text of the Specification Document that are relevant to the Essential Claim; and
- an identification of each patent or patent application claim covering the Specification Document.

This information is informal in nature and does not constitute a legal opinion, but should be based on "good faith and belief" of the Discloser. Information provided in this section does not represent a formal "notice" that implementation of any resulting ATSC Standard or Recommended Practice would infringe any patent or patent application for the Essential Claim.

Completed By:

Name of Participant	_____
	LG ELECTRONICS INC.
Name of Representative	_____
	<i>Hwi-Jae CHO</i>
Title of Representative	_____
	<i>Vice president</i>
Signature	_____
	<i>[Handwritten Signature]</i>
Place, Date	_____
	Seoul, KOREA , <i>June. 14. 2021</i>