

# ATSC

## Disclosure Statement and Licensing Declaration

This declaration does not represent an implied license grant

Please return to:

President  
ATSC

1750 K Street NW  
Suite 1200  
Washington, DC 20006  
202-872-9160-Office  
202-872-9161 - Fax

Discloser:

Name of  
Participant

Samsung Electronics Co., LTD.

### Contact Information for Participant's Representative:

Name of  
Representative

HeungMo Lee  
DMC Research Center, Samsung Electronics,  
34, Seongchon-gil, Seocho-gu, Seoul, Korea

Tel.

82-2-6147-3500

Fax

82-2-6147-3977

Email

heungmo@samsung.com

URL (Optional)

### Identification of ATSC Specification Document relevant to the Disclosure Statement:

Number

A/322, A/330, A/331, A/341, A/342

Title

- ATSC Finalized Standard : Physical Layer Protocol (A/322), Link-Layer Protocol (A/330), Video (A/341), Audio (A/342)
- ATSC Proposed Standard : Signaling, Delivery, Synchronization, and Error Protection (A/331)

**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   X   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.t 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/ Application Holder    | Status [granted/pending] |
|-----|------------------------|---------|-------------------------------|--------------------------|
| 1   | 2644491                | CA      | Samsung Electronics Co., LTD. | Granted                  |
| 2   | 2644495                | CA      | Samsung Electronics Co., LTD. | Granted                  |
| 3   | ZL200780009908.7       | CN      | Samsung Electronics Co., LTD. | Granted                  |
| 4   | ZL200780010023.9       | CN      | Samsung Electronics Co., LTD. | Granted                  |
| 5   | ZL200910207652.1       | CN      | Samsung Electronics Co., LTD. | Granted                  |
| 6   | ZL200910207647.0       | CN      | Samsung Electronics Co., LTD. | Granted                  |
| 7   | 293561                 | MX      | Samsung Electronics Co., LTD. | Granted                  |
| 8   | 293574                 | MX      | Samsung Electronics Co., LTD. | Granted                  |
| 9   | US7639751              | US      | Samsung Electronics Co., LTD. | Granted                  |
| 10  | US8493973              | US      | Samsung Electronics Co., LTD. | Granted                  |
| 11  | US8218666              | US      | Samsung Electronics Co., LTD. | Granted                  |
| 12  | 13811                  | VN      | Samsung Electronics Co., LTD. | Granted                  |
| 13  | 13858                  | VN      | Samsung Electronics Co., LTD. | Granted                  |
| 14  | PI0713659-5            | BR      | Samsung Electronics Co., LTD. | Pending                  |
| 15  | PI0722371-4            | BR      | Samsung Electronics Co., LTD. | Pending                  |
| 16  | PI0722372-2            | BR      | Samsung Electronics Co., LTD. | Pending                  |
| 17  | 2645533                | CA      | Samsung Electronics Co., LTD. | Granted                  |
| 18  | 2686278                | CA      | Samsung Electronics Co., LTD. | Granted                  |
| 19  | 2686669                | CA      | Samsung Electronics Co., LTD. | Granted                  |
| 20  | ZL200780012724.6       | CN      | Samsung Electronics Co., LTD. | Granted                  |
| 21  | ZL200910174011.0       | CN      | Samsung Electronics Co., LTD. | Granted                  |
| 22  | 309748                 | MX      | Samsung Electronics Co., LTD. | Granted                  |
| 23  | 311289                 | MX      | Samsung Electronics Co., LTD. | Granted                  |
| 24  | 311276                 | MX      | Samsung Electronics Co., LTD. | Granted                  |
| 25  | US8599875              | US      | Samsung Electronics Co., LTD. | Granted                  |
| 26  | US8830995              | US      | Samsung Electronics Co., LTD. | Granted                  |
| 27  | US8824503              | US      | Samsung Electronics Co., LTD. | Granted                  |

|    |                  |    |                               |         |
|----|------------------|----|-------------------------------|---------|
| 28 | US8831038        | US | Samsung Electronics Co., LTD. | Granted |
| 29 | 9829             | VN | Samsung Electronics Co., LTD. | Granted |
| 30 | 12861            | VN | Samsung Electronics Co., LTD. | Granted |
| 31 | 2684993          | CA | Samsung Electronics Co., LTD. | Granted |
| 32 | 2684401          | CA | Samsung Electronics Co., LTD. | Granted |
| 33 | ZL200910205858.0 | CN | Samsung Electronics Co., LTD. | Granted |
| 34 | ZL200910205859.5 | CN | Samsung Electronics Co., LTD. | Granted |
| 35 | ZL200910205860.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 36 | P0793963         | KR | Samsung Electronics Co., LTD. | Granted |
| 37 | 299289           | MX | Samsung Electronics Co., LTD. | Granted |
| 38 | 298693           | MX | Samsung Electronics Co., LTD. | Granted |
| 39 | 303994           | MX | Samsung Electronics Co., LTD. | Granted |
| 40 | US7876750        | US | Samsung Electronics Co., LTD. | Granted |
| 41 | US7929529        | US | Samsung Electronics Co., LTD. | Granted |
| 42 | US8223764        | US | Samsung Electronics Co., LTD. | Granted |
| 43 | 0710525-8        | BR | Samsung Electronics Co., LTD. | Pending |
| 44 | 2645612          | CA | Samsung Electronics Co., LTD. | Granted |
| 45 | ZL200780010132.0 | CN | Samsung Electronics Co., LTD. | Granted |
| 46 | ZL200910170700.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 47 | P0811186         | KR | Samsung Electronics Co., LTD. | Granted |
| 48 | 301333           | MX | Samsung Electronics Co., LTD. | Granted |
| 49 | US8548000        | US | Samsung Electronics Co., LTD. | Granted |
| 50 | 13859            | VN | Samsung Electronics Co., LTD. | Granted |
| 51 | 2625353          | CA | Samsung Electronics Co., LTD. | Granted |
| 52 | 2680190          | CA | Samsung Electronics Co., LTD. | Granted |
| 53 | ZL200680038636.9 | CN | Samsung Electronics Co., LTD. | Granted |
| 54 | ZL200910222726.9 | CN | Samsung Electronics Co., LTD. | Granted |
| 55 | 5312944          | JP | Samsung Electronics Co., LTD. | Granted |
| 56 | 5205355          | JP | Samsung Electronics Co., LTD. | Granted |
| 57 | P0740202         | KR | Samsung Electronics Co., LTD. | Granted |
| 58 | 303995           | MX | Samsung Electronics Co., LTD. | Granted |
| 59 | 304988           | MX | Samsung Electronics Co., LTD. | Granted |
| 60 | US8594139        | US | Samsung Electronics Co., LTD. | Granted |

|    |                  |    |                               |         |
|----|------------------|----|-------------------------------|---------|
| 61 | US8050298        | US | Samsung Electronics Co., LTD. | Granted |
| 62 | 2625405          | CA | Samsung Electronics Co., LTD. | Granted |
| 63 | ZL200680037885.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 64 | 5221360          | JP | Samsung Electronics Co., LTD. | Granted |
| 65 | P0842083         | KR | Samsung Electronics Co., LTD. | Granted |
| 66 | 280053           | MX | Samsung Electronics Co., LTD. | Granted |
| 67 | US8356238        | US | Samsung Electronics Co., LTD. | Granted |
| 68 | 2625160          | CA | Samsung Electronics Co., LTD. | Granted |
| 69 | 2686274          | CA | Samsung Electronics Co., LTD. | Granted |
| 70 | 2686676          | CA | Samsung Electronics Co., LTD. | Granted |
| 71 | ZL200680038333.7 | CN | Samsung Electronics Co., LTD. | Granted |
| 72 | ZL200910225391.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 73 | ZL200910225392.0 | CN | Samsung Electronics Co., LTD. | Granted |
| 74 | ZL200910225390.1 | CN | Samsung Electronics Co., LTD. | Granted |
| 75 | 5221363          | JP | Samsung Electronics Co., LTD. | Granted |
| 76 | 5221497          | JP | Samsung Electronics Co., LTD. | Granted |
| 77 | 5221498          | JP | Samsung Electronics Co., LTD. | Granted |
| 78 | P0797176         | KR | Samsung Electronics Co., LTD. | Granted |
| 79 | 303990           | MX | Samsung Electronics Co., LTD. | Granted |
| 80 | 314957           | MX | Samsung Electronics Co., LTD. | Granted |
| 81 | 314958           | MX | Samsung Electronics Co., LTD. | Granted |
| 82 | US8514892        | US | Samsung Electronics Co., LTD. | Granted |
| 83 | US8457161        | US | Samsung Electronics Co., LTD. | Granted |
| 84 | US8385369        | US | Samsung Electronics Co., LTD. | Granted |
| 85 | P1414472         | KR | Samsung Electronics Co., LTD. | Granted |
| 86 | US9124924        | US | Samsung Electronics Co., LTD. | Granted |
| 87 | US8792587        | US | Samsung Electronics Co., LTD. | Granted |
| 88 | US8750422        | US | Samsung Electronics Co., LTD. | Granted |
| 89 | US8744007        | US | Samsung Electronics Co., LTD. | Granted |
| 90 | US8879668        | US | Samsung Electronics Co., LTD. | Granted |
| 91 | US8787500        | US | Samsung Electronics Co., LTD. | Granted |
| 92 | US8744008        | US | Samsung Electronics Co., LTD. | Granted |
| 93 | 2678408          | CA | Samsung Electronics Co., LTD. | Granted |

|     |                  |    |                               |         |
|-----|------------------|----|-------------------------------|---------|
| 94  | ZL200880009010.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 95  | 124797           | FI | Samsung Electronics Co., LTD. | Granted |
| 96  | P1366247         | KR | Samsung Electronics Co., LTD. | Granted |
| 97  | 301808           | MX | Samsung Electronics Co., LTD. | Granted |
| 98  | 14297            | VN | Samsung Electronics Co., LTD. | Granted |
| 99  | PI0809623-6      | BR | Samsung Electronics Co., LTD. | Pending |
| 100 | 2677188          | CA | Samsung Electronics Co., LTD. | Pending |
| 101 | ZL200880005996.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 102 | 289583           | MX | Samsung Electronics Co., LTD. | Granted |
| 103 | US8458576        | US | Samsung Electronics Co., LTD. | Granted |
| 104 | US8769388        | US | Samsung Electronics Co., LTD. | Granted |
| 105 | 13860            | VN | Samsung Electronics Co., LTD. | Granted |
| 106 | P1427647         | KR | Samsung Electronics Co., LTD. | Granted |
| 107 | US8718131        | US | Samsung Electronics Co., LTD. | Granted |
| 108 | 124807           | FI | Samsung Electronics Co., LTD. | Granted |
| 109 | P1496346         | KR | Samsung Electronics Co., LTD. | Granted |
| 110 | 306025           | MX | Samsung Electronics Co., LTD. | Granted |
| 111 | PI0814315-3      | BR | Samsung Electronics Co., LTD. | Pending |
| 112 | PI0823178-8      | BR | Samsung Electronics Co., LTD. | Pending |
| 113 | PI0823179-6      | BR | Samsung Electronics Co., LTD. | Pending |
| 114 | 2692639          | CA | Samsung Electronics Co., LTD. | Granted |
| 115 | 2700667          | CA | Samsung Electronics Co., LTD. | Granted |
| 116 | 2700674          | CA | Samsung Electronics Co., LTD. | Granted |
| 117 | ZL201010104385.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 118 | ZL201010104386.2 | CN | Samsung Electronics Co., LTD. | Granted |
| 119 | 302691           | MX | Samsung Electronics Co., LTD. | Granted |
| 120 | 317935           | MX | Samsung Electronics Co., LTD. | Granted |
| 121 | 304813           | MX | Samsung Electronics Co., LTD. | Granted |
| 122 | US8458554        | US | Samsung Electronics Co., LTD. | Granted |
| 123 | US8489963        | US | Samsung Electronics Co., LTD. | Granted |
| 124 | 13992            | VN | Samsung Electronics Co., LTD. | Granted |
| 125 | 13863            | VN | Samsung Electronics Co., LTD. | Granted |
| 126 | 13993            | VN | Samsung Electronics Co., LTD. | Granted |

|     |                  |    |                               |         |
|-----|------------------|----|-------------------------------|---------|
| 127 | PI0805828-8      | BR | Samsung Electronics Co., LTD. | Pending |
| 128 | 2666573          | CA | Samsung Electronics Co., LTD. | Granted |
| 129 | ZL200880001062.7 | CN | Samsung Electronics Co., LTD. | Granted |
| 130 | 124038           | FI | Samsung Electronics Co., LTD. | Granted |
| 131 | P1373013         | KR | Samsung Electronics Co., LTD. | Granted |
| 132 | 300253           | MX | Samsung Electronics Co., LTD. | Granted |
| 133 | US8275002        | US | Samsung Electronics Co., LTD. | Granted |
| 134 | 10247            | VN | Samsung Electronics Co., LTD. | Granted |
| 135 | PI0818445-3      | BR | Samsung Electronics Co., LTD. | Pending |
| 136 | 2702054          | CA | Samsung Electronics Co., LTD. | Granted |
| 137 | ZL200880110773.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 138 | 112008002691.2   | DE | Samsung Electronics Co., LTD. | Pending |
| 139 | 125467           | FI | Samsung Electronics Co., LTD. | Granted |
| 140 | P1416233         | KR | Samsung Electronics Co., LTD. | Granted |
| 141 | 292695           | MX | Samsung Electronics Co., LTD. | Granted |
| 142 | US8995353        | US | Samsung Electronics Co., LTD. | Granted |
| 143 | 13343            | VN | Samsung Electronics Co., LTD. | Granted |
| 144 | PI0805829-6      | BR | Samsung Electronics Co., LTD. | Pending |
| 145 | 2667571          | CA | Samsung Electronics Co., LTD. | Granted |
| 146 | ZL200880001075.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 147 | 112008000552.4   | DE | Samsung Electronics Co., LTD. | Pending |
| 148 | 124830           | FI | Samsung Electronics Co., LTD. | Granted |
| 149 | P1122200         | KR | Samsung Electronics Co., LTD. | Granted |
| 150 | 293627           | MX | Samsung Electronics Co., LTD. | Granted |
| 151 | US8717961        | US | Samsung Electronics Co., LTD. | Granted |
| 152 | 1-2009-01229     | VN | Samsung Electronics Co., LTD. | Pending |
| 153 | ZL200880022194.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 154 | 316886           | MX | Samsung Electronics Co., LTD. | Granted |
| 155 | P1138281         | KR | Samsung Electronics Co., LTD. | Granted |
| 156 | P1158098         | KR | Samsung Electronics Co., LTD. | Granted |
| 157 | 2732953          | CA | Samsung Electronics Co., LTD. | Granted |
| 158 | ZL200980132603.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 159 | ZL201310138607.1 | CN | Samsung Electronics Co., LTD. | Granted |

|     |                  |    |                               |         |
|-----|------------------|----|-------------------------------|---------|
| 160 | P1575632         | KR | Samsung Electronics Co., LTD. | Granted |
| 161 | 317646           | MX | Samsung Electronics Co., LTD. | Granted |
| 162 | 322974           | MX | Samsung Electronics Co., LTD. | Granted |
| 163 | US8503335        | US | Samsung Electronics Co., LTD. | Granted |
| 164 | US9131469        | US | Samsung Electronics Co., LTD. | Granted |
| 165 | 14970            | VN | Samsung Electronics Co., LTD. | Granted |
| 166 | P0970733         | KR | Samsung Electronics Co., LTD. | Granted |
| 167 | ZL200480016942.3 | CN | Samsung Electronics Co., LTD. | Granted |
| 168 | ZL200910141451.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 169 | P0698620         | KR | Samsung Electronics Co., LTD. | Granted |
| 170 | 255369           | MX | Samsung Electronics Co., LTD. | Granted |
| 171 | US7337386        | US | Samsung Electronics Co., LTD. | Granted |
| 172 | USRE44076        | US | Samsung Electronics Co., LTD. | Granted |
| 173 | USRE44053        | US | Samsung Electronics Co., LTD. | Granted |
| 174 | ZL200810178731.X | CN | Samsung Electronics Co., LTD. | Granted |
| 175 | ZL200810178729.2 | CN | Samsung Electronics Co., LTD. | Granted |
| 176 | ZL200910134563.9 | CN | Samsung Electronics Co., LTD. | Granted |
| 177 | 1680923          | DE | Samsung Electronics Co., LTD. | Granted |
| 178 | 1680923          | EP | Samsung Electronics Co., LTD. | Granted |
| 179 | P0683179         | KR | Samsung Electronics Co., LTD. | Granted |
| 180 | 276042           | MX | Samsung Electronics Co., LTD. | Granted |
| 181 | 1680923          | NL | Samsung Electronics Co., LTD. | Granted |
| 182 | US7480851        | US | Samsung Electronics Co., LTD. | Granted |
| 183 | US7865810        | US | Samsung Electronics Co., LTD. | Granted |
| 184 | 2554495          | CA | Samsung Electronics Co., LTD. | Granted |
| 185 | 2683448          | CA | Samsung Electronics Co., LTD. | Granted |
| 186 | 2683447          | CA | Samsung Electronics Co., LTD. | Granted |
| 187 | 2681959          | CA | Samsung Electronics Co., LTD. | Granted |
| 188 | 2681955          | CA | Samsung Electronics Co., LTD. | Granted |
| 189 | ZL200580003120.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 190 | ZL200910118486.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 191 | ZL200910204012.5 | CN | Samsung Electronics Co., LTD. | Granted |
| 192 | ZL200910204011.0 | CN | Samsung Electronics Co., LTD. | Granted |



|     |                  |    |                               |         |
|-----|------------------|----|-------------------------------|---------|
| 193 | ZL200910204010.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 194 | ZL200910204009.3 | CN | Samsung Electronics Co., LTD. | Granted |
| 195 | 4663658          | JP | Samsung Electronics Co., LTD. | Granted |
| 196 | 4594436          | JP | Samsung Electronics Co., LTD. | Granted |
| 197 | 5005752          | JP | Samsung Electronics Co., LTD. | Granted |
| 198 | 4975798          | JP | Samsung Electronics Co., LTD. | Granted |
| 199 | 5091218          | JP | Samsung Electronics Co., LTD. | Granted |
| 200 | P0896684         | KR | Samsung Electronics Co., LTD. | Granted |
| 201 | 275003           | MX | Samsung Electronics Co., LTD. | Granted |
| 202 | 298365           | MX | Samsung Electronics Co., LTD. | Granted |
| 203 | 298366           | MX | Samsung Electronics Co., LTD. | Granted |
| 204 | 300531           | MX | Samsung Electronics Co., LTD. | Granted |
| 205 | 298364           | MX | Samsung Electronics Co., LTD. | Granted |
| 206 | 2508605          | RU | Samsung Electronics Co., LTD. | Granted |
| 207 | US7593474        | US | Samsung Electronics Co., LTD. | Granted |
| 208 | US8019011        | US | Samsung Electronics Co., LTD. | Granted |
| 209 | US8107548        | US | Samsung Electronics Co., LTD. | Granted |
| 210 | US8199839        | US | Samsung Electronics Co., LTD. | Granted |
| 211 | US8050347        | US | Samsung Electronics Co., LTD. | Granted |
| 212 | 2511903          | CA | Samsung Electronics Co., LTD. | Granted |
| 213 | ZL200910132712.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 214 | ZL200910147511.5 | CN | Samsung Electronics Co., LTD. | Granted |
| 215 | P1058038         | KR | Samsung Electronics Co., LTD. | Granted |
| 216 | 252421           | MX | Samsung Electronics Co., LTD. | Granted |
| 217 | USRE42301        | US | Samsung Electronics Co., LTD. | Granted |
| 218 | P1086309         | KR | Samsung Electronics Co., LTD. | Granted |
| 219 | P1085916         | KR | Samsung Electronics Co., LTD. | Granted |
| 220 | P1160332         | KR | Samsung Electronics Co., LTD. | Granted |
| 221 | P1037942         | KR | Samsung Electronics Co., LTD. | Granted |
| 222 | P1037943         | KR | Samsung Electronics Co., LTD. | Granted |
| 223 | P1037944         | KR | Samsung Electronics Co., LTD. | Granted |
| 224 | P1037945         | KR | Samsung Electronics Co., LTD. | Granted |
| 225 | P1092538         | KR | Samsung Electronics Co., LTD. | Granted |

|     |            |    |                               |         |
|-----|------------|----|-------------------------------|---------|
| 226 | P1314752   | KR | Samsung Electronics Co., LTD. | Granted |
| 227 | P1366627   | KR | Samsung Electronics Co., LTD. | Granted |
| 228 | P1366634   | KR | Samsung Electronics Co., LTD. | Granted |
| 229 | P1468953   | KR | Samsung Electronics Co., LTD. | Granted |
| 230 | P1360002   | KR | Samsung Electronics Co., LTD. | Granted |
| 231 | P1393016   | KR | Samsung Electronics Co., LTD. | Granted |
| 232 | P1358292   | KR | Samsung Electronics Co., LTD. | Granted |
| 233 | P1358720   | KR | Samsung Electronics Co., LTD. | Granted |
| 234 | P1358722   | KR | Samsung Electronics Co., LTD. | Granted |
| 235 | P1138275   | KR | Samsung Electronics Co., LTD. | Granted |
| 236 | P1074039   | KR | Samsung Electronics Co., LTD. | Granted |
| 237 | P1138274   | KR | Samsung Electronics Co., LTD. | Granted |
| 238 | P1160336   | KR | Samsung Electronics Co., LTD. | Granted |
| 239 | P1160334   | KR | Samsung Electronics Co., LTD. | Granted |
| 240 | P1183209   | KR | Samsung Electronics Co., LTD. | Granted |
| 241 | P1183208   | KR | Samsung Electronics Co., LTD. | Granted |
| 242 | P1183210   | KR | Samsung Electronics Co., LTD. | Granted |
| 243 | P1160335   | KR | Samsung Electronics Co., LTD. | Granted |
| 244 | P1401611   | KR | Samsung Electronics Co., LTD. | Granted |
| 245 | P1367216   | KR | Samsung Electronics Co., LTD. | Granted |
| 246 | P1367209   | KR | Samsung Electronics Co., LTD. | Granted |
| 247 | P1309286   | KR | Samsung Electronics Co., LTD. | Granted |
| 248 | P1309285   | KR | Samsung Electronics Co., LTD. | Granted |
| 249 | P1235861   | KR | Samsung Electronics Co., LTD. | Granted |
| 250 | P1373017   | KR | Samsung Electronics Co., LTD. | Granted |
| 251 | P1385442   | KR | Samsung Electronics Co., LTD. | Granted |
| 252 | P1385441   | KR | Samsung Electronics Co., LTD. | Granted |
| 253 | P1385440   | KR | Samsung Electronics Co., LTD. | Granted |
| 254 | 2106055    | AT | Samsung Electronics Co., LTD. | Granted |
| 255 | 2101429    | AT | Samsung Electronics Co., LTD. | Granted |
| 256 | 2009220329 | AU | Samsung Electronics Co., LTD. | Granted |
| 257 | 2013231171 | AU | Samsung Electronics Co., LTD. | Granted |
| 258 | 2013231175 | AU | Samsung Electronics Co., LTD. | Granted |

|     |                  |    |                               |         |
|-----|------------------|----|-------------------------------|---------|
| 259 | 2106055          | BE | Samsung Electronics Co., LTD. | Granted |
| 260 | 2101429          | BE | Samsung Electronics Co., LTD. | Granted |
| 261 | 2106055          | BG | Samsung Electronics Co., LTD. | Granted |
| 262 | 2101429          | BG | Samsung Electronics Co., LTD. | Granted |
| 263 | 2106055          | CH | Samsung Electronics Co., LTD. | Granted |
| 264 | 2101429          | CH | Samsung Electronics Co., LTD. | Granted |
| 265 | ZL200980107570.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 266 | ZL201310350532.3 | CN | Samsung Electronics Co., LTD. | Granted |
| 267 | ZL201310350121.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 268 | 2099149          | CZ | Samsung Electronics Co., LTD. | Granted |
| 269 | 2106055          | CZ | Samsung Electronics Co., LTD. | Granted |
| 270 | 2101429          | CZ | Samsung Electronics Co., LTD. | Granted |
| 271 | 2099149          | DE | Samsung Electronics Co., LTD. | Granted |
| 272 | 2106055          | DE | Samsung Electronics Co., LTD. | Granted |
| 273 | 2101429          | DE | Samsung Electronics Co., LTD. | Granted |
| 274 | 2106055          | DK | Samsung Electronics Co., LTD. | Granted |
| 275 | 2101429          | DK | Samsung Electronics Co., LTD. | Granted |
| 276 | 2099149          | EP | Samsung Electronics Co., LTD. | Granted |
| 277 | 2106055          | EP | Samsung Electronics Co., LTD. | Granted |
| 278 | 2101429          | EP | Samsung Electronics Co., LTD. | Granted |
| 279 | 2099149          | ES | Samsung Electronics Co., LTD. | Granted |
| 280 | 2106055          | ES | Samsung Electronics Co., LTD. | Granted |
| 281 | 2101429          | ES | Samsung Electronics Co., LTD. | Granted |
| 282 | 2099149          | FI | Samsung Electronics Co., LTD. | Granted |
| 283 | 2106055          | FI | Samsung Electronics Co., LTD. | Granted |
| 284 | 2101429          | FI | Samsung Electronics Co., LTD. | Granted |
| 285 | 2099149          | FR | Samsung Electronics Co., LTD. | Granted |
| 286 | 2106055          | FR | Samsung Electronics Co., LTD. | Granted |
| 287 | 2101429          | FR | Samsung Electronics Co., LTD. | Granted |
| 288 | 2099149          | GB | Samsung Electronics Co., LTD. | Granted |
| 289 | 2106055          | GB | Samsung Electronics Co., LTD. | Granted |
| 290 | 2101429          | GB | Samsung Electronics Co., LTD. | Granted |
| 291 | 2106055          | GR | Samsung Electronics Co., LTD. | Granted |

|     |                 |    |                               |         |
|-----|-----------------|----|-------------------------------|---------|
| 292 | 2101429         | GR | Samsung Electronics Co., LTD. | Granted |
| 293 | 2099149         | HU | Samsung Electronics Co., LTD. | Granted |
| 294 | 2106055         | HU | Samsung Electronics Co., LTD. | Granted |
| 295 | 2101429         | HU | Samsung Electronics Co., LTD. | Granted |
| 296 | IDP0031717      | ID | Samsung Electronics Co., LTD. | Granted |
| 297 | IDP000040682    | ID | Samsung Electronics Co., LTD. | Granted |
| 298 | IDP000035936    | ID | Samsung Electronics Co., LTD. | Granted |
| 299 | 6971/DELNP/2010 | IN | Samsung Electronics Co., LTD. | Pending |
| 300 | 2099149         | IT | Samsung Electronics Co., LTD. | Granted |
| 301 | 2106055         | IT | Samsung Electronics Co., LTD. | Granted |
| 302 | 2101429         | IT | Samsung Electronics Co., LTD. | Granted |
| 303 | 5263797         | JP | Samsung Electronics Co., LTD. | Granted |
| 304 | P1455393        | KR | Samsung Electronics Co., LTD. | Granted |
| 305 | P1490608        | KR | Samsung Electronics Co., LTD. | Granted |
| 306 | PI2010004145    | MY | Samsung Electronics Co., LTD. | Pending |
| 307 | PI2015001150    | MY | Samsung Electronics Co., LTD. | Pending |
| 308 | PI2015001151    | MY | Samsung Electronics Co., LTD. | Pending |
| 309 | 2099149         | NL | Samsung Electronics Co., LTD. | Granted |
| 310 | 2106055         | NL | Samsung Electronics Co., LTD. | Granted |
| 311 | 2101429         | NL | Samsung Electronics Co., LTD. | Granted |
| 312 | 2106055         | NO | Samsung Electronics Co., LTD. | Granted |
| 313 | 2101429         | NO | Samsung Electronics Co., LTD. | Granted |
| 314 | 2099149         | PL | Samsung Electronics Co., LTD. | Granted |
| 315 | 2106055         | PL | Samsung Electronics Co., LTD. | Granted |
| 316 | 2101429         | PL | Samsung Electronics Co., LTD. | Granted |
| 317 | 2106055         | PT | Samsung Electronics Co., LTD. | Granted |
| 318 | 2101429         | PT | Samsung Electronics Co., LTD. | Granted |
| 319 | 2106055         | RO | Samsung Electronics Co., LTD. | Granted |
| 320 | 2101429         | RO | Samsung Electronics Co., LTD. | Granted |
| 321 | 2469478         | RU | Samsung Electronics Co., LTD. | Granted |
| 322 | 2099149         | SE | Samsung Electronics Co., LTD. | Granted |
| 323 | 2106055         | SE | Samsung Electronics Co., LTD. | Granted |
| 324 | 2101429         | SE | Samsung Electronics Co., LTD. | Granted |

|     |              |    |                               |         |
|-----|--------------|----|-------------------------------|---------|
| 325 | 164163       | SG | Samsung Electronics Co., LTD. | Granted |
| 326 | 188838       | SG | Samsung Electronics Co., LTD. | Granted |
| 327 | 10201401474Q | SG | Samsung Electronics Co., LTD. | Granted |
| 328 | 2106055      | SI | Samsung Electronics Co., LTD. | Granted |
| 329 | 2101429      | SI | Samsung Electronics Co., LTD. | Granted |
| 330 | 2099149      | SK | Samsung Electronics Co., LTD. | Granted |
| 331 | 2106055      | SK | Samsung Electronics Co., LTD. | Granted |
| 332 | 2101429      | SK | Samsung Electronics Co., LTD. | Granted |
| 333 | 2106055      | TR | Samsung Electronics Co., LTD. | Granted |
| 334 | 2101429      | TR | Samsung Electronics Co., LTD. | Granted |
| 335 | I382708      | TW | Samsung Electronics Co., LTD. | Granted |
| 336 | US9001776    | US | Samsung Electronics Co., LTD. | Granted |
| 337 | US9008037    | US | Samsung Electronics Co., LTD. | Granted |
| 338 | US14/685142  | US | Samsung Electronics Co., LTD. | Pending |
| 339 | 12790        | VN | Samsung Electronics Co., LTD. | Granted |
| 340 | P20140045554 | KR | Samsung Electronics Co., LTD. | Pending |
| 341 | US9571318    | US | Samsung Electronics Co., LTD. | Granted |
| 342 | P20140067460 | KR | Samsung Electronics Co., LTD. | Pending |
| 343 | US9565044    | US | Samsung Electronics Co., LTD. | Granted |
| 344 | P20140004024 | KR | Samsung Electronics Co., LTD. | Pending |
| 345 | US9559821    | US | Samsung Electronics Co., LTD. | Granted |
| 346 | US15/402810  | US | Samsung Electronics Co., LTD. | Pending |
| 347 | P20140058589 | KR | Samsung Electronics Co., LTD. | Pending |
| 348 | US9379843    | US | Samsung Electronics Co., LTD. | Granted |
| 349 | P20130158629 | KR | Samsung Electronics Co., LTD. | Pending |
| 350 | P20140066349 | KR | Samsung Electronics Co., LTD. | Pending |
| 351 | US9553610    | US | Samsung Electronics Co., LTD. | Granted |
| 352 | US15/403812  | US | Samsung Electronics Co., LTD. | Pending |
| 353 | P20140066986 | KR | Samsung Electronics Co., LTD. | Pending |
| 354 | US14/728233  | US | Samsung Electronics Co., LTD. | Pending |
| 355 | P20140058988 | KR | Samsung Electronics Co., LTD. | Pending |
| 356 | US9258159    | US | Samsung Electronics Co., LTD. | Granted |
| 357 | P20140061096 | KR | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 358 | US14/489851       | US | Samsung Electronics Co., LTD. | Pending |
| 359 | P20140177661      | KR | Samsung Electronics Co., LTD. | Pending |
| 360 | US14/962077       | US | Samsung Electronics Co., LTD. | Pending |
| 361 | P20140084995      | KR | Samsung Electronics Co., LTD. | Pending |
| 362 | US14/794243       | US | Samsung Electronics Co., LTD. | Pending |
| 363 | 201580008642.9    | CN | Samsung Electronics Co., LTD. | Pending |
| 364 | P20140091214      | KR | Samsung Electronics Co., LTD. | Pending |
| 365 | US9258167         | US | Samsung Electronics Co., LTD. | Granted |
| 366 | 201580009285.8    | CN | Samsung Electronics Co., LTD. | Pending |
| 367 | P20140164286      | KR | Samsung Electronics Co., LTD. | Pending |
| 368 | US9674020         | US | Samsung Electronics Co., LTD. | Granted |
| 369 | 2972882           | CA | Samsung Electronics Co., LTD. | Pending |
| 370 | 201680005075.6    | CN | Samsung Electronics Co., LTD. | Pending |
| 371 | 201717027330      | IN | Samsung Electronics Co., LTD. | Pending |
| 372 | P20150177018      | KR | Samsung Electronics Co., LTD. | Pending |
| 373 | MX/a/2017/008967  | MX | Samsung Electronics Co., LTD. | Pending |
| 374 | US14/989894       | US | Samsung Electronics Co., LTD. | Pending |
| 375 | 1-2017-03024      | VN | Samsung Electronics Co., LTD. | Pending |
| 376 | P20160008221      | KR | Samsung Electronics Co., LTD. | Pending |
| 377 | US15/003969       | US | Samsung Electronics Co., LTD. | Pending |
| 378 | PCT/KR2017/002330 | WO | Samsung Electronics Co., LTD. | Pending |
| 379 | P20130152261      | KR | Samsung Electronics Co., LTD. | Pending |
| 380 | US14/023215       | US | Samsung Electronics Co., LTD. | Pending |
| 381 | GB1410979.7       | GB | Samsung Electronics Co., LTD. | Pending |
| 382 | 201580009823.3    | CN | Samsung Electronics Co., LTD. | Pending |
| 383 | GB2523363         | GB | Samsung Electronics Co., LTD. | Granted |
| 384 | P20150008107      | KR | Samsung Electronics Co., LTD. | Pending |
| 385 | US14/628456       | US | Samsung Electronics Co., LTD. | Pending |
| 386 | GB1419081.3       | GB | Samsung Electronics Co., LTD. | Pending |
| 387 | P20150008032      | KR | Samsung Electronics Co., LTD. | Pending |
| 388 | US9628589         | US | Samsung Electronics Co., LTD. | Granted |
| 389 | P20140091024      | KR | Samsung Electronics Co., LTD. | Pending |
| 390 | 2,974,341         | CA | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 391 | 201680006400.0    | CN | Samsung Electronics Co., LTD. | Pending |
| 392 | 16740381.5        | EP | Samsung Electronics Co., LTD. | Pending |
| 393 | 201717027657      | IN | Samsung Electronics Co., LTD. | Pending |
| 394 | P20150015547      | KR | Samsung Electronics Co., LTD. | Pending |
| 395 | P20177023265      | KR | Samsung Electronics Co., LTD. | Pending |
| 396 | MX/a/2017/009429  | MX | Samsung Electronics Co., LTD. | Pending |
| 397 | US15/544423       | US | Samsung Electronics Co., LTD. | Pending |
| 398 | 201680019429.2    | CN | Samsung Electronics Co., LTD. | Pending |
| 399 | 2017-551303       | JP | Samsung Electronics Co., LTD. | Pending |
| 400 | P20150080209      | KR | Samsung Electronics Co., LTD. | Pending |
| 401 | US15/562296       | US | Samsung Electronics Co., LTD. | Pending |
| 402 | PCT/KR2016/003433 | WO | Samsung Electronics Co., LTD. | Pending |
| 403 | P20150094400      | KR | Samsung Electronics Co., LTD. | Pending |
| 404 | US15/200569       | US | Samsung Electronics Co., LTD. | Pending |
| 405 | PCT/KR2016/007107 | WO | Samsung Electronics Co., LTD. | Pending |
| 406 | P20150107526      | KR | Samsung Electronics Co., LTD. | Pending |
| 407 | US15/567267       | US | Samsung Electronics Co., LTD. | Pending |
| 408 | PCT/KR2016/004022 | WO | Samsung Electronics Co., LTD. | Pending |
| 409 | P20150143109      | KR | Samsung Electronics Co., LTD. | Pending |
| 410 | PCT/KR2016/011490 | WO | Samsung Electronics Co., LTD. | Pending |
| 411 | P20150143121      | KR | Samsung Electronics Co., LTD. | Pending |
| 412 | PCT/KR2016/011486 | WO | Samsung Electronics Co., LTD. | Pending |
| 413 | P20150143104      | KR | Samsung Electronics Co., LTD. | Pending |
| 414 | PCT/KR2016/011489 | WO | Samsung Electronics Co., LTD. | Pending |
| 415 | P20150142468      | KR | Samsung Electronics Co., LTD. | Pending |
| 416 | PCT/KR2016/011422 | WO | Samsung Electronics Co., LTD. | Pending |
| 417 | P20160005354      | KR | Samsung Electronics Co., LTD. | Pending |
| 418 | US15/251489       | US | Samsung Electronics Co., LTD. | Pending |
| 419 | PCT/KR2016/009629 | WO | Samsung Electronics Co., LTD. | Pending |
| 420 | P20160018787      | KR | Samsung Electronics Co., LTD. | Pending |
| 421 | PCT/KR2017/001780 | WO | Samsung Electronics Co., LTD. | Pending |
| 422 | P20160018791      | KR | Samsung Electronics Co., LTD. | Pending |
| 423 | PCT/KR2017/001805 | WO | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 424 | P20160065059      | KR | Samsung Electronics Co., LTD. | Pending |
| 425 | PCT/KR2017/005554 | WO | Samsung Electronics Co., LTD. | Pending |
| 426 | P20160069108      | KR | Samsung Electronics Co., LTD. | Pending |
| 427 | PCT/KR2017/005816 | WO | Samsung Electronics Co., LTD. | Pending |
| 428 | P20170007335      | KR | Samsung Electronics Co., LTD. | Pending |
| 429 | PCT/KR2017/005555 | WO | Samsung Electronics Co., LTD. | Pending |
| 430 | P20170040338      | KR | Samsung Electronics Co., LTD. | Pending |
| 431 | P20170040310      | KR | Samsung Electronics Co., LTD. | Pending |
| 432 | P20170089265      | KR | Samsung Electronics Co., LTD. | Pending |
| 433 | P20170143834      | KR | Samsung Electronics Co., LTD. | Pending |
| 434 | P20170133600      | KR | Samsung Electronics Co., LTD. | Pending |
| 435 | P20170134905      | KR | Samsung Electronics Co., LTD. | Pending |
| 436 | P20170136127      | KR | Samsung Electronics Co., LTD. | Pending |
| 437 | P20170134909      | KR | Samsung Electronics Co., LTD. | Pending |
| 438 | 201480071501.7    | CN | Samsung Electronics Co., LTD. | Pending |
| 439 | 14857726.5        | EP | Samsung Electronics Co., LTD. | Pending |
| 440 | 201647017978      | IN | Samsung Electronics Co., LTD. | Pending |
| 441 | 2016-527355       | JP | Samsung Electronics Co., LTD. | Pending |
| 442 | P20167014419      | KR | Samsung Electronics Co., LTD. | Pending |
| 443 | US14/525103       | US | Samsung Electronics Co., LTD. | Pending |
| 444 | 201580026111.2    | CN | Samsung Electronics Co., LTD. | Pending |
| 445 | 2017-500785       | JP | Samsung Electronics Co., LTD. | Pending |
| 446 | P20167029356      | KR | Samsung Electronics Co., LTD. | Pending |
| 447 | US14/661668       | US | Samsung Electronics Co., LTD. | Pending |
| 448 | 201580016796.2    | CN | Samsung Electronics Co., LTD. | Pending |
| 449 | 2016-559209       | JP | Samsung Electronics Co., LTD. | Pending |
| 450 | P20167030169      | KR | Samsung Electronics Co., LTD. | Pending |
| 451 | US9560421         | US | Samsung Electronics Co., LTD. | Granted |
| 452 | 201580028899.0    | CN | Samsung Electronics Co., LTD. | Pending |
| 453 | 15772592.0        | EP | Samsung Electronics Co., LTD. | Pending |
| 454 | 2016-559580       | JP | Samsung Electronics Co., LTD. | Pending |
| 455 | P20167030476      | KR | Samsung Electronics Co., LTD. | Pending |
| 456 | US14/596796       | US | Samsung Electronics Co., LTD. | Pending |



|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 457 | 201580028953.1    | CN | Samsung Electronics Co., LTD. | Pending |
| 458 | 15773549.9        | EP | Samsung Electronics Co., LTD. | Pending |
| 459 | 2016-560475       | JP | Samsung Electronics Co., LTD. | Pending |
| 460 | P20167030454      | KR | Samsung Electronics Co., LTD. | Pending |
| 461 | US14/616432       | US | Samsung Electronics Co., LTD. | Pending |
| 462 | 201580017753.6    | CN | Samsung Electronics Co., LTD. | Pending |
| 463 | 15772594.6        | EP | Samsung Electronics Co., LTD. | Pending |
| 464 | 2016-560493       | JP | Samsung Electronics Co., LTD. | Pending |
| 465 | P20167030732      | KR | Samsung Electronics Co., LTD. | Pending |
| 466 | US14/616972       | US | Samsung Electronics Co., LTD. | Pending |
| 467 | 201680009505.1    | CN | Samsung Electronics Co., LTD. | Pending |
| 468 | 2017-540821       | JP | Samsung Electronics Co., LTD. | Pending |
| 469 | P20177018108      | KR | Samsung Electronics Co., LTD. | Pending |
| 470 | US14/965627       | US | Samsung Electronics Co., LTD. | Pending |
| 471 | PCT/KR2016/001440 | WO | Samsung Electronics Co., LTD. | Pending |
| 472 | US14/992990       | US | Samsung Electronics Co., LTD. | Pending |
| 473 | PCT/KR2016/006280 | WO | Samsung Electronics Co., LTD. | Pending |
| 474 | US15/001018       | US | Samsung Electronics Co., LTD. | Pending |
| 475 | PCT/KR2016/006252 | WO | Samsung Electronics Co., LTD. | Pending |
| 476 | US15/013847       | US | Samsung Electronics Co., LTD. | Pending |
| 477 | PCT/KR2016/011689 | WO | Samsung Electronics Co., LTD. | Pending |
| 478 | US15/415840       | US | Samsung Electronics Co., LTD. | Pending |
| 479 | PCT/KR2017/005339 | WO | Samsung Electronics Co., LTD. | Pending |
| 480 | US15/465424       | US | Samsung Electronics Co., LTD. | Pending |
| 481 | PCT/KR2017/005473 | WO | Samsung Electronics Co., LTD. | Pending |
| 482 | US15/729101       | US | Samsung Electronics Co., LTD. | Pending |
| 483 | PCT/KR2017/011244 | WO | Samsung Electronics Co., LTD. | Pending |
| 484 | 11809862.3        | EP | Samsung Electronics Co., LTD. | Pending |
| 485 | US9060185         | US | Samsung Electronics Co., LTD. | Granted |
| 486 | US9628534         | US | Samsung Electronics Co., LTD. | Granted |
| 487 | US15/409062       | US | Samsung Electronics Co., LTD. | Pending |
| 488 | P20110036914      | KR | Samsung Electronics Co., LTD. | Pending |
| 489 | P20130043577      | KR | Samsung Electronics Co., LTD. | Pending |

|     |                  |    |                               |         |
|-----|------------------|----|-------------------------------|---------|
| 490 | US9147291        | US | Samsung Electronics Co., LTD. | Granted |
| 491 | 13779094.5       | EP | Samsung Electronics Co., LTD. | Pending |
| 492 | P20130043521     | KR | Samsung Electronics Co., LTD. | Pending |
| 493 | US13/866451      | US | Samsung Electronics Co., LTD. | Pending |
| 494 | P20120074676     | KR | Samsung Electronics Co., LTD. | Pending |
| 495 | P20120100522     | KR | Samsung Electronics Co., LTD. | Pending |
| 496 | P20150056636     | KR | Samsung Electronics Co., LTD. | Pending |
| 497 | 2014205778       | AU | Samsung Electronics Co., LTD. | Pending |
| 498 | 2,893,415        | CA | Samsung Electronics Co., LTD. | Pending |
| 499 | 201480004834.8   | CN | Samsung Electronics Co., LTD. | Pending |
| 500 | 14737927.5       | EP | Samsung Electronics Co., LTD. | Pending |
| 501 | 2199/MUMNP/2015  | IN | Samsung Electronics Co., LTD. | Pending |
| 502 | 2015-552589      | JP | Samsung Electronics Co., LTD. | Pending |
| 503 | MX/a/2015/008738 | MX | Samsung Electronics Co., LTD. | Pending |
| 504 | 2015134191       | RU | Samsung Electronics Co., LTD. | Pending |
| 505 | US14/154507      | US | Samsung Electronics Co., LTD. | Pending |
| 506 | 201380027909.X   | CN | Samsung Electronics Co., LTD. | Pending |
| 507 | 13785254.7       | EP | Samsung Electronics Co., LTD. | Pending |
| 508 | 2015-510186      | JP | Samsung Electronics Co., LTD. | Pending |
| 509 | P20147033934     | KR | Samsung Electronics Co., LTD. | Pending |
| 510 | US9699188        | US | Samsung Electronics Co., LTD. | Granted |
| 511 | 201480031901.5   | CN | Samsung Electronics Co., LTD. | Pending |
| 512 | 14784642.2       | EP | Samsung Electronics Co., LTD. | Pending |
| 513 | 3151/MUMNP/2015  | IN | Samsung Electronics Co., LTD. | Pending |
| 514 | 2016-508876      | JP | Samsung Electronics Co., LTD. | Pending |
| 515 | P20157031959     | KR | Samsung Electronics Co., LTD. | Pending |
| 516 | US14/256592      | US | Samsung Electronics Co., LTD. | Pending |
| 517 | 1120160064372    | BR | Samsung Electronics Co., LTD. | Pending |
| 518 | 2,925,279        | CA | Samsung Electronics Co., LTD. | Pending |
| 519 | 201480052441.4   | CN | Samsung Electronics Co., LTD. | Pending |
| 520 | 14845983.7       | EP | Samsung Electronics Co., LTD. | Pending |
| 521 | 201617013957     | IN | Samsung Electronics Co., LTD. | Pending |
| 522 | 2016-516572      | JP | Samsung Electronics Co., LTD. | Pending |

|     |                  |    |                               |         |
|-----|------------------|----|-------------------------------|---------|
| 523 | P20130112794     | KR | Samsung Electronics Co., LTD. | Pending |
| 524 | MX/a/2016/003842 | MX | Samsung Electronics Co., LTD. | Pending |
| 525 | 2016115536       | RU | Samsung Electronics Co., LTD. | Pending |
| 526 | US9720745        | US | Samsung Electronics Co., LTD. | Granted |
| 527 | US15/647875      | US | Samsung Electronics Co., LTD. | Pending |
| 528 | 201580004274.0   | CN | Samsung Electronics Co., LTD. | Pending |
| 529 | 15734991.1       | EP | Samsung Electronics Co., LTD. | Pending |
| 530 | 201617026265     | IN | Samsung Electronics Co., LTD. | Pending |
| 531 | 2016-545846      | JP | Samsung Electronics Co., LTD. | Pending |
| 532 | P20140003093     | KR | Samsung Electronics Co., LTD. | Pending |
| 533 | US14/593435      | US | Samsung Electronics Co., LTD. | Pending |
| 534 | 201580017259.X   | CN | Samsung Electronics Co., LTD. | Pending |
| 535 | 15772654.8       | EP | Samsung Electronics Co., LTD. | Pending |
| 536 | 2016-558747      | JP | Samsung Electronics Co., LTD. | Pending |
| 537 | P20140037341     | KR | Samsung Electronics Co., LTD. | Pending |
| 538 | US14/671359      | US | Samsung Electronics Co., LTD. | Pending |
| 539 | 201580017090.8   | CN | Samsung Electronics Co., LTD. | Pending |
| 540 | 15768498.6       | EP | Samsung Electronics Co., LTD. | Pending |
| 541 | 201617035895     | IN | Samsung Electronics Co., LTD. | Pending |
| 542 | 2016-558749      | JP | Samsung Electronics Co., LTD. | Pending |
| 543 | P20140037265     | KR | Samsung Electronics Co., LTD. | Pending |
| 544 | US15/129294      | US | Samsung Electronics Co., LTD. | Pending |
| 545 | 201580015803.7   | CN | Samsung Electronics Co., LTD. | Pending |
| 546 | 15768788.0       | EP | Samsung Electronics Co., LTD. | Pending |
| 547 | 201617034843     | IN | Samsung Electronics Co., LTD. | Pending |
| 548 | 2016-559620      | JP | Samsung Electronics Co., LTD. | Pending |
| 549 | P20140037261     | KR | Samsung Electronics Co., LTD. | Pending |
| 550 | P20167021068     | KR | Samsung Electronics Co., LTD. | Pending |
| 551 | US15/129624      | US | Samsung Electronics Co., LTD. | Pending |
| 552 | 201580041106.9   | CN | Samsung Electronics Co., LTD. | Pending |
| 553 | 2017-500077      | JP | Samsung Electronics Co., LTD. | Pending |
| 554 | P20140083996     | KR | Samsung Electronics Co., LTD. | Pending |
| 555 | US15/323674      | US | Samsung Electronics Co., LTD. | Pending |

|     |                  |    |                               |         |
|-----|------------------|----|-------------------------------|---------|
| 556 | 201580036656.1   | CN | Samsung Electronics Co., LTD. | Pending |
| 557 | 2017-500078      | JP | Samsung Electronics Co., LTD. | Pending |
| 558 | P20140083990     | KR | Samsung Electronics Co., LTD. | Pending |
| 559 | US15/323592      | US | Samsung Electronics Co., LTD. | Pending |
| 560 | 1120160064038    | BR | Samsung Electronics Co., LTD. | Pending |
| 561 | 2,925,284        | CA | Samsung Electronics Co., LTD. | Pending |
| 562 | 201480052311.0   | CN | Samsung Electronics Co., LTD. | Pending |
| 563 | 14846282.3       | EP | Samsung Electronics Co., LTD. | Pending |
| 564 | 201617013958     | IN | Samsung Electronics Co., LTD. | Pending |
| 565 | 2016-516562      | JP | Samsung Electronics Co., LTD. | Pending |
| 566 | P20140063216     | KR | Samsung Electronics Co., LTD. | Pending |
| 567 | MX/a/2016/003821 | MX | Samsung Electronics Co., LTD. | Pending |
| 568 | 2016115528       | RU | Samsung Electronics Co., LTD. | Pending |
| 569 | US15/023923      | US | Samsung Electronics Co., LTD. | Pending |
| 570 | 201580033401.X   | CN | Samsung Electronics Co., LTD. | Pending |
| 571 | 15809947.3       | EP | Samsung Electronics Co., LTD. | Pending |
| 572 | 2017-519437      | JP | Samsung Electronics Co., LTD. | Pending |
| 573 | P20140075757     | KR | Samsung Electronics Co., LTD. | Pending |
| 574 | US15/320546      | US | Samsung Electronics Co., LTD. | Pending |
| 575 | 201580033427.4   | CN | Samsung Electronics Co., LTD. | Pending |
| 576 | 15810288.9       | EP | Samsung Electronics Co., LTD. | Pending |
| 577 | 2017-519435      | JP | Samsung Electronics Co., LTD. | Pending |
| 578 | P20140076091     | KR | Samsung Electronics Co., LTD. | Pending |
| 579 | US15/320661      | US | Samsung Electronics Co., LTD. | Pending |
| 580 | 201580047294.6   | CN | Samsung Electronics Co., LTD. | Pending |
| 581 | 2017-500081      | JP | Samsung Electronics Co., LTD. | Pending |
| 582 | P20140083199     | KR | Samsung Electronics Co., LTD. | Pending |
| 583 | US15/323612      | US | Samsung Electronics Co., LTD. | Pending |
| 584 | 5512038          | JP | Samsung Electronics Co., LTD. | Granted |
| 585 | US8638818        | US | Samsung Electronics Co., LTD. | Granted |
| 586 | KR2011/002836    | WO | Samsung Electronics Co., LTD. | Pending |
| 587 | US14/158177      | US | Samsung Electronics Co., LTD. | Pending |
| 588 | P20100036180     | KR | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 589 | 11772225.6        | EP | Samsung Electronics Co., LTD. | Pending |
| 590 | 201180020090.5    | CN | Samsung Electronics Co., LTD. | Pending |
| 591 | 5897603           | JP | Samsung Electronics Co., LTD. | Granted |
| 592 | PCT/KR2012/000505 | WO | Samsung Electronics Co., LTD. | Pending |
| 593 | US13/980443       | US | Samsung Electronics Co., LTD. | Pending |
| 594 | P20110005625      | KR | Samsung Electronics Co., LTD. | Pending |
| 595 | 2016-39849        | JP | Samsung Electronics Co., LTD. | Pending |
| 596 | 6482/CHENP/2013   | IN | Samsung Electronics Co., LTD. | Pending |
| 597 | 12736581.5        | EP | Samsung Electronics Co., LTD. | Pending |
| 598 | 201280014043.4    | CN | Samsung Electronics Co., LTD. | Pending |
| 599 | 2012207719        | AU | Samsung Electronics Co., LTD. | Pending |
| 600 | 2012207725        | AU | Samsung Electronics Co., LTD. | Granted |
| 601 | US8544052         | US | Samsung Electronics Co., LTD. | Granted |
| 602 | US9009347         | US | Samsung Electronics Co., LTD. | Granted |
| 603 | PCT/KR2012/000514 | WO | Samsung Electronics Co., LTD. | Pending |
| 604 | US14/684808       | US | Samsung Electronics Co., LTD. | Pending |
| 605 | P20137021764      | KR | Samsung Electronics Co., LTD. | Pending |
| 606 | P20110005650      | KR | Samsung Electronics Co., LTD. | Pending |
| 607 | 2013-550410       | JP | Samsung Electronics Co., LTD. | Pending |
| 608 | 2441/KOLNP/2013   | IN | Samsung Electronics Co., LTD. | Pending |
| 609 | 12736315.8        | EP | Samsung Electronics Co., LTD. | Pending |
| 610 | 201280005850.X    | CN | Samsung Electronics Co., LTD. | Pending |
| 611 | PCT/KR2012/001908 | WO | Samsung Electronics Co., LTD. | Pending |
| 612 | US13/421375       | US | Samsung Electronics Co., LTD. | Pending |
| 613 | P20110023578      | KR | Samsung Electronics Co., LTD. | Pending |
| 614 | 12757912.6        | EP | Samsung Electronics Co., LTD. | Pending |
| 615 | US9191032         | US | Samsung Electronics Co., LTD. | Granted |
| 616 | PCT/KR2012/004559 | WO | Samsung Electronics Co., LTD. | Pending |
| 617 | US14/942381       | US | Samsung Electronics Co., LTD. | Pending |
| 618 | 2014100886        | RU | Samsung Electronics Co., LTD. | Pending |
| 619 | P20110056562      | KR | Samsung Electronics Co., LTD. | Pending |
| 620 | 2014-515715       | JP | Samsung Electronics Co., LTD. | Pending |
| 621 | 18/KOLNP/2014     | IN | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 622 | 12801048.5        | EP | Samsung Electronics Co., LTD. | Pending |
| 623 | 201280039247.3    | CN | Samsung Electronics Co., LTD. | Pending |
| 624 | 2012270387        | AU | Samsung Electronics Co., LTD. | Pending |
| 625 | PCT/KR2012/004666 | WO | Samsung Electronics Co., LTD. | Pending |
| 626 | US13/495429       | US | Samsung Electronics Co., LTD. | Pending |
| 627 | 2014100914        | RU | Samsung Electronics Co., LTD. | Pending |
| 628 | P20110057714      | KR | Samsung Electronics Co., LTD. | Pending |
| 629 | 2014-515746       | JP | Samsung Electronics Co., LTD. | Pending |
| 630 | 19/KOLNP/2014     | IN | Samsung Electronics Co., LTD. | Pending |
| 631 | 12799847.4        | EP | Samsung Electronics Co., LTD. | Pending |
| 632 | 201280029677.7    | CN | Samsung Electronics Co., LTD. | Pending |
| 633 | 2012270417        | AU | Samsung Electronics Co., LTD. | Pending |
| 634 | US8769369         | US | Samsung Electronics Co., LTD. | Granted |
| 635 | PCT/KR2012/005386 | WO | Samsung Electronics Co., LTD. | Pending |
| 636 | US15/229889       | US | Samsung Electronics Co., LTD. | Pending |
| 637 | US14/313353       | US | Samsung Electronics Co., LTD. | Pending |
| 638 | P20110068098      | KR | Samsung Electronics Co., LTD. | Pending |
| 639 | 2014-518829       | JP | Samsung Electronics Co., LTD. | Pending |
| 640 | 12812110          | EP | Samsung Electronics Co., LTD. | Pending |
| 641 | 201610158780.1    | CN | Samsung Electronics Co., LTD. | Pending |
| 642 | 201280033919.X    | CN | Samsung Electronics Co., LTD. | Pending |
| 643 | 5860158           | JP | Samsung Electronics Co., LTD. | Granted |
| 644 | PCT/KR2012/008377 | WO | Samsung Electronics Co., LTD. | Pending |
| 645 | US13/651815       | US | Samsung Electronics Co., LTD. | Pending |
| 646 | P20150024328      | KR | Samsung Electronics Co., LTD. | Pending |
| 647 | P20110104879      | KR | Samsung Electronics Co., LTD. | Pending |
| 648 | 2015-246544       | JP | Samsung Electronics Co., LTD. | Pending |
| 649 | 3346/CHENP/2014   | IN | Samsung Electronics Co., LTD. | Pending |
| 650 | 12839590.2        | EP | Samsung Electronics Co., LTD. | Pending |
| 651 | 201280061383.2    | CN | Samsung Electronics Co., LTD. | Pending |
| 652 | 2,852,002         | CA | Samsung Electronics Co., LTD. | Pending |
| 653 | 2012321424        | AU | Samsung Electronics Co., LTD. | Pending |
| 654 | PCT/KR2012/008389 | WO | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 655 | US13/650408       | US | Samsung Electronics Co., LTD. | Pending |
| 656 | P20110104888      | KR | Samsung Electronics Co., LTD. | Pending |
| 657 | 2014-535657       | JP | Samsung Electronics Co., LTD. | Pending |
| 658 | 12839976.3        | EP | Samsung Electronics Co., LTD. | Pending |
| 659 | 201280049863.7    | CN | Samsung Electronics Co., LTD. | Pending |
| 660 | P1626686          | KR | Samsung Electronics Co., LTD. | Granted |
| 661 | PCT/KR2012/008404 | WO | Samsung Electronics Co., LTD. | Pending |
| 662 | US14/351419       | US | Samsung Electronics Co., LTD. | Pending |
| 663 | P20157035434      | KR | Samsung Electronics Co., LTD. | Pending |
| 664 | P20110104892      | KR | Samsung Electronics Co., LTD. | Pending |
| 665 | 2014-535664       | JP | Samsung Electronics Co., LTD. | Pending |
| 666 | 12840497.7        | EP | Samsung Electronics Co., LTD. | Pending |
| 667 | 201280061956.1    | CN | Samsung Electronics Co., LTD. | Pending |
| 668 | 2,852,204         | CA | Samsung Electronics Co., LTD. | Pending |
| 669 | PCT/KR2012/009968 | WO | Samsung Electronics Co., LTD. | Pending |
| 670 | US14/360480       | US | Samsung Electronics Co., LTD. | Pending |
| 671 | P20110123878      | KR | Samsung Electronics Co., LTD. | Pending |
| 672 | 2014-543420       | JP | Samsung Electronics Co., LTD. | Pending |
| 673 | 12851568.1        | EP | Samsung Electronics Co., LTD. | Pending |
| 674 | 201280068020.1    | CN | Samsung Electronics Co., LTD. | Pending |
| 675 | PCT/KR2012/010311 | WO | Samsung Electronics Co., LTD. | Pending |
| 676 | US14/974888       | US | Samsung Electronics Co., LTD. | Pending |
| 677 | US13/690808       | US | Samsung Electronics Co., LTD. | Pending |
| 678 | P20147018166      | KR | Samsung Electronics Co., LTD. | Pending |
| 679 | P20110127366      | KR | Samsung Electronics Co., LTD. | Pending |
| 680 | 2014-544672       | JP | Samsung Electronics Co., LTD. | Pending |
| 681 | 12853877.4        | EP | Samsung Electronics Co., LTD. | Pending |
| 682 | 201280058688.8    | CN | Samsung Electronics Co., LTD. | Pending |
| 683 | 336523            | MX | Samsung Electronics Co., LTD. | Granted |
| 684 | US9043682         | US | Samsung Electronics Co., LTD. | Granted |
| 685 | PCT/KR2013/001587 | WO | Samsung Electronics Co., LTD. | Pending |
| 686 | US15/243055       | US | Samsung Electronics Co., LTD. | Pending |
| 687 | US14/720141       | US | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 688 | P20120112032      | KR | Samsung Electronics Co., LTD. | Pending |
| 689 | 2014-559828       | JP | Samsung Electronics Co., LTD. | Pending |
| 690 | 13754486.2        | EP | Samsung Electronics Co., LTD. | Pending |
| 691 | 201380016464.5    | CN | Samsung Electronics Co., LTD. | Pending |
| 692 | PCT/KR2013/003955 | WO | Samsung Electronics Co., LTD. | Pending |
| 693 | US13/888663       | US | Samsung Electronics Co., LTD. | Pending |
| 694 | MX/a/2014/013560  | MX | Samsung Electronics Co., LTD. | Pending |
| 695 | P20120050291      | KR | Samsung Electronics Co., LTD. | Pending |
| 696 | 2015-511356       | JP | Samsung Electronics Co., LTD. | Pending |
| 697 | 2775/KOLNP/2014   | IN | Samsung Electronics Co., LTD. | Pending |
| 698 | 13787421          | EP | Samsung Electronics Co., LTD. | Pending |
| 699 | 201380024021.0    | CN | Samsung Electronics Co., LTD. | Pending |
| 700 | 2,873,024         | CA | Samsung Electronics Co., LTD. | Pending |
| 701 | 2013260417        | AU | Samsung Electronics Co., LTD. | Pending |
| 702 | 5947454           | JP | Samsung Electronics Co., LTD. | Granted |
| 703 | P1501347          | KR | Samsung Electronics Co., LTD. | Granted |
| 704 | PCT/KR2013/003582 | WO | Samsung Electronics Co., LTD. | Pending |
| 705 | US14/397055       | US | Samsung Electronics Co., LTD. | Pending |
| 706 | 2014147209        | RU | Samsung Electronics Co., LTD. | Pending |
| 707 | MX/a/2014/012947  | MX | Samsung Electronics Co., LTD. | Pending |
| 708 | 2016-54413        | JP | Samsung Electronics Co., LTD. | Pending |
| 709 | 2604/KOLNP/2014   | IN | Samsung Electronics Co., LTD. | Pending |
| 710 | 13782460.3        | EP | Samsung Electronics Co., LTD. | Pending |
| 711 | 201380025465.6    | CN | Samsung Electronics Co., LTD. | Pending |
| 712 | 2,871,578         | CA | Samsung Electronics Co., LTD. | Pending |
| 713 | 331164            | MX | Samsung Electronics Co., LTD. | Granted |
| 714 | 337351            | MX | Samsung Electronics Co., LTD. | Granted |
| 715 | US8918697         | US | Samsung Electronics Co., LTD. | Granted |
| 716 | US9059741         | US | Samsung Electronics Co., LTD. | Granted |
| 717 | PCT/KR2012/009466 | WO | Samsung Electronics Co., LTD. | Pending |
| 718 | US14/739825       | US | Samsung Electronics Co., LTD. | Pending |
| 719 | P20120111459      | KR | Samsung Electronics Co., LTD. | Pending |
| 720 | 2014-540953       | JP | Samsung Electronics Co., LTD. | Pending |



|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 721 | 12848353.4        | EP | Samsung Electronics Co., LTD. | Pending |
| 722 | 201280055114.5    | CN | Samsung Electronics Co., LTD. | Pending |
| 723 | 2,854,738         | CA | Samsung Electronics Co., LTD. | Pending |
| 724 | PCT/KR2013/009116 | WO | Samsung Electronics Co., LTD. | Pending |
| 725 | US14/051707       | US | Samsung Electronics Co., LTD. | Pending |
| 726 | 2015117638        | RU | Samsung Electronics Co., LTD. | Pending |
| 727 | MX/a/2015/004597  | MX | Samsung Electronics Co., LTD. | Pending |
| 728 | P20120113052      | KR | Samsung Electronics Co., LTD. | Pending |
| 729 | 2015-536717       | JP | Samsung Electronics Co., LTD. | Pending |
| 730 | 1055/MUMNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 731 | 13845071.3        | EP | Samsung Electronics Co., LTD. | Pending |
| 732 | 201380053506.2    | CN | Samsung Electronics Co., LTD. | Pending |
| 733 | 2,887,999         | CA | Samsung Electronics Co., LTD. | Pending |
| 734 | PCT/KR2013/009150 | WO | Samsung Electronics Co., LTD. | Pending |
| 735 | US14/944595       | US | Samsung Electronics Co., LTD. | Pending |
| 736 | US14/054293       | US | Samsung Electronics Co., LTD. | Pending |
| 737 | 2015117516        | RU | Samsung Electronics Co., LTD. | Pending |
| 738 | MX/a/2015/004602  | MX | Samsung Electronics Co., LTD. | Pending |
| 739 | P20120113841      | KR | Samsung Electronics Co., LTD. | Pending |
| 740 | 2015-536719       | JP | Samsung Electronics Co., LTD. | Pending |
| 741 | 1161/MUMNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 742 | 13846199.1        | EP | Samsung Electronics Co., LTD. | Pending |
| 743 | 201380053379.6    | CN | Samsung Electronics Co., LTD. | Pending |
| 744 | 2,888,004         | CA | Samsung Electronics Co., LTD. | Pending |
| 745 | 2013330543        | AU | Samsung Electronics Co., LTD. | Pending |
| 746 | 5947455           | JP | Samsung Electronics Co., LTD. | Granted |
| 747 | P1501344          | KR | Samsung Electronics Co., LTD. | Granted |
| 748 | PCT/KR2013/003808 | WO | Samsung Electronics Co., LTD. | Pending |
| 749 | US14/398645       | US | Samsung Electronics Co., LTD. | Pending |
| 750 | MX/a/2014/013277  | MX | Samsung Electronics Co., LTD. | Pending |
| 751 | 2016-045771       | JP | Samsung Electronics Co., LTD. | Pending |
| 752 | 2764/KOLNP/2014   | IN | Samsung Electronics Co., LTD. | Pending |
| 753 | 13784923.8        | EP | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 754 | 201380035064.9    | CN | Samsung Electronics Co., LTD. | Pending |
| 755 | 2872506           | CA | Samsung Electronics Co., LTD. | Pending |
| 756 | 2013255124        | AU | Samsung Electronics Co., LTD. | Pending |
| 757 | PCT/KR2014/003362 | WO | Samsung Electronics Co., LTD. | Pending |
| 758 | US15/225132       | US | Samsung Electronics Co., LTD. | Pending |
| 759 | US14/255215       | US | Samsung Electronics Co., LTD. | Pending |
| 760 | 2015148959        | RU | Samsung Electronics Co., LTD. | Pending |
| 761 | MX/a/2015/014696  | MX | Samsung Electronics Co., LTD. | Pending |
| 762 | P20130042045      | KR | Samsung Electronics Co., LTD. | Pending |
| 763 | 2016-508872       | JP | Samsung Electronics Co., LTD. | Pending |
| 764 | 3153/MUMNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 765 | 14785047.3        | EP | Samsung Electronics Co., LTD. | Pending |
| 766 | 201480034288.2    | CN | Samsung Electronics Co., LTD. | Pending |
| 767 | 2,909,801         | CA | Samsung Electronics Co., LTD. | Pending |
| 768 | PCT/KR2013/003731 | WO | Samsung Electronics Co., LTD. | Pending |
| 769 | US15/234627       | US | Samsung Electronics Co., LTD. | Pending |
| 770 | US14/811068       | US | Samsung Electronics Co., LTD. | Pending |
| 771 | US13/873739       | US | Samsung Electronics Co., LTD. | Pending |
| 772 | P20130045082      | KR | Samsung Electronics Co., LTD. | Pending |
| 773 | 2015-510181       | JP | Samsung Electronics Co., LTD. | Pending |
| 774 | 13784446          | EP | Samsung Electronics Co., LTD. | Pending |
| 775 | 201380022904.8    | CN | Samsung Electronics Co., LTD. | Pending |
| 776 | 5898380           | JP | Samsung Electronics Co., LTD. | Granted |
| 777 | P1484843          | KR | Samsung Electronics Co., LTD. | Granted |
| 778 | PCT/KR2014/003470 | WO | Samsung Electronics Co., LTD. | Pending |
| 779 | US14/257249       | US | Samsung Electronics Co., LTD. | Pending |
| 780 | 2015149465        | RU | Samsung Electronics Co., LTD. | Pending |
| 781 | MX/a/2015/014695  | MX | Samsung Electronics Co., LTD. | Pending |
| 782 | 2016-041616       | JP | Samsung Electronics Co., LTD. | Pending |
| 783 | 10445/DELNP/2015  | IN | Samsung Electronics Co., LTD. | Pending |
| 784 | 14785165.3        | EP | Samsung Electronics Co., LTD. | Pending |
| 785 | 201480022346.X    | CN | Samsung Electronics Co., LTD. | Pending |
| 786 | 2,909,906         | CA | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 787 | PCT/KR2013/006389 | WO | Samsung Electronics Co., LTD. | Pending |
| 788 | US13/944265       | US | Samsung Electronics Co., LTD. | Pending |
| 789 | P20120077856      | KR | Samsung Electronics Co., LTD. | Pending |
| 790 | 2015-523008       | JP | Samsung Electronics Co., LTD. | Pending |
| 791 | 823/CHENP/2015    | IN | Samsung Electronics Co., LTD. | Pending |
| 792 | 13819236.4        | EP | Samsung Electronics Co., LTD. | Pending |
| 793 | 201380038076.7    | CN | Samsung Electronics Co., LTD. | Pending |
| 794 | PCT/KR2014/006549 | WO | Samsung Electronics Co., LTD. | Pending |
| 795 | US14/906183       | US | Samsung Electronics Co., LTD. | Pending |
| 796 | PI2016700168      | MY | Samsung Electronics Co., LTD. | Pending |
| 797 | MX/a/2016/000718  | MX | Samsung Electronics Co., LTD. | Pending |
| 798 | P20130084877      | KR | Samsung Electronics Co., LTD. | Pending |
| 799 | 2016-527939       | JP | Samsung Electronics Co., LTD. | Pending |
| 800 | 201627004231      | IN | Samsung Electronics Co., LTD. | Pending |
| 801 | P-00201601064     | ID | Samsung Electronics Co., LTD. | Pending |
| 802 | 14826773.5        | EP | Samsung Electronics Co., LTD. | Pending |
| 803 | 201480040849.X    | CN | Samsung Electronics Co., LTD. | Pending |
| 804 | 1120160009134     | BR | Samsung Electronics Co., LTD. | Pending |
| 805 | 2014290953        | AU | Samsung Electronics Co., LTD. | Pending |
| 806 | PCT/KR2015/000358 | WO | Samsung Electronics Co., LTD. | Pending |
| 807 | US15/111322       | US | Samsung Electronics Co., LTD. | Pending |
| 808 | P20167022057      | KR | Samsung Electronics Co., LTD. | Pending |
| 809 | P20140004256      | KR | Samsung Electronics Co., LTD. | Pending |
| 810 | 201617026673      | IN | Samsung Electronics Co., LTD. | Pending |
| 811 | PCT/KR2013/009049 | WO | Samsung Electronics Co., LTD. | Pending |
| 812 | US14/049022       | US | Samsung Electronics Co., LTD. | Pending |
| 813 | 2015117519        | RU | Samsung Electronics Co., LTD. | Pending |
| 814 | MX/a/2015/004596  | MX | Samsung Electronics Co., LTD. | Pending |
| 815 | P20157012135      | KR | Samsung Electronics Co., LTD. | Pending |
| 816 | 2015-536713       | JP | Samsung Electronics Co., LTD. | Pending |
| 817 | 1159/KOLNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 818 | 13845741.1        | EP | Samsung Electronics Co., LTD. | Pending |
| 819 | 201380053098.0    | CN | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 820 | 2,887,997         | CA | Samsung Electronics Co., LTD. | Pending |
| 821 | 2013330649        | AU | Samsung Electronics Co., LTD. | Pending |
| 822 | P1484903          | KR | Samsung Electronics Co., LTD. | Granted |
| 823 | PCT/KR2013/010932 | WO | Samsung Electronics Co., LTD. | Pending |
| 824 | US14/091243       | US | Samsung Electronics Co., LTD. | Pending |
| 825 | 2015125573        | RU | Samsung Electronics Co., LTD. | Pending |
| 826 | MX/a/2015/006835  | MX | Samsung Electronics Co., LTD. | Pending |
| 827 | 2016-110819       | JP | Samsung Electronics Co., LTD. | Pending |
| 828 | 2015-523032       | JP | Samsung Electronics Co., LTD. | Pending |
| 829 | 4995/DELNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 830 | 13858997.3        | EP | Samsung Electronics Co., LTD. | Pending |
| 831 | 201380062645.1    | CN | Samsung Electronics Co., LTD. | Pending |
| 832 | 2,893,122         | CA | Samsung Electronics Co., LTD. | Pending |
| 833 | 2013352767        | AU | Samsung Electronics Co., LTD. | Pending |
| 834 | 5883199           | JP | Samsung Electronics Co., LTD. | Granted |
| 835 | P1530825          | KR | Samsung Electronics Co., LTD. | Granted |
| 836 | PCT/KR2014/006829 | WO | Samsung Electronics Co., LTD. | Pending |
| 837 | 1-2016-00670      | VN | Samsung Electronics Co., LTD. | Pending |
| 838 | US14/178212       | US | Samsung Electronics Co., LTD. | Pending |
| 839 | PI2016700246      | MY | Samsung Electronics Co., LTD. | Pending |
| 840 | MX/a/2016/001137  | MX | Samsung Electronics Co., LTD. | Pending |
| 841 | P20150000130      | KR | Samsung Electronics Co., LTD. | Pending |
| 842 | 2016-020212       | JP | Samsung Electronics Co., LTD. | Pending |
| 843 | 201627004307      | IN | Samsung Electronics Co., LTD. | Pending |
| 844 | P-00201601111     | ID | Samsung Electronics Co., LTD. | Pending |
| 845 | 14828733.7        | EP | Samsung Electronics Co., LTD. | Pending |
| 846 | 201480042072.0    | CN | Samsung Electronics Co., LTD. | Pending |
| 847 | 1120160016610     | BR | Samsung Electronics Co., LTD. | Pending |
| 848 | 2014293819        | AU | Samsung Electronics Co., LTD. | Pending |
| 849 | PCT/KR2015/006601 | WO | Samsung Electronics Co., LTD. | Pending |
| 850 | P20150091586      | KR | Samsung Electronics Co., LTD. | Pending |
| 851 | PCT/KR2015/003680 | WO | Samsung Electronics Co., LTD. | Pending |
| 852 | PCT/KR2015/003130 | WO | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 853 | PCT/KR2015/002895 | WO | Samsung Electronics Co., LTD. | Pending |
| 854 | PCT/KR2015/002894 | WO | Samsung Electronics Co., LTD. | Pending |
| 855 | PCT/KR2015/002891 | WO | Samsung Electronics Co., LTD. | Pending |
| 856 | PCT/KR2015/000303 | WO | Samsung Electronics Co., LTD. | Pending |
| 857 | 1-2016-02881      | VN | Samsung Electronics Co., LTD. | Pending |
| 858 | US15/110861       | US | Samsung Electronics Co., LTD. | Pending |
| 859 | P20140003619      | KR | Samsung Electronics Co., LTD. | Pending |
| 860 | 201627025473      | IN | Samsung Electronics Co., LTD. | Pending |
| 861 | 15734960.6        | EP | Samsung Electronics Co., LTD. | Pending |
| 862 | BR1120160160088   | BR | Samsung Electronics Co., LTD. | Pending |
| 863 | PCT/KR2014/010134 | WO | Samsung Electronics Co., LTD. | Pending |
| 864 | 1-2016-01418      | VN | Samsung Electronics Co., LTD. | Pending |
| 865 | US15/029143       | US | Samsung Electronics Co., LTD. | Pending |
| 866 | MX/a/2016/004750  | MX | Samsung Electronics Co., LTD. | Pending |
| 867 | P20130128038      | KR | Samsung Electronics Co., LTD. | Pending |
| 868 | 2016-523302       | JP | Samsung Electronics Co., LTD. | Pending |
| 869 | 201627011756      | IN | Samsung Electronics Co., LTD. | Pending |
| 870 | 14855641.8        | EP | Samsung Electronics Co., LTD. | Pending |
| 871 | 201480058551.1    | CN | Samsung Electronics Co., LTD. | Pending |
| 872 | PCT/KR2014/002643 | WO | Samsung Electronics Co., LTD. | Pending |
| 873 | 1-2015-04048      | VN | Samsung Electronics Co., LTD. | Pending |
| 874 | US14/781235       | US | Samsung Electronics Co., LTD. | Pending |
| 875 | 1501005954        | TH | Samsung Electronics Co., LTD. | Pending |
| 876 | 11201507726X      | SG | Samsung Electronics Co., LTD. | Pending |
| 877 | 2015146225        | RU | Samsung Electronics Co., LTD. | Pending |
| 878 | PI2015703394      | MY | Samsung Electronics Co., LTD. | Pending |
| 879 | MX/a/2015/013783  | MX | Samsung Electronics Co., LTD. | Pending |
| 880 | P20157022453      | KR | Samsung Electronics Co., LTD. | Pending |
| 881 | 2015-562940       | JP | Samsung Electronics Co., LTD. | Pending |
| 882 | 2842/MUMNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 883 | P-00201506926     | ID | Samsung Electronics Co., LTD. | Pending |
| 884 | 14773799.3        | EP | Samsung Electronics Co., LTD. | Pending |
| 885 | 201480019359.1    | CN | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 886 | 2908037           | CA | Samsung Electronics Co., LTD. | Pending |
| 887 | 1120150246923     | BR | Samsung Electronics Co., LTD. | Pending |
| 888 | 2014244722        | AU | Samsung Electronics Co., LTD. | Pending |
| 889 | PCT/KR2013/011182 | WO | Samsung Electronics Co., LTD. | Pending |
| 890 | 1-2015-02444      | VN | Samsung Electronics Co., LTD. | Pending |
| 891 | US14/649824       | US | Samsung Electronics Co., LTD. | Pending |
| 892 | 1501003095        | TH | Samsung Electronics Co., LTD. | Pending |
| 893 | 11201504368V      | SG | Samsung Electronics Co., LTD. | Pending |
| 894 | 2015126777        | RU | Samsung Electronics Co., LTD. | Pending |
| 895 | PI2015701775      | MY | Samsung Electronics Co., LTD. | Pending |
| 896 | MX/a/2015/007100  | MX | Samsung Electronics Co., LTD. | Pending |
| 897 | P20157018083      | KR | Samsung Electronics Co., LTD. | Pending |
| 898 | 2015-546386       | JP | Samsung Electronics Co., LTD. | Pending |
| 899 | 1771/MUMNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 900 | P-00201504108     | ID | Samsung Electronics Co., LTD. | Pending |
| 901 | 13861015.9        | EP | Samsung Electronics Co., LTD. | Pending |
| 902 | 201380072141.8    | CN | Samsung Electronics Co., LTD. | Pending |
| 903 | 2893729           | CA | Samsung Electronics Co., LTD. | Pending |
| 904 | BR1120150131549   | BR | Samsung Electronics Co., LTD. | Pending |
| 905 | 2013355504        | AU | Samsung Electronics Co., LTD. | Pending |
| 906 | PCT/KR2013/000047 | WO | Samsung Electronics Co., LTD. | Pending |
| 907 | US14/324740       | US | Samsung Electronics Co., LTD. | Pending |
| 908 | P20130001218      | KR | Samsung Electronics Co., LTD. | Pending |
| 909 | 13733650.9        | EP | Samsung Electronics Co., LTD. | Pending |
| 910 | KR2011/004937     | WO | Samsung Electronics Co., LTD. | Pending |
| 911 | 1-2013-00418      | VN | Samsung Electronics Co., LTD. | Pending |
| 912 | US13/177903       | US | Samsung Electronics Co., LTD. | Pending |
| 913 | 1301000042        | TH | Samsung Electronics Co., LTD. | Pending |
| 914 | 186868            | SG | Samsung Electronics Co., LTD. | Granted |
| 915 | 2015134326        | RU | Samsung Electronics Co., LTD. | Pending |
| 916 | 2564050           | RU | Samsung Electronics Co., LTD. | Granted |
| 917 | PI2013000036      | MY | Samsung Electronics Co., LTD. | Pending |
| 918 | 313557            | MX | Samsung Electronics Co., LTD. | Granted |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 919 | P20100137232      | KR | Samsung Electronics Co., LTD. | Pending |
| 920 | 2016-047473       | JP | Samsung Electronics Co., LTD. | Pending |
| 921 | 2013-518274       | JP | Samsung Electronics Co., LTD. | Pending |
| 922 | 268/MUMNP/2013    | IN | Samsung Electronics Co., LTD. | Pending |
| 923 | W-00201300527     | ID | Samsung Electronics Co., LTD. | Pending |
| 924 | 11803793.6        | EP | Samsung Electronics Co., LTD. | Pending |
| 925 | 201510818493.4    | CN | Samsung Electronics Co., LTD. | Pending |
| 926 | 201180042811.2    | CN | Samsung Electronics Co., LTD. | Pending |
| 927 | 2804346           | CA | Samsung Electronics Co., LTD. | Pending |
| 928 | BR112013000328-6  | BR | Samsung Electronics Co., LTD. | Pending |
| 929 | 2015207829        | AU | Samsung Electronics Co., LTD. | Pending |
| 930 | 2011274709        | AU | Samsung Electronics Co., LTD. | Pending |
| 931 | PCT/KR2015/011799 | WO | Samsung Electronics Co., LTD. | Pending |
| 932 | US14/932320       | US | Samsung Electronics Co., LTD. | Pending |
| 933 | P20150154332      | KR | Samsung Electronics Co., LTD. | Pending |
| 934 | PCT/KR2016/006144 | WO | Samsung Electronics Co., LTD. | Pending |
| 935 | US15/177481       | US | Samsung Electronics Co., LTD. | Pending |
| 936 | P20160016444      | KR | Samsung Electronics Co., LTD. | Pending |
| 937 | PCT/KR2016/006143 | WO | Samsung Electronics Co., LTD. | Pending |
| 938 | US15/177522       | US | Samsung Electronics Co., LTD. | Pending |
| 939 | P20160016379      | KR | Samsung Electronics Co., LTD. | Pending |
| 940 | PCT/KR2016/006142 | WO | Samsung Electronics Co., LTD. | Pending |
| 941 | US15/177469       | US | Samsung Electronics Co., LTD. | Pending |
| 942 | P20160016406      | KR | Samsung Electronics Co., LTD. | Pending |
| 943 | PCT/KR2016/000137 | WO | Samsung Electronics Co., LTD. | Pending |
| 944 | US14/989894       | US | Samsung Electronics Co., LTD. | Pending |
| 945 | P20150177018      | KR | Samsung Electronics Co., LTD. | Pending |
| 946 | PCT/KR2015/012131 | WO | Samsung Electronics Co., LTD. | Pending |
| 947 | US14/938116       | US | Samsung Electronics Co., LTD. | Pending |
| 948 | P20150158268      | KR | Samsung Electronics Co., LTD. | Pending |
| 949 | PCT/KR2016/007138 | WO | Samsung Electronics Co., LTD. | Pending |
| 950 | US15/200238       | US | Samsung Electronics Co., LTD. | Pending |
| 951 | P20160014916      | KR | Samsung Electronics Co., LTD. | Pending |

|     |                   |    |                               |         |
|-----|-------------------|----|-------------------------------|---------|
| 952 | PCT/KR2016/002092 | WO | Samsung Electronics Co., LTD. | Pending |
| 953 | US15/058255       | US | Samsung Electronics Co., LTD. | Pending |
| 954 | P20150137189      | KR | Samsung Electronics Co., LTD. | Pending |
| 955 | PCT/KR2016/002090 | WO | Samsung Electronics Co., LTD. | Pending |
| 956 | US15/058364       | US | Samsung Electronics Co., LTD. | Pending |
| 957 | P20150137190      | KR | Samsung Electronics Co., LTD. | Pending |
| 958 | PCT/KR2016/001506 | WO | Samsung Electronics Co., LTD. | Pending |
| 959 | US15/044419       | US | Samsung Electronics Co., LTD. | Pending |
| 960 | P20150137191      | KR | Samsung Electronics Co., LTD. | Pending |
| 961 | PCT/KR2016/001820 | WO | Samsung Electronics Co., LTD. | Pending |
| 962 | US15/099998       | US | Samsung Electronics Co., LTD. | Pending |
| 963 | US15/052049       | US | Samsung Electronics Co., LTD. | Pending |
| 964 | P20150137187      | KR | Samsung Electronics Co., LTD. | Pending |
| 965 | US14/716427       | US | Samsung Electronics Co., LTD. | Pending |
| 966 | US14/716023       | US | Samsung Electronics Co., LTD. | Pending |
| 967 | US14/716283       | US | Samsung Electronics Co., LTD. | Pending |
| 968 | US14/715747       | US | Samsung Electronics Co., LTD. | Pending |
| 969 | US14/715892       | US | Samsung Electronics Co., LTD. | Pending |
| 970 | US14/715873       | US | Samsung Electronics Co., LTD. | Pending |
| 971 | US14/715817       | US | Samsung Electronics Co., LTD. | Pending |
| 972 | US14/714565       | US | Samsung Electronics Co., LTD. | Pending |
| 973 | US14/715845       | US | Samsung Electronics Co., LTD. | Pending |
| 974 | US14/716271       | US | Samsung Electronics Co., LTD. | Pending |
| 975 | US14/716093       | US | Samsung Electronics Co., LTD. | Pending |
| 976 | US14/715908       | US | Samsung Electronics Co., LTD. | Pending |
| 977 | US14/715795       | US | Samsung Electronics Co., LTD. | Pending |
| 978 | US14/716340       | US | Samsung Electronics Co., LTD. | Pending |
| 979 | US14/716222       | US | Samsung Electronics Co., LTD. | Pending |
| 980 | US14/716013       | US | Samsung Electronics Co., LTD. | Pending |
| 981 | US14/714530       | US | Samsung Electronics Co., LTD. | Pending |
| 982 | US14/715780       | US | Samsung Electronics Co., LTD. | Pending |
| 983 | US14/714624       | US | Samsung Electronics Co., LTD. | Pending |
| 984 | US14/715674       | US | Samsung Electronics Co., LTD. | Pending |



|      |                   |    |                               |         |
|------|-------------------|----|-------------------------------|---------|
| 985  | US14/715861       | US | Samsung Electronics Co., LTD. | Pending |
| 986  | US14/714508       | US | Samsung Electronics Co., LTD. | Pending |
| 987  | US14/716324       | US | Samsung Electronics Co., LTD. | Pending |
| 988  | US14/716053       | US | Samsung Electronics Co., LTD. | Pending |
| 989  | US14/715941       | US | Samsung Electronics Co., LTD. | Pending |
| 990  | US14/715764       | US | Samsung Electronics Co., LTD. | Pending |
| 991  | US14/716287       | US | Samsung Electronics Co., LTD. | Pending |
| 992  | US14/716156       | US | Samsung Electronics Co., LTD. | Pending |
| 993  | US14/716365       | US | Samsung Electronics Co., LTD. | Pending |
| 994  | US14/716172       | US | Samsung Electronics Co., LTD. | Pending |
| 995  | PCT/KR2016/002088 | WO | Samsung Electronics Co., LTD. | Pending |
| 996  | US15/130040       | US | Samsung Electronics Co., LTD. | Pending |
| 997  | US15/058415       | US | Samsung Electronics Co., LTD. | Pending |
| 998  | P20150137186      | KR | Samsung Electronics Co., LTD. | Pending |
| 999  | PCT/KR2016/002086 | WO | Samsung Electronics Co., LTD. | Pending |
| 1000 | US15/058515       | US | Samsung Electronics Co., LTD. | Pending |
| 1001 | P20150137183      | KR | Samsung Electronics Co., LTD. | Pending |
| 1002 | PCT/KR2016/002093 | WO | Samsung Electronics Co., LTD. | Pending |
| 1003 | US15/130011       | US | Samsung Electronics Co., LTD. | Pending |
| 1004 | US15/058318       | US | Samsung Electronics Co., LTD. | Pending |
| 1005 | P20150137185      | KR | Samsung Electronics Co., LTD. | Pending |
| 1006 | P20150137185      | KR | Samsung Electronics Co., LTD. | Pending |
| 1007 | PCT/KR2016/002094 | WO | Samsung Electronics Co., LTD. | Pending |
| 1008 | US15/058242       | US | Samsung Electronics Co., LTD. | Pending |
| 1009 | PCT/KR2016/002091 | WO | Samsung Electronics Co., LTD. | Pending |
| 1010 | US15/058348       | US | Samsung Electronics Co., LTD. | Pending |
| 1011 | P20150137188      | KR | Samsung Electronics Co., LTD. | Pending |
| 1012 | PCT/KR2016/002087 | WO | Samsung Electronics Co., LTD. | Pending |
| 1013 | US15/058353       | US | Samsung Electronics Co., LTD. | Pending |
| 1014 | P20150137184      | KR | Samsung Electronics Co., LTD. | Pending |
| 1015 | PCT/KR2016/002074 | WO | Samsung Electronics Co., LTD. | Pending |
| 1016 | US15/130181       | US | Samsung Electronics Co., LTD. | Pending |
| 1017 | US15/058365       | US | Samsung Electronics Co., LTD. | Pending |

|      |                   |    |                               |         |
|------|-------------------|----|-------------------------------|---------|
| 1018 | P20150137181      | KR | Samsung Electronics Co., LTD. | Pending |
| 1019 | PCT/KR2016/001885 | WO | Samsung Electronics Co., LTD. | Pending |
| 1020 | US15/053058       | US | Samsung Electronics Co., LTD. | Pending |
| 1021 | P20150137180      | KR | Samsung Electronics Co., LTD. | Pending |
| 1022 | PCT/KR2016/001883 | WO | Samsung Electronics Co., LTD. | Pending |
| 1023 | US15/053101       | US | Samsung Electronics Co., LTD. | Pending |
| 1024 | P20150137179      | KR | Samsung Electronics Co., LTD. | Pending |
| 1025 | PCT/KR2016/001880 | WO | Samsung Electronics Co., LTD. | Pending |
| 1026 | US15/099825       | US | Samsung Electronics Co., LTD. | Pending |
| 1027 | US15/053038       | US | Samsung Electronics Co., LTD. | Pending |
| 1028 | P20150137178      | KR | Samsung Electronics Co., LTD. | Pending |
| 1029 | PCT/KR2016/001500 | WO | Samsung Electronics Co., LTD. | Pending |
| 1030 | US15/044266       | US | Samsung Electronics Co., LTD. | Pending |
| 1031 | P20160014351      | KR | Samsung Electronics Co., LTD. | Pending |
| 1032 | PCT/KR2016/000252 | WO | Samsung Electronics Co., LTD. | Pending |
| 1033 | US14/992105       | US | Samsung Electronics Co., LTD. | Pending |
| 1034 | P20150162420      | KR | Samsung Electronics Co., LTD. | Pending |
| 1035 | PCT/KR2014/006024 | WO | Samsung Electronics Co., LTD. | Pending |
| 1036 | 1-2016-00511      | VN | Samsung Electronics Co., LTD. | Pending |
| 1037 | US14/324436       | US | Samsung Electronics Co., LTD. | Pending |
| 1038 | MX/a/2016/000010  | MX | Samsung Electronics Co., LTD. | Pending |
| 1039 | P20140083647      | KR | Samsung Electronics Co., LTD. | Pending |
| 1040 | 14819774.2        | EP | Samsung Electronics Co., LTD. | Pending |
| 1041 | 201480038616.6    | CN | Samsung Electronics Co., LTD. | Pending |
| 1042 | 2917422           | CA | Samsung Electronics Co., LTD. | Pending |
| 1043 | BR1120160001460   | BR | Samsung Electronics Co., LTD. | Pending |
| 1044 | PCT/KR2015/001694 | WO | Samsung Electronics Co., LTD. | Pending |
| 1045 | US15/130204       | US | Samsung Electronics Co., LTD. | Pending |
| 1046 | US14/625862       | US | Samsung Electronics Co., LTD. | Pending |
| 1047 | P20150000671      | KR | Samsung Electronics Co., LTD. | Pending |
| 1048 | PCT/KR2015/005101 | WO | Samsung Electronics Co., LTD. | Pending |
| 1049 | US15/130154       | US | Samsung Electronics Co., LTD. | Pending |
| 1050 | US14/716124       | US | Samsung Electronics Co., LTD. | Pending |

|      |                   |    |                               |         |
|------|-------------------|----|-------------------------------|---------|
| 1051 | P20150000672      | KR | Samsung Electronics Co., LTD. | Pending |
| 1052 | PCT/KR2015/005099 | WO | Samsung Electronics Co., LTD. | Pending |
| 1053 | US15/130096       | US | Samsung Electronics Co., LTD. | Pending |
| 1054 | US14/716132       | US | Samsung Electronics Co., LTD. | Pending |
| 1055 | P20150000697      | KR | Samsung Electronics Co., LTD. | Pending |
| 1056 | PCT/KR2015/005097 | WO | Samsung Electronics Co., LTD. | Pending |
| 1057 | US14/716503       | US | Samsung Electronics Co., LTD. | Pending |
| 1058 | P20150069924      | KR | Samsung Electronics Co., LTD. | Pending |
| 1059 | PCT/KR2015/001191 | WO | Samsung Electronics Co., LTD. | Pending |
| 1060 | US14/615148       | US | Samsung Electronics Co., LTD. | Pending |
| 1061 | MX/a/2016/010164  | MX | Samsung Electronics Co., LTD. | Pending |
| 1062 | P20150017971      | KR | Samsung Electronics Co., LTD. | Pending |
| 1063 | 15746125.2        | EP | Samsung Electronics Co., LTD. | Pending |
| 1064 | BR1120160179455   | BR | Samsung Electronics Co., LTD. | Pending |
| 1065 | PCT/KR2014/006125 | WO | Samsung Electronics Co., LTD. | Pending |
| 1066 | US14/910948       | US | Samsung Electronics Co., LTD. | Pending |
| 1067 | P20167003433      | KR | Samsung Electronics Co., LTD. | Pending |
| 1068 | 201627004230      | IN | Samsung Electronics Co., LTD. | Pending |
| 1069 | GB1410222.2       | GB | Samsung Electronics Co., LTD. | Pending |
| 1070 | 201480050068.9    | CN | Samsung Electronics Co., LTD. | Pending |
| 1071 | 2919830           | CA | Samsung Electronics Co., LTD. | Pending |
| 1072 | PCT/KR2015/002677 | WO | Samsung Electronics Co., LTD. | Pending |
| 1073 | US15/130001       | US | Samsung Electronics Co., LTD. | Pending |
| 1074 | US14/662379       | US | Samsung Electronics Co., LTD. | Pending |
| 1075 | P20150000677      | KR | Samsung Electronics Co., LTD. | Pending |
| 1076 | PCT/KR2015/001695 | WO | Samsung Electronics Co., LTD. | Pending |
| 1077 | US15/099946       | US | Samsung Electronics Co., LTD. | Pending |
| 1078 | US14/625795       | US | Samsung Electronics Co., LTD. | Pending |
| 1079 | P20150024183      | KR | Samsung Electronics Co., LTD. | Pending |
| 1080 | 15751726.9        | EP | Samsung Electronics Co., LTD. | Pending |
| 1081 | US14/527953       | US | Samsung Electronics Co., LTD. | Pending |
| 1082 | P20140149342      | KR | Samsung Electronics Co., LTD. | Pending |
| 1083 | PCT/KR2014/008223 | WO | Samsung Electronics Co., LTD. | Pending |

|      |                   |    |                               |         |
|------|-------------------|----|-------------------------------|---------|
| 1084 | 1-2016-00860      | VN | Samsung Electronics Co., LTD. | Pending |
| 1085 | US14/476872       | US | Samsung Electronics Co., LTD. | Pending |
| 1086 | MX/a/2016/002827  | MX | Samsung Electronics Co., LTD. | Pending |
| 1087 | P20140054756      | KR | Samsung Electronics Co., LTD. | Pending |
| 1088 | 201627009967      | IN | Samsung Electronics Co., LTD. | Pending |
| 1089 | 14842565.5        | EP | Samsung Electronics Co., LTD. | Pending |
| 1090 | 201480060384.4    | CN | Samsung Electronics Co., LTD. | Pending |
| 1091 | 2923467           | CA | Samsung Electronics Co., LTD. | Pending |
| 1092 | BR1120160049152   | BR | Samsung Electronics Co., LTD. | Pending |
| 1093 | PCT/KR2014/007226 | WO | Samsung Electronics Co., LTD. | Pending |
| 1094 | 1-2016-00740      | VN | Samsung Electronics Co., LTD. | Pending |
| 1095 | US14/452133       | US | Samsung Electronics Co., LTD. | Pending |
| 1096 | MX/a/2016/001582  | MX | Samsung Electronics Co., LTD. | Pending |
| 1097 | P20140062575      | KR | Samsung Electronics Co., LTD. | Pending |
| 1098 | 201617007012      | IN | Samsung Electronics Co., LTD. | Pending |
| 1099 | 14834212.4        | EP | Samsung Electronics Co., LTD. | Pending |
| 1100 | 201480044670.1    | CN | Samsung Electronics Co., LTD. | Pending |
| 1101 | 2920150           | CA | Samsung Electronics Co., LTD. | Pending |
| 1102 | BR1120160025024   | BR | Samsung Electronics Co., LTD. | Pending |
| 1103 | US14/506771       | US | Samsung Electronics Co., LTD. | Pending |
| 1104 | P20140134505      | KR | Samsung Electronics Co., LTD. | Pending |
| 1105 | US14/506794       | US | Samsung Electronics Co., LTD. | Pending |
| 1106 | P20140134441      | KR | Samsung Electronics Co., LTD. | Pending |
| 1107 | PCT/KR2014/006646 | WO | Samsung Electronics Co., LTD. | Pending |
| 1108 | 1-2016-00626      | VN | Samsung Electronics Co., LTD. | Pending |
| 1109 | US14/337435       | US | Samsung Electronics Co., LTD. | Pending |
| 1110 | MX/a/2016/000901  | MX | Samsung Electronics Co., LTD. | Pending |
| 1111 | P20140054762      | KR | Samsung Electronics Co., LTD. | Pending |
| 1112 | 201627005705      | IN | Samsung Electronics Co., LTD. | Pending |
| 1113 | 14828802          | EP | Samsung Electronics Co., LTD. | Pending |
| 1114 | 201480041602.X    | CN | Samsung Electronics Co., LTD. | Pending |
| 1115 | 2919139           | CA | Samsung Electronics Co., LTD. | Pending |
| 1116 | BR1120160015240   | BR | Samsung Electronics Co., LTD. | Pending |

|      |                   |    |                               |         |
|------|-------------------|----|-------------------------------|---------|
| 1117 | US14/497635       | US | Samsung Electronics Co., LTD. | Pending |
| 1118 | P20140129604      | KR | Samsung Electronics Co., LTD. | Pending |
| 1119 | US14/497779       | US | Samsung Electronics Co., LTD. | Pending |
| 1120 | P20140129606      | KR | Samsung Electronics Co., LTD. | Pending |
| 1121 | US14/488549       | US | Samsung Electronics Co., LTD. | Pending |
| 1122 | P20140123657      | KR | Samsung Electronics Co., LTD. | Pending |
| 1123 | PCT/KR2014/005204 | WO | Samsung Electronics Co., LTD. | Pending |
| 1124 | 1-2016-00152      | VN | Samsung Electronics Co., LTD. | Pending |
| 1125 | US14/303834       | US | Samsung Electronics Co., LTD. | Pending |
| 1126 | MX/a/2015/017052  | MX | Samsung Electronics Co., LTD. | Pending |
| 1127 | P20140058599      | KR | Samsung Electronics Co., LTD. | Pending |
| 1128 | 201647001007      | IN | Samsung Electronics Co., LTD. | Pending |
| 1129 | 14810282.5        | EP | Samsung Electronics Co., LTD. | Pending |
| 1130 | 201480033816.2    | CN | Samsung Electronics Co., LTD. | Pending |
| 1131 | 2915740           | CA | Samsung Electronics Co., LTD. | Pending |
| 1132 | BR1120150311130   | BR | Samsung Electronics Co., LTD. | Pending |
| 1133 | PCT/KR2014/005588 | WO | Samsung Electronics Co., LTD. | Pending |
| 1134 | 1-2016-00351      | VN | Samsung Electronics Co., LTD. | Pending |
| 1135 | US14/243103       | US | Samsung Electronics Co., LTD. | Pending |
| 1136 | MX/a/2015/017492  | MX | Samsung Electronics Co., LTD. | Pending |
| 1137 | P20130096128      | KR | Samsung Electronics Co., LTD. | Pending |
| 1138 | GB1311443.4       | GB | Samsung Electronics Co., LTD. | Pending |
| 1139 | 14818032.6        | EP | Samsung Electronics Co., LTD. | Pending |
| 1140 | 201480037117.5    | CN | Samsung Electronics Co., LTD. | Pending |
| 1141 | 2916943           | CA | Samsung Electronics Co., LTD. | Pending |
| 1142 | BR1120150320678   | BR | Samsung Electronics Co., LTD. | Pending |
| 1143 | PCT/KR2014/005592 | WO | Samsung Electronics Co., LTD. | Pending |
| 1144 | 1-2016-00370      | VN | Samsung Electronics Co., LTD. | Pending |
| 1145 | US14/305028       | US | Samsung Electronics Co., LTD. | Pending |
| 1146 | MX/a/2015/017350  | MX | Samsung Electronics Co., LTD. | Pending |
| 1147 | P20130075725      | KR | Samsung Electronics Co., LTD. | Pending |
| 1148 | 3679/MUMNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 1149 | 14818369.2        | EP | Samsung Electronics Co., LTD. | Pending |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1150 | 201480037109.0   | CN | Samsung Electronics Co., LTD. | Pending |
| 1151 | 2916946          | CA | Samsung Electronics Co., LTD. | Pending |
| 1152 | BR1120150320694  | BR | Samsung Electronics Co., LTD. | Pending |
| 1153 | KR2011/006462    | WO | Samsung Electronics Co., LTD. | Pending |
| 1154 | US9386562        | US | Samsung Electronics Co., LTD. | Granted |
| 1155 | US9179440        | US | Samsung Electronics Co., LTD. | Granted |
| 1156 | US8804675        | US | Samsung Electronics Co., LTD. | Granted |
| 1157 | 311262           | MX | Samsung Electronics Co., LTD. | Granted |
| 1158 | P20110088158     | KR | Samsung Electronics Co., LTD. | Pending |
| 1159 | GB1014432.7      | GB | Samsung Electronics Co., LTD. | Pending |
| 1160 | 2809953          | CA | Samsung Electronics Co., LTD. | Pending |
| 1161 | KR2010/008704    | WO | Samsung Electronics Co., LTD. | Pending |
| 1162 | US14/842210      | US | Samsung Electronics Co., LTD. | Pending |
| 1163 | US14/164870      | US | Samsung Electronics Co., LTD. | Pending |
| 1164 | US8689093        | US | Samsung Electronics Co., LTD. | Granted |
| 1165 | P20090120572     | KR | Samsung Electronics Co., LTD. | Pending |
| 1166 | 10836189         | EP | Samsung Electronics Co., LTD. | Pending |
| 1167 | KR2010/008155    | WO | Samsung Electronics Co., LTD. | Pending |
| 1168 | US14/873877      | US | Samsung Electronics Co., LTD. | Pending |
| 1169 | US9154341        | US | Samsung Electronics Co., LTD. | Granted |
| 1170 | US8707125        | US | Samsung Electronics Co., LTD. | Granted |
| 1171 | P20127015593     | KR | Samsung Electronics Co., LTD. | Pending |
| 1172 | P20090111489     | KR | Samsung Electronics Co., LTD. | Pending |
| 1173 | 5612699          | JP | Samsung Electronics Co., LTD. | Granted |
| 1174 | 5116/CHENP/2012  | IN | Samsung Electronics Co., LTD. | Pending |
| 1175 | 10191630.2       | EP | Samsung Electronics Co., LTD. | Pending |
| 1176 | ZL201080061781.5 | CN | Samsung Electronics Co., LTD. | Granted |
| 1177 | 2010322598       | AU | Samsung Electronics Co., LTD. | Granted |
| 1178 | KR2009/001051    | WO | Samsung Electronics Co., LTD. | Pending |
| 1179 | 13658            | VN | Samsung Electronics Co., LTD. | Granted |
| 1180 | US8352844        | US | Samsung Electronics Co., LTD. | Granted |
| 1181 | I376907          | TW | Samsung Electronics Co., LTD. | Granted |
| 1182 | 2101431          | TR | Samsung Electronics Co., LTD. | Granted |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 1183 | 2101430         | TR | Samsung Electronics Co., LTD. | Granted |
| 1184 | 2101431         | SK | Samsung Electronics Co., LTD. | Granted |
| 1185 | 2101430         | SK | Samsung Electronics Co., LTD. | Granted |
| 1186 | 2099150         | SK | Samsung Electronics Co., LTD. | Granted |
| 1187 | 2101431         | SI | Samsung Electronics Co., LTD. | Granted |
| 1188 | 2101430         | SI | Samsung Electronics Co., LTD. | Granted |
| 1189 | 164162          | SG | Samsung Electronics Co., LTD. | Granted |
| 1190 | 2101431         | SE | Samsung Electronics Co., LTD. | Granted |
| 1191 | 2101430         | SE | Samsung Electronics Co., LTD. | Granted |
| 1192 | 2099150         | SE | Samsung Electronics Co., LTD. | Granted |
| 1193 | 2453992         | RU | Samsung Electronics Co., LTD. | Granted |
| 1194 | 2101431         | RO | Samsung Electronics Co., LTD. | Granted |
| 1195 | 2101430         | RO | Samsung Electronics Co., LTD. | Granted |
| 1196 | 2101431         | PT | Samsung Electronics Co., LTD. | Granted |
| 1197 | 2101430         | PT | Samsung Electronics Co., LTD. | Granted |
| 1198 | 2101431         | PL | Samsung Electronics Co., LTD. | Granted |
| 1199 | 2101430         | PL | Samsung Electronics Co., LTD. | Granted |
| 1200 | 2099150         | PL | Samsung Electronics Co., LTD. | Granted |
| 1201 | 2101431         | NO | Samsung Electronics Co., LTD. | Granted |
| 1202 | 2101430         | NO | Samsung Electronics Co., LTD. | Granted |
| 1203 | 2101431         | NL | Samsung Electronics Co., LTD. | Granted |
| 1204 | 2099150         | NL | Samsung Electronics Co., LTD. | Granted |
| 1205 | 2101430         | NL | Samsung Electronics Co., LTD. | Granted |
| 1206 | 2099150         | NL | Samsung Electronics Co., LTD. | Granted |
| 1207 | PI 2010004146   | MY | Samsung Electronics Co., LTD. | Pending |
| 1208 | P20080019650    | KR | Samsung Electronics Co., LTD. | Pending |
| 1209 | 5670537         | JP | Samsung Electronics Co., LTD. | Granted |
| 1210 | 5441270         | JP | Samsung Electronics Co., LTD. | Granted |
| 1211 | 2101431         | IT | Samsung Electronics Co., LTD. | Granted |
| 1212 | 2101430         | IT | Samsung Electronics Co., LTD. | Granted |
| 1213 | 2099150         | IT | Samsung Electronics Co., LTD. | Granted |
| 1214 | 6970/DELNP/2010 | IN | Samsung Electronics Co., LTD. | Pending |
| 1215 | IDP0032958      | ID | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1216 | 2101431          | HU | Samsung Electronics Co., LTD. | Granted |
| 1217 | 2101430          | HU | Samsung Electronics Co., LTD. | Granted |
| 1218 | 2099150          | HU | Samsung Electronics Co., LTD. | Granted |
| 1219 | 2101431          | GR | Samsung Electronics Co., LTD. | Granted |
| 1220 | 2101430          | GR | Samsung Electronics Co., LTD. | Granted |
| 1221 | 2101431          | GB | Samsung Electronics Co., LTD. | Granted |
| 1222 | 2101430          | GB | Samsung Electronics Co., LTD. | Granted |
| 1223 | 2099150          | GB | Samsung Electronics Co., LTD. | Granted |
| 1224 | 2101431          | FR | Samsung Electronics Co., LTD. | Granted |
| 1225 | 2101430          | FR | Samsung Electronics Co., LTD. | Granted |
| 1226 | 2099150          | FR | Samsung Electronics Co., LTD. | Granted |
| 1227 | 2101431          | FI | Samsung Electronics Co., LTD. | Granted |
| 1228 | 2101430          | FI | Samsung Electronics Co., LTD. | Granted |
| 1229 | 2099150          | FI | Samsung Electronics Co., LTD. | Granted |
| 1230 | 2101431          | ES | Samsung Electronics Co., LTD. | Granted |
| 1231 | 2101430          | ES | Samsung Electronics Co., LTD. | Granted |
| 1232 | 2099150          | ES | Samsung Electronics Co., LTD. | Granted |
| 1233 | 12160589.3       | EP | Samsung Electronics Co., LTD. | Pending |
| 1234 | 11177843.7       | EP | Samsung Electronics Co., LTD. | Pending |
| 1235 | 2101431          | EP | Samsung Electronics Co., LTD. | Granted |
| 1236 | 2101430          | EP | Samsung Electronics Co., LTD. | Granted |
| 1237 | 2099150          | EP | Samsung Electronics Co., LTD. | Granted |
| 1238 | 2101431          | DK | Samsung Electronics Co., LTD. | Granted |
| 1239 | 2101430          | DK | Samsung Electronics Co., LTD. | Granted |
| 1240 | 2101431          | DE | Samsung Electronics Co., LTD. | Granted |
| 1241 | 2101430          | DE | Samsung Electronics Co., LTD. | Granted |
| 1242 | 2099150          | DE | Samsung Electronics Co., LTD. | Granted |
| 1243 | 2101431          | CZ | Samsung Electronics Co., LTD. | Granted |
| 1244 | 2101430          | CZ | Samsung Electronics Co., LTD. | Granted |
| 1245 | 2099150          | CZ | Samsung Electronics Co., LTD. | Granted |
| 1246 | 201310227235.X   | CN | Samsung Electronics Co., LTD. | Pending |
| 1247 | 201310227250.4   | CN | Samsung Electronics Co., LTD. | Pending |
| 1248 | ZL200980115022.X | CN | Samsung Electronics Co., LTD. | Granted |



|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1249 | 2101431          | CH | Samsung Electronics Co., LTD. | Granted |
| 1250 | 2101430          | CH | Samsung Electronics Co., LTD. | Granted |
| 1251 | 2101431          | BG | Samsung Electronics Co., LTD. | Granted |
| 1252 | 2101430          | BG | Samsung Electronics Co., LTD. | Granted |
| 1253 | 2101431          | BE | Samsung Electronics Co., LTD. | Granted |
| 1254 | 2101430          | BE | Samsung Electronics Co., LTD. | Granted |
| 1255 | 2009220323       | AU | Samsung Electronics Co., LTD. | Granted |
| 1256 | 2101431          | AT | Samsung Electronics Co., LTD. | Granted |
| 1257 | 2101430          | AT | Samsung Electronics Co., LTD. | Granted |
| 1258 | KR/2009/001027   | WO | Samsung Electronics Co., LTD. | Pending |
| 1259 | US8533556        | US | Samsung Electronics Co., LTD. | Granted |
| 1260 | US8321745        | US | Samsung Electronics Co., LTD. | Granted |
| 1261 | P20080019607     | KR | Samsung Electronics Co., LTD. | Pending |
| 1262 | 5461728          | JP | Samsung Electronics Co., LTD. | Granted |
| 1263 | 5301575          | JP | Samsung Electronics Co., LTD. | Granted |
| 1264 | 6950/DELNP/2010  | IN | Samsung Electronics Co., LTD. | Pending |
| 1265 | 9154123.5        | EP | Samsung Electronics Co., LTD. | Pending |
| 1266 | 201310127349.7   | CN | Samsung Electronics Co., LTD. | Pending |
| 1267 | ZL200980107576.5 | CN | Samsung Electronics Co., LTD. | Granted |
| 1268 | 2009220393       | AU | Samsung Electronics Co., LTD. | Granted |
| 1269 | KR2008/007249    | WO | Samsung Electronics Co., LTD. | Pending |
| 1270 | 12905            | VN | Samsung Electronics Co., LTD. | Granted |
| 1271 | US8166367        | US | Samsung Electronics Co., LTD. | Granted |
| 1272 | 2381583          | SK | Samsung Electronics Co., LTD. | Granted |
| 1273 | 2381582          | SK | Samsung Electronics Co., LTD. | Granted |
| 1274 | 2239854          | SK | Samsung Electronics Co., LTD. | Granted |
| 1275 | 2068449          | SK | Samsung Electronics Co., LTD. | Granted |
| 1276 | 201209001.5      | SG | Samsung Electronics Co., LTD. | Granted |
| 1277 | 161004           | SG | Samsung Electronics Co., LTD. | Granted |
| 1278 | 2381583          | SE | Samsung Electronics Co., LTD. | Granted |
| 1279 | 2381582          | SE | Samsung Electronics Co., LTD. | Granted |
| 1280 | 2239854          | SE | Samsung Electronics Co., LTD. | Granted |
| 1281 | 2068449          | SE | Samsung Electronics Co., LTD. | Granted |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 1282 | 2491728         | RU | Samsung Electronics Co., LTD. | Granted |
| 1283 | 2491727         | RU | Samsung Electronics Co., LTD. | Granted |
| 1284 | 2446585         | RU | Samsung Electronics Co., LTD. | Granted |
| 1285 | 2381583         | PL | Samsung Electronics Co., LTD. | Granted |
| 1286 | 2381582         | PL | Samsung Electronics Co., LTD. | Granted |
| 1287 | 2239854         | PL | Samsung Electronics Co., LTD. | Granted |
| 1288 | 2068449         | PL | Samsung Electronics Co., LTD. | Granted |
| 1289 | 2381583         | NL | Samsung Electronics Co., LTD. | Granted |
| 1290 | 2381582         | NL | Samsung Electronics Co., LTD. | Granted |
| 1291 | 2239854         | NL | Samsung Electronics Co., LTD. | Granted |
| 1292 | 2068449         | NL | Samsung Electronics Co., LTD. | Granted |
| 1293 | PI 2010002022   | MY | Samsung Electronics Co., LTD. | Pending |
| 1294 | P20070126083    | KR | Samsung Electronics Co., LTD. | Pending |
| 1295 | 5441282         | JP | Samsung Electronics Co., LTD. | Granted |
| 1296 | 5302972         | JP | Samsung Electronics Co., LTD. | Granted |
| 1297 | 2381583         | IT | Samsung Electronics Co., LTD. | Granted |
| 1298 | 2381582         | IT | Samsung Electronics Co., LTD. | Granted |
| 1299 | 2239854         | IT | Samsung Electronics Co., LTD. | Granted |
| 1300 | 2068449         | IT | Samsung Electronics Co., LTD. | Granted |
| 1301 | 2067/KOLNP/2010 | IN | Samsung Electronics Co., LTD. | Pending |
| 1302 | W00201302138    | ID | Samsung Electronics Co., LTD. | Pending |
| 1303 | IDP000035518    | ID | Samsung Electronics Co., LTD. | Granted |
| 1304 | 2381583         | HU | Samsung Electronics Co., LTD. | Granted |
| 1305 | 2381582         | HU | Samsung Electronics Co., LTD. | Granted |
| 1306 | 2239854         | HU | Samsung Electronics Co., LTD. | Granted |
| 1307 | 2068449         | HU | Samsung Electronics Co., LTD. | Granted |
| 1308 | 2381583         | GB | Samsung Electronics Co., LTD. | Granted |
| 1309 | 2381582         | GB | Samsung Electronics Co., LTD. | Granted |
| 1310 | 2239854         | GB | Samsung Electronics Co., LTD. | Granted |
| 1311 | 2068449         | GB | Samsung Electronics Co., LTD. | Granted |
| 1312 | 2381583         | FR | Samsung Electronics Co., LTD. | Granted |
| 1313 | 2381582         | FR | Samsung Electronics Co., LTD. | Granted |
| 1314 | 2239854         | FR | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1315 | 2068449          | FR | Samsung Electronics Co., LTD. | Granted |
| 1316 | 2381583          | FI | Samsung Electronics Co., LTD. | Granted |
| 1317 | 2381582          | FI | Samsung Electronics Co., LTD. | Granted |
| 1318 | 2239854          | FI | Samsung Electronics Co., LTD. | Granted |
| 1319 | 2068449          | FI | Samsung Electronics Co., LTD. | Granted |
| 1320 | 2381583          | ES | Samsung Electronics Co., LTD. | Granted |
| 1321 | 2381582          | ES | Samsung Electronics Co., LTD. | Granted |
| 1322 | 2239854          | ES | Samsung Electronics Co., LTD. | Granted |
| 1323 | 2068449          | ES | Samsung Electronics Co., LTD. | Granted |
| 1324 | 2381583          | EP | Samsung Electronics Co., LTD. | Granted |
| 1325 | 2381582          | EP | Samsung Electronics Co., LTD. | Granted |
| 1326 | 2239854          | EP | Samsung Electronics Co., LTD. | Granted |
| 1327 | 2068449          | EP | Samsung Electronics Co., LTD. | Granted |
| 1328 | 2381583          | DE | Samsung Electronics Co., LTD. | Granted |
| 1329 | 2381582          | DE | Samsung Electronics Co., LTD. | Granted |
| 1330 | 2239854          | DE | Samsung Electronics Co., LTD. | Granted |
| 1331 | 2068449          | DE | Samsung Electronics Co., LTD. | Granted |
| 1332 | 2381583          | CZ | Samsung Electronics Co., LTD. | Granted |
| 1333 | 2381582          | CZ | Samsung Electronics Co., LTD. | Granted |
| 1334 | 2239854          | CZ | Samsung Electronics Co., LTD. | Granted |
| 1335 | 2068449          | CZ | Samsung Electronics Co., LTD. | Granted |
| 1336 | ZL200880119339.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 1337 | 2012200530       | AU | Samsung Electronics Co., LTD. | Granted |
| 1338 | 2008332040       | AU | Samsung Electronics Co., LTD. | Granted |
| 1339 | KR2008/002722    | WO | Samsung Electronics Co., LTD. | Pending |
| 1340 | 12811            | VN | Samsung Electronics Co., LTD. | Granted |
| 1341 | 1-2009-02511     | VN | Samsung Electronics Co., LTD. | Pending |
| 1342 | US8879651        | US | Samsung Electronics Co., LTD. | Granted |
| 1343 | US8238484        | US | Samsung Electronics Co., LTD. | Granted |
| 1344 | US8406324        | US | Samsung Electronics Co., LTD. | Granted |
| 1345 | 320315           | MX | Samsung Electronics Co., LTD. | Granted |
| 1346 | 314960           | MX | Samsung Electronics Co., LTD. | Granted |
| 1347 | P1498019         | KR | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1348 | 10105781         | HK | Samsung Electronics Co., LTD. | Pending |
| 1349 | 20096321         | FI | Samsung Electronics Co., LTD. | Pending |
| 1350 | 20096316         | FI | Samsung Electronics Co., LTD. | Pending |
| 1351 | 112008002042.6   | DE | Samsung Electronics Co., LTD. | Pending |
| 1352 | 112008001013.7   | DE | Samsung Electronics Co., LTD. | Pending |
| 1353 | ZL200910224800.0 | CN | Samsung Electronics Co., LTD. | Granted |
| 1354 | ZL200880012202.0 | CN | Samsung Electronics Co., LTD. | Granted |
| 1355 | 2684387          | CA | Samsung Electronics Co., LTD. | Granted |
| 1356 | 2681860          | CA | Samsung Electronics Co., LTD. | Granted |
| 1357 | PI0823175-3      | BR | Samsung Electronics Co., LTD. | Pending |
| 1358 | PI0811077-8      | BR | Samsung Electronics Co., LTD. | Pending |
| 1359 | KR2008/000636    | WO | Samsung Electronics Co., LTD. | Pending |
| 1360 | US8737432        | US | Samsung Electronics Co., LTD. | Granted |
| 1361 | P20160077424     | KR | Samsung Electronics Co., LTD. | Pending |
| 1362 | P1633879         | KR | Samsung Electronics Co., LTD. | Granted |
| 1363 | US9106455        | US | Samsung Electronics Co., LTD. | Granted |
| 1364 | US12/254282      | US | Samsung Electronics Co., LTD. | Pending |
| 1365 | US9166826        | US | Samsung Electronics Co., LTD. | Granted |
| 1366 | US8385448        | US | Samsung Electronics Co., LTD. | Granted |
| 1367 | US8325830        | US | Samsung Electronics Co., LTD. | Granted |
| 1368 | US8385447        | US | Samsung Electronics Co., LTD. | Granted |
| 1369 | US8406347        | US | Samsung Electronics Co., LTD. | Granted |
| 1370 | US8385437        | US | Samsung Electronics Co., LTD. | Granted |
| 1371 | US8149932        | US | Samsung Electronics Co., LTD. | Granted |
| 1372 | P1369838         | KR | Samsung Electronics Co., LTD. | Granted |
| 1373 | 2004/002296      | WO | Samsung Electronics Co., LTD. | Pending |
| 1374 | US7340006        | US | Samsung Electronics Co., LTD. | Granted |
| 1375 | 1515504          | SE | Samsung Electronics Co., LTD. | Granted |
| 1376 | 2313910          | RU | Samsung Electronics Co., LTD. | Granted |
| 1377 | P0933115         | KR | Samsung Electronics Co., LTD. | Granted |
| 1378 | 4303288          | JP | Samsung Electronics Co., LTD. | Granted |
| 1379 | 1515504          | IT | Samsung Electronics Co., LTD. | Granted |
| 1380 | 242608           | IN | Samsung Electronics Co., LTD. | Granted |

|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 1381 | 1515504             | GB | Samsung Electronics Co., LTD. | Granted |
| 1382 | 1515504             | FR | Samsung Electronics Co., LTD. | Granted |
| 1383 | 1515504             | EP | Samsung Electronics Co., LTD. | Granted |
| 1384 | 1515504             | DE | Samsung Electronics Co., LTD. | Granted |
| 1385 | ZL200480025726.5    | CN | Samsung Electronics Co., LTD. | Granted |
| 1386 | 2536234             | CA | Samsung Electronics Co., LTD. | Granted |
| 1387 | 2004303047          | AU | Samsung Electronics Co., LTD. | Granted |
| 1388 | CA 2440013          | CA | Samsung Electronics Co., LTD. | Granted |
| 1389 | CN ZL200410005357.5 | CN | Samsung Electronics Co., LTD. | Granted |
| 1390 | RU 2276472          | RU | Samsung Electronics Co., LTD. | Granted |
| 1391 | IN 268596           | IN | Samsung Electronics Co., LTD. | Granted |
| 1392 | US 8160138          | US | Samsung Electronics Co., LTD. | Granted |
| 1393 | CN 03801207.3       | CN | Samsung Electronics Co., LTD. | Granted |
| 1394 | IN 203511           | IN | Samsung Electronics Co., LTD. | Granted |
| 1395 | CN ZL201210210549.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 1396 | CN ZL201310013117   | CN | Samsung Electronics Co., LTD. | Granted |
| 1397 | CN ZL201310013145   | CN | Samsung Electronics Co., LTD. | Granted |
| 1398 | CN ZL201310013187   | CN | Samsung Electronics Co., LTD. | Granted |
| 1399 | CN ZL201310013142.7 | CN | Samsung Electronics Co., LTD. | Granted |
| 1400 | CN 200880020191.0   | CN | Samsung Electronics Co., LTD. | Granted |
| 1401 | AL 2665267          | AL | Samsung Electronics Co., LTD. | Granted |
| 1402 | AL 2804383          | AL | Samsung Electronics Co., LTD. | Granted |
| 1403 | AT 2665267          | AT | Samsung Electronics Co., LTD. | Granted |
| 1404 | AT 2804383          | AT | Samsung Electronics Co., LTD. | Granted |
| 1405 | AU 2010283045       | AU | Samsung Electronics Co., LTD. | Granted |
| 1406 | AU 2013202016       | AU | Samsung Electronics Co., LTD. | Granted |
| 1407 | AU 2013202015       | AU | Samsung Electronics Co., LTD. | Granted |
| 1408 | BE 2665267          | BE | Samsung Electronics Co., LTD. | Granted |
| 1409 | BE 2804383          | BE | Samsung Electronics Co., LTD. | Granted |
| 1410 | BG 2665267          | BG | Samsung Electronics Co., LTD. | Granted |
| 1411 | BG 2804383          | BG | Samsung Electronics Co., LTD. | Granted |
| 1412 | BR1120120023896     | BR | Samsung Electronics Co., LTD. | Pending |
| 1413 | 1220130190120       | BR | Samsung Electronics Co., LTD. | Pending |

|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 1414 | 1220130190155       | BR | Samsung Electronics Co., LTD. | Pending |
| 1415 | CA 2770991          | CA | Samsung Electronics Co., LTD. | Granted |
| 1416 | CA 2814715          | CA | Samsung Electronics Co., LTD. | Granted |
| 1417 | CA 2814270          | CA | Samsung Electronics Co., LTD. | Granted |
| 1418 | CA 2876420          | CA | Samsung Electronics Co., LTD. | Granted |
| 1419 | CH 2665267          | CH | Samsung Electronics Co., LTD. | Granted |
| 1420 | CH 2804383          | CH | Samsung Electronics Co., LTD. | Granted |
| 1421 | CN ZL201080036192.1 | CN | Samsung Electronics Co., LTD. | Granted |
| 1422 | CN ZL201310086149.1 | CN | Samsung Electronics Co., LTD. | Granted |
| 1423 | CN ZL201310091738.9 | CN | Samsung Electronics Co., LTD. | Granted |
| 1424 | CN ZL201510004944.0 | CN | Samsung Electronics Co., LTD. | Granted |
| 1425 | 201510004895        | CN | Samsung Electronics Co., LTD. | Pending |
| 1426 | CN ZL201510004975.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 1427 | 201510004976        | CN | Samsung Electronics Co., LTD. | Pending |
| 1428 | 201510002762.X      | CN | Samsung Electronics Co., LTD. | Pending |
| 1429 | CY 2665267          | CY | Samsung Electronics Co., LTD. | Granted |
| 1430 | CY 2804383          | CY | Samsung Electronics Co., LTD. | Granted |
| 1431 | CZ 2665267          | CZ | Samsung Electronics Co., LTD. | Granted |
| 1432 | CZ 2804383          | CZ | Samsung Electronics Co., LTD. | Granted |
| 1433 | DE 131806135        | DE | Samsung Electronics Co., LTD. | Granted |
| 1434 | DE 141786988        | DE | Samsung Electronics Co., LTD. | Granted |
| 1435 | DK 2665267          | DK | Samsung Electronics Co., LTD. | Granted |
| 1436 | DK 2804383          | DK | Samsung Electronics Co., LTD. | Granted |
| 1437 | EE 2665267          | EE | Samsung Electronics Co., LTD. | Granted |
| 1438 | EE 2804383          | EE | Samsung Electronics Co., LTD. | Granted |
| 1439 | 10808400            | EP | Samsung Electronics Co., LTD. | Pending |
| 1440 | 13180614            | EP | Samsung Electronics Co., LTD. | Pending |
| 1441 | 15151648            | EP | Samsung Electronics Co., LTD. | Pending |
| 1442 | 15153212            | EP | Samsung Electronics Co., LTD. | Pending |
| 1443 | 16180870            | EP | Samsung Electronics Co., LTD. | Pending |
| 1444 | ES 2665267          | ES | Samsung Electronics Co., LTD. | Granted |
| 1445 | ES 2804383          | ES | Samsung Electronics Co., LTD. | Granted |
| 1446 | FI 2665267          | FI | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1447 | FI 2804383       | FI | Samsung Electronics Co., LTD. | Granted |
| 1448 | FR 2665267       | FR | Samsung Electronics Co., LTD. | Granted |
| 1449 | FR 2804383       | FR | Samsung Electronics Co., LTD. | Granted |
| 1450 | GB 2665267       | GB | Samsung Electronics Co., LTD. | Granted |
| 1451 | GB 2804383       | GB | Samsung Electronics Co., LTD. | Granted |
| 1452 | GR 2665267       | GR | Samsung Electronics Co., LTD. | Granted |
| 1453 | GR 2804383       | GR | Samsung Electronics Co., LTD. | Granted |
| 1454 | HR 2665267       | HR | Samsung Electronics Co., LTD. | Granted |
| 1455 | HR 2804383       | HR | Samsung Electronics Co., LTD. | Granted |
| 1456 | HU 2665267       | HU | Samsung Electronics Co., LTD. | Granted |
| 1457 | HU 2804383       | HU | Samsung Electronics Co., LTD. | Granted |
| 1458 | ID W-00201200971 | ID | Samsung Electronics Co., LTD. | Granted |
| 1459 | W-00201301922    | ID | Samsung Electronics Co., LTD. | Pending |
| 1460 | W-00201301925    | ID | Samsung Electronics Co., LTD. | Pending |
| 1461 | P-00201500479    | ID | Samsung Electronics Co., LTD. | Pending |
| 1462 | P-00201500480    | ID | Samsung Electronics Co., LTD. | Pending |
| 1463 | P-00201500474    | ID | Samsung Electronics Co., LTD. | Pending |
| 1464 | IE 2665267       | IE | Samsung Electronics Co., LTD. | Granted |
| 1465 | IE 2804383       | IE | Samsung Electronics Co., LTD. | Granted |
| 1466 | 2235/CHENP/2012  | IN | Samsung Electronics Co., LTD. | Pending |
| 1467 | 2468/CHENP/2013  | IN | Samsung Electronics Co., LTD. | Pending |
| 1468 | 2447/CHENP/2013  | IN | Samsung Electronics Co., LTD. | Pending |
| 1469 | 478/CHENP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 1470 | 477/CHENP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 1471 | 476/CHENP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 1472 | IS 2665267       | IS | Samsung Electronics Co., LTD. | Granted |
| 1473 | IS 2804383       | IS | Samsung Electronics Co., LTD. | Granted |
| 1474 | IT 2665267       | IT | Samsung Electronics Co., LTD. | Granted |
| 1475 | IT 2804383       | IT | Samsung Electronics Co., LTD. | Granted |
| 1476 | JP 5654597       | JP | Samsung Electronics Co., LTD. | Granted |
| 1477 | JP 5688123       | JP | Samsung Electronics Co., LTD. | Granted |
| 1478 | JP 5688124       | JP | Samsung Electronics Co., LTD. | Granted |
| 1479 | JP 5739571       | JP | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1480 | JP 5767387       | JP | Samsung Electronics Co., LTD. | Granted |
| 1481 | 2015-123028      | JP | Samsung Electronics Co., LTD. | Pending |
| 1482 | KR 1487686       | KR | Samsung Electronics Co., LTD. | Granted |
| 1483 | KR 1454642       | KR | Samsung Electronics Co., LTD. | Granted |
| 1484 | 2565740          | CA | Samsung Electronics Co., LTD. | Granted |
| 1485 | 2677963          | CA | Samsung Electronics Co., LTD. | Granted |
| 1486 | 2677967          | CA | Samsung Electronics Co., LTD. | Granted |
| 1487 | ZL200580014321.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 1488 | ZL200910167090.2 | CN | Samsung Electronics Co., LTD. | Granted |
| 1489 | ZL200910167083.2 | CN | Samsung Electronics Co., LTD. | Granted |
| 1490 | ZL200910167082.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 1491 | 1140074          | HK | Samsung Electronics Co., LTD. | Granted |
| 1492 | 1140075          | HK | Samsung Electronics Co., LTD. | Granted |
| 1493 | P0683879         | KR | Samsung Electronics Co., LTD. | Granted |
| 1494 | 271727           | MX | Samsung Electronics Co., LTD. | Granted |
| 1495 | 301682           | MX | Samsung Electronics Co., LTD. | Granted |
| 1496 | 299759           | MX | Samsung Electronics Co., LTD. | Granted |
| 1497 | US8619900        | US | Samsung Electronics Co., LTD. | Granted |
| 1498 | US8644398        | US | Samsung Electronics Co., LTD. | Granted |
| 1499 | US8638881        | US | Samsung Electronics Co., LTD. | Granted |
| 1500 | US8705640        | US | Samsung Electronics Co., LTD. | Granted |
| 1501 | US8644421        | US | Samsung Electronics Co., LTD. | Granted |
| 1502 | US8634497        | US | Samsung Electronics Co., LTD. | Granted |
| 1503 | US8660211        | US | Samsung Electronics Co., LTD. | Granted |
| 1504 | 2565736          | CA | Samsung Electronics Co., LTD. | Granted |
| 1505 | 2691756          | CA | Samsung Electronics Co., LTD. | Granted |
| 1506 | 2692245          | CA | Samsung Electronics Co., LTD. | Granted |
| 1507 | ZL200580014463.2 | CN | Samsung Electronics Co., LTD. | Granted |
| 1508 | ZL200910220888.9 | CN | Samsung Electronics Co., LTD. | Granted |
| 1509 | ZL200910220887.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 1510 | ZL200910252847.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 1511 | P0692596         | KR | Samsung Electronics Co., LTD. | Granted |
| 1512 | 271889           | MX | Samsung Electronics Co., LTD. | Granted |



|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1513 | 298817           | MX | Samsung Electronics Co., LTD. | Granted |
| 1514 | 304742           | MX | Samsung Electronics Co., LTD. | Granted |
| 1515 | US7773684        | US | Samsung Electronics Co., LTD. | Granted |
| 1516 | US7590187        | US | Samsung Electronics Co., LTD. | Granted |
| 1517 | US8737495        | US | Samsung Electronics Co., LTD. | Granted |
| 1518 | 2565284          | CA | Samsung Electronics Co., LTD. | Granted |
| 1519 | 2679043          | CA | Samsung Electronics Co., LTD. | Granted |
| 1520 | 2679046          | CA | Samsung Electronics Co., LTD. | Granted |
| 1521 | 2679040          | CA | Samsung Electronics Co., LTD. | Granted |
| 1522 | 2679049          | CA | Samsung Electronics Co., LTD. | Granted |
| 1523 | ZL200580015387.7 | CN | Samsung Electronics Co., LTD. | Granted |
| 1524 | ZL200910168919.0 | CN | Samsung Electronics Co., LTD. | Granted |
| 1525 | ZL200910168918.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 1526 | ZL200910168917.1 | CN | Samsung Electronics Co., LTD. | Granted |
| 1527 | ZL200910168915.2 | CN | Samsung Electronics Co., LTD. | Granted |
| 1528 | 271730           | MX | Samsung Electronics Co., LTD. | Granted |
| 1529 | 299251           | MX | Samsung Electronics Co., LTD. | Granted |
| 1530 | 299252           | MX | Samsung Electronics Co., LTD. | Granted |
| 1531 | 299253           | MX | Samsung Electronics Co., LTD. | Granted |
| 1532 | 295262           | MX | Samsung Electronics Co., LTD. | Granted |
| 1533 | US8582682        | US | Samsung Electronics Co., LTD. | Granted |
| 1534 | US8498364        | US | Samsung Electronics Co., LTD. | Granted |
| 1535 | US8498367        | US | Samsung Electronics Co., LTD. | Granted |
| 1536 | US8548080        | US | Samsung Electronics Co., LTD. | Granted |
| 1537 | US8743996        | US | Samsung Electronics Co., LTD. | Granted |
| 1538 | US8483303        | US | Samsung Electronics Co., LTD. | Granted |
| 1539 | US8761313        | US | Samsung Electronics Co., LTD. | Granted |
| 1540 | US8514981        | US | Samsung Electronics Co., LTD. | Granted |
| 1541 | US8542780        | US | Samsung Electronics Co., LTD. | Granted |
| 1542 | US8306158        | US | Samsung Electronics Co., LTD. | Granted |
| 1543 | US8565354        | US | Samsung Electronics Co., LTD. | Granted |
| 1544 | 2565863          | CA | Samsung Electronics Co., LTD. | Granted |
| 1545 | ZL200580015642.8 | CN | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1546 | ZL200910128567.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 1547 | 277001           | MX | Samsung Electronics Co., LTD. | Granted |
| 1548 | US7852961        | US | Samsung Electronics Co., LTD. | Granted |
| 1549 | US8170129        | US | Samsung Electronics Co., LTD. | Granted |
| 1550 | US8054903        | US | Samsung Electronics Co., LTD. | Granted |
| 1551 | US8634477        | US | Samsung Electronics Co., LTD. | Granted |
| 1552 | US8611432        | US | Samsung Electronics Co., LTD. | Granted |
| 1553 | US8611429        | US | Samsung Electronics Co., LTD. | Granted |
| 1554 | US8619869        | US | Samsung Electronics Co., LTD. | Granted |
| 1555 | US8619870        | US | Samsung Electronics Co., LTD. | Granted |
| 1556 | US8619878        | US | Samsung Electronics Co., LTD. | Granted |
| 1557 | US8467458        | US | Samsung Electronics Co., LTD. | Granted |
| 1558 | US8306127        | US | Samsung Electronics Co., LTD. | Granted |
| 1559 | US8204135        | US | Samsung Electronics Co., LTD. | Granted |
| 1560 | US8565322        | US | Samsung Electronics Co., LTD. | Granted |
| 1561 | US8942294        | US | Samsung Electronics Co., LTD. | Granted |
| 1562 | US8315316        | US | Samsung Electronics Co., LTD. | Granted |
| 1563 | US9100673        | US | Samsung Electronics Co., LTD. | Granted |
| 1564 | US9167284        | US | Samsung Electronics Co., LTD. | Granted |
| 1565 | PI0512505-7      | BR | Samsung Electronics Co., LTD. | Pending |
| 1566 | PI0520872-6      | BR | Samsung Electronics Co., LTD. | Pending |
| 1567 | 2568023          | CA | Samsung Electronics Co., LTD. | Granted |
| 1568 | ZL200580020365.X | CN | Samsung Electronics Co., LTD. | Granted |
| 1569 | 05765831.2       | EP | Samsung Electronics Co., LTD. | Pending |
| 1570 | 09170079.9       | EP | Samsung Electronics Co., LTD. | Pending |
| 1571 | 1100608          | HK | Samsung Electronics Co., LTD. | Granted |
| 1572 | IDP0030125       | ID | Samsung Electronics Co., LTD. | Granted |
| 1573 | 5990/DELNP/2006  | IN | Samsung Electronics Co., LTD. | Pending |
| 1574 | 5742/DELNP/2009  | IN | Samsung Electronics Co., LTD. | Pending |
| 1575 | 4668987          | JP | Samsung Electronics Co., LTD. | Granted |
| 1576 | 4669063          | JP | Samsung Electronics Co., LTD. | Granted |
| 1577 | P0744055         | KR | Samsung Electronics Co., LTD. | Granted |
| 1578 | 273726           | MX | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1579 | 2350037          | RU | Samsung Electronics Co., LTD. | Granted |
| 1580 | 153853           | SG | Samsung Electronics Co., LTD. | Granted |
| 1581 | US7738581        | US | Samsung Electronics Co., LTD. | Granted |
| 1582 | US7752528        | US | Samsung Electronics Co., LTD. | Granted |
| 1583 | US8194797        | US | Samsung Electronics Co., LTD. | Granted |
| 1584 | US8059741        | US | Samsung Electronics Co., LTD. | Granted |
| 1585 | US8312357        | US | Samsung Electronics Co., LTD. | Granted |
| 1586 | US8127210        | US | Samsung Electronics Co., LTD. | Granted |
| 1587 | 2572912          | CA | Samsung Electronics Co., LTD. | Granted |
| 1588 | 2677969          | CA | Samsung Electronics Co., LTD. | Granted |
| 1589 | 2677982          | CA | Samsung Electronics Co., LTD. | Granted |
| 1590 | 2677984          | CA | Samsung Electronics Co., LTD. | Granted |
| 1591 | 2677985          | CA | Samsung Electronics Co., LTD. | Granted |
| 1592 | ZL200580023761.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 1593 | ZL200910165469.X | CN | Samsung Electronics Co., LTD. | Granted |
| 1594 | ZL200910165470.2 | CN | Samsung Electronics Co., LTD. | Granted |
| 1595 | ZL200910167081.3 | CN | Samsung Electronics Co., LTD. | Granted |
| 1596 | ZL200910167086.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 1597 | ZL200910167085.1 | CN | Samsung Electronics Co., LTD. | Granted |
| 1598 | 1140078          | HK | Samsung Electronics Co., LTD. | Granted |
| 1599 | 1140081          | HK | Samsung Electronics Co., LTD. | Granted |
| 1600 | P1165379         | KR | Samsung Electronics Co., LTD. | Granted |
| 1601 | P1172787         | KR | Samsung Electronics Co., LTD. | Granted |
| 1602 | 264029           | MX | Samsung Electronics Co., LTD. | Granted |
| 1603 | 300226           | MX | Samsung Electronics Co., LTD. | Granted |
| 1604 | 294304           | MX | Samsung Electronics Co., LTD. | Granted |
| 1605 | 299249           | MX | Samsung Electronics Co., LTD. | Granted |
| 1606 | 299250           | MX | Samsung Electronics Co., LTD. | Granted |
| 1607 | 291935           | MX | Samsung Electronics Co., LTD. | Granted |
| 1608 | US7844012        | US | Samsung Electronics Co., LTD. | Granted |
| 1609 | US8848832        | US | Samsung Electronics Co., LTD. | Granted |
| 1610 | US8885770        | US | Samsung Electronics Co., LTD. | Granted |
| 1611 | US8855237        | US | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1612 | US7848462        | US | Samsung Electronics Co., LTD. | Granted |
| 1613 | US8855238        | US | Samsung Electronics Co., LTD. | Granted |
| 1614 | US8855239        | US | Samsung Electronics Co., LTD. | Granted |
| 1615 | US8068565        | US | Samsung Electronics Co., LTD. | Granted |
| 1616 | US8238486        | US | Samsung Electronics Co., LTD. | Granted |
| 1617 | P0708479         | KR | Samsung Electronics Co., LTD. | Granted |
| 1618 | PI20061299       | MY | Samsung Electronics Co., LTD. | Pending |
| 1619 | PI20091471       | MY | Samsung Electronics Co., LTD. | Pending |
| 1620 | MY-151866-A      | MY | Samsung Electronics Co., LTD. | Granted |
| 1621 | I314822          | TW | Samsung Electronics Co., LTD. | Granted |
| 1622 | US9100051        | US | Samsung Electronics Co., LTD. | Granted |
| 1623 | US8861645        | US | Samsung Electronics Co., LTD. | Granted |
| 1624 | US8213551        | US | Samsung Electronics Co., LTD. | Granted |
| 1625 | P0708471         | KR | Samsung Electronics Co., LTD. | Granted |
| 1626 | 2614889          | CA | Samsung Electronics Co., LTD. | Granted |
| 1627 | 2680188          | CA | Samsung Electronics Co., LTD. | Granted |
| 1628 | 2680187          | CA | Samsung Electronics Co., LTD. | Granted |
| 1629 | ZL200680025724.5 | CN | Samsung Electronics Co., LTD. | Granted |
| 1630 | ZL200910221917.3 | CN | Samsung Electronics Co., LTD. | Granted |
| 1631 | P0806863         | KR | Samsung Electronics Co., LTD. | Granted |
| 1632 | 317539           | MX | Samsung Electronics Co., LTD. | Granted |
| 1633 | 335233           | MX | Samsung Electronics Co., LTD. | Granted |
| 1634 | US7711045        | US | Samsung Electronics Co., LTD. | Granted |
| 1635 | US8379714        | US | Samsung Electronics Co., LTD. | Granted |
| 1636 | US7873103        | US | Samsung Electronics Co., LTD. | Granted |
| 1637 | US7813426        | US | Samsung Electronics Co., LTD. | Granted |
| 1638 | PI0611174-2      | BR | Samsung Electronics Co., LTD. | Pending |
| 1639 | PI0622270-6      | BR | Samsung Electronics Co., LTD. | Pending |
| 1640 | 2608461          | CA | Samsung Electronics Co., LTD. | Granted |
| 1641 | 2679566          | CA | Samsung Electronics Co., LTD. | Granted |
| 1642 | ZL200810148922.1 | CN | Samsung Electronics Co., LTD. | Granted |
| 1643 | ZL200810148923.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 1644 | ZL200810148924.0 | CN | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1645 | 2157795          | EP | Samsung Electronics Co., LTD. | Granted |
| 1646 | 2157795          | FI | Samsung Electronics Co., LTD. | Granted |
| 1647 | IDP0034248       | ID | Samsung Electronics Co., LTD. | Granted |
| 1648 | IDP0028562       | ID | Samsung Electronics Co., LTD. | Granted |
| 1649 | 5741/DELNP/2009  | IN | Samsung Electronics Co., LTD. | Pending |
| 1650 | 4839368          | JP | Samsung Electronics Co., LTD. | Granted |
| 1651 | 4839400          | JP | Samsung Electronics Co., LTD. | Granted |
| 1652 | 285212           | MX | Samsung Electronics Co., LTD. | Granted |
| 1653 | 308011           | MX | Samsung Electronics Co., LTD. | Granted |
| 1654 | 2157795          | NL | Samsung Electronics Co., LTD. | Granted |
| 1655 | 2391779          | RU | Samsung Electronics Co., LTD. | Granted |
| 1656 | 137512           | SG | Samsung Electronics Co., LTD. | Granted |
| 1657 | US7920602        | US | Samsung Electronics Co., LTD. | Granted |
| 1658 | US8194705        | US | Samsung Electronics Co., LTD. | Granted |
| 1659 | US8135044        | US | Samsung Electronics Co., LTD. | Granted |
| 1660 | US8130798        | US | Samsung Electronics Co., LTD. | Granted |
| 1661 | PI0617315-2      | BR | Samsung Electronics Co., LTD. | Pending |
| 1662 | PI0617281-4      | BR | Samsung Electronics Co., LTD. | Pending |
| 1663 | PI0622265-0      | BR | Samsung Electronics Co., LTD. | Pending |
| 1664 | PI0622266-8      | BR | Samsung Electronics Co., LTD. | Pending |
| 1665 | PI0622267-6      | BR | Samsung Electronics Co., LTD. | Pending |
| 1666 | 2624477          | CA | Samsung Electronics Co., LTD. | Granted |
| 1667 | 2624399          | CA | Samsung Electronics Co., LTD. | Granted |
| 1668 | 2684448          | CA | Samsung Electronics Co., LTD. | Granted |
| 1669 | 2684432          | CA | Samsung Electronics Co., LTD. | Granted |
| 1670 | 2684435          | CA | Samsung Electronics Co., LTD. | Granted |
| 1671 | ZL200680036245.3 | CN | Samsung Electronics Co., LTD. | Granted |
| 1672 | ZL200680034480.7 | CN | Samsung Electronics Co., LTD. | Granted |
| 1673 | ZL200910179534.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 1674 | ZL200910179529.3 | CN | Samsung Electronics Co., LTD. | Granted |
| 1675 | ZL200910179530.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 1676 | 376/MUMNP/2008   | IN | Samsung Electronics Co., LTD. | Pending |
| 1677 | 1827/MUMNP/2009  | IN | Samsung Electronics Co., LTD. | Pending |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1678 | 1828/MUMNP/2009  | IN | Samsung Electronics Co., LTD. | Pending |
| 1679 | 1829/MUMNP/2009  | IN | Samsung Electronics Co., LTD. | Pending |
| 1680 | P0756036         | KR | Samsung Electronics Co., LTD. | Granted |
| 1681 | 303564           | MX | Samsung Electronics Co., LTD. | Granted |
| 1682 | 282032           | MX | Samsung Electronics Co., LTD. | Granted |
| 1683 | 303992           | MX | Samsung Electronics Co., LTD. | Granted |
| 1684 | 303993           | MX | Samsung Electronics Co., LTD. | Granted |
| 1685 | 303991           | MX | Samsung Electronics Co., LTD. | Granted |
| 1686 | MY-151620-A      | MY | Samsung Electronics Co., LTD. | Granted |
| 1687 | PI20094217       | MY | Samsung Electronics Co., LTD. | Pending |
| 1688 | PI20094216       | MY | Samsung Electronics Co., LTD. | Pending |
| 1689 | US8619876        | US | Samsung Electronics Co., LTD. | Granted |
| 1690 | US8711947        | US | Samsung Electronics Co., LTD. | Granted |
| 1691 | US8804841        | US | Samsung Electronics Co., LTD. | Granted |
| 1692 | US8867623        | US | Samsung Electronics Co., LTD. | Granted |
| 1693 | US8699584        | US | Samsung Electronics Co., LTD. | Granted |
| 1694 | US8625679        | US | Samsung Electronics Co., LTD. | Granted |
| 1695 | 2629297          | CA | Samsung Electronics Co., LTD. | Granted |
| 1696 | 2685283          | CA | Samsung Electronics Co., LTD. | Granted |
| 1697 | 2686672          | CA | Samsung Electronics Co., LTD. | Granted |
| 1698 | 2686667          | CA | Samsung Electronics Co., LTD. | Granted |
| 1699 | 2686674          | CA | Samsung Electronics Co., LTD. | Granted |
| 1700 | 2686275          | CA | Samsung Electronics Co., LTD. | Granted |
| 1701 | ZL200910205252.7 | CN | Samsung Electronics Co., LTD. | Granted |
| 1702 | ZL200910205254.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 1703 | ZL200910205253.1 | CN | Samsung Electronics Co., LTD. | Granted |
| 1704 | ZL200910205249.5 | CN | Samsung Electronics Co., LTD. | Granted |
| 1705 | 5084738          | JP | Samsung Electronics Co., LTD. | Granted |
| 1706 | 4990956          | JP | Samsung Electronics Co., LTD. | Granted |
| 1707 | 5230582          | JP | Samsung Electronics Co., LTD. | Granted |
| 1708 | 5230583          | JP | Samsung Electronics Co., LTD. | Granted |
| 1709 | 4990957          | JP | Samsung Electronics Co., LTD. | Granted |
| 1710 | P0854090         | KR | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1711 | 290487           | MX | Samsung Electronics Co., LTD. | Granted |
| 1712 | 299290           | MX | Samsung Electronics Co., LTD. | Granted |
| 1713 | 303563           | MX | Samsung Electronics Co., LTD. | Granted |
| 1714 | 303561           | MX | Samsung Electronics Co., LTD. | Granted |
| 1715 | 303565           | MX | Samsung Electronics Co., LTD. | Granted |
| 1716 | 309746           | MX | Samsung Electronics Co., LTD. | Granted |
| 1717 | US7983354        | US | Samsung Electronics Co., LTD. | Granted |
| 1718 | US8537918        | US | Samsung Electronics Co., LTD. | Granted |
| 1719 | US8111768        | US | Samsung Electronics Co., LTD. | Granted |
| 1720 | US8223823        | US | Samsung Electronics Co., LTD. | Granted |
| 1721 | US8320501        | US | Samsung Electronics Co., LTD. | Granted |
| 1722 | 2629998          | CA | Samsung Electronics Co., LTD. | Granted |
| 1723 | 2679572          | CA | Samsung Electronics Co., LTD. | Granted |
| 1724 | ZL200680041427.X | CN | Samsung Electronics Co., LTD. | Granted |
| 1725 | 5116691          | JP | Samsung Electronics Co., LTD. | Granted |
| 1726 | 5129798          | JP | Samsung Electronics Co., LTD. | Granted |
| 1727 | P0740206         | KR | Samsung Electronics Co., LTD. | Granted |
| 1728 | 307259           | MX | Samsung Electronics Co., LTD. | Granted |
| 1729 | 307260           | MX | Samsung Electronics Co., LTD. | Granted |
| 1730 | US8184695        | US | Samsung Electronics Co., LTD. | Granted |
| 1731 | US8009704        | US | Samsung Electronics Co., LTD. | Granted |
| 1732 | US7920622        | US | Samsung Electronics Co., LTD. | Granted |
| 1733 | US8379673        | US | Samsung Electronics Co., LTD. | Granted |
| 1734 | US8275004        | US | Samsung Electronics Co., LTD. | Granted |
| 1735 | 2635234          | CA | Samsung Electronics Co., LTD. | Granted |
| 1736 | ZL200680050391.1 | CN | Samsung Electronics Co., LTD. | Granted |
| 1737 | 282027           | MX | Samsung Electronics Co., LTD. | Granted |
| 1738 | US7823051        | US | Samsung Electronics Co., LTD. | Granted |
| 1739 | 0620901-7        | BR | Samsung Electronics Co., LTD. | Pending |
| 1740 | PI0622269-2      | BR | Samsung Electronics Co., LTD. | Pending |
| 1741 | 2635200          | CA | Samsung Electronics Co., LTD. | Granted |
| 1742 | 2680191          | CA | Samsung Electronics Co., LTD. | Granted |
| 1743 | ZL200910173085.2 | CN | Samsung Electronics Co., LTD. | Granted |

|      |           |    |                               |         |
|------|-----------|----|-------------------------------|---------|
| 1744 | 1980031   | DE | Samsung Electronics Co., LTD. | Granted |
| 1745 | 1980031   | EP | Samsung Electronics Co., LTD. | Granted |
| 1746 | P1431616  | KR | Samsung Electronics Co., LTD. | Granted |
| 1747 | 298694    | MX | Samsung Electronics Co., LTD. | Granted |
| 1748 | 311288    | MX | Samsung Electronics Co., LTD. | Granted |
| 1749 | US7913152 | US | Samsung Electronics Co., LTD. | Granted |
| 1750 | US8332733 | US | Samsung Electronics Co., LTD. | Granted |
| 1751 | US7941735 | US | Samsung Electronics Co., LTD. | Granted |
| 1752 | US7996751 | US | Samsung Electronics Co., LTD. | Granted |
| 1753 | 13857     | VN | Samsung Electronics Co., LTD. | Granted |
| 1754 | P0818229  | KR | Samsung Electronics Co., LTD. | Granted |
| 1755 | 285214    | MX | Samsung Electronics Co., LTD. | Granted |
| 1756 | US7814400 | US | Samsung Electronics Co., LTD. | Granted |
| 1757 | P0754732  | KR | Samsung Electronics Co., LTD. | Granted |
| 1758 | USRE43627 | US | Samsung Electronics Co., LTD. | Granted |
| 1759 | 2685692   | AT | Samsung Electronics Co., LTD. | Granted |
| 1760 | 2685692   | BE | Samsung Electronics Co., LTD. | Granted |
| 1761 | 2685692   | BG | Samsung Electronics Co., LTD. | Granted |
| 1762 | 2685692   | CH | Samsung Electronics Co., LTD. | Granted |
| 1763 | 2153600   | CZ | Samsung Electronics Co., LTD. | Granted |
| 1764 | 2442512   | CZ | Samsung Electronics Co., LTD. | Granted |
| 1765 | 2685692   | CZ | Samsung Electronics Co., LTD. | Granted |
| 1766 | 2153600   | DE | Samsung Electronics Co., LTD. | Granted |
| 1767 | 2442512   | DE | Samsung Electronics Co., LTD. | Granted |
| 1768 | 2685692   | DE | Samsung Electronics Co., LTD. | Granted |
| 1769 | 2685692   | DK | Samsung Electronics Co., LTD. | Granted |
| 1770 | 2153600   | EP | Samsung Electronics Co., LTD. | Granted |
| 1771 | 2442512   | EP | Samsung Electronics Co., LTD. | Granted |
| 1772 | 2685692   | EP | Samsung Electronics Co., LTD. | Granted |
| 1773 | 2153600   | ES | Samsung Electronics Co., LTD. | Granted |
| 1774 | 2442512   | ES | Samsung Electronics Co., LTD. | Granted |
| 1775 | 2685692   | ES | Samsung Electronics Co., LTD. | Granted |
| 1776 | 2153600   | FI | Samsung Electronics Co., LTD. | Granted |



|      |           |    |                               |         |
|------|-----------|----|-------------------------------|---------|
| 1777 | 2442512   | FI | Samsung Electronics Co., LTD. | Granted |
| 1778 | 2685692   | FI | Samsung Electronics Co., LTD. | Granted |
| 1779 | 2153600   | FR | Samsung Electronics Co., LTD. | Granted |
| 1780 | 2442512   | FR | Samsung Electronics Co., LTD. | Granted |
| 1781 | 2685692   | FR | Samsung Electronics Co., LTD. | Granted |
| 1782 | 2153600   | GB | Samsung Electronics Co., LTD. | Granted |
| 1783 | 2442512   | GB | Samsung Electronics Co., LTD. | Granted |
| 1784 | 2685692   | GB | Samsung Electronics Co., LTD. | Granted |
| 1785 | 2685692   | GR | Samsung Electronics Co., LTD. | Granted |
| 1786 | 2153600   | HU | Samsung Electronics Co., LTD. | Granted |
| 1787 | 2442512   | HU | Samsung Electronics Co., LTD. | Granted |
| 1788 | 2685692   | HU | Samsung Electronics Co., LTD. | Granted |
| 1789 | 2153600   | IT | Samsung Electronics Co., LTD. | Granted |
| 1790 | 2442512   | IT | Samsung Electronics Co., LTD. | Granted |
| 1791 | 2685692   | IT | Samsung Electronics Co., LTD. | Granted |
| 1792 | 2153600   | NL | Samsung Electronics Co., LTD. | Granted |
| 1793 | 2442512   | NL | Samsung Electronics Co., LTD. | Granted |
| 1794 | 2685692   | NL | Samsung Electronics Co., LTD. | Granted |
| 1795 | 2685692   | NO | Samsung Electronics Co., LTD. | Granted |
| 1796 | 2153600   | PL | Samsung Electronics Co., LTD. | Granted |
| 1797 | 2442512   | PL | Samsung Electronics Co., LTD. | Granted |
| 1798 | 2685692   | PL | Samsung Electronics Co., LTD. | Granted |
| 1799 | 2685692   | PT | Samsung Electronics Co., LTD. | Granted |
| 1800 | 2685692   | RO | Samsung Electronics Co., LTD. | Granted |
| 1801 | 2153600   | SE | Samsung Electronics Co., LTD. | Granted |
| 1802 | 2442512   | SE | Samsung Electronics Co., LTD. | Granted |
| 1803 | 2685692   | SE | Samsung Electronics Co., LTD. | Granted |
| 1804 | 2685692   | SI | Samsung Electronics Co., LTD. | Granted |
| 1805 | 2153600   | SK | Samsung Electronics Co., LTD. | Granted |
| 1806 | 2442512   | SK | Samsung Electronics Co., LTD. | Granted |
| 1807 | 2685692   | SK | Samsung Electronics Co., LTD. | Granted |
| 1808 | 2685692   | TR | Samsung Electronics Co., LTD. | Granted |
| 1809 | US8300714 | US | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1810 | 2091156          | AT | Samsung Electronics Co., LTD. | Granted |
| 1811 | 2093887          | AT | Samsung Electronics Co., LTD. | Granted |
| 1812 | 2009216008       | AU | Samsung Electronics Co., LTD. | Granted |
| 1813 | 2091156          | BE | Samsung Electronics Co., LTD. | Granted |
| 1814 | 2093887          | BE | Samsung Electronics Co., LTD. | Granted |
| 1815 | 2091156          | BG | Samsung Electronics Co., LTD. | Granted |
| 1816 | 2093887          | BG | Samsung Electronics Co., LTD. | Granted |
| 1817 | 2091156          | CH | Samsung Electronics Co., LTD. | Granted |
| 1818 | 2093887          | CH | Samsung Electronics Co., LTD. | Granted |
| 1819 | ZL200980105340.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 1820 | ZL201310027486.3 | CN | Samsung Electronics Co., LTD. | Granted |
| 1821 | ZL201310027180.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 1822 | 2091156          | CZ | Samsung Electronics Co., LTD. | Granted |
| 1823 | 2093887          | CZ | Samsung Electronics Co., LTD. | Granted |
| 1824 | 2091156          | DE | Samsung Electronics Co., LTD. | Granted |
| 1825 | 2093887          | DE | Samsung Electronics Co., LTD. | Granted |
| 1826 | 2091156          | DK | Samsung Electronics Co., LTD. | Granted |
| 1827 | 2093887          | DK | Samsung Electronics Co., LTD. | Granted |
| 1828 | 2091156          | EP | Samsung Electronics Co., LTD. | Granted |
| 1829 | 2093887          | EP | Samsung Electronics Co., LTD. | Granted |
| 1830 | 2091156          | ES | Samsung Electronics Co., LTD. | Granted |
| 1831 | 2093887          | ES | Samsung Electronics Co., LTD. | Granted |
| 1832 | 2091156          | FI | Samsung Electronics Co., LTD. | Granted |
| 1833 | 2093887          | FI | Samsung Electronics Co., LTD. | Granted |
| 1834 | 2091156          | FR | Samsung Electronics Co., LTD. | Granted |
| 1835 | 2093887          | FR | Samsung Electronics Co., LTD. | Granted |
| 1836 | 2091156          | GB | Samsung Electronics Co., LTD. | Granted |
| 1837 | 2093887          | GB | Samsung Electronics Co., LTD. | Granted |
| 1838 | 2091156          | GR | Samsung Electronics Co., LTD. | Granted |
| 1839 | 2093887          | GR | Samsung Electronics Co., LTD. | Granted |
| 1840 | 2091156          | HU | Samsung Electronics Co., LTD. | Granted |
| 1841 | 2093887          | HU | Samsung Electronics Co., LTD. | Granted |
| 1842 | IDP0030101       | ID | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1843 | 5824/CHENP/2010  | IN | Samsung Electronics Co., LTD. | Pending |
| 1844 | 201748019697     | IN | Samsung Electronics Co., LTD. | Pending |
| 1845 | 2091156          | IT | Samsung Electronics Co., LTD. | Granted |
| 1846 | 2093887          | IT | Samsung Electronics Co., LTD. | Granted |
| 1847 | 5120862          | JP | Samsung Electronics Co., LTD. | Granted |
| 1848 | 5506878          | JP | Samsung Electronics Co., LTD. | Granted |
| 1849 | 5506879          | JP | Samsung Electronics Co., LTD. | Granted |
| 1850 | MY-153328-A      | MY | Samsung Electronics Co., LTD. | Granted |
| 1851 | 2091156          | NL | Samsung Electronics Co., LTD. | Granted |
| 1852 | 2093887          | NL | Samsung Electronics Co., LTD. | Granted |
| 1853 | 2091156          | NO | Samsung Electronics Co., LTD. | Granted |
| 1854 | 2093887          | NO | Samsung Electronics Co., LTD. | Granted |
| 1855 | 2091156          | PL | Samsung Electronics Co., LTD. | Granted |
| 1856 | 2093887          | PL | Samsung Electronics Co., LTD. | Granted |
| 1857 | 2091156          | PT | Samsung Electronics Co., LTD. | Granted |
| 1858 | 2093887          | PT | Samsung Electronics Co., LTD. | Granted |
| 1859 | 2091156          | RO | Samsung Electronics Co., LTD. | Granted |
| 1860 | 2093887          | RO | Samsung Electronics Co., LTD. | Granted |
| 1861 | 2450442          | RU | Samsung Electronics Co., LTD. | Granted |
| 1862 | 2091156          | SE | Samsung Electronics Co., LTD. | Granted |
| 1863 | 2093887          | SE | Samsung Electronics Co., LTD. | Granted |
| 1864 | 163313           | SG | Samsung Electronics Co., LTD. | Granted |
| 1865 | 2091156          | SI | Samsung Electronics Co., LTD. | Granted |
| 1866 | 2093887          | SI | Samsung Electronics Co., LTD. | Granted |
| 1867 | 2091156          | SK | Samsung Electronics Co., LTD. | Granted |
| 1868 | 2093887          | SK | Samsung Electronics Co., LTD. | Granted |
| 1869 | 2091156          | TR | Samsung Electronics Co., LTD. | Granted |
| 1870 | 2093887          | TR | Samsung Electronics Co., LTD. | Granted |
| 1871 | I387212          | TW | Samsung Electronics Co., LTD. | Granted |
| 1872 | US8291282        | US | Samsung Electronics Co., LTD. | Granted |
| 1873 | 10740            | VN | Samsung Electronics Co., LTD. | Granted |
| 1874 | 2009209844       | AU | Samsung Electronics Co., LTD. | Granted |
| 1875 | ZL200980103350.8 | CN | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1876 | 09151552.8       | EP | Samsung Electronics Co., LTD. | Pending |
| 1877 | IDP000034361     | ID | Samsung Electronics Co., LTD. | Granted |
| 1878 | 276993           | IN | Samsung Electronics Co., LTD. | Granted |
| 1879 | 5255655          | JP | Samsung Electronics Co., LTD. | Granted |
| 1880 | MY-156891-A      | MY | Samsung Electronics Co., LTD. | Granted |
| 1881 | 1-2010-501653    | PH | Samsung Electronics Co., LTD. | Granted |
| 1882 | 2479130          | RU | Samsung Electronics Co., LTD. | Granted |
| 1883 | 162518           | SG | Samsung Electronics Co., LTD. | Granted |
| 1884 | US9628205        | US | Samsung Electronics Co., LTD. | Granted |
| 1885 | 12348            | VN | Samsung Electronics Co., LTD. | Granted |
| 1886 | 2009213247       | AU | Samsung Electronics Co., LTD. | Granted |
| 1887 | 2013203514       | AU | Samsung Electronics Co., LTD. | Granted |
| 1888 | ZL200980104873.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 1889 | ZL201310168423.X | CN | Samsung Electronics Co., LTD. | Granted |
| 1890 | 2088678          | DE | Samsung Electronics Co., LTD. | Granted |
| 1891 | 2093886          | DE | Samsung Electronics Co., LTD. | Granted |
| 1892 | 2088678          | EP | Samsung Electronics Co., LTD. | Granted |
| 1893 | 2093886          | EP | Samsung Electronics Co., LTD. | Granted |
| 1894 | 12188084.3       | EP | Samsung Electronics Co., LTD. | Pending |
| 1895 | 12188093.4       | EP | Samsung Electronics Co., LTD. | Pending |
| 1896 | 12188162.7       | EP | Samsung Electronics Co., LTD. | Pending |
| 1897 | 12188183.3       | EP | Samsung Electronics Co., LTD. | Pending |
| 1898 | 2088678          | FR | Samsung Electronics Co., LTD. | Granted |
| 1899 | 2093886          | FR | Samsung Electronics Co., LTD. | Granted |
| 1900 | 2088678          | GB | Samsung Electronics Co., LTD. | Granted |
| 1901 | 2093886          | GB | Samsung Electronics Co., LTD. | Granted |
| 1902 | IDP000035694     | ID | Samsung Electronics Co., LTD. | Granted |
| 1903 | 3338/KOLNP/2010  | IN | Samsung Electronics Co., LTD. | Pending |
| 1904 | 5506099          | JP | Samsung Electronics Co., LTD. | Granted |
| 1905 | 5583833          | JP | Samsung Electronics Co., LTD. | Granted |
| 1906 | MY-152791-A      | MY | Samsung Electronics Co., LTD. | Granted |
| 1907 | PI2010003511     | MY | Samsung Electronics Co., LTD. | Pending |
| 1908 | 2088678          | NL | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1909 | 2093886          | NL | Samsung Electronics Co., LTD. | Granted |
| 1910 | 2439793          | RU | Samsung Electronics Co., LTD. | Granted |
| 1911 | 188149           | SG | Samsung Electronics Co., LTD. | Granted |
| 1912 | 10201400710U     | SG | Samsung Electronics Co., LTD. | Granted |
| 1913 | I384766          | TW | Samsung Electronics Co., LTD. | Granted |
| 1914 | I401892          | TW | Samsung Electronics Co., LTD. | Granted |
| 1915 | US8286065        | US | Samsung Electronics Co., LTD. | Granted |
| 1916 | 14512            | VN | Samsung Electronics Co., LTD. | Granted |
| 1917 | 2009216037       | AU | Samsung Electronics Co., LTD. | Granted |
| 1918 | ZL200980106092.9 | CN | Samsung Electronics Co., LTD. | Granted |
| 1919 | 09153321.6       | EP | Samsung Electronics Co., LTD. | Pending |
| 1920 | 09154672.1       | EP | Samsung Electronics Co., LTD. | Pending |
| 1921 | IDP0031942       | ID | Samsung Electronics Co., LTD. | Granted |
| 1922 | 5866/CHENP/2010  | IN | Samsung Electronics Co., LTD. | Pending |
| 1923 | 5175942          | JP | Samsung Electronics Co., LTD. | Granted |
| 1924 | MY-157527-A      | MY | Samsung Electronics Co., LTD. | Granted |
| 1925 | 1-2010-501893    | PH | Samsung Electronics Co., LTD. | Granted |
| 1926 | 2450474          | RU | Samsung Electronics Co., LTD. | Granted |
| 1927 | 163417           | SG | Samsung Electronics Co., LTD. | Granted |
| 1928 | US9060251        | US | Samsung Electronics Co., LTD. | Granted |
| 1929 | US9602978        | US | Samsung Electronics Co., LTD. | Granted |
| 1930 | US9602979        | US | Samsung Electronics Co., LTD. | Granted |
| 1931 | 14312            | VN | Samsung Electronics Co., LTD. | Granted |
| 1932 | 2009217934       | AU | Samsung Electronics Co., LTD. | Granted |
| 1933 | 2013201428       | AU | Samsung Electronics Co., LTD. | Granted |
| 1934 | ZL200980114592.7 | CN | Samsung Electronics Co., LTD. | Granted |
| 1935 | 201310149429.2   | CN | Samsung Electronics Co., LTD. | Pending |
| 1936 | ZL201310149574.0 | CN | Samsung Electronics Co., LTD. | Granted |
| 1937 | 2096760          | DE | Samsung Electronics Co., LTD. | Granted |
| 1938 | 2099136          | DE | Samsung Electronics Co., LTD. | Granted |
| 1939 | 2096760          | EP | Samsung Electronics Co., LTD. | Granted |
| 1940 | 2099136          | EP | Samsung Electronics Co., LTD. | Granted |
| 1941 | 11151068.1       | EP | Samsung Electronics Co., LTD. | Pending |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 1942 | 12166288.6      | EP | Samsung Electronics Co., LTD. | Pending |
| 1943 | 2096760         | ES | Samsung Electronics Co., LTD. | Granted |
| 1944 | 2099136         | ES | Samsung Electronics Co., LTD. | Granted |
| 1945 | 2096760         | FR | Samsung Electronics Co., LTD. | Granted |
| 1946 | 2099136         | FR | Samsung Electronics Co., LTD. | Granted |
| 1947 | 2096760         | GB | Samsung Electronics Co., LTD. | Granted |
| 1948 | 2099136         | GB | Samsung Electronics Co., LTD. | Granted |
| 1949 | 2096760         | HU | Samsung Electronics Co., LTD. | Granted |
| 1950 | IDP000040112    | ID | Samsung Electronics Co., LTD. | Granted |
| 1951 | 5865/CHENP/2010 | IN | Samsung Electronics Co., LTD. | Pending |
| 1952 | 2096760         | IT | Samsung Electronics Co., LTD. | Granted |
| 1953 | 2099136         | IT | Samsung Electronics Co., LTD. | Granted |
| 1954 | 5440804         | JP | Samsung Electronics Co., LTD. | Granted |
| 1955 | 5648223         | JP | Samsung Electronics Co., LTD. | Granted |
| 1956 | 5648224         | JP | Samsung Electronics Co., LTD. | Granted |
| 1957 | MY-152769-A     | MY | Samsung Electronics Co., LTD. | Granted |
| 1958 | PI2014003229    | MY | Samsung Electronics Co., LTD. | Pending |
| 1959 | 2096760         | NL | Samsung Electronics Co., LTD. | Granted |
| 1960 | 2099136         | NL | Samsung Electronics Co., LTD. | Granted |
| 1961 | 2454794         | RU | Samsung Electronics Co., LTD. | Granted |
| 1962 | 2490791         | RU | Samsung Electronics Co., LTD. | Granted |
| 1963 | 2543553         | RU | Samsung Electronics Co., LTD. | Granted |
| 1964 | 2096760         | SE | Samsung Electronics Co., LTD. | Granted |
| 1965 | 2099136         | SE | Samsung Electronics Co., LTD. | Granted |
| 1966 | 163819          | SG | Samsung Electronics Co., LTD. | Granted |
| 1967 | 188821          | SG | Samsung Electronics Co., LTD. | Granted |
| 1968 | 10201401192S    | SG | Samsung Electronics Co., LTD. | Granted |
| 1969 | I399043         | TW | Samsung Electronics Co., LTD. | Granted |
| 1970 | I506964         | TW | Samsung Electronics Co., LTD. | Granted |
| 1971 | I506963         | TW | Samsung Electronics Co., LTD. | Granted |
| 1972 | US8176384       | US | Samsung Electronics Co., LTD. | Granted |
| 1973 | 13666           | VN | Samsung Electronics Co., LTD. | Granted |
| 1974 | 2096761         | AT | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 1975 | 2009217933       | AU | Samsung Electronics Co., LTD. | Granted |
| 1976 | 2013203761       | AU | Samsung Electronics Co., LTD. | Granted |
| 1977 | 2096761          | BE | Samsung Electronics Co., LTD. | Granted |
| 1978 | 2584707          | BE | Samsung Electronics Co., LTD. | Granted |
| 1979 | 2096761          | BG | Samsung Electronics Co., LTD. | Granted |
| 1980 | 2096761          | CH | Samsung Electronics Co., LTD. | Granted |
| 1981 | ZL200980114594.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 1982 | ZL201310261513.3 | CN | Samsung Electronics Co., LTD. | Granted |
| 1983 | ZL201310261500.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 1984 | ZL201310261487.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 1985 | 2096761          | CZ | Samsung Electronics Co., LTD. | Granted |
| 1986 | 2096761          | DE | Samsung Electronics Co., LTD. | Granted |
| 1987 | 2584707          | DE | Samsung Electronics Co., LTD. | Granted |
| 1988 | 2584708          | DE | Samsung Electronics Co., LTD. | Granted |
| 1989 | 2096761          | DK | Samsung Electronics Co., LTD. | Granted |
| 1990 | 2584707          | DK | Samsung Electronics Co., LTD. | Granted |
| 1991 | 2096761          | EP | Samsung Electronics Co., LTD. | Granted |
| 1992 | 09154661.4       | EP | Samsung Electronics Co., LTD. | Pending |
| 1993 | 2584707          | EP | Samsung Electronics Co., LTD. | Granted |
| 1994 | 2584708          | EP | Samsung Electronics Co., LTD. | Granted |
| 1995 | 2096761          | ES | Samsung Electronics Co., LTD. | Granted |
| 1996 | 2584707          | ES | Samsung Electronics Co., LTD. | Granted |
| 1997 | 2584708          | ES | Samsung Electronics Co., LTD. | Granted |
| 1998 | 2096761          | FI | Samsung Electronics Co., LTD. | Granted |
| 1999 | 2584708          | FI | Samsung Electronics Co., LTD. | Granted |
| 2000 | 2096761          | FR | Samsung Electronics Co., LTD. | Granted |
| 2001 | 2584707          | FR | Samsung Electronics Co., LTD. | Granted |
| 2002 | 2584708          | FR | Samsung Electronics Co., LTD. | Granted |
| 2003 | 2096761          | GB | Samsung Electronics Co., LTD. | Granted |
| 2004 | 2584707          | GB | Samsung Electronics Co., LTD. | Granted |
| 2005 | 2584708          | GB | Samsung Electronics Co., LTD. | Granted |
| 2006 | 2096761          | GR | Samsung Electronics Co., LTD. | Granted |
| 2007 | 2096761          | HU | Samsung Electronics Co., LTD. | Granted |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 2008 | IDP000039403    | ID | Samsung Electronics Co., LTD. | Granted |
| 2009 | 5864/CHENP/2010 | IN | Samsung Electronics Co., LTD. | Pending |
| 2010 | 2096761         | IT | Samsung Electronics Co., LTD. | Granted |
| 2011 | 2584707         | IT | Samsung Electronics Co., LTD. | Granted |
| 2012 | 2584708         | IT | Samsung Electronics Co., LTD. | Granted |
| 2013 | 5440805         | JP | Samsung Electronics Co., LTD. | Granted |
| 2014 | 5644010         | JP | Samsung Electronics Co., LTD. | Granted |
| 2015 | 5644011         | JP | Samsung Electronics Co., LTD. | Granted |
| 2016 | 5644012         | JP | Samsung Electronics Co., LTD. | Granted |
| 2017 | PI2010003681    | MY | Samsung Electronics Co., LTD. | Pending |
| 2018 | 2096761         | NL | Samsung Electronics Co., LTD. | Granted |
| 2019 | 2584707         | NL | Samsung Electronics Co., LTD. | Granted |
| 2020 | 2584708         | NL | Samsung Electronics Co., LTD. | Granted |
| 2021 | 2096761         | NO | Samsung Electronics Co., LTD. | Granted |
| 2022 | 2584707         | NO | Samsung Electronics Co., LTD. | Granted |
| 2023 | 2096761         | PL | Samsung Electronics Co., LTD. | Granted |
| 2024 | 2096761         | PT | Samsung Electronics Co., LTD. | Granted |
| 2025 | 2584707         | PT | Samsung Electronics Co., LTD. | Granted |
| 2026 | 2096761         | RO | Samsung Electronics Co., LTD. | Granted |
| 2027 | 2450443         | RU | Samsung Electronics Co., LTD. | Granted |
| 2028 | 2520406         | RU | Samsung Electronics Co., LTD. | Granted |
| 2029 | 2520405         | RU | Samsung Electronics Co., LTD. | Granted |
| 2030 | 2096761         | SE | Samsung Electronics Co., LTD. | Granted |
| 2031 | 2584707         | SE | Samsung Electronics Co., LTD. | Granted |
| 2032 | 2584708         | SE | Samsung Electronics Co., LTD. | Granted |
| 2033 | 163815          | SG | Samsung Electronics Co., LTD. | Granted |
| 2034 | 188820          | SG | Samsung Electronics Co., LTD. | Granted |
| 2035 | 10201401195Q    | SG | Samsung Electronics Co., LTD. | Granted |
| 2036 | 2096761         | SI | Samsung Electronics Co., LTD. | Granted |
| 2037 | 2096761         | SK | Samsung Electronics Co., LTD. | Granted |
| 2038 | 2096761         | TR | Samsung Electronics Co., LTD. | Granted |
| 2039 | 1399928         | TW | Samsung Electronics Co., LTD. | Granted |
| 2040 | 1511469         | TW | Samsung Electronics Co., LTD. | Granted |



|      |                |    |                               |         |
|------|----------------|----|-------------------------------|---------|
| 2041 | I511470        | TW | Samsung Electronics Co., LTD. | Granted |
| 2042 | US8271846      | US | Samsung Electronics Co., LTD. | Granted |
| 2043 | 13667          | VN | Samsung Electronics Co., LTD. | Granted |
| 2044 | P20130113714   | KR | Samsung Electronics Co., LTD. | Pending |
| 2045 | 201410315991.2 | CN | Samsung Electronics Co., LTD. | Pending |
| 2046 | 14175265.9     | EP | Samsung Electronics Co., LTD. | Pending |
| 2047 | P20130115739   | KR | Samsung Electronics Co., LTD. | Pending |
| 2048 | US14/308977    | US | Samsung Electronics Co., LTD. | Pending |
| 2049 | 201410321144.7 | CN | Samsung Electronics Co., LTD. | Pending |
| 2050 | 14175742.7     | EP | Samsung Electronics Co., LTD. | Pending |
| 2051 | P20140067800   | KR | Samsung Electronics Co., LTD. | Pending |
| 2052 | US9300376      | US | Samsung Electronics Co., LTD. | Granted |
| 2053 | 201410318897.2 | CN | Samsung Electronics Co., LTD. | Pending |
| 2054 | P20140075128   | KR | Samsung Electronics Co., LTD. | Pending |
| 2055 | US9276654      | US | Samsung Electronics Co., LTD. | Granted |
| 2056 | P20130112199   | KR | Samsung Electronics Co., LTD. | Pending |
| 2057 | US9450704      | US | Samsung Electronics Co., LTD. | Granted |
| 2058 | P20130066188   | KR | Samsung Electronics Co., LTD. | Pending |
| 2059 | US14/290062    | US | Samsung Electronics Co., LTD. | Pending |
| 2060 | P20130073222   | KR | Samsung Electronics Co., LTD. | Pending |
| 2061 | US9548765      | US | Samsung Electronics Co., LTD. | Granted |
| 2062 | P20130115740   | KR | Samsung Electronics Co., LTD. | Pending |
| 2063 | US9467748      | US | Samsung Electronics Co., LTD. | Granted |
| 2064 | P20130114787   | KR | Samsung Electronics Co., LTD. | Pending |
| 2065 | US9553607      | US | Samsung Electronics Co., LTD. | Granted |
| 2066 | P20130109542   | KR | Samsung Electronics Co., LTD. | Pending |
| 2067 | US9210002      | US | Samsung Electronics Co., LTD. | Granted |
| 2068 | P20130096061   | KR | Samsung Electronics Co., LTD. | Pending |
| 2069 | US9667757      | US | Samsung Electronics Co., LTD. | Granted |
| 2070 | P20130114921   | KR | Samsung Electronics Co., LTD. | Pending |
| 2071 | US9559723      | US | Samsung Electronics Co., LTD. | Granted |
| 2072 | P20130115400   | KR | Samsung Electronics Co., LTD. | Pending |
| 2073 | US14/496388    | US | Samsung Electronics Co., LTD. | Pending |

|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 2074 | P20130114922        | KR | Samsung Electronics Co., LTD. | Pending |
| 2075 | 201480072208.2      | CN | Samsung Electronics Co., LTD. | Pending |
| 2076 | P20140000808        | KR | Samsung Electronics Co., LTD. | Pending |
| 2077 | US9571322           | US | Samsung Electronics Co., LTD. | Granted |
| 2078 | P20140002942        | KR | Samsung Electronics Co., LTD. | Pending |
| 2079 | US14/314487         | US | Samsung Electronics Co., LTD. | Pending |
| 2080 | P20130166444        | KR | Samsung Electronics Co., LTD. | Pending |
| 2081 | US9621396           | US | Samsung Electronics Co., LTD. | Granted |
| 2082 | P20130115741        | KR | Samsung Electronics Co., LTD. | Pending |
| 2083 | US14/273630         | US | Samsung Electronics Co., LTD. | Pending |
| 2084 | P20140055634        | KR | Samsung Electronics Co., LTD. | Pending |
| 2085 | US9356815           | US | Samsung Electronics Co., LTD. | Granted |
| 2086 | P20140054755        | KR | Samsung Electronics Co., LTD. | Pending |
| 2087 | US9231807           | US | Samsung Electronics Co., LTD. | Granted |
| 2088 | P20140121189        | KR | Samsung Electronics Co., LTD. | Pending |
| 2089 | US9184966           | US | Samsung Electronics Co., LTD. | Granted |
| 2090 | P20140058323        | KR | Samsung Electronics Co., LTD. | Pending |
| 2091 | US9362952           | US | Samsung Electronics Co., LTD. | Granted |
| 2092 | P20140065370        | KR | Samsung Electronics Co., LTD. | Pending |
| 2093 | US9553613           | US | Samsung Electronics Co., LTD. | Granted |
| 2094 | AU 2011239128       | AU | Samsung Electronics Co., LTD. | Granted |
| 2095 | 2016201285          | AU | Samsung Electronics Co., LTD. | Pending |
| 2096 | 1120120253123       | BR | Samsung Electronics Co., LTD. | Pending |
| 2097 | 2795439             | CA | Samsung Electronics Co., LTD. | Pending |
| 2098 | 2887786             | CA | Samsung Electronics Co., LTD. | Pending |
| 2099 | 2887783             | CA | Samsung Electronics Co., LTD. | Pending |
| 2100 | 2887748             | CA | Samsung Electronics Co., LTD. | Pending |
| 2101 | 2887791             | CA | Samsung Electronics Co., LTD. | Pending |
| 2102 | CN ZL201180027828.0 | CN | Samsung Electronics Co., LTD. | Granted |
| 2103 | 201510219893        | CN | Samsung Electronics Co., LTD. | Pending |
| 2104 | 201510217267        | CN | Samsung Electronics Co., LTD. | Pending |
| 2105 | 201510219881        | CN | Samsung Electronics Co., LTD. | Pending |
| 2106 | 201510217251        | CN | Samsung Electronics Co., LTD. | Pending |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 2107 | 201510218304.X  | CN | Samsung Electronics Co., LTD. | Pending |
| 2108 | 11766125        | EP | Samsung Electronics Co., LTD. | Pending |
| 2109 | 15191860        | EP | Samsung Electronics Co., LTD. | Pending |
| 2110 | 15191912        | EP | Samsung Electronics Co., LTD. | Pending |
| 2111 | 15191964        | EP | Samsung Electronics Co., LTD. | Pending |
| 2112 | 15191968        | EP | Samsung Electronics Co., LTD. | Pending |
| 2113 | ID P000039995   | ID | Samsung Electronics Co., LTD. | Granted |
| 2114 | P-00201506991   | ID | Samsung Electronics Co., LTD. | Pending |
| 2115 | P-00201506992   | ID | Samsung Electronics Co., LTD. | Pending |
| 2116 | P-00201506993   | ID | Samsung Electronics Co., LTD. | Pending |
| 2117 | P-00201506990   | ID | Samsung Electronics Co., LTD. | Pending |
| 2118 | 9227/CHENP/2012 | IN | Samsung Electronics Co., LTD. | Pending |
| 2119 | 2357/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2120 | 2356/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2121 | 2355/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2122 | 2354/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2123 | 2353/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2124 | 2015-90686      | JP | Samsung Electronics Co., LTD. | Pending |
| 2125 | KR 1529992      | KR | Samsung Electronics Co., LTD. | Granted |
| 2126 | P20160064227    | KR | Samsung Electronics Co., LTD. | Pending |
| 2127 | MX 316237       | MX | Samsung Electronics Co., LTD. | Granted |
| 2128 | MX 320438       | MX | Samsung Electronics Co., LTD. | Granted |
| 2129 | MX 320437       | MX | Samsung Electronics Co., LTD. | Granted |
| 2130 | MX 320436       | MX | Samsung Electronics Co., LTD. | Granted |
| 2131 | MX 320433       | MX | Samsung Electronics Co., LTD. | Granted |
| 2132 | MY-154665-A     | MY | Samsung Electronics Co., LTD. | Granted |
| 2133 | PI2014003542    | MY | Samsung Electronics Co., LTD. | Pending |
| 2134 | PI2015000863    | MY | Samsung Electronics Co., LTD. | Pending |
| 2135 | PI2015000867    | MY | Samsung Electronics Co., LTD. | Pending |
| 2136 | PI2015000868    | MY | Samsung Electronics Co., LTD. | Pending |
| 2137 | RU 2554555      | RU | Samsung Electronics Co., LTD. | Granted |
| 2138 | 2015118706      | RU | Samsung Electronics Co., LTD. | Pending |
| 2139 | 2015118705      | RU | Samsung Electronics Co., LTD. | Pending |

|      |                |    |                               |         |
|------|----------------|----|-------------------------------|---------|
| 2140 | 2015118881     | RU | Samsung Electronics Co., LTD. | Pending |
| 2141 | 2015118723     | RU | Samsung Electronics Co., LTD. | Pending |
| 2142 | US 8982962     | US | Samsung Electronics Co., LTD. | Granted |
| 2143 | US 9118914     | US | Samsung Electronics Co., LTD. | Granted |
| 2144 | US 9124892     | US | Samsung Electronics Co., LTD. | Granted |
| 2145 | US 9124893     | US | Samsung Electronics Co., LTD. | Granted |
| 2146 | US 9124894     | US | Samsung Electronics Co., LTD. | Granted |
| 2147 | US14/802584    | US | Samsung Electronics Co., LTD. | Pending |
| 2148 | 1-2012-03280   | VN | Samsung Electronics Co., LTD. | Pending |
| 2149 | 1-2016-01901   | VN | Samsung Electronics Co., LTD. | Pending |
| 2150 | 1-2016-01902   | VN | Samsung Electronics Co., LTD. | Pending |
| 2151 | 1-2016-01903   | VN | Samsung Electronics Co., LTD. | Pending |
| 2152 | 1-2016-01904   | VN | Samsung Electronics Co., LTD. | Pending |
| 2153 | 2015/00711     | ZA | Samsung Electronics Co., LTD. | Pending |
| 2154 | 2015/00712     | ZA | Samsung Electronics Co., LTD. | Pending |
| 2155 | 2015/00713     | ZA | Samsung Electronics Co., LTD. | Pending |
| 2156 | 2015/00714     | ZA | Samsung Electronics Co., LTD. | Pending |
| 2157 | AL 2545713     | AL | Samsung Electronics Co., LTD. | Granted |
| 2158 | AT 2545713     | AT | Samsung Electronics Co., LTD. | Granted |
| 2159 | AU 2011239130  | AU | Samsung Electronics Co., LTD. | Granted |
| 2160 | BE 2545713     | BE | Samsung Electronics Co., LTD. | Granted |
| 2161 | BG 2545713     | BG | Samsung Electronics Co., LTD. | Granted |
| 2162 | 1120120253107  | BR | Samsung Electronics Co., LTD. | Pending |
| 2163 | 2795475        | CA | Samsung Electronics Co., LTD. | Pending |
| 2164 | 2884205        | CA | Samsung Electronics Co., LTD. | Pending |
| 2165 | 2884540        | CA | Samsung Electronics Co., LTD. | Pending |
| 2166 | 2884537        | CA | Samsung Electronics Co., LTD. | Pending |
| 2167 | 2884486        | CA | Samsung Electronics Co., LTD. | Pending |
| 2168 | CH 2545713     | CH | Samsung Electronics Co., LTD. | Granted |
| 2169 | 201180027803   | CN | Samsung Electronics Co., LTD. | Pending |
| 2170 | 201510175695   | CN | Samsung Electronics Co., LTD. | Pending |
| 2171 | 201510173765.X | CN | Samsung Electronics Co., LTD. | Pending |
| 2172 | 201510175695   | CN | Samsung Electronics Co., LTD. | Pending |

|      |                      |    |                               |         |
|------|----------------------|----|-------------------------------|---------|
| 2173 | 201510175913         | CN | Samsung Electronics Co., LTD. | Pending |
| 2174 | 201510175162         | CN | Samsung Electronics Co., LTD. | Pending |
| 2175 | 201510173807.X       | CN | Samsung Electronics Co., LTD. | Pending |
| 2176 | CY 2545713           | CY | Samsung Electronics Co., LTD. | Granted |
| 2177 | CZ 2545713           | CZ | Samsung Electronics Co., LTD. | Granted |
| 2178 | DE 60 2011 026 738.8 | DE | Samsung Electronics Co., LTD. | Granted |
| 2179 | DK 2545713           | DK | Samsung Electronics Co., LTD. | Granted |
| 2180 | EE 2545713           | EE | Samsung Electronics Co., LTD. | Granted |
| 2181 | 15160768             | EP | Samsung Electronics Co., LTD. | Pending |
| 2182 | 15160769             | EP | Samsung Electronics Co., LTD. | Pending |
| 2183 | 15160769             | EP | Samsung Electronics Co., LTD. | Pending |
| 2184 | 15160770             | EP | Samsung Electronics Co., LTD. | Pending |
| 2185 | ES 2545713           | ES | Samsung Electronics Co., LTD. | Granted |
| 2186 | FI 2545713           | FI | Samsung Electronics Co., LTD. | Granted |
| 2187 | FR 2545713           | FR | Samsung Electronics Co., LTD. | Granted |
| 2188 | GB 2545713           | GB | Samsung Electronics Co., LTD. | Granted |
| 2189 | GR 2545713           | GR | Samsung Electronics Co., LTD. | Granted |
| 2190 | HR 2545713           | HR | Samsung Electronics Co., LTD. | Granted |
| 2191 | HU 2545713           | HU | Samsung Electronics Co., LTD. | Granted |
| 2192 | W-00201204524        | ID | Samsung Electronics Co., LTD. | Pending |
| 2193 | P-00201501778        | ID | Samsung Electronics Co., LTD. | Pending |
| 2194 | P-00201501779        | ID | Samsung Electronics Co., LTD. | Pending |
| 2195 | P-00201501780        | ID | Samsung Electronics Co., LTD. | Pending |
| 2196 | P-00201501781        | ID | Samsung Electronics Co., LTD. | Pending |
| 2197 | P-00201501782        | ID | Samsung Electronics Co., LTD. | Pending |
| 2198 | IE 2545713           | IE | Samsung Electronics Co., LTD. | Granted |
| 2199 | 9254/CHENP/2012      | IN | Samsung Electronics Co., LTD. | Pending |
| 2200 | 1673/CHENP/2015      | IN | Samsung Electronics Co., LTD. | Pending |
| 2201 | 1674/CHENP/2015      | IN | Samsung Electronics Co., LTD. | Pending |
| 2202 | 1683/CHENP/2015      | IN | Samsung Electronics Co., LTD. | Pending |
| 2203 | 1680/CHENP/2015      | IN | Samsung Electronics Co., LTD. | Pending |
| 2204 | 1682/CHENP/2015      | IN | Samsung Electronics Co., LTD. | Pending |
| 2205 | IS 2545713           | IS | Samsung Electronics Co., LTD. | Granted |

|      |              |    |                               |         |
|------|--------------|----|-------------------------------|---------|
| 2206 | IT 2545713   | IT | Samsung Electronics Co., LTD. | Granted |
| 2207 | 2015-95268   | JP | Samsung Electronics Co., LTD. | Pending |
| 2208 | 2015-95269   | JP | Samsung Electronics Co., LTD. | Pending |
| 2209 | 2015-95270   | JP | Samsung Electronics Co., LTD. | Pending |
| 2210 | 2015-95271   | JP | Samsung Electronics Co., LTD. | Pending |
| 2211 | KR 1503269   | KR | Samsung Electronics Co., LTD. | Granted |
| 2212 | P20140148755 | KR | Samsung Electronics Co., LTD. | Pending |
| 2213 | P20150034010 | KR | Samsung Electronics Co., LTD. | Pending |
| 2214 | P20150034011 | KR | Samsung Electronics Co., LTD. | Pending |
| 2215 | P20150034012 | KR | Samsung Electronics Co., LTD. | Pending |
| 2216 | P20150034013 | KR | Samsung Electronics Co., LTD. | Pending |
| 2217 | LI 2545713   | LI | Samsung Electronics Co., LTD. | Granted |
| 2218 | LT 2545713   | LT | Samsung Electronics Co., LTD. | Granted |
| 2219 | LU 2545713   | LU | Samsung Electronics Co., LTD. | Granted |
| 2220 | LV 2545713   | LV | Samsung Electronics Co., LTD. | Granted |
| 2221 | MC 2545713   | MC | Samsung Electronics Co., LTD. | Granted |
| 2222 | MK 2545713   | MK | Samsung Electronics Co., LTD. | Granted |
| 2223 | MT 2545713   | MT | Samsung Electronics Co., LTD. | Granted |
| 2224 | MX 310105    | MX | Samsung Electronics Co., LTD. | Granted |
| 2225 | PI2012004419 | MY | Samsung Electronics Co., LTD. | Pending |
| 2226 | PI2015000649 | MY | Samsung Electronics Co., LTD. | Pending |
| 2227 | PI2015000651 | MY | Samsung Electronics Co., LTD. | Pending |
| 2228 | PI2015000650 | MY | Samsung Electronics Co., LTD. | Pending |
| 2229 | PI2015000652 | MY | Samsung Electronics Co., LTD. | Pending |
| 2230 | PI2015000648 | MY | Samsung Electronics Co., LTD. | Pending |
| 2231 | NL 2545713   | NL | Samsung Electronics Co., LTD. | Granted |
| 2232 | NO 2545713   | NO | Samsung Electronics Co., LTD. | Granted |
| 2233 | PL 2545713   | PL | Samsung Electronics Co., LTD. | Granted |
| 2234 | PT 2545713   | PT | Samsung Electronics Co., LTD. | Granted |
| 2235 | RO 2545713   | RO | Samsung Electronics Co., LTD. | Granted |
| 2236 | RS 2545713   | RS | Samsung Electronics Co., LTD. | Granted |
| 2237 | RU 2542884   | RU | Samsung Electronics Co., LTD. | Granted |
| 2238 | 2014153750   | RU | Samsung Electronics Co., LTD. | Pending |

|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 2239 | 2014153851          | RU | Samsung Electronics Co., LTD. | Pending |
| 2240 | 2014153752          | RU | Samsung Electronics Co., LTD. | Pending |
| 2241 | 2014153849          | RU | Samsung Electronics Co., LTD. | Pending |
| 2242 | 2014153748          | RU | Samsung Electronics Co., LTD. | Pending |
| 2243 | SE 2545713          | SE | Samsung Electronics Co., LTD. | Granted |
| 2244 | SI 2545713          | SI | Samsung Electronics Co., LTD. | Granted |
| 2245 | SK 2545713          | SK | Samsung Electronics Co., LTD. | Granted |
| 2246 | SM 2545713          | SM | Samsung Electronics Co., LTD. | Granted |
| 2247 | TR 2545713          | TR | Samsung Electronics Co., LTD. | Granted |
| 2248 | US 8964840          | US | Samsung Electronics Co., LTD. | Granted |
| 2249 | US14/597808         | US | Samsung Electronics Co., LTD. | Pending |
| 2250 | US14/597853         | US | Samsung Electronics Co., LTD. | Pending |
| 2251 | US14/597724         | US | Samsung Electronics Co., LTD. | Pending |
| 2252 | 1-2012-03277        | VN | Samsung Electronics Co., LTD. | Pending |
| 2253 | 1-2015-00807        | VN | Samsung Electronics Co., LTD. | Pending |
| 2254 | 1-2015-00806        | VN | Samsung Electronics Co., LTD. | Pending |
| 2255 | 1-2015-00808        | VN | Samsung Electronics Co., LTD. | Pending |
| 2256 | 1-2015-00809        | VN | Samsung Electronics Co., LTD. | Pending |
| 2257 | 2015/000715         | ZA | Samsung Electronics Co., LTD. | Pending |
| 2258 | 2015/000716         | ZA | Samsung Electronics Co., LTD. | Pending |
| 2259 | 2015/000718         | ZA | Samsung Electronics Co., LTD. | Pending |
| 2260 | 2015/000719         | ZA | Samsung Electronics Co., LTD. | Pending |
| 2261 | CN ZL201180014824.9 | CN | Samsung Electronics Co., LTD. | Granted |
| 2262 | 201510445851        | CN | Samsung Electronics Co., LTD. | Pending |
| 2263 | 201510446035        | CN | Samsung Electronics Co., LTD. | Pending |
| 2264 | 201510445869        | CN | Samsung Electronics Co., LTD. | Pending |
| 2265 | 201510446031        | CN | Samsung Electronics Co., LTD. | Pending |
| 2266 | 201510445625        | CN | Samsung Electronics Co., LTD. | Pending |
| 2267 | 11734862            | EP | Samsung Electronics Co., LTD. | Pending |
| 2268 | 2012-549942         | JP | Samsung Electronics Co., LTD. | Pending |
| 2269 | 2016-111255         | JP | Samsung Electronics Co., LTD. | Pending |
| 2270 | P20160034725        | KR | Samsung Electronics Co., LTD. | Pending |
| 2271 | PI2012003278        | MY | Samsung Electronics Co., LTD. | Pending |

|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 2272 | 1-2012-501455       | PH | Samsung Electronics Co., LTD. | Pending |
| 2273 | 1201003611          | TH | Samsung Electronics Co., LTD. | Pending |
| 2274 | US15/133918         | US | Samsung Electronics Co., LTD. | Pending |
| 2275 | 1-2012-02447        | VN | Samsung Electronics Co., LTD. | Pending |
| 2276 | 1-2016-00371        | VN | Samsung Electronics Co., LTD. | Pending |
| 2277 | CN ZL201180034696.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 2278 | 201610374155        | CN | Samsung Electronics Co., LTD. | Pending |
| 2279 | 201610373549        | CN | Samsung Electronics Co., LTD. | Pending |
| 2280 | 201610374809        | CN | Samsung Electronics Co., LTD. | Pending |
| 2281 | 11780863            | EP | Samsung Electronics Co., LTD. | Pending |
| 2282 | W-00201205186       | ID | Samsung Electronics Co., LTD. | Pending |
| 2283 | P20110006485        | KR | Samsung Electronics Co., LTD. | Pending |
| 2284 | PI2012004942        | MY | Samsung Electronics Co., LTD. | Pending |
| 2285 | PI2014002343        | MY | Samsung Electronics Co., LTD. | Pending |
| 2286 | PI2015000990        | MY | Samsung Electronics Co., LTD. | Pending |
| 2287 | PI2015000992        | MY | Samsung Electronics Co., LTD. | Pending |
| 2288 | PI2015000991        | MY | Samsung Electronics Co., LTD. | Pending |
| 2289 | US13/108188         | US | Samsung Electronics Co., LTD. | Pending |
| 2290 | 1-2012-03745        | VN | Samsung Electronics Co., LTD. | Pending |
| 2291 | 2015218476          | AU | Samsung Electronics Co., LTD. | Pending |
| 2292 | 2016213718          | AU | Samsung Electronics Co., LTD. | Pending |
| 2293 | 1120130005580       | BR | Samsung Electronics Co., LTD. | Pending |
| 2294 | 2921710             | CA | Samsung Electronics Co., LTD. | Pending |
| 2295 | CN ZL201180043638.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 2296 | 201610305425        | CN | Samsung Electronics Co., LTD. | Pending |
| 2297 | 201610304349        | CN | Samsung Electronics Co., LTD. | Pending |
| 2298 | 201610305656        | CN | Samsung Electronics Co., LTD. | Pending |
| 2299 | 201610305591        | CN | Samsung Electronics Co., LTD. | Pending |
| 2300 | 11803837            | EP | Samsung Electronics Co., LTD. | Pending |
| 2301 | 16180224            | EP | Samsung Electronics Co., LTD. | Pending |
| 2302 | 16180225            | EP | Samsung Electronics Co., LTD. | Pending |
| 2303 | 16180228            | EP | Samsung Electronics Co., LTD. | Pending |
| 2304 | W-00201300542       | ID | Samsung Electronics Co., LTD. | Pending |



|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 2305 | P-00201603246   | ID | Samsung Electronics Co., LTD. | Pending |
| 2306 | P-00201603233   | ID | Samsung Electronics Co., LTD. | Pending |
| 2307 | P-00201603232   | ID | Samsung Electronics Co., LTD. | Pending |
| 2308 | P-00201603231   | ID | Samsung Electronics Co., LTD. | Pending |
| 2309 | 1039/CHENP/2013 | IN | Samsung Electronics Co., LTD. | Pending |
| 2310 | 2016-5602       | JP | Samsung Electronics Co., LTD. | Pending |
| 2311 | P20110067996    | KR | Samsung Electronics Co., LTD. | Pending |
| 2312 | PI2013000067    | MY | Samsung Electronics Co., LTD. | Pending |
| 2313 | PI2015000038    | MY | Samsung Electronics Co., LTD. | Pending |
| 2314 | PI2015000862    | MY | Samsung Electronics Co., LTD. | Pending |
| 2315 | PI2015000870    | MY | Samsung Electronics Co., LTD. | Pending |
| 2316 | PI2015000864    | MY | Samsung Electronics Co., LTD. | Pending |
| 2317 | 1-2013-500062   | PH | Samsung Electronics Co., LTD. | Pending |
| 2318 | 1-2015-500942   | PH | Samsung Electronics Co., LTD. | Pending |
| 2319 | 1-2015-500943   | PH | Samsung Electronics Co., LTD. | Pending |
| 2320 | 1-2015-500944   | PH | Samsung Electronics Co., LTD. | Pending |
| 2321 | 1-2015-500945   | PH | Samsung Electronics Co., LTD. | Pending |
| 2322 | 2014133412      | RU | Samsung Electronics Co., LTD. | Pending |
| 2323 | 201307864-7     | SG | Samsung Electronics Co., LTD. | Pending |
| 2324 | 1301000136      | TH | Samsung Electronics Co., LTD. | Pending |
| 2325 | 1-2013-00416    | VN | Samsung Electronics Co., LTD. | Pending |
| 2326 | 2015/02806      | ZA | Samsung Electronics Co., LTD. | Pending |
| 2327 | 2015/02807      | ZA | Samsung Electronics Co., LTD. | Pending |
| 2328 | 2015/02809      | ZA | Samsung Electronics Co., LTD. | Pending |
| 2329 | 2015/02810      | ZA | Samsung Electronics Co., LTD. | Pending |
| 2330 | 1120130005599   | BR | Samsung Electronics Co., LTD. | Pending |
| 2331 | BR1220150138710 | BR | Samsung Electronics Co., LTD. | Pending |
| 2332 | BR1220150138892 | BR | Samsung Electronics Co., LTD. | Pending |
| 2333 | BR1220150138876 | BR | Samsung Electronics Co., LTD. | Pending |
| 2334 | BR1220150138850 | BR | Samsung Electronics Co., LTD. | Pending |
| 2335 | 201180043465    | CN | Samsung Electronics Co., LTD. | Pending |
| 2336 | 201510195306    | CN | Samsung Electronics Co., LTD. | Pending |
| 2337 | 201510293875.X  | CN | Samsung Electronics Co., LTD. | Pending |

|      |                |    |                               |         |
|------|----------------|----|-------------------------------|---------|
| 2338 | 201510292289   | CN | Samsung Electronics Co., LTD. | Pending |
| 2339 | 201510292537   | CN | Samsung Electronics Co., LTD. | Pending |
| 2340 | 11803836       | EP | Samsung Electronics Co., LTD. | Pending |
| 2341 | 15167257       | EP | Samsung Electronics Co., LTD. | Pending |
| 2342 | 15167257       | EP | Samsung Electronics Co., LTD. | Pending |
| 2343 | 15167258       | EP | Samsung Electronics Co., LTD. | Pending |
| 2344 | 15167260       | EP | Samsung Electronics Co., LTD. | Pending |
| 2345 | P-00201503934  | ID | Samsung Electronics Co., LTD. | Pending |
| 2346 | P-00201503936  | ID | Samsung Electronics Co., LTD. | Pending |
| 2347 | P-00201503940  | ID | Samsung Electronics Co., LTD. | Pending |
| 2348 | P-002015034944 | ID | Samsung Electronics Co., LTD. | Pending |
| 2349 | 2013-519576    | JP | Samsung Electronics Co., LTD. | Pending |
| 2350 | KR 1456499     | KR | Samsung Electronics Co., LTD. | Granted |
| 2351 | KR 1507811     | KR | Samsung Electronics Co., LTD. | Granted |
| 2352 | PI2013000070   | MY | Samsung Electronics Co., LTD. | Pending |
| 2353 | PI 2015000285  | MY | Samsung Electronics Co., LTD. | Pending |
| 2354 | PI 2015000284  | MY | Samsung Electronics Co., LTD. | Pending |
| 2355 | PI 2015000283  | MY | Samsung Electronics Co., LTD. | Pending |
| 2356 | PI 2015000282  | MY | Samsung Electronics Co., LTD. | Pending |
| 2357 | 1-2013-500059  | PH | Samsung Electronics Co., LTD. | Pending |
| 2358 | 1-2015-500254  | PH | Samsung Electronics Co., LTD. | Pending |
| 2359 | 1-2005-500256  | PH | Samsung Electronics Co., LTD. | Pending |
| 2360 | 1-2015-500255  | PH | Samsung Electronics Co., LTD. | Pending |
| 2361 | 1-2015-500257  | PH | Samsung Electronics Co., LTD. | Pending |
| 2362 | SG 186978      | SG | Samsung Electronics Co., LTD. | Granted |
| 2363 | SG 195593      | SG | Samsung Electronics Co., LTD. | Granted |
| 2364 | 10201503795R   | SG | Samsung Electronics Co., LTD. | Pending |
| 2365 | 10201503796P   | SG | Samsung Electronics Co., LTD. | Pending |
| 2366 | 10201503797Q   | SG | Samsung Electronics Co., LTD. | Pending |
| 2367 | 10201503798S   | SG | Samsung Electronics Co., LTD. | Pending |
| 2368 | US14/615165    | US | Samsung Electronics Co., LTD. | Pending |
| 2369 | US14/615194    | US | Samsung Electronics Co., LTD. | Pending |
| 2370 | US14/615219    | US | Samsung Electronics Co., LTD. | Pending |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 2371 | 1-2015-01708    | VN | Samsung Electronics Co., LTD. | Pending |
| 2372 | 1-2015-01709    | VN | Samsung Electronics Co., LTD. | Pending |
| 2373 | 1-2015-01710    | VN | Samsung Electronics Co., LTD. | Pending |
| 2374 | 1-2015-01711    | VN | Samsung Electronics Co., LTD. | Pending |
| 2375 | AU 2011274722   | AU | Samsung Electronics Co., LTD. | Granted |
| 2376 | 2015201569      | AU | Samsung Electronics Co., LTD. | Pending |
| 2377 | 2015201608      | AU | Samsung Electronics Co., LTD. | Pending |
| 2378 | 2015201606      | AU | Samsung Electronics Co., LTD. | Pending |
| 2379 | 2015201607      | AU | Samsung Electronics Co., LTD. | Pending |
| 2380 | 1120130005556   | BR | Samsung Electronics Co., LTD. | Pending |
| 2381 | 2804780         | CA | Samsung Electronics Co., LTD. | Pending |
| 2382 | 2886721         | CA | Samsung Electronics Co., LTD. | Pending |
| 2383 | 2886960         | CA | Samsung Electronics Co., LTD. | Pending |
| 2384 | 2886964         | CA | Samsung Electronics Co., LTD. | Pending |
| 2385 | 201180043660    | CN | Samsung Electronics Co., LTD. | Pending |
| 2386 | 201510206249    | CN | Samsung Electronics Co., LTD. | Pending |
| 2387 | 201510204803    | CN | Samsung Electronics Co., LTD. | Pending |
| 2388 | 201510204900    | CN | Samsung Electronics Co., LTD. | Pending |
| 2389 | 201510203207    | CN | Samsung Electronics Co., LTD. | Pending |
| 2390 | 201510204652    | CN | Samsung Electronics Co., LTD. | Pending |
| 2391 | 11803807        | EP | Samsung Electronics Co., LTD. | Pending |
| 2392 | 14193557        | EP | Samsung Electronics Co., LTD. | Pending |
| 2393 | 15154330        | EP | Samsung Electronics Co., LTD. | Pending |
| 2394 | 15166149        | EP | Samsung Electronics Co., LTD. | Pending |
| 2395 | 15166150        | EP | Samsung Electronics Co., LTD. | Pending |
| 2396 | W-00201300539   | ID | Samsung Electronics Co., LTD. | Pending |
| 2397 | P-00201503420   | ID | Samsung Electronics Co., LTD. | Pending |
| 2398 | P-00201503421   | ID | Samsung Electronics Co., LTD. | Pending |
| 2399 | P-00201503424   | ID | Samsung Electronics Co., LTD. | Pending |
| 2400 | P-00201503426   | ID | Samsung Electronics Co., LTD. | Pending |
| 2401 | 909/CHENP/2013  | IN | Samsung Electronics Co., LTD. | Pending |
| 2402 | 2253/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2403 | 2254/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 2404 | 2262/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2405 | 2263/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2406 | 2264/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2407 | JP 5738991      | JP | Samsung Electronics Co., LTD. | Granted |
| 2408 | KR 1524643      | KR | Samsung Electronics Co., LTD. | Granted |
| 2409 | P20140097624    | KR | Samsung Electronics Co., LTD. | Pending |
| 2410 | MX 313959       | MX | Samsung Electronics Co., LTD. | Granted |
| 2411 | MY-156223-A     | MY | Samsung Electronics Co., LTD. | Granted |
| 2412 | PI2014003581    | MY | Samsung Electronics Co., LTD. | Pending |
| 2413 | PI2015000881    | MY | Samsung Electronics Co., LTD. | Pending |
| 2414 | PI2015000880    | MY | Samsung Electronics Co., LTD. | Pending |
| 2415 | PI2015000879    | MY | Samsung Electronics Co., LTD. | Pending |
| 2416 | 1-2013-500058   | PH | Samsung Electronics Co., LTD. | Pending |
| 2417 | 1-2015-500916   | PH | Samsung Electronics Co., LTD. | Pending |
| 2418 | 1-2015-500918   | PH | Samsung Electronics Co., LTD. | Pending |
| 2419 | 1-2015-500919   | PH | Samsung Electronics Co., LTD. | Pending |
| 2420 | 1-2015-500917   | PH | Samsung Electronics Co., LTD. | Pending |
| 2421 | 2013105501      | RU | Samsung Electronics Co., LTD. | Pending |
| 2422 | RU 2577182      | RU | Samsung Electronics Co., LTD. | Granted |
| 2423 | SG 186970       | SG | Samsung Electronics Co., LTD. | Granted |
| 2424 | SG 196797       | SG | Samsung Electronics Co., LTD. | Granted |
| 2425 | SG 10201503379S | SG | Samsung Electronics Co., LTD. | Granted |
| 2426 | SG 10201503381W | SG | Samsung Electronics Co., LTD. | Granted |
| 2427 | SG 10201503383P | SG | Samsung Electronics Co., LTD. | Granted |
| 2428 | 1301000134      | TH | Samsung Electronics Co., LTD. | Pending |
| 2429 | US8885727       | US | Samsung Electronics Co., LTD. | Granted |
| 2430 | US14/299896     | US | Samsung Electronics Co., LTD. | Pending |
| 2431 | US14/299942     | US | Samsung Electronics Co., LTD. | Pending |
| 2432 | US14/299801     | US | Samsung Electronics Co., LTD. | Pending |
| 2433 | US14/299863     | US | Samsung Electronics Co., LTD. | Pending |
| 2434 | US14/299897     | US | Samsung Electronics Co., LTD. | Pending |
| 2435 | 1-2013-00423    | VN | Samsung Electronics Co., LTD. | Pending |
| 2436 | 1-2015-01507    | VN | Samsung Electronics Co., LTD. | Pending |

|      |               |    |                               |         |
|------|---------------|----|-------------------------------|---------|
| 2437 | 1-2015-01508  | VN | Samsung Electronics Co., LTD. | Pending |
| 2438 | 1-2015-01509  | VN | Samsung Electronics Co., LTD. | Pending |
| 2439 | 1-2015-01510  | VN | Samsung Electronics Co., LTD. | Pending |
| 2440 | 2015/02591    | ZA | Samsung Electronics Co., LTD. | Pending |
| 2441 | 2015/02592    | ZA | Samsung Electronics Co., LTD. | Pending |
| 2442 | 2015/02593    | ZA | Samsung Electronics Co., LTD. | Pending |
| 2443 | 2015/02594    | ZA | Samsung Electronics Co., LTD. | Pending |
| 2444 | P20160094148  | KR | Samsung Electronics Co., LTD. | Pending |
| 2445 | LI 2665267    | LI | Samsung Electronics Co., LTD. | Granted |
| 2446 | LI 2804383    | LI | Samsung Electronics Co., LTD. | Granted |
| 2447 | LT 2665267    | LT | Samsung Electronics Co., LTD. | Granted |
| 2448 | LT 2804383    | LT | Samsung Electronics Co., LTD. | Granted |
| 2449 | LU 2665267    | LU | Samsung Electronics Co., LTD. | Granted |
| 2450 | LU 2804383    | LU | Samsung Electronics Co., LTD. | Granted |
| 2451 | LV 2665267    | LV | Samsung Electronics Co., LTD. | Granted |
| 2452 | LV 2804383    | LV | Samsung Electronics Co., LTD. | Granted |
| 2453 | MC 2665267    | MC | Samsung Electronics Co., LTD. | Granted |
| 2454 | MC 2804383    | MC | Samsung Electronics Co., LTD. | Granted |
| 2455 | MK 2665267    | MK | Samsung Electronics Co., LTD. | Granted |
| 2456 | MK 2804383    | MK | Samsung Electronics Co., LTD. | Granted |
| 2457 | MT 2665267    | MT | Samsung Electronics Co., LTD. | Granted |
| 2458 | MT 2804383    | MT | Samsung Electronics Co., LTD. | Granted |
| 2459 | MX 320213     | MX | Samsung Electronics Co., LTD. | Granted |
| 2460 | MX 320209     | MX | Samsung Electronics Co., LTD. | Granted |
| 2461 | MX 322645     | MX | Samsung Electronics Co., LTD. | Granted |
| 2462 | MX 320205     | MX | Samsung Electronics Co., LTD. | Granted |
| 2463 | PI2012000237  | MY | Samsung Electronics Co., LTD. | Pending |
| 2464 | MY-155175-A   | MY | Samsung Electronics Co., LTD. | Granted |
| 2465 | MY-155121-A   | MY | Samsung Electronics Co., LTD. | Granted |
| 2466 | MY-154147-A   | MY | Samsung Electronics Co., LTD. | Granted |
| 2467 | PI 2015000361 | MY | Samsung Electronics Co., LTD. | Pending |
| 2468 | PI2015001521  | MY | Samsung Electronics Co., LTD. | Pending |
| 2469 | NL 2665267    | NL | Samsung Electronics Co., LTD. | Granted |

|      |             |    |                               |         |
|------|-------------|----|-------------------------------|---------|
| 2470 | NL 2804383  | NL | Samsung Electronics Co., LTD. | Granted |
| 2471 | NO 2665267  | NO | Samsung Electronics Co., LTD. | Granted |
| 2472 | NO 2804383  | NO | Samsung Electronics Co., LTD. | Granted |
| 2473 | PL 2665267  | PL | Samsung Electronics Co., LTD. | Granted |
| 2474 | PL 2804383  | PL | Samsung Electronics Co., LTD. | Granted |
| 2475 | PT 2665267  | PT | Samsung Electronics Co., LTD. | Granted |
| 2476 | PT 2804383  | PT | Samsung Electronics Co., LTD. | Granted |
| 2477 | RO 2665267  | RO | Samsung Electronics Co., LTD. | Granted |
| 2478 | RO 2804383  | RO | Samsung Electronics Co., LTD. | Granted |
| 2479 | RU 2519280  | RU | Samsung Electronics Co., LTD. | Granted |
| 2480 | SE 2665267  | SE | Samsung Electronics Co., LTD. | Granted |
| 2481 | SE 2804383  | SE | Samsung Electronics Co., LTD. | Granted |
| 2482 | SI 2665267  | SI | Samsung Electronics Co., LTD. | Granted |
| 2483 | SI 2804383  | SI | Samsung Electronics Co., LTD. | Granted |
| 2484 | SK 2665267  | SK | Samsung Electronics Co., LTD. | Granted |
| 2485 | SK 2804383  | SK | Samsung Electronics Co., LTD. | Granted |
| 2486 | SM 2665267  | SM | Samsung Electronics Co., LTD. | Granted |
| 2487 | SM 2804383  | SM | Samsung Electronics Co., LTD. | Granted |
| 2488 | TR 2665267  | TR | Samsung Electronics Co., LTD. | Granted |
| 2489 | TR 2804383  | TR | Samsung Electronics Co., LTD. | Granted |
| 2490 | TW I430668  | TW | Samsung Electronics Co., LTD. | Granted |
| 2491 | TW I429291  | TW | Samsung Electronics Co., LTD. | Granted |
| 2492 | TW I426784  | TW | Samsung Electronics Co., LTD. | Granted |
| 2493 | TW I462594  | TW | Samsung Electronics Co., LTD. | Granted |
| 2494 | TW I474722  | TW | Samsung Electronics Co., LTD. | Granted |
| 2495 | TW I475889  | TW | Samsung Electronics Co., LTD. | Granted |
| 2496 | 104102055   | TW | Samsung Electronics Co., LTD. | Pending |
| 2497 | US13/764119 | US | Samsung Electronics Co., LTD. | Pending |
| 2498 | US 8953682  | US | Samsung Electronics Co., LTD. | Granted |
| 2499 | US 8842734  | US | Samsung Electronics Co., LTD. | Granted |
| 2500 | US 9307238  | US | Samsung Electronics Co., LTD. | Granted |
| 2501 | US14/300047 | US | Samsung Electronics Co., LTD. | Pending |
| 2502 | US 9313490  | US | Samsung Electronics Co., LTD. | Granted |

|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 2503 | 1-2013-00802        | VN | Samsung Electronics Co., LTD. | Pending |
| 2504 | 1-2013-00801        | VN | Samsung Electronics Co., LTD. | Pending |
| 2505 | 1-2015-00300        | VN | Samsung Electronics Co., LTD. | Pending |
| 2506 | 1-2015-00299        | VN | Samsung Electronics Co., LTD. | Pending |
| 2507 | 1-2015-02717        | VN | Samsung Electronics Co., LTD. | Pending |
| 2508 | ZA 2013/03523       | ZA | Samsung Electronics Co., LTD. | Granted |
| 2509 | ZA 2013/03522       | ZA | Samsung Electronics Co., LTD. | Granted |
| 2510 | ZA 2014/03018       | ZA | Samsung Electronics Co., LTD. | Granted |
| 2511 | ZA 2014/03019       | ZA | Samsung Electronics Co., LTD. | Granted |
| 2512 | ZA 2014/03020       | ZA | Samsung Electronics Co., LTD. | Granted |
| 2513 | AU 2010283121       | AU | Samsung Electronics Co., LTD. | Granted |
| 2514 | AU 2013201857       | AU | Samsung Electronics Co., LTD. | Granted |
| 2515 | AU 2013201858       | AU | Samsung Electronics Co., LTD. | Granted |
| 2516 | AU 2013201859       | AU | Samsung Electronics Co., LTD. | Granted |
| 2517 | BR112012001514      | BR | Samsung Electronics Co., LTD. | Pending |
| 2518 | 1220130190163       | BR | Samsung Electronics Co., LTD. | Pending |
| 2519 | 1220130190171       | BR | Samsung Electronics Co., LTD. | Pending |
| 2520 | 1220130190180       | BR | Samsung Electronics Co., LTD. | Pending |
| 2521 | 2768182             | CA | Samsung Electronics Co., LTD. | Pending |
| 2522 | 2820905             | CA | Samsung Electronics Co., LTD. | Pending |
| 2523 | CA 2820553          | CA | Samsung Electronics Co., LTD. | Granted |
| 2524 | 2877202             | CA | Samsung Electronics Co., LTD. | Pending |
| 2525 | CN ZL201080036026.1 | CN | Samsung Electronics Co., LTD. | Granted |
| 2526 | 201310132005.5      | CN | Samsung Electronics Co., LTD. | Pending |
| 2527 | 201310130439.1      | CN | Samsung Electronics Co., LTD. | Pending |
| 2528 | 201310131990.8      | CN | Samsung Electronics Co., LTD. | Pending |
| 2529 | 201510002248.6      | CN | Samsung Electronics Co., LTD. | Pending |
| 2530 | 201510001768.5      | CN | Samsung Electronics Co., LTD. | Pending |
| 2531 | 10808396.5          | EP | Samsung Electronics Co., LTD. | Pending |
| 2532 | 13185336.8          | EP | Samsung Electronics Co., LTD. | Pending |
| 2533 | 13185337.6          | EP | Samsung Electronics Co., LTD. | Pending |
| 2534 | 13185335.0          | EP | Samsung Electronics Co., LTD. | Pending |
| 2535 | 15168128.5          | EP | Samsung Electronics Co., LTD. | Pending |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 2536 | ID W00201200067  | ID | Samsung Electronics Co., LTD. | Granted |
| 2537 | ID W-00201302753 | ID | Samsung Electronics Co., LTD. | Granted |
| 2538 | W-00201302752    | ID | Samsung Electronics Co., LTD. | Pending |
| 2539 | W-00201302751    | ID | Samsung Electronics Co., LTD. | Pending |
| 2540 | 529/MUMNP/2012   | IN | Samsung Electronics Co., LTD. | Pending |
| 2541 | 664/MUMNP/2013   | IN | Samsung Electronics Co., LTD. | Pending |
| 2542 | 666/MUMNP/2013   | IN | Samsung Electronics Co., LTD. | Pending |
| 2543 | 667/MUMNP/2013   | IN | Samsung Electronics Co., LTD. | Pending |
| 2544 | 1291/MUMNP/2015  | IN | Samsung Electronics Co., LTD. | Pending |
| 2545 | 1292/MUMNP/2015  | IN | Samsung Electronics Co., LTD. | Pending |
| 2546 | JP 5756106       | JP | Samsung Electronics Co., LTD. | Granted |
| 2547 | JP 5624178       | JP | Samsung Electronics Co., LTD. | Granted |
| 2548 | JP 5571827       | JP | Samsung Electronics Co., LTD. | Granted |
| 2549 | JP 5624179       | JP | Samsung Electronics Co., LTD. | Granted |
| 2550 | KR 1452859       | KR | Samsung Electronics Co., LTD. | Granted |
| 2551 | KR 1454664       | KR | Samsung Electronics Co., LTD. | Granted |
| 2552 | KR 1477545       | KR | Samsung Electronics Co., LTD. | Granted |
| 2553 | KR 1477546       | KR | Samsung Electronics Co., LTD. | Granted |
| 2554 | P20160022010     | KR | Samsung Electronics Co., LTD. | Pending |
| 2555 | MX 319251        | MX | Samsung Electronics Co., LTD. | Granted |
| 2556 | MX 318519        | MX | Samsung Electronics Co., LTD. | Granted |
| 2557 | MX 323298        | MX | Samsung Electronics Co., LTD. | Granted |
| 2558 | MX 328193        | MX | Samsung Electronics Co., LTD. | Granted |
| 2559 | MX 327687        | MX | Samsung Electronics Co., LTD. | Granted |
| 2560 | PI2012000197     | MY | Samsung Electronics Co., LTD. | Pending |
| 2561 | MY-154795-A      | MY | Samsung Electronics Co., LTD. | Granted |
| 2562 | MY 155891-A      | MY | Samsung Electronics Co., LTD. | Granted |
| 2563 | PI2013003328     | MY | Samsung Electronics Co., LTD. | Pending |
| 2564 | RU 2559740       | RU | Samsung Electronics Co., LTD. | Granted |
| 2565 | RU 2559738       | RU | Samsung Electronics Co., LTD. | Granted |
| 2566 | 2015120773       | RU | Samsung Electronics Co., LTD. | Pending |
| 2567 | 2015120764       | RU | Samsung Electronics Co., LTD. | Pending |
| 2568 | TW I413417       | TW | Samsung Electronics Co., LTD. | Granted |



|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 2569 | TW I424749          | TW | Samsung Electronics Co., LTD. | Granted |
| 2570 | TW I432033          | TW | Samsung Electronics Co., LTD. | Granted |
| 2571 | 102129568           | TW | Samsung Electronics Co., LTD. | Pending |
| 2572 | TW I468019          | TW | Samsung Electronics Co., LTD. | Granted |
| 2573 | TW I462593          | TW | Samsung Electronics Co., LTD. | Granted |
| 2574 | US 8792558          | US | Samsung Electronics Co., LTD. | Granted |
| 2575 | US 8787463          | US | Samsung Electronics Co., LTD. | Granted |
| 2576 | US 8811488          | US | Samsung Electronics Co., LTD. | Granted |
| 2577 | US14/341493         | US | Samsung Electronics Co., LTD. | Pending |
| 2578 | 1-2013-00832        | VN | Samsung Electronics Co., LTD. | Pending |
| 2579 | 1-2013-00833        | VN | Samsung Electronics Co., LTD. | Pending |
| 2580 | 1-2013-00835        | VN | Samsung Electronics Co., LTD. | Pending |
| 2581 | 1-2015-01764        | VN | Samsung Electronics Co., LTD. | Pending |
| 2582 | ZA 2012/01158       | ZA | Samsung Electronics Co., LTD. | Granted |
| 2583 | ZA 2013/04975       | ZA | Samsung Electronics Co., LTD. | Granted |
| 2584 | ZA 2013/04976       | ZA | Samsung Electronics Co., LTD. | Granted |
| 2585 | ZA 2013/04977       | ZA | Samsung Electronics Co., LTD. | Granted |
| 2586 | 2015/03389          | ZA | Samsung Electronics Co., LTD. | Pending |
| 2587 | AU 2010285491       | AU | Samsung Electronics Co., LTD. | Granted |
| 2588 | AU 2013201719       | AU | Samsung Electronics Co., LTD. | Granted |
| 2589 | AU 2013201715       | AU | Samsung Electronics Co., LTD. | Granted |
| 2590 | 2014200535          | AU | Samsung Electronics Co., LTD. | Pending |
| 2591 | AU 2014200537       | AU | Samsung Electronics Co., LTD. | Granted |
| 2592 | 2015202670          | AU | Samsung Electronics Co., LTD. | Pending |
| 2593 | BR1120120034308     | BR | Samsung Electronics Co., LTD. | Pending |
| 2594 | 1220130201840       | BR | Samsung Electronics Co., LTD. | Pending |
| 2595 | 1220130201858       | BR | Samsung Electronics Co., LTD. | Pending |
| 2596 | CA 2823808          | CA | Samsung Electronics Co., LTD. | Granted |
| 2597 | 2857365             | CA | Samsung Electronics Co., LTD. | Pending |
| 2598 | 2857370             | CA | Samsung Electronics Co., LTD. | Pending |
| 2599 | 2857392             | CA | Samsung Electronics Co., LTD. | Pending |
| 2600 | CN 201080036789.6   | CN | Samsung Electronics Co., LTD. | Granted |
| 2601 | CN ZL201310096270.2 | CN | Samsung Electronics Co., LTD. | Granted |

|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 2602 | CN ZL201310096284.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 2603 | 201510075767.5      | CN | Samsung Electronics Co., LTD. | Pending |
| 2604 | 201510075249.3      | CN | Samsung Electronics Co., LTD. | Pending |
| 2605 | 201510075768.X      | CN | Samsung Electronics Co., LTD. | Pending |
| 2606 | 10810146.0          | EP | Samsung Electronics Co., LTD. | Pending |
| 2607 | 13185319.4          | EP | Samsung Electronics Co., LTD. | Pending |
| 2608 | 13185327.7          | EP | Samsung Electronics Co., LTD. | Pending |
| 2609 | 15168609.4          | EP | Samsung Electronics Co., LTD. | Pending |
| 2610 | 15168611.0          | EP | Samsung Electronics Co., LTD. | Pending |
| 2611 | ID W-00201200066    | ID | Samsung Electronics Co., LTD. | Granted |
| 2612 | ID P000039760       | ID | Samsung Electronics Co., LTD. | Granted |
| 2613 | W-00201302942       | ID | Samsung Electronics Co., LTD. | Pending |
| 2614 | 604/MUMNP/2012      | IN | Samsung Electronics Co., LTD. | Pending |
| 2615 | 634/MUMNP/2013      | IN | Samsung Electronics Co., LTD. | Pending |
| 2616 | 633/MUMNP/2013      | IN | Samsung Electronics Co., LTD. | Pending |
| 2617 | 1293/MUMNP/2015     | IN | Samsung Electronics Co., LTD. | Pending |
| 2618 | 1295/MUMNP/2015     | IN | Samsung Electronics Co., LTD. | Pending |
| 2619 | 1296/MUMNP/2015     | IN | Samsung Electronics Co., LTD. | Pending |
| 2620 | JP 5770185          | JP | Samsung Electronics Co., LTD. | Granted |
| 2621 | 2013-211775         | JP | Samsung Electronics Co., LTD. | Pending |
| 2622 | 2013-211776         | JP | Samsung Electronics Co., LTD. | Pending |
| 2623 | 2014-99018          | JP | Samsung Electronics Co., LTD. | Pending |
| 2624 | 2014-99019          | JP | Samsung Electronics Co., LTD. | Pending |
| 2625 | 2014-99020          | JP | Samsung Electronics Co., LTD. | Pending |
| 2626 | 2016-137202         | JP | Samsung Electronics Co., LTD. | Pending |
| 2627 | 2016-137203         | JP | Samsung Electronics Co., LTD. | Pending |
| 2628 | KR 1452860          | KR | Samsung Electronics Co., LTD. | Granted |
| 2629 | P20150052466        | KR | Samsung Electronics Co., LTD. | Pending |
| 2630 | MX 319249           | MX | Samsung Electronics Co., LTD. | Granted |
| 2631 | MX 323386           | MX | Samsung Electronics Co., LTD. | Granted |
| 2632 | MX 323390           | MX | Samsung Electronics Co., LTD. | Granted |
| 2633 | MX 323387           | MX | Samsung Electronics Co., LTD. | Granted |
| 2634 | MX 323391           | MX | Samsung Electronics Co., LTD. | Granted |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 2635 | PI2012000238    | MY | Samsung Electronics Co., LTD. | Pending |
| 2636 | MY 155173-A     | MY | Samsung Electronics Co., LTD. | Granted |
| 2637 | PI2013003309    | MY | Samsung Electronics Co., LTD. | Pending |
| 2638 | PI2015001391    | MY | Samsung Electronics Co., LTD. | Pending |
| 2639 | PI2015001392    | MY | Samsung Electronics Co., LTD. | Pending |
| 2640 | RU 2513708      | RU | Samsung Electronics Co., LTD. | Granted |
| 2641 | RU 2514927      | RU | Samsung Electronics Co., LTD. | Granted |
| 2642 | 2014100169      | RU | Samsung Electronics Co., LTD. | Pending |
| 2643 | 2014100181      | RU | Samsung Electronics Co., LTD. | Pending |
| 2644 | 2014100179      | RU | Samsung Electronics Co., LTD. | Pending |
| 2645 | 2014100177      | RU | Samsung Electronics Co., LTD. | Pending |
| 2646 | US 9313502      | US | Samsung Electronics Co., LTD. | Granted |
| 2647 | US12/857682     | US | Samsung Electronics Co., LTD. | Pending |
| 2648 | US 9277224      | US | Samsung Electronics Co., LTD. | Granted |
| 2649 | US 9319686      | US | Samsung Electronics Co., LTD. | Granted |
| 2650 | US14/056551     | US | Samsung Electronics Co., LTD. | Pending |
| 2651 | US 9313503      | US | Samsung Electronics Co., LTD. | Granted |
| 2652 | US14/056605     | US | Samsung Electronics Co., LTD. | Pending |
| 2653 | US 9369715      | US | Samsung Electronics Co., LTD. | Granted |
| 2654 | US14/299226     | US | Samsung Electronics Co., LTD. | Pending |
| 2655 | VN 1-2012-00416 | VN | Samsung Electronics Co., LTD. | Granted |
| 2656 | 1-2013-00836    | VN | Samsung Electronics Co., LTD. | Pending |
| 2657 | 1-2013-00834    | VN | Samsung Electronics Co., LTD. | Pending |
| 2658 | 1-2015-01875    | VN | Samsung Electronics Co., LTD. | Pending |
| 2659 | 1-2015-01876    | VN | Samsung Electronics Co., LTD. | Pending |
| 2660 | ZA 2012/01156   | ZA | Samsung Electronics Co., LTD. | Granted |
| 2661 | ZA 2013/04971   | ZA | Samsung Electronics Co., LTD. | Granted |
| 2662 | ZA 2013/04972   | ZA | Samsung Electronics Co., LTD. | Granted |
| 2663 | 2015/03434      | ZA | Samsung Electronics Co., LTD. | Pending |
| 2664 | 2015/03355      | ZA | Samsung Electronics Co., LTD. | Pending |
| 2665 | 2640076         | AT | Samsung Electronics Co., LTD. | Granted |
| 2666 | AT 2712198      | AT | Samsung Electronics Co., LTD. | Granted |
| 2667 | AT 2713617      | AT | Samsung Electronics Co., LTD. | Granted |

|      |                |    |                               |         |
|------|----------------|----|-------------------------------|---------|
| 2668 | AT 2713618     | AT | Samsung Electronics Co., LTD. | Granted |
| 2669 | AT 2712200     | AT | Samsung Electronics Co., LTD. | Granted |
| 2670 | 2640076        | BE | Samsung Electronics Co., LTD. | Granted |
| 2671 | BE 2712198     | BE | Samsung Electronics Co., LTD. | Granted |
| 2672 | BE 2713617     | BE | Samsung Electronics Co., LTD. | Granted |
| 2673 | BE 2713618     | BE | Samsung Electronics Co., LTD. | Granted |
| 2674 | BE 2712200     | BE | Samsung Electronics Co., LTD. | Granted |
| 2675 | 2640076        | BG | Samsung Electronics Co., LTD. | Granted |
| 2676 | BG 2712198     | BG | Samsung Electronics Co., LTD. | Granted |
| 2677 | BG 2713617     | BG | Samsung Electronics Co., LTD. | Granted |
| 2678 | BG 2713618     | BG | Samsung Electronics Co., LTD. | Granted |
| 2679 | BG 2712200     | BG | Samsung Electronics Co., LTD. | Granted |
| 2680 | 2640076        | CH | Samsung Electronics Co., LTD. | Granted |
| 2681 | CH 2712198     | CH | Samsung Electronics Co., LTD. | Granted |
| 2682 | CH 2713617     | CH | Samsung Electronics Co., LTD. | Granted |
| 2683 | CH 2713618     | CH | Samsung Electronics Co., LTD. | Granted |
| 2684 | CH 2712200     | CH | Samsung Electronics Co., LTD. | Granted |
| 2685 | 201310093716.6 | CN | Samsung Electronics Co., LTD. | Pending |
| 2686 | 201410203258.1 | CN | Samsung Electronics Co., LTD. | Pending |
| 2687 | 201410202315.4 | CN | Samsung Electronics Co., LTD. | Pending |
| 2688 | 201410204121.8 | CN | Samsung Electronics Co., LTD. | Pending |
| 2689 | 201410203566.4 | CN | Samsung Electronics Co., LTD. | Pending |
| 2690 | 201410203600.8 | CN | Samsung Electronics Co., LTD. | Pending |
| 2691 | 2640076        | CY | Samsung Electronics Co., LTD. | Granted |
| 2692 | CY 2712198     | CY | Samsung Electronics Co., LTD. | Granted |
| 2693 | CY 2713617     | CY | Samsung Electronics Co., LTD. | Granted |
| 2694 | CY 2713618     | CY | Samsung Electronics Co., LTD. | Granted |
| 2695 | CY 2712200     | CY | Samsung Electronics Co., LTD. | Granted |
| 2696 | 2640076        | CZ | Samsung Electronics Co., LTD. | Granted |
| 2697 | CZ 2712198     | CZ | Samsung Electronics Co., LTD. | Granted |
| 2698 | CZ 2713617     | CZ | Samsung Electronics Co., LTD. | Granted |
| 2699 | CZ 2713618     | CZ | Samsung Electronics Co., LTD. | Granted |
| 2700 | CZ 2712200     | CZ | Samsung Electronics Co., LTD. | Granted |

|      |                      |    |                               |         |
|------|----------------------|----|-------------------------------|---------|
| 2701 | 2640076              | DE | Samsung Electronics Co., LTD. | Granted |
| 2702 | DE 2712198           | DE | Samsung Electronics Co., LTD. | Granted |
| 2703 | DE 60 2009 033 875.7 | DE | Samsung Electronics Co., LTD. | Granted |
| 2704 | DE 2713618           | DE | Samsung Electronics Co., LTD. | Granted |
| 2705 | DE 60 2009 030 123.3 | DE | Samsung Electronics Co., LTD. | Granted |
| 2706 | 2640076              | DK | Samsung Electronics Co., LTD. | Granted |
| 2707 | DK 2712198           | DK | Samsung Electronics Co., LTD. | Granted |
| 2708 | DK 2713617           | DK | Samsung Electronics Co., LTD. | Granted |
| 2709 | DK 2713618           | DK | Samsung Electronics Co., LTD. | Granted |
| 2710 | DK 2712200           | DK | Samsung Electronics Co., LTD. | Granted |
| 2711 | 2640076              | EE | Samsung Electronics Co., LTD. | Granted |
| 2712 | EE 2712198           | EE | Samsung Electronics Co., LTD. | Granted |
| 2713 | EE 2713617           | EE | Samsung Electronics Co., LTD. | Granted |
| 2714 | EE 2713618           | EE | Samsung Electronics Co., LTD. | Granted |
| 2715 | EE 2712200           | EE | Samsung Electronics Co., LTD. | Granted |
| 2716 | 2640076              | ES | Samsung Electronics Co., LTD. | Granted |
| 2717 | ES 2712198           | ES | Samsung Electronics Co., LTD. | Granted |
| 2718 | ES 2713617           | ES | Samsung Electronics Co., LTD. | Granted |
| 2719 | ES 2713618           | ES | Samsung Electronics Co., LTD. | Granted |
| 2720 | ES 2533333           | ES | Samsung Electronics Co., LTD. | Granted |
| 2721 | 2640076              | FI | Samsung Electronics Co., LTD. | Granted |
| 2722 | FI 2712198           | FI | Samsung Electronics Co., LTD. | Granted |
| 2723 | FI 2713617           | FI | Samsung Electronics Co., LTD. | Granted |
| 2724 | FI 2713618           | FI | Samsung Electronics Co., LTD. | Granted |
| 2725 | FI 2712200           | FI | Samsung Electronics Co., LTD. | Granted |
| 2726 | 2640076              | FR | Samsung Electronics Co., LTD. | Granted |
| 2727 | FR 2712198           | FR | Samsung Electronics Co., LTD. | Granted |
| 2728 | FR 2713617           | FR | Samsung Electronics Co., LTD. | Granted |
| 2729 | FR 2713618           | FR | Samsung Electronics Co., LTD. | Granted |
| 2730 | FR 2712200           | FR | Samsung Electronics Co., LTD. | Granted |
| 2731 | 2640076              | GB | Samsung Electronics Co., LTD. | Granted |
| 2732 | GB 2712198           | GB | Samsung Electronics Co., LTD. | Granted |
| 2733 | GB 2713617           | GB | Samsung Electronics Co., LTD. | Granted |

|      |            |    |                               |         |
|------|------------|----|-------------------------------|---------|
| 2734 | GB 2713618 | GB | Samsung Electronics Co., LTD. | Granted |
| 2735 | GB 2712200 | GB | Samsung Electronics Co., LTD. | Granted |
| 2736 | 2640076    | GR | Samsung Electronics Co., LTD. | Granted |
| 2737 | GR 2712198 | GR | Samsung Electronics Co., LTD. | Granted |
| 2738 | GR 2713617 | GR | Samsung Electronics Co., LTD. | Granted |
| 2739 | GR 2713618 | GR | Samsung Electronics Co., LTD. | Granted |
| 2740 | GR 2712200 | GR | Samsung Electronics Co., LTD. | Granted |
| 2741 | 2640076    | HR | Samsung Electronics Co., LTD. | Granted |
| 2742 | HR 2712198 | HR | Samsung Electronics Co., LTD. | Granted |
| 2743 | HR 2713617 | HR | Samsung Electronics Co., LTD. | Granted |
| 2744 | HR 2713618 | HR | Samsung Electronics Co., LTD. | Granted |
| 2745 | HR 2712200 | HR | Samsung Electronics Co., LTD. | Granted |
| 2746 | 2640076    | HU | Samsung Electronics Co., LTD. | Granted |
| 2747 | HU 2712198 | HU | Samsung Electronics Co., LTD. | Granted |
| 2748 | HU 2713617 | HU | Samsung Electronics Co., LTD. | Granted |
| 2749 | HU 2713618 | HU | Samsung Electronics Co., LTD. | Granted |
| 2750 | HU 2712200 | HU | Samsung Electronics Co., LTD. | Granted |
| 2751 | 2640076    | IE | Samsung Electronics Co., LTD. | Granted |
| 2752 | IE 2712198 | IE | Samsung Electronics Co., LTD. | Granted |
| 2753 | IE 2713617 | IE | Samsung Electronics Co., LTD. | Granted |
| 2754 | IE 2713618 | IE | Samsung Electronics Co., LTD. | Granted |
| 2755 | IE 2712200 | IE | Samsung Electronics Co., LTD. | Granted |
| 2756 | 2640076    | IS | Samsung Electronics Co., LTD. | Granted |
| 2757 | IS 2712198 | IS | Samsung Electronics Co., LTD. | Granted |
| 2758 | IS 2713617 | IS | Samsung Electronics Co., LTD. | Granted |
| 2759 | IS 2713618 | IS | Samsung Electronics Co., LTD. | Granted |
| 2760 | IS 2712200 | IS | Samsung Electronics Co., LTD. | Granted |
| 2761 | 2640076    | IT | Samsung Electronics Co., LTD. | Granted |
| 2762 | IT 2712198 | IT | Samsung Electronics Co., LTD. | Granted |
| 2763 | IT 2713617 | IT | Samsung Electronics Co., LTD. | Granted |
| 2764 | IT 2713618 | IT | Samsung Electronics Co., LTD. | Granted |
| 2765 | IT 2712200 | IT | Samsung Electronics Co., LTD. | Granted |
| 2766 | KR 1464538 | KR | Samsung Electronics Co., LTD. | Granted |

|      |              |    |                               |         |
|------|--------------|----|-------------------------------|---------|
| 2767 | P20150086152 | KR | Samsung Electronics Co., LTD. | Pending |
| 2768 | 2640076      | LI | Samsung Electronics Co., LTD. | Granted |
| 2769 | LI 2712198   | LI | Samsung Electronics Co., LTD. | Granted |
| 2770 | LI 2713617   | LI | Samsung Electronics Co., LTD. | Granted |
| 2771 | LI 2713618   | LI | Samsung Electronics Co., LTD. | Granted |
| 2772 | LI 2712200   | LI | Samsung Electronics Co., LTD. | Granted |
| 2773 | 2640076      | LT | Samsung Electronics Co., LTD. | Granted |
| 2774 | LT 2712198   | LT | Samsung Electronics Co., LTD. | Granted |
| 2775 | LT 2713617   | LT | Samsung Electronics Co., LTD. | Granted |
| 2776 | LT 2713618   | LT | Samsung Electronics Co., LTD. | Granted |
| 2777 | LT 2712200   | LT | Samsung Electronics Co., LTD. | Granted |
| 2778 | 2640076      | LU | Samsung Electronics Co., LTD. | Granted |
| 2779 | LU 2712198   | LU | Samsung Electronics Co., LTD. | Granted |
| 2780 | LU 2713617   | LU | Samsung Electronics Co., LTD. | Granted |
| 2781 | LU 2713618   | LU | Samsung Electronics Co., LTD. | Granted |
| 2782 | LU 2712200   | LU | Samsung Electronics Co., LTD. | Granted |
| 2783 | 2640076      | LV | Samsung Electronics Co., LTD. | Granted |
| 2784 | LV 2712198   | LV | Samsung Electronics Co., LTD. | Granted |
| 2785 | LV 2713617   | LV | Samsung Electronics Co., LTD. | Granted |
| 2786 | LV 2713618   | LV | Samsung Electronics Co., LTD. | Granted |
| 2787 | LV 2712200   | LV | Samsung Electronics Co., LTD. | Granted |
| 2788 | 2640076      | MC | Samsung Electronics Co., LTD. | Granted |
| 2789 | MC 2712198   | MC | Samsung Electronics Co., LTD. | Granted |
| 2790 | MC 2713617   | MC | Samsung Electronics Co., LTD. | Granted |
| 2791 | MC 2713618   | MC | Samsung Electronics Co., LTD. | Granted |
| 2792 | MC 2712200   | MC | Samsung Electronics Co., LTD. | Granted |
| 2793 | 2640076      | MK | Samsung Electronics Co., LTD. | Granted |
| 2794 | MK 2712198   | MK | Samsung Electronics Co., LTD. | Granted |
| 2795 | MK 2713617   | MK | Samsung Electronics Co., LTD. | Granted |
| 2796 | MK 2713618   | MK | Samsung Electronics Co., LTD. | Granted |
| 2797 | MK 2712200   | MK | Samsung Electronics Co., LTD. | Granted |
| 2798 | 2640076      | MT | Samsung Electronics Co., LTD. | Granted |
| 2799 | MT 2712198   | MT | Samsung Electronics Co., LTD. | Granted |

|      |            |    |                               |         |
|------|------------|----|-------------------------------|---------|
| 2800 | MT 2713617 | MT | Samsung Electronics Co., LTD. | Granted |
| 2801 | MT 2713618 | MT | Samsung Electronics Co., LTD. | Granted |
| 2802 | MT 2712200 | MT | Samsung Electronics Co., LTD. | Granted |
| 2803 | 2640076    | NL | Samsung Electronics Co., LTD. | Granted |
| 2804 | NL 2712198 | NL | Samsung Electronics Co., LTD. | Granted |
| 2805 | NL 2713617 | NL | Samsung Electronics Co., LTD. | Granted |
| 2806 | NL 2713618 | NL | Samsung Electronics Co., LTD. | Granted |
| 2807 | NL 2712200 | NL | Samsung Electronics Co., LTD. | Granted |
| 2808 | 2640076    | NO | Samsung Electronics Co., LTD. | Granted |
| 2809 | NO 2712198 | NO | Samsung Electronics Co., LTD. | Granted |
| 2810 | NO 2713617 | NO | Samsung Electronics Co., LTD. | Granted |
| 2811 | NO 2713618 | NO | Samsung Electronics Co., LTD. | Granted |
| 2812 | NO 2712200 | NO | Samsung Electronics Co., LTD. | Granted |
| 2813 | 2640076    | PL | Samsung Electronics Co., LTD. | Granted |
| 2814 | PL 2712198 | PL | Samsung Electronics Co., LTD. | Granted |
| 2815 | PL 2713617 | PL | Samsung Electronics Co., LTD. | Granted |
| 2816 | PL 2713618 | PL | Samsung Electronics Co., LTD. | Granted |
| 2817 | PL 2712200 | PL | Samsung Electronics Co., LTD. | Granted |
| 2818 | 2640076    | PT | Samsung Electronics Co., LTD. | Granted |
| 2819 | PT 2712198 | PT | Samsung Electronics Co., LTD. | Granted |
| 2820 | PT 2713617 | PT | Samsung Electronics Co., LTD. | Granted |
| 2821 | PT 2713618 | PT | Samsung Electronics Co., LTD. | Granted |
| 2822 | PT 2712200 | PT | Samsung Electronics Co., LTD. | Granted |
| 2823 | 2640076    | RO | Samsung Electronics Co., LTD. | Granted |
| 2824 | RO 2712198 | RO | Samsung Electronics Co., LTD. | Granted |
| 2825 | RO 2713617 | RO | Samsung Electronics Co., LTD. | Granted |
| 2826 | RO 2713618 | RO | Samsung Electronics Co., LTD. | Granted |
| 2827 | RO 2712200 | RO | Samsung Electronics Co., LTD. | Granted |
| 2828 | 2640076    | SE | Samsung Electronics Co., LTD. | Granted |
| 2829 | SE 2712198 | SE | Samsung Electronics Co., LTD. | Granted |
| 2830 | SE 2713617 | SE | Samsung Electronics Co., LTD. | Granted |
| 2831 | SE 2713618 | SE | Samsung Electronics Co., LTD. | Granted |
| 2832 | SE 2712200 | SE | Samsung Electronics Co., LTD. | Granted |



|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 2833 | 2640076             | SI | Samsung Electronics Co., LTD. | Granted |
| 2834 | SI 2712198          | SI | Samsung Electronics Co., LTD. | Granted |
| 2835 | SI 2713617          | SI | Samsung Electronics Co., LTD. | Granted |
| 2836 | SI 2713618          | SI | Samsung Electronics Co., LTD. | Granted |
| 2837 | SI 2712200          | SI | Samsung Electronics Co., LTD. | Granted |
| 2838 | 2640076             | SK | Samsung Electronics Co., LTD. | Granted |
| 2839 | SK 2712198          | SK | Samsung Electronics Co., LTD. | Granted |
| 2840 | SK 2713617          | SK | Samsung Electronics Co., LTD. | Granted |
| 2841 | SK 2713618          | SK | Samsung Electronics Co., LTD. | Granted |
| 2842 | SK 2712200          | SK | Samsung Electronics Co., LTD. | Granted |
| 2843 | 2640076             | SM | Samsung Electronics Co., LTD. | Granted |
| 2844 | SM 2712198          | SM | Samsung Electronics Co., LTD. | Granted |
| 2845 | SM 2713617          | SM | Samsung Electronics Co., LTD. | Granted |
| 2846 | SM 2713618          | SM | Samsung Electronics Co., LTD. | Granted |
| 2847 | SM 2712200          | SM | Samsung Electronics Co., LTD. | Granted |
| 2848 | 2640076             | TR | Samsung Electronics Co., LTD. | Granted |
| 2849 | TR 2712198          | TR | Samsung Electronics Co., LTD. | Granted |
| 2850 | TR 2713617          | TR | Samsung Electronics Co., LTD. | Granted |
| 2851 | TR 2713618          | TR | Samsung Electronics Co., LTD. | Granted |
| 2852 | TR 2712200          | TR | Samsung Electronics Co., LTD. | Granted |
| 2853 | US13/002398         | US | Samsung Electronics Co., LTD. | Pending |
| 2854 | US 8879626          | US | Samsung Electronics Co., LTD. | Granted |
| 2855 | US 8824549          | US | Samsung Electronics Co., LTD. | Granted |
| 2856 | US 8902979          | US | Samsung Electronics Co., LTD. | Granted |
| 2857 | US 8837590          | US | Samsung Electronics Co., LTD. | Granted |
| 2858 | US 9118913          | US | Samsung Electronics Co., LTD. | Granted |
| 2859 | CN ZL201080034035.7 | CN | Samsung Electronics Co., LTD. | Granted |
| 2860 | 201410841178.9      | CN | Samsung Electronics Co., LTD. | Pending |
| 2861 | 201410840948.8      | CN | Samsung Electronics Co., LTD. | Pending |
| 2862 | CN ZL201410843880.9 | CN | Samsung Electronics Co., LTD. | Granted |
| 2863 | 201410840826.9      | CN | Samsung Electronics Co., LTD. | Pending |
| 2864 | 201410841108.3      | CN | Samsung Electronics Co., LTD. | Pending |
| 2865 | 201410841773.2      | CN | Samsung Electronics Co., LTD. | Pending |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 2866 | 10802493.6      | EP | Samsung Electronics Co., LTD. | Pending |
| 2867 | 15161952.5      | EP | Samsung Electronics Co., LTD. | Pending |
| 2868 | 15161956.6      | EP | Samsung Electronics Co., LTD. | Pending |
| 2869 | 15161957.4      | EP | Samsung Electronics Co., LTD. | Pending |
| 2870 | 15161960.8      | EP | Samsung Electronics Co., LTD. | Pending |
| 2871 | KR 1483750      | KR | Samsung Electronics Co., LTD. | Granted |
| 2872 | P20150006116    | KR | Samsung Electronics Co., LTD. | Pending |
| 2873 | US8768081       | US | Samsung Electronics Co., LTD. | Granted |
| 2874 | US 8885958      | US | Samsung Electronics Co., LTD. | Granted |
| 2875 | US 9131231      | US | Samsung Electronics Co., LTD. | Granted |
| 2876 | US 9137534      | US | Samsung Electronics Co., LTD. | Granted |
| 2877 | US 9131232      | US | Samsung Electronics Co., LTD. | Granted |
| 2878 | US14/802849     | US | Samsung Electronics Co., LTD. | Pending |
| 2879 | BR1120120032453 | BR | Samsung Electronics Co., LTD. | Pending |
| 2880 | BR1220150138868 | BR | Samsung Electronics Co., LTD. | Pending |
| 2881 | BR1220150138884 | BR | Samsung Electronics Co., LTD. | Pending |
| 2882 | BR1220150138930 | BR | Samsung Electronics Co., LTD. | Pending |
| 2883 | BR1220150138817 | BR | Samsung Electronics Co., LTD. | Pending |
| 2884 | 2768691         | CA | Samsung Electronics Co., LTD. | Pending |
| 2885 | 2889729         | CA | Samsung Electronics Co., LTD. | Pending |
| 2886 | 2889737         | CA | Samsung Electronics Co., LTD. | Pending |
| 2887 | 10808398.1      | EP | Samsung Electronics Co., LTD. | Pending |
| 2888 | 15166147.7      | EP | Samsung Electronics Co., LTD. | Pending |
| 2889 | 15166148.5      | EP | Samsung Electronics Co., LTD. | Pending |
| 2890 | 530/MUMNP/2012  | IN | Samsung Electronics Co., LTD. | Pending |
| 2891 | 1223/MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2892 | 1224/MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2893 | 1225/MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2894 | 1226/MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2895 | 2015-97948      | JP | Samsung Electronics Co., LTD. | Pending |
| 2896 | P20160058783    | KR | Samsung Electronics Co., LTD. | Pending |
| 2897 | P20160058785    | KR | Samsung Electronics Co., LTD. | Pending |
| 2898 | 2014105279      | RU | Samsung Electronics Co., LTD. | Pending |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 2899 | 2014105280      | RU | Samsung Electronics Co., LTD. | Pending |
| 2900 | 2014105195      | RU | Samsung Electronics Co., LTD. | Pending |
| 2901 | 2014105194      | RU | Samsung Electronics Co., LTD. | Pending |
| 2902 | 2014105190      | RU | Samsung Electronics Co., LTD. | Pending |
| 2903 | 2014105189      | RU | Samsung Electronics Co., LTD. | Pending |
| 2904 | US 9148665      | US | Samsung Electronics Co., LTD. | Granted |
| 2905 | US14/177272     | US | Samsung Electronics Co., LTD. | Pending |
| 2906 | US14/177267     | US | Samsung Electronics Co., LTD. | Pending |
| 2907 | US14/177074     | US | Samsung Electronics Co., LTD. | Pending |
| 2908 | US14/177280     | US | Samsung Electronics Co., LTD. | Pending |
| 2909 | US14/177292     | US | Samsung Electronics Co., LTD. | Pending |
| 2910 | US14/177286     | US | Samsung Electronics Co., LTD. | Pending |
| 2911 | US14/719629     | US | Samsung Electronics Co., LTD. | Pending |
| 2912 | US14/719872     | US | Samsung Electronics Co., LTD. | Pending |
| 2913 | US14/719689     | US | Samsung Electronics Co., LTD. | Pending |
| 2914 | US14/720001     | US | Samsung Electronics Co., LTD. | Pending |
| 2915 | BR1120120022440 | BR | Samsung Electronics Co., LTD. | Pending |
| 2916 | CA 2768693      | CA | Samsung Electronics Co., LTD. | Granted |
| 2917 | CA 2857833      | CA | Samsung Electronics Co., LTD. | Granted |
| 2918 | 2894589         | CA | Samsung Electronics Co., LTD. | Pending |
| 2919 | 2896017         | CA | Samsung Electronics Co., LTD. | Pending |
| 2920 | 2896087         | CA | Samsung Electronics Co., LTD. | Pending |
| 2921 | 201510002361.4  | CN | Samsung Electronics Co., LTD. | Pending |
| 2922 | 201510170531.X  | CN | Samsung Electronics Co., LTD. | Pending |
| 2923 | 201510171193.1  | CN | Samsung Electronics Co., LTD. | Pending |
| 2924 | 201510169455.0  | CN | Samsung Electronics Co., LTD. | Pending |
| 2925 | 10808402.1      | EP | Samsung Electronics Co., LTD. | Pending |
| 2926 | 15168669.8      | EP | Samsung Electronics Co., LTD. | Pending |
| 2927 | 15168651.6      | EP | Samsung Electronics Co., LTD. | Pending |
| 2928 | 15168652.4      | EP | Samsung Electronics Co., LTD. | Pending |
| 2929 | 15168653.2      | EP | Samsung Electronics Co., LTD. | Pending |
| 2930 | 584/MUMNP/2012  | IN | Samsung Electronics Co., LTD. | Pending |
| 2931 | 1237/MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 2932 | 1238//MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2933 | 1239//MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2934 | 1240//MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2935 | 1241//MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 2936 | JP 5746170       | JP | Samsung Electronics Co., LTD. | Granted |
| 2937 | JP 5778367       | JP | Samsung Electronics Co., LTD. | Granted |
| 2938 | JP 5778368       | JP | Samsung Electronics Co., LTD. | Granted |
| 2939 | KR 1456498       | KR | Samsung Electronics Co., LTD. | Granted |
| 2940 | P20150094926     | KR | Samsung Electronics Co., LTD. | Pending |
| 2941 | MX 315662        | MX | Samsung Electronics Co., LTD. | Granted |
| 2942 | MX 322910        | MX | Samsung Electronics Co., LTD. | Granted |
| 2943 | MX 323151        | MX | Samsung Electronics Co., LTD. | Granted |
| 2944 | MX 324108        | MX | Samsung Electronics Co., LTD. | Granted |
| 2945 | MX 320435        | MX | Samsung Electronics Co., LTD. | Granted |
| 2946 | RU 2526861       | RU | Samsung Electronics Co., LTD. | Granted |
| 2947 | 2013139143       | RU | Samsung Electronics Co., LTD. | Pending |
| 2948 | 2013139146       | RU | Samsung Electronics Co., LTD. | Pending |
| 2949 | 2014108445       | RU | Samsung Electronics Co., LTD. | Pending |
| 2950 | 2014108444       | RU | Samsung Electronics Co., LTD. | Pending |
| 2951 | US 8824551       | US | Samsung Electronics Co., LTD. | Granted |
| 2952 | US 8831097       | US | Samsung Electronics Co., LTD. | Granted |
| 2953 | US 8831098       | US | Samsung Electronics Co., LTD. | Granted |
| 2954 | US8817877        | US | Samsung Electronics Co., LTD. | Granted |
| 2955 | US 8897363       | US | Samsung Electronics Co., LTD. | Granted |
| 2956 | AU 2010285492    | AU | Samsung Electronics Co., LTD. | Granted |
| 2957 | AU 2013202078    | AU | Samsung Electronics Co., LTD. | Granted |
| 2958 | AU 2015202119    | AU | Samsung Electronics Co., LTD. | Granted |
| 2959 | AU 2015202118    | AU | Samsung Electronics Co., LTD. | Granted |
| 2960 | BR1120120016873  | BR | Samsung Electronics Co., LTD. | Pending |
| 2961 | 1220130197230    | BR | Samsung Electronics Co., LTD. | Pending |
| 2962 | BR1220150217440  | BR | Samsung Electronics Co., LTD. | Pending |
| 2963 | BR1220150217474  | BR | Samsung Electronics Co., LTD. | Pending |
| 2964 | BR1220150217458  | BR | Samsung Electronics Co., LTD. | Pending |

|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 2965 | 2768694             | CA | Samsung Electronics Co., LTD. | Pending |
| 2966 | CA 2823885          | CA | Samsung Electronics Co., LTD. | Granted |
| 2967 | 2888489             | CA | Samsung Electronics Co., LTD. | Pending |
| 2968 | 2888490             | CA | Samsung Electronics Co., LTD. | Pending |
| 2969 | 2888495             | CA | Samsung Electronics Co., LTD. | Pending |
| 2970 | CN ZL201080036788.1 | CN | Samsung Electronics Co., LTD. | Granted |
| 2971 | 201310088381.9      | CN | Samsung Electronics Co., LTD. | Pending |
| 2972 | 201510193955.8      | CN | Samsung Electronics Co., LTD. | Pending |
| 2973 | 201510193915.3      | CN | Samsung Electronics Co., LTD. | Pending |
| 2974 | 201510192248.7      | CN | Samsung Electronics Co., LTD. | Pending |
| 2975 | 201510193969.X      | CN | Samsung Electronics Co., LTD. | Pending |
| 2976 | 10810147.8          | EP | Samsung Electronics Co., LTD. | Pending |
| 2977 | 13185302.0          | EP | Samsung Electronics Co., LTD. | Pending |
| 2978 | 15163267.6          | EP | Samsung Electronics Co., LTD. | Pending |
| 2979 | 15163275.9          | EP | Samsung Electronics Co., LTD. | Pending |
| 2980 | 15163276.7          | EP | Samsung Electronics Co., LTD. | Pending |
| 2981 | W-00201200065       | ID | Samsung Electronics Co., LTD. | Pending |
| 2982 | ID P000039172       | ID | Samsung Electronics Co., LTD. | Granted |
| 2983 | P-00201404015       | ID | Samsung Electronics Co., LTD. | Pending |
| 2984 | P-00201404014       | ID | Samsung Electronics Co., LTD. | Pending |
| 2985 | P-00201500383       | ID | Samsung Electronics Co., LTD. | Pending |
| 2986 | P-00201500385       | ID | Samsung Electronics Co., LTD. | Pending |
| 2987 | 528/MUMNP/2012      | IN | Samsung Electronics Co., LTD. | Pending |
| 2988 | 679/MUMNP/2013      | IN | Samsung Electronics Co., LTD. | Pending |
| 2989 | 1078/MUMNP/2015     | IN | Samsung Electronics Co., LTD. | Pending |
| 2990 | 1077/MUMNP/2015     | IN | Samsung Electronics Co., LTD. | Pending |
| 2991 | 1076/MUMNP/2015     | IN | Samsung Electronics Co., LTD. | Pending |
| 2992 | JP 5650742          | JP | Samsung Electronics Co., LTD. | Granted |
| 2993 | JP 5620554          | JP | Samsung Electronics Co., LTD. | Granted |
| 2994 | KR 1510108          | KR | Samsung Electronics Co., LTD. | Granted |
| 2995 | MX 320458           | MX | Samsung Electronics Co., LTD. | Granted |
| 2996 | PI2012000404        | MY | Samsung Electronics Co., LTD. | Pending |
| 2997 | PI 2014001381       | MY | Samsung Electronics Co., LTD. | Pending |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 2998 | PI2014001539    | MY | Samsung Electronics Co., LTD. | Pending |
| 2999 | PI2014001541    | MY | Samsung Electronics Co., LTD. | Pending |
| 3000 | PI2015000869    | MY | Samsung Electronics Co., LTD. | Pending |
| 3001 | RU 2517193      | RU | Samsung Electronics Co., LTD. | Granted |
| 3002 | RU 2517293      | RU | Samsung Electronics Co., LTD. | Granted |
| 3003 | RU 2546619      | RU | Samsung Electronics Co., LTD. | Granted |
| 3004 | 2014122343      | RU | Samsung Electronics Co., LTD. | Pending |
| 3005 | 2015101791      | RU | Samsung Electronics Co., LTD. | Pending |
| 3006 | 2015101795      | RU | Samsung Electronics Co., LTD. | Pending |
| 3007 | 2015129684      | RU | Samsung Electronics Co., LTD. | Pending |
| 3008 | US 8989266      | US | Samsung Electronics Co., LTD. | Granted |
| 3009 | US8787458       | US | Samsung Electronics Co., LTD. | Granted |
| 3010 | US 9036703      | US | Samsung Electronics Co., LTD. | Granted |
| 3011 | US 9071839      | US | Samsung Electronics Co., LTD. | Granted |
| 3012 | US 9049458      | US | Samsung Electronics Co., LTD. | Granted |
| 3013 | 1/2012/00127    | VN | Samsung Electronics Co., LTD. | Pending |
| 3014 | 1-2013-00749    | VN | Samsung Electronics Co., LTD. | Pending |
| 3015 | 1-2014-01750    | VN | Samsung Electronics Co., LTD. | Pending |
| 3016 | 1-2014-01749    | VN | Samsung Electronics Co., LTD. | Pending |
| 3017 | 1-2015-02521    | VN | Samsung Electronics Co., LTD. | Pending |
| 3018 | ZA 2012/01153   | ZA | Samsung Electronics Co., LTD. | Granted |
| 3019 | ZA 2013/04970   | ZA | Samsung Electronics Co., LTD. | Granted |
| 3020 | ZA 2014/05219   | ZA | Samsung Electronics Co., LTD. | Granted |
| 3021 | 2014/05219      | ZA | Samsung Electronics Co., LTD. | Pending |
| 3022 | ZA 2014/05220   | ZA | Samsung Electronics Co., LTD. | Granted |
| 3023 | 2014/05220      | ZA | Samsung Electronics Co., LTD. | Pending |
| 3024 | 2015/03353      | ZA | Samsung Electronics Co., LTD. | Pending |
| 3025 | 2015/03354      | ZA | Samsung Electronics Co., LTD. | Pending |
| 3026 | AU 2010283113   | AU | Samsung Electronics Co., LTD. | Granted |
| 3027 | AU 2013201911   | AU | Samsung Electronics Co., LTD. | Granted |
| 3028 | AU 2013201883   | AU | Samsung Electronics Co., LTD. | Granted |
| 3029 | BR1120120017578 | BR | Samsung Electronics Co., LTD. | Pending |
| 3030 | 1220130197249   | BR | Samsung Electronics Co., LTD. | Pending |

|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 3031 | 1220130197257       | BR | Samsung Electronics Co., LTD. | Pending |
| 3032 | CA 2768181          | CA | Samsung Electronics Co., LTD. | Granted |
| 3033 | CA 2815893          | CA | Samsung Electronics Co., LTD. | Granted |
| 3034 | CA 2815777          | CA | Samsung Electronics Co., LTD. | Granted |
| 3035 | 2877241             | CA | Samsung Electronics Co., LTD. | Pending |
| 3036 | CA 2877255          | CA | Samsung Electronics Co., LTD. | Granted |
| 3037 | CN ZL201080036020.4 | CN | Samsung Electronics Co., LTD. | Granted |
| 3038 | 201310092700.3      | CN | Samsung Electronics Co., LTD. | Pending |
| 3039 | 201310097476.7      | CN | Samsung Electronics Co., LTD. | Pending |
| 3040 | CN ZL201510005662.2 | CN | Samsung Electronics Co., LTD. | Granted |
| 3041 | 201510006252.X      | CN | Samsung Electronics Co., LTD. | Pending |
| 3042 | CN ZL201510005604.X | CN | Samsung Electronics Co., LTD. | Granted |
| 3043 | 10808383.3          | EP | Samsung Electronics Co., LTD. | Pending |
| 3044 | 13167743.7          | EP | Samsung Electronics Co., LTD. | Pending |
| 3045 | 13167744.5          | EP | Samsung Electronics Co., LTD. | Pending |
| 3046 | 15150191.3          | EP | Samsung Electronics Co., LTD. | Pending |
| 3047 | 15150192.1          | EP | Samsung Electronics Co., LTD. | Pending |
| 3048 | W-00201200954       | ID | Samsung Electronics Co., LTD. | Pending |
| 3049 | W-00201302175       | ID | Samsung Electronics Co., LTD. | Pending |
| 3050 | ID P000039998       | ID | Samsung Electronics Co., LTD. | Granted |
| 3051 | W-00201304145       | ID | Samsung Electronics Co., LTD. | Pending |
| 3052 | P-00201500449       | ID | Samsung Electronics Co., LTD. | Pending |
| 3053 | P-00201500448       | ID | Samsung Electronics Co., LTD. | Pending |
| 3054 | 585/MUMNP/2012      | IN | Samsung Electronics Co., LTD. | Pending |
| 3055 | 939/MUMNP/2013      | IN | Samsung Electronics Co., LTD. | Pending |
| 3056 | 940/MUMNP/2013      | IN | Samsung Electronics Co., LTD. | Pending |
| 3057 | 400/MUMNP/2015      | IN | Samsung Electronics Co., LTD. | Pending |
| 3058 | 401/MUMNP/2015      | IN | Samsung Electronics Co., LTD. | Pending |
| 3059 | 402/MUMNP/2015      | IN | Samsung Electronics Co., LTD. | Pending |
| 3060 | JP 5746169          | JP | Samsung Electronics Co., LTD. | Granted |
| 3061 | JP 5753327          | JP | Samsung Electronics Co., LTD. | Granted |
| 3062 | JP 5753328          | JP | Samsung Electronics Co., LTD. | Granted |
| 3063 | 2015-095215         | JP | Samsung Electronics Co., LTD. | Pending |

|      |               |    |                               |         |
|------|---------------|----|-------------------------------|---------|
| 3064 | 2015-095216   | JP | Samsung Electronics Co., LTD. | Pending |
| 3065 | KR 1474756    | KR | Samsung Electronics Co., LTD. | Granted |
| 3066 | P20160078117  | KR | Samsung Electronics Co., LTD. | Pending |
| 3067 | MX 315664     | MX | Samsung Electronics Co., LTD. | Granted |
| 3068 | MX 322644     | MX | Samsung Electronics Co., LTD. | Granted |
| 3069 | MX 320217     | MX | Samsung Electronics Co., LTD. | Granted |
| 3070 | MX 320207     | MX | Samsung Electronics Co., LTD. | Granted |
| 3071 | MX 328501     | MX | Samsung Electronics Co., LTD. | Granted |
| 3072 | MY 153787A    | MY | Samsung Electronics Co., LTD. | Granted |
| 3073 | RU 2543519    | RU | Samsung Electronics Co., LTD. | Granted |
| 3074 | RU 2510945    | RU | Samsung Electronics Co., LTD. | Granted |
| 3075 | RU 2514777    | RU | Samsung Electronics Co., LTD. | Granted |
| 3076 | RU 2551794    | RU | Samsung Electronics Co., LTD. | Granted |
| 3077 | US8792741     | US | Samsung Electronics Co., LTD. | Granted |
| 3078 | US 8842921    | US | Samsung Electronics Co., LTD. | Granted |
| 3079 | US 8792737    | US | Samsung Electronics Co., LTD. | Granted |
| 3080 | US 8971650    | US | Samsung Electronics Co., LTD. | Granted |
| 3081 | 1-2012-00620  | VN | Samsung Electronics Co., LTD. | Pending |
| 3082 | 1-2013-00799  | VN | Samsung Electronics Co., LTD. | Pending |
| 3083 | 1-2013-00800  | VN | Samsung Electronics Co., LTD. | Pending |
| 3084 | 1-2015-00046  | VN | Samsung Electronics Co., LTD. | Pending |
| 3085 | 1-2015-00045  | VN | Samsung Electronics Co., LTD. | Pending |
| 3086 | 2012/01157    | ZA | Samsung Electronics Co., LTD. | Pending |
| 3087 | ZA 2013/04973 | ZA | Samsung Electronics Co., LTD. | Granted |
| 3088 | 2013/04974    | ZA | Samsung Electronics Co., LTD. | Pending |
| 3089 | 2015/02023    | ZA | Samsung Electronics Co., LTD. | Pending |
| 3090 | 2015/02025    | ZA | Samsung Electronics Co., LTD. | Pending |
| 3091 | AU 2010313967 | AU | Samsung Electronics Co., LTD. | Granted |
| 3092 | 2015201330    | AU | Samsung Electronics Co., LTD. | Pending |
| 3093 | 2015201329    | AU | Samsung Electronics Co., LTD. | Pending |
| 3094 | 1120120097229 | BR | Samsung Electronics Co., LTD. | Pending |
| 3095 | 2777587       | CA | Samsung Electronics Co., LTD. | Pending |
| 3096 | 2883978       | CA | Samsung Electronics Co., LTD. | Pending |



|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 3097 | 2883923             | CA | Samsung Electronics Co., LTD. | Pending |
| 3098 | 2883913             | CA | Samsung Electronics Co., LTD. | Pending |
| 3099 | 2883920             | CA | Samsung Electronics Co., LTD. | Pending |
| 3100 | CN ZL201080049289.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 3101 | 201510148781.3      | CN | Samsung Electronics Co., LTD. | Pending |
| 3102 | 201510150297.4      | CN | Samsung Electronics Co., LTD. | Pending |
| 3103 | 201510149521.8      | CN | Samsung Electronics Co., LTD. | Pending |
| 3104 | 201510149195.0      | CN | Samsung Electronics Co., LTD. | Pending |
| 3105 | 201510149594.7      | CN | Samsung Electronics Co., LTD. | Pending |
| 3106 | 10827104.0          | EP | Samsung Electronics Co., LTD. | Pending |
| 3107 | 15158640.1          | EP | Samsung Electronics Co., LTD. | Pending |
| 3108 | 15158612.0          | EP | Samsung Electronics Co., LTD. | Pending |
| 3109 | 15158613.8          | EP | Samsung Electronics Co., LTD. | Pending |
| 3110 | 15158614.6          | EP | Samsung Electronics Co., LTD. | Pending |
| 3111 | W-00201202066       | ID | Samsung Electronics Co., LTD. | Pending |
| 3112 | P00201501864        | ID | Samsung Electronics Co., LTD. | Pending |
| 3113 | P00201501866        | ID | Samsung Electronics Co., LTD. | Pending |
| 3114 | P00201501867        | ID | Samsung Electronics Co., LTD. | Pending |
| 3115 | P00201501868        | ID | Samsung Electronics Co., LTD. | Pending |
| 3116 | 1264/MUMNP/2012     | IN | Samsung Electronics Co., LTD. | Pending |
| 3117 | 742/MUMNP/2015      | IN | Samsung Electronics Co., LTD. | Pending |
| 3118 | 745/MUMNP/2015      | IN | Samsung Electronics Co., LTD. | Pending |
| 3119 | 741/MUMNP/2015      | IN | Samsung Electronics Co., LTD. | Pending |
| 3120 | 740/MUMNP/2015      | IN | Samsung Electronics Co., LTD. | Pending |
| 3121 | JP 5711247          | JP | Samsung Electronics Co., LTD. | Granted |
| 3122 | KR 1457894          | KR | Samsung Electronics Co., LTD. | Granted |
| 3123 | P20160063729        | KR | Samsung Electronics Co., LTD. | Pending |
| 3124 | MX 323424           | MX | Samsung Electronics Co., LTD. | Granted |
| 3125 | PI2012001789        | MY | Samsung Electronics Co., LTD. | Pending |
| 3126 | PI2015000598        | MY | Samsung Electronics Co., LTD. | Pending |
| 3127 | PI2015000597        | MY | Samsung Electronics Co., LTD. | Pending |
| 3128 | PI2015000596        | MY | Samsung Electronics Co., LTD. | Pending |
| 3129 | PI2015000595        | MY | Samsung Electronics Co., LTD. | Pending |

|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 3130 | RU 2493669          | RU | Samsung Electronics Co., LTD. | Granted |
| 3131 | 2015108338          | RU | Samsung Electronics Co., LTD. | Pending |
| 3132 | 2015108351          | RU | Samsung Electronics Co., LTD. | Pending |
| 3133 | 2015108352          | RU | Samsung Electronics Co., LTD. | Pending |
| 3134 | US8811479           | US | Samsung Electronics Co., LTD. | Granted |
| 3135 | US14/323424         | US | Samsung Electronics Co., LTD. | Pending |
| 3136 | US14/619299         | US | Samsung Electronics Co., LTD. | Pending |
| 3137 | US14/619323         | US | Samsung Electronics Co., LTD. | Pending |
| 3138 | US14/619187         | US | Samsung Electronics Co., LTD. | Pending |
| 3139 | US14/619160         | US | Samsung Electronics Co., LTD. | Pending |
| 3140 | 1-2012-01480        | VN | Samsung Electronics Co., LTD. | Pending |
| 3141 | 1-2015-00827        | VN | Samsung Electronics Co., LTD. | Pending |
| 3142 | 1-2015-00825        | VN | Samsung Electronics Co., LTD. | Pending |
| 3143 | 1-2015-00826        | VN | Samsung Electronics Co., LTD. | Pending |
| 3144 | 1-2015-00824        | VN | Samsung Electronics Co., LTD. | Pending |
| 3145 | 2015/04997          | ZA | Samsung Electronics Co., LTD. | Pending |
| 3146 | 2015/04998          | ZA | Samsung Electronics Co., LTD. | Pending |
| 3147 | 2015/04999          | ZA | Samsung Electronics Co., LTD. | Pending |
| 3148 | 2015/05000          | ZA | Samsung Electronics Co., LTD. | Pending |
| 3149 | AU 2010313997       | AU | Samsung Electronics Co., LTD. | Granted |
| 3150 | AU 2013201912       | AU | Samsung Electronics Co., LTD. | Granted |
| 3151 | AU 2013201913       | AU | Samsung Electronics Co., LTD. | Granted |
| 3152 | AU 2014203052       | AU | Samsung Electronics Co., LTD. | Granted |
| 3153 | 112012009766-0      | BR | Samsung Electronics Co., LTD. | Pending |
| 3154 | 1220130205527       | BR | Samsung Electronics Co., LTD. | Pending |
| 3155 | 1220130205535       | BR | Samsung Electronics Co., LTD. | Pending |
| 3156 | BR1220150240042     | BR | Samsung Electronics Co., LTD. | Pending |
| 3157 | BR1220150240026     | BR | Samsung Electronics Co., LTD. | Pending |
| 3158 | CA 2778534          | CA | Samsung Electronics Co., LTD. | Granted |
| 3159 | CA 2818572          | CA | Samsung Electronics Co., LTD. | Granted |
| 3160 | CA 2818587          | CA | Samsung Electronics Co., LTD. | Granted |
| 3161 | CA 2888396          | CA | Samsung Electronics Co., LTD. | Granted |
| 3162 | CN ZL201080049482.X | CN | Samsung Electronics Co., LTD. | Granted |

|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 3163 | CN ZL201310088343.3 | CN | Samsung Electronics Co., LTD. | Granted |
| 3164 | 201310092751.6      | CN | Samsung Electronics Co., LTD. | Pending |
| 3165 | CN ZL201510005386.X | CN | Samsung Electronics Co., LTD. | Granted |
| 3166 | CN ZL201510006815.5 | CN | Samsung Electronics Co., LTD. | Granted |
| 3167 | 201510053831.X      | CN | Samsung Electronics Co., LTD. | Pending |
| 3168 | 201510161725.3      | CN | Samsung Electronics Co., LTD. | Pending |
| 3169 | 201510161073.3      | CN | Samsung Electronics Co., LTD. | Pending |
| 3170 | 10827134.7          | EP | Samsung Electronics Co., LTD. | Pending |
| 3171 | 13167711.4          | EP | Samsung Electronics Co., LTD. | Pending |
| 3172 | 13167729.6          | EP | Samsung Electronics Co., LTD. | Pending |
| 3173 | 14157333.7          | EP | Samsung Electronics Co., LTD. | Pending |
| 3174 | 14157338.6          | EP | Samsung Electronics Co., LTD. | Pending |
| 3175 | 14157340.2          | EP | Samsung Electronics Co., LTD. | Pending |
| 3176 | 14157343.6          | EP | Samsung Electronics Co., LTD. | Pending |
| 3177 | 16163927.3          | EP | Samsung Electronics Co., LTD. | Pending |
| 3178 | W-00201202112       | ID | Samsung Electronics Co., LTD. | Pending |
| 3179 | W-00201301944       | ID | Samsung Electronics Co., LTD. | Pending |
| 3180 | W-00201301945       | ID | Samsung Electronics Co., LTD. | Pending |
| 3181 | P00201502615        | ID | Samsung Electronics Co., LTD. | Pending |
| 3182 | P00201502609        | ID | Samsung Electronics Co., LTD. | Pending |
| 3183 | P-00201506298       | ID | Samsung Electronics Co., LTD. | Pending |
| 3184 | 4651/CHENP/2012     | IN | Samsung Electronics Co., LTD. | Pending |
| 3185 | 2362/CHENP/2013     | IN | Samsung Electronics Co., LTD. | Pending |
| 3186 | 2361/CHENP/2013     | IN | Samsung Electronics Co., LTD. | Pending |
| 3187 | 2193/CHENP/2015     | IN | Samsung Electronics Co., LTD. | Pending |
| 3188 | 2191/CHENP/2015     | IN | Samsung Electronics Co., LTD. | Pending |
| 3189 | 2192/CHENP/2015     | IN | Samsung Electronics Co., LTD. | Pending |
| 3190 | JP 5711248          | JP | Samsung Electronics Co., LTD. | Granted |
| 3191 | JP 5687310          | JP | Samsung Electronics Co., LTD. | Granted |
| 3192 | JP 5639687          | JP | Samsung Electronics Co., LTD. | Granted |
| 3193 | JP 5727114          | JP | Samsung Electronics Co., LTD. | Granted |
| 3194 | JP 5727115          | JP | Samsung Electronics Co., LTD. | Granted |
| 3195 | KR 1452713          | KR | Samsung Electronics Co., LTD. | Granted |

|      |               |    |                               |         |
|------|---------------|----|-------------------------------|---------|
| 3196 | P20140148721  | KR | Samsung Electronics Co., LTD. | Pending |
| 3197 | MX 319564     | MX | Samsung Electronics Co., LTD. | Granted |
| 3198 | MX 319562     | MX | Samsung Electronics Co., LTD. | Granted |
| 3199 | MX 319560     | MX | Samsung Electronics Co., LTD. | Granted |
| 3200 | MX 319559     | MX | Samsung Electronics Co., LTD. | Granted |
| 3201 | MX 319561     | MX | Samsung Electronics Co., LTD. | Granted |
| 3202 | MX 323296     | MX | Samsung Electronics Co., LTD. | Granted |
| 3203 | PI2012001841  | MY | Samsung Electronics Co., LTD. | Pending |
| 3204 | PI2013003184  | MY | Samsung Electronics Co., LTD. | Pending |
| 3205 | PI2013003183  | MY | Samsung Electronics Co., LTD. | Pending |
| 3206 | PI2015001487  | MY | Samsung Electronics Co., LTD. | Pending |
| 3207 | PI2015001486  | MY | Samsung Electronics Co., LTD. | Pending |
| 3208 | PI2015002232  | MY | Samsung Electronics Co., LTD. | Pending |
| 3209 | 2490815       | RU | Samsung Electronics Co., LTD. | Granted |
| 3210 | 2509436       | RU | Samsung Electronics Co., LTD. | Granted |
| 3211 | 2518635       | RU | Samsung Electronics Co., LTD. | Granted |
| 3212 | 2013119372    | RU | Samsung Electronics Co., LTD. | Pending |
| 3213 | 2013119400    | RU | Samsung Electronics Co., LTD. | Pending |
| 3214 | 2013119397    | RU | Samsung Electronics Co., LTD. | Pending |
| 3215 | 2013152955    | RU | Samsung Electronics Co., LTD. | Pending |
| 3216 | US 8837840    | US | Samsung Electronics Co., LTD. | Granted |
| 3217 | US8208742     | US | Samsung Electronics Co., LTD. | Granted |
| 3218 | US 8582901    | US | Samsung Electronics Co., LTD. | Granted |
| 3219 | US 8842926    | US | Samsung Electronics Co., LTD. | Granted |
| 3220 | US 8842922    | US | Samsung Electronics Co., LTD. | Granted |
| 3221 | 1-2012-01514  | VN | Samsung Electronics Co., LTD. | Pending |
| 3222 | 1-2013-00797  | VN | Samsung Electronics Co., LTD. | Pending |
| 3223 | 1-2013-00798  | VN | Samsung Electronics Co., LTD. | Pending |
| 3224 | 1-2015-01392  | VN | Samsung Electronics Co., LTD. | Pending |
| 3225 | 1-2015-01393  | VN | Samsung Electronics Co., LTD. | Pending |
| 3226 | 1-2015-02743  | VN | Samsung Electronics Co., LTD. | Pending |
| 3227 | ZA 2012/02670 | ZA | Samsung Electronics Co., LTD. | Granted |
| 3228 | 2013/04978    | ZA | Samsung Electronics Co., LTD. | Granted |

|      |                   |    |                               |         |
|------|-------------------|----|-------------------------------|---------|
| 3229 | 2013/04979        | ZA | Samsung Electronics Co., LTD. | Granted |
| 3230 | ZA 2014/06113     | ZA | Samsung Electronics Co., LTD. | Granted |
| 3231 | ZA 2015/00338     | ZA | Samsung Electronics Co., LTD. | Granted |
| 3232 | ZA 2015/00339     | ZA | Samsung Electronics Co., LTD. | Granted |
| 3233 | AL 2629528        | AL | Samsung Electronics Co., LTD. | Granted |
| 3234 | AT 2629528        | AT | Samsung Electronics Co., LTD. | Granted |
| 3235 | AU 2010328813     | AU | Samsung Electronics Co., LTD. | Granted |
| 3236 | AU 2013201503     | AU | Samsung Electronics Co., LTD. | Granted |
| 3237 | AU 2013201504     | AU | Samsung Electronics Co., LTD. | Granted |
| 3238 | BE 2629528        | BE | Samsung Electronics Co., LTD. | Granted |
| 3239 | BG 2629528        | BG | Samsung Electronics Co., LTD. | Granted |
| 3240 | 11 2012 013871 5  | BR | Samsung Electronics Co., LTD. | Pending |
| 3241 | 1220130199535     | BR | Samsung Electronics Co., LTD. | Pending |
| 3242 | 1220130199527     | BR | Samsung Electronics Co., LTD. | Pending |
| 3243 | 2783786           | CA | Samsung Electronics Co., LTD. | Pending |
| 3244 | 2816467           | CA | Samsung Electronics Co., LTD. | Pending |
| 3245 | CA 2876814        | CA | Samsung Electronics Co., LTD. | Granted |
| 3246 | CH 2629528        | CH | Samsung Electronics Co., LTD. | Granted |
| 3247 | CN 201080063102.8 | CN | Samsung Electronics Co., LTD. | Granted |
| 3248 | 201310091250.6    | CN | Samsung Electronics Co., LTD. | Pending |
| 3249 | 201510006877.6    | CN | Samsung Electronics Co., LTD. | Pending |
| 3250 | 201510007111.X    | CN | Samsung Electronics Co., LTD. | Pending |
| 3251 | 201510069835.7    | CN | Samsung Electronics Co., LTD. | Pending |
| 3252 | 201510192457.1    | CN | Samsung Electronics Co., LTD. | Pending |
| 3253 | CY 2629528        | CY | Samsung Electronics Co., LTD. | Granted |
| 3254 | CZ 2629528        | CZ | Samsung Electronics Co., LTD. | Granted |
| 3255 | DE 2629528        | DE | Samsung Electronics Co., LTD. | Granted |
| 3256 | DK 2629528        | DK | Samsung Electronics Co., LTD. | Granted |
| 3257 | EE 2629528        | EE | Samsung Electronics Co., LTD. | Granted |
| 3258 | 10836203.9        | EP | Samsung Electronics Co., LTD. | Pending |
| 3259 | 13167741.1        | EP | Samsung Electronics Co., LTD. | Pending |
| 3260 | 15159951.1        | EP | Samsung Electronics Co., LTD. | Pending |
| 3261 | 15159952.9        | EP | Samsung Electronics Co., LTD. | Pending |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 3262 | ES 2629528      | ES | Samsung Electronics Co., LTD. | Granted |
| 3263 | FI 2629528      | FI | Samsung Electronics Co., LTD. | Granted |
| 3264 | FR 2629528      | FR | Samsung Electronics Co., LTD. | Granted |
| 3265 | GB 2629528      | GB | Samsung Electronics Co., LTD. | Granted |
| 3266 | GR 2629528      | GR | Samsung Electronics Co., LTD. | Granted |
| 3267 | HR 2629528      | HR | Samsung Electronics Co., LTD. | Granted |
| 3268 | HU 2629528      | HU | Samsung Electronics Co., LTD. | Granted |
| 3269 | W-00201202678   | ID | Samsung Electronics Co., LTD. | Pending |
| 3270 | W-00201303992   | ID | Samsung Electronics Co., LTD. | Pending |
| 3271 | W-00201303994   | ID | Samsung Electronics Co., LTD. | Pending |
| 3272 | P00201502612    | ID | Samsung Electronics Co., LTD. | Pending |
| 3273 | P00201502613    | ID | Samsung Electronics Co., LTD. | Pending |
| 3274 | IE 2629528      | IE | Samsung Electronics Co., LTD. | Granted |
| 3275 | 1687/MUMNP/2012 | IN | Samsung Electronics Co., LTD. | Pending |
| 3276 | 929/MUMNP/2013  | IN | Samsung Electronics Co., LTD. | Pending |
| 3277 | 930/MUMNP/2013  | IN | Samsung Electronics Co., LTD. | Pending |
| 3278 | 850/MUMNP/2015  | IN | Samsung Electronics Co., LTD. | Pending |
| 3279 | 851/MUMNP/2015  | IN | Samsung Electronics Co., LTD. | Pending |
| 3280 | 852/MUMNP/2015  | IN | Samsung Electronics Co., LTD. | Pending |
| 3281 | IS 2629528      | IS | Samsung Electronics Co., LTD. | Granted |
| 3282 | IT 2629528      | IT | Samsung Electronics Co., LTD. | Granted |
| 3283 | JP 5632515      | JP | Samsung Electronics Co., LTD. | Granted |
| 3284 | JP 5632516      | JP | Samsung Electronics Co., LTD. | Granted |
| 3285 | 2016-105544     | JP | Samsung Electronics Co., LTD. | Pending |
| 3286 | KR 1484280      | KR | Samsung Electronics Co., LTD. | Granted |
| 3287 | P20140148722    | KR | Samsung Electronics Co., LTD. | Pending |
| 3288 | P20150008765    | KR | Samsung Electronics Co., LTD. | Pending |
| 3289 | LI 2629528      | LI | Samsung Electronics Co., LTD. | Granted |
| 3290 | LT 2629528      | LT | Samsung Electronics Co., LTD. | Granted |
| 3291 | LU 2629528      | LU | Samsung Electronics Co., LTD. | Granted |
| 3292 | LV 2629528      | LV | Samsung Electronics Co., LTD. | Granted |
| 3293 | MC 2629528      | MC | Samsung Electronics Co., LTD. | Granted |
| 3294 | MK 2629528      | MK | Samsung Electronics Co., LTD. | Granted |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 3295 | MT 2629528      | MT | Samsung Electronics Co., LTD. | Granted |
| 3296 | MX 316852       | MX | Samsung Electronics Co., LTD. | Granted |
| 3297 | PI2012002568    | MY | Samsung Electronics Co., LTD. | Pending |
| 3298 | PI2013003241    | MY | Samsung Electronics Co., LTD. | Pending |
| 3299 | MY 155120-A     | MY | Samsung Electronics Co., LTD. | Granted |
| 3300 | PI2015001427    | MY | Samsung Electronics Co., LTD. | Pending |
| 3301 | PI2015001426    | MY | Samsung Electronics Co., LTD. | Pending |
| 3302 | NL 2629528      | NL | Samsung Electronics Co., LTD. | Granted |
| 3303 | NO 2629528      | NO | Samsung Electronics Co., LTD. | Granted |
| 3304 | PL 2629528      | PL | Samsung Electronics Co., LTD. | Granted |
| 3305 | PT 2629528      | PT | Samsung Electronics Co., LTD. | Granted |
| 3306 | RO 2629528      | RO | Samsung Electronics Co., LTD. | Granted |
| 3307 | SR 2629528      | Rs | Samsung Electronics Co., LTD. | Granted |
| 3308 | RU 2517404      | RU | Samsung Electronics Co., LTD. | Granted |
| 3309 | RU 2517253      | RU | Samsung Electronics Co., LTD. | Granted |
| 3310 | RU 2515226      | RU | Samsung Electronics Co., LTD. | Granted |
| 3311 | SE 2629528      | SE | Samsung Electronics Co., LTD. | Granted |
| 3312 | SI 2629528      | SI | Samsung Electronics Co., LTD. | Granted |
| 3313 | SK 2629528      | SK | Samsung Electronics Co., LTD. | Granted |
| 3314 | SM 2629528      | SM | Samsung Electronics Co., LTD. | Granted |
| 3315 | TR 2629528      | TR | Samsung Electronics Co., LTD. | Granted |
| 3316 | US 8938006      | US | Samsung Electronics Co., LTD. | Granted |
| 3317 | US8780993       | US | Samsung Electronics Co., LTD. | Granted |
| 3318 | US 8885725      | US | Samsung Electronics Co., LTD. | Granted |
| 3319 | US 8885723      | US | Samsung Electronics Co., LTD. | Granted |
| 3320 | US 8885724      | US | Samsung Electronics Co., LTD. | Granted |
| 3321 | US15/016790     | US | Samsung Electronics Co., LTD. | Pending |
| 3322 | VN 1-2012-01954 | VN | Samsung Electronics Co., LTD. | Granted |
| 3323 | 1-2013-00803    | VN | Samsung Electronics Co., LTD. | Pending |
| 3324 | 1-2013-00804    | VN | Samsung Electronics Co., LTD. | Pending |
| 3325 | VN 1-2015-01763 | VN | Samsung Electronics Co., LTD. | Granted |
| 3326 | 1-2015-01763    | VN | Samsung Electronics Co., LTD. | Pending |
| 3327 | VN 1-2015-01762 | VN | Samsung Electronics Co., LTD. | Granted |

|      |                  |    |                               |         |
|------|------------------|----|-------------------------------|---------|
| 3328 | 1-2015-01762     | VN | Samsung Electronics Co., LTD. | Pending |
| 3329 | ZA 2013/04981    | ZA | Samsung Electronics Co., LTD. | Granted |
| 3330 | 2015/05589       | ZA | Samsung Electronics Co., LTD. | Pending |
| 3331 | 2015/05590       | ZA | Samsung Electronics Co., LTD. | Pending |
| 3332 | 1120120091786    | BR | Samsung Electronics Co., LTD. | Pending |
| 3333 | BR122015021750-4 | BR | Samsung Electronics Co., LTD. | Pending |
| 3334 | BR122015021748-2 | BR | Samsung Electronics Co., LTD. | Pending |
| 3335 | BR122015021746-6 | BR | Samsung Electronics Co., LTD. | Pending |
| 3336 | BR122015021751-2 | BR | Samsung Electronics Co., LTD. | Pending |
| 3337 | CA 2777584       | CA | Samsung Electronics Co., LTD. | Granted |
| 3338 | 201510192458.6   | CN | Samsung Electronics Co., LTD. | Pending |
| 3339 | 201510192566.3   | CN | Samsung Electronics Co., LTD. | Pending |
| 3340 | 201510195311.2   | CN | Samsung Electronics Co., LTD. | Pending |
| 3341 | 201510195313.1   | CN | Samsung Electronics Co., LTD. | Pending |
| 3342 | 201510454366.0   | CN | Samsung Electronics Co., LTD. | Pending |
| 3343 | 10825221.4       | EP | Samsung Electronics Co., LTD. | Pending |
| 3344 | 14192864.8       | EP | Samsung Electronics Co., LTD. | Pending |
| 3345 | 15153236.3       | EP | Samsung Electronics Co., LTD. | Pending |
| 3346 | 15169004.7       | EP | Samsung Electronics Co., LTD. | Pending |
| 3347 | 15169003.9       | EP | Samsung Electronics Co., LTD. | Pending |
| 3348 | 1224/MUMNP/2012  | IN | Samsung Electronics Co., LTD. | Pending |
| 3349 | 839/MUMNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 3350 | 840/MUMNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 3351 | 841/MUMNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 3352 | 842/MUMNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 3353 | 843/MUMNP/2015   | IN | Samsung Electronics Co., LTD. | Pending |
| 3354 | JP 5711244       | JP | Samsung Electronics Co., LTD. | Granted |
| 3355 | KR 1457418       | KR | Samsung Electronics Co., LTD. | Granted |
| 3356 | P20150052006     | KR | Samsung Electronics Co., LTD. | Pending |
| 3357 | P20150052007     | KR | Samsung Electronics Co., LTD. | Pending |
| 3358 | P20150052008     | KR | Samsung Electronics Co., LTD. | Pending |
| 3359 | MX 323423        | MX | Samsung Electronics Co., LTD. | Granted |
| 3360 | MX 326542        | MX | Samsung Electronics Co., LTD. | Granted |



|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 3361 | MX/a/2014/016033    | MX | Samsung Electronics Co., LTD. | Pending |
| 3362 | RU 2509435          | RU | Samsung Electronics Co., LTD. | Granted |
| 3363 | US8798159           | US | Samsung Electronics Co., LTD. | Granted |
| 3364 | US 8897369          | US | Samsung Electronics Co., LTD. | Granted |
| 3365 | US 8891632          | US | Samsung Electronics Co., LTD. | Granted |
| 3366 | US 8891631          | US | Samsung Electronics Co., LTD. | Granted |
| 3367 | US 8891618          | US | Samsung Electronics Co., LTD. | Granted |
| 3368 | CN ZL201080063360.6 | CN | Samsung Electronics Co., LTD. | Granted |
| 3369 | 201510387296.1      | CN | Samsung Electronics Co., LTD. | Pending |
| 3370 | 201510388593.8      | CN | Samsung Electronics Co., LTD. | Pending |
| 3371 | 201510387983.3      | CN | Samsung Electronics Co., LTD. | Pending |
| 3372 | 201510388369.9      | CN | Samsung Electronics Co., LTD. | Pending |
| 3373 | 10836223.7          | EP | Samsung Electronics Co., LTD. | Pending |
| 3374 | 15174986.8          | EP | Samsung Electronics Co., LTD. | Pending |
| 3375 | 15174988.4          | EP | Samsung Electronics Co., LTD. | Pending |
| 3376 | 15174991.8          | EP | Samsung Electronics Co., LTD. | Pending |
| 3377 | 15174992.6          | EP | Samsung Electronics Co., LTD. | Pending |
| 3378 | P20090121935        | KR | Samsung Electronics Co., LTD. | Pending |
| 3379 | P20150015588        | KR | Samsung Electronics Co., LTD. | Pending |
| 3380 | P20150052464        | KR | Samsung Electronics Co., LTD. | Pending |
| 3381 | P20150105295        | KR | Samsung Electronics Co., LTD. | Pending |
| 3382 | P20150105296        | KR | Samsung Electronics Co., LTD. | Pending |
| 3383 | P20150105297        | KR | Samsung Electronics Co., LTD. | Pending |
| 3384 | P20150105298        | KR | Samsung Electronics Co., LTD. | Pending |
| 3385 | US14/849073         | US | Samsung Electronics Co., LTD. | Pending |
| 3386 | US14/926883         | US | Samsung Electronics Co., LTD. | Pending |
| 3387 | US14/926968         | US | Samsung Electronics Co., LTD. | Pending |
| 3388 | US14/927025         | US | Samsung Electronics Co., LTD. | Pending |
| 3389 | US14/927096         | US | Samsung Electronics Co., LTD. | Pending |
| 3390 | 2011205896          | AU | Samsung Electronics Co., LTD. | Pending |
| 3391 | 2013202014          | AU | Samsung Electronics Co., LTD. | Pending |
| 3392 | AU 2014202994       | AU | Samsung Electronics Co., LTD. | Granted |
| 3393 | 11 2012 017408 8    | BR | Samsung Electronics Co., LTD. | Pending |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 3394 | 1220130205519   | BR | Samsung Electronics Co., LTD. | Pending |
| 3395 | BR1220150213690 | BR | Samsung Electronics Co., LTD. | Pending |
| 3396 | BR1220150213673 | BR | Samsung Electronics Co., LTD. | Pending |
| 3397 | BR1220150213703 | BR | Samsung Electronics Co., LTD. | Pending |
| 3398 | CA 2828001      | CA | Samsung Electronics Co., LTD. | Granted |
| 3399 | CA 2880465      | CA | Samsung Electronics Co., LTD. | Granted |
| 3400 | 2880472         | CA | Samsung Electronics Co., LTD. | Pending |
| 3401 | 2880256         | CA | Samsung Electronics Co., LTD. | Pending |
| 3402 | 201180014025.1  | CN | Samsung Electronics Co., LTD. | Pending |
| 3403 | 201410811994.5  | CN | Samsung Electronics Co., LTD. | Pending |
| 3404 | 201510178147.4  | CN | Samsung Electronics Co., LTD. | Pending |
| 3405 | 201510178593.5  | CN | Samsung Electronics Co., LTD. | Pending |
| 3406 | 201510245822.0  | CN | Samsung Electronics Co., LTD. | Pending |
| 3407 | 201510246252.7  | CN | Samsung Electronics Co., LTD. | Pending |
| 3408 | 11733108.2      | EP | Samsung Electronics Co., LTD. | Pending |
| 3409 | 13172421.3      | EP | Samsung Electronics Co., LTD. | Pending |
| 3410 | 15168134.3      | EP | Samsung Electronics Co., LTD. | Pending |
| 3411 | 15168135.0      | EP | Samsung Electronics Co., LTD. | Pending |
| 3412 | 15168136.8      | EP | Samsung Electronics Co., LTD. | Pending |
| 3413 | W-00201203290   | ID | Samsung Electronics Co., LTD. | Pending |
| 3414 | W-00201301703   | ID | Samsung Electronics Co., LTD. | Pending |
| 3415 | P-00201503975   | ID | Samsung Electronics Co., LTD. | Pending |
| 3416 | P-00201503977   | ID | Samsung Electronics Co., LTD. | Pending |
| 3417 | P-00201503976   | ID | Samsung Electronics Co., LTD. | Pending |
| 3418 | 7066/CHENP/2012 | IN | Samsung Electronics Co., LTD. | Pending |
| 3419 | 3042/CHENP/2013 | IN | Samsung Electronics Co., LTD. | Pending |
| 3420 | 2806/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3421 | 2807/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3422 | 2805/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3423 | JP 5620555      | JP | Samsung Electronics Co., LTD. | Granted |
| 3424 | 2015-87004      | JP | Samsung Electronics Co., LTD. | Pending |
| 3425 | 2015-87005      | JP | Samsung Electronics Co., LTD. | Pending |
| 3426 | KR 1522850      | KR | Samsung Electronics Co., LTD. | Granted |

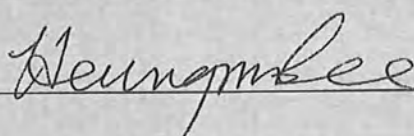
|      |                |    |                               |         |
|------|----------------|----|-------------------------------|---------|
| 3427 | P20150052468   | KR | Samsung Electronics Co., LTD. | Pending |
| 3428 | MX 324186      | MX | Samsung Electronics Co., LTD. | Granted |
| 3429 | PI2012003196   | MY | Samsung Electronics Co., LTD. | Pending |
| 3430 | PI2013003240   | MY | Samsung Electronics Co., LTD. | Pending |
| 3431 | PI2015001297   | MY | Samsung Electronics Co., LTD. | Pending |
| 3432 | PI2015001296   | MY | Samsung Electronics Co., LTD. | Pending |
| 3433 | PI2015001295   | MY | Samsung Electronics Co., LTD. | Pending |
| 3434 | RU 2514929     | RU | Samsung Electronics Co., LTD. | Granted |
| 3435 | RU 2513707     | RU | Samsung Electronics Co., LTD. | Granted |
| 3436 | RU 2530252     | RU | Samsung Electronics Co., LTD. | Granted |
| 3437 | 2013158843     | RU | Samsung Electronics Co., LTD. | Pending |
| 3438 | 2013158760     | RU | Samsung Electronics Co., LTD. | Pending |
| 3439 | 2013158853     | RU | Samsung Electronics Co., LTD. | Pending |
| 3440 | 2013158636     | RU | Samsung Electronics Co., LTD. | Pending |
| 3441 | SG 182491      | SG | Samsung Electronics Co., LTD. | Granted |
| 3442 | SG 192512      | SG | Samsung Electronics Co., LTD. | Granted |
| 3443 | SG 192511      | SG | Samsung Electronics Co., LTD. | Granted |
| 3444 | 10201500917W   | SG | Samsung Electronics Co., LTD. | Pending |
| 3445 | US 8995529     | US | Samsung Electronics Co., LTD. | Granted |
| 3446 | US8861608      | US | Samsung Electronics Co., LTD. | Granted |
| 3447 | US 8861609     | US | Samsung Electronics Co., LTD. | Granted |
| 3448 | US 9131237     | US | Samsung Electronics Co., LTD. | Granted |
| 3449 | US 9106924     | US | Samsung Electronics Co., LTD. | Granted |
| 3450 | 1-2012-02401   | VN | Samsung Electronics Co., LTD. | Pending |
| 3451 | 1-2013-00793   | VN | Samsung Electronics Co., LTD. | Pending |
| 3452 | 1-2015-01676   | VN | Samsung Electronics Co., LTD. | Pending |
| 3453 | 1-2015-01675   | VN | Samsung Electronics Co., LTD. | Pending |
| 3454 | 1-2015-01674   | VN | Samsung Electronics Co., LTD. | Pending |
| 3455 | 2012/05735     | ZA | Samsung Electronics Co., LTD. | Pending |
| 3456 | ZA 2013/04982  | ZA | Samsung Electronics Co., LTD. | Granted |
| 3457 | 2015/07995     | ZA | Samsung Electronics Co., LTD. | Pending |
| 3458 | 1120120174061  | BR | Samsung Electronics Co., LTD. | Pending |
| 3459 | 201180013432.0 | CN | Samsung Electronics Co., LTD. | Pending |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 3460 | 201510134315.X  | CN | Samsung Electronics Co., LTD. | Pending |
| 3461 | 201510134277.8  | CN | Samsung Electronics Co., LTD. | Pending |
| 3462 | 201510134292.2  | CN | Samsung Electronics Co., LTD. | Pending |
| 3463 | 201510131900.4  | CN | Samsung Electronics Co., LTD. | Pending |
| 3464 | 201510289124.0  | CN | Samsung Electronics Co., LTD. | Pending |
| 3465 | 11733110.8      | EP | Samsung Electronics Co., LTD. | Pending |
| 3466 | 15183034.6      | EP | Samsung Electronics Co., LTD. | Pending |
| 3467 | 15183036.1      | EP | Samsung Electronics Co., LTD. | Pending |
| 3468 | 15183038.7      | EP | Samsung Electronics Co., LTD. | Pending |
| 3469 | 15183039.5      | EP | Samsung Electronics Co., LTD. | Pending |
| 3470 | W-00201203291   | ID | Samsung Electronics Co., LTD. | Pending |
| 3471 | P-00201505310   | ID | Samsung Electronics Co., LTD. | Pending |
| 3472 | P-00201505312   | ID | Samsung Electronics Co., LTD. | Pending |
| 3473 | P-00201505317   | ID | Samsung Electronics Co., LTD. | Pending |
| 3474 | P-00201505320   | ID | Samsung Electronics Co., LTD. | Pending |
| 3475 | 1924/MUMNP/2012 | IN | Samsung Electronics Co., LTD. | Pending |
| 3476 | 1361/MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3477 | 1360/MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3478 | 1359/MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3479 | 1358/MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3480 | 1357/MUMNP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3481 | JP 5718363      | JP | Samsung Electronics Co., LTD. | Granted |
| 3482 | KR 1487687      | KR | Samsung Electronics Co., LTD. | Granted |
| 3483 | P20160063730    | KR | Samsung Electronics Co., LTD. | Pending |
| 3484 | PI2012003195    | MY | Samsung Electronics Co., LTD. | Pending |
| 3485 | MY-155335-A     | MY | Samsung Electronics Co., LTD. | Granted |
| 3486 | MY-155333-A     | MY | Samsung Electronics Co., LTD. | Granted |
| 3487 | PI2015001597    | MY | Samsung Electronics Co., LTD. | Pending |
| 3488 | PI2015001596    | MY | Samsung Electronics Co., LTD. | Pending |
| 3489 | 1-2012-501443   | PH | Samsung Electronics Co., LTD. | Pending |
| 3490 | 1-2015-500846   | PH | Samsung Electronics Co., LTD. | Pending |
| 3491 | 1-2015-500840   | PH | Samsung Electronics Co., LTD. | Pending |
| 3492 | 1-2015-500842   | PH | Samsung Electronics Co., LTD. | Pending |

|      |                 |    |                               |         |
|------|-----------------|----|-------------------------------|---------|
| 3493 | 1-2015-500845   | PH | Samsung Electronics Co., LTD. | Pending |
| 3494 | 1201003549      | TH | Samsung Electronics Co., LTD. | Pending |
| 3495 | US8842927       | US | Samsung Electronics Co., LTD. | Granted |
| 3496 | US 8923641      | US | Samsung Electronics Co., LTD. | Granted |
| 3497 | US 8971654      | US | Samsung Electronics Co., LTD. | Granted |
| 3498 | US 8971653      | US | Samsung Electronics Co., LTD. | Granted |
| 3499 | US 8885959      | US | Samsung Electronics Co., LTD. | Granted |
| 3500 | US14/609643     | US | Samsung Electronics Co., LTD. | Pending |
| 3501 | 1-2012-02402    | VN | Samsung Electronics Co., LTD. | Pending |
| 3502 | 1-2015-01872    | VN | Samsung Electronics Co., LTD. | Pending |
| 3503 | 1-2015-01870    | VN | Samsung Electronics Co., LTD. | Pending |
| 3504 | 1-2015-01873    | VN | Samsung Electronics Co., LTD. | Pending |
| 3505 | 1-2015-01871    | VN | Samsung Electronics Co., LTD. | Pending |
| 3506 | 201180013472.5  | CN | Samsung Electronics Co., LTD. | Pending |
| 3507 | 201510038200.0  | CN | Samsung Electronics Co., LTD. | Pending |
| 3508 | 201510236639.4  | CN | Samsung Electronics Co., LTD. | Pending |
| 3509 | 201510236860.X  | CN | Samsung Electronics Co., LTD. | Pending |
| 3510 | 201510236511.8  | CN | Samsung Electronics Co., LTD. | Pending |
| 3511 | 201510236407.9  | CN | Samsung Electronics Co., LTD. | Pending |
| 3512 | W-00201203294   | ID | Samsung Electronics Co., LTD. | Pending |
| 3513 | P-00201504124   | ID | Samsung Electronics Co., LTD. | Pending |
| 3514 | P-00201504129   | ID | Samsung Electronics Co., LTD. | Pending |
| 3515 | P-00201504127   | ID | Samsung Electronics Co., LTD. | Pending |
| 3516 | P-00201504125   | ID | Samsung Electronics Co., LTD. | Pending |
| 3517 | 6981/CHENP/2012 | IN | Samsung Electronics Co., LTD. | Pending |
| 3518 | 2779/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3519 | 2777/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3520 | 2776/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3521 | 2775/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3522 | 2774/CHENP/2015 | IN | Samsung Electronics Co., LTD. | Pending |
| 3523 | KR 1457396      | KR | Samsung Electronics Co., LTD. | Granted |
| 3524 | PI2012003194    | MY | Samsung Electronics Co., LTD. | Pending |
| 3525 | 1-2015-501077   | PH | Samsung Electronics Co., LTD. | Pending |

|      |                     |    |                               |         |
|------|---------------------|----|-------------------------------|---------|
| 3526 | 1-2015-501078       | PH | Samsung Electronics Co., LTD. | Pending |
| 3527 | 1-2015-501079       | PH | Samsung Electronics Co., LTD. | Pending |
| 3528 | 1-2015-501080       | PH | Samsung Electronics Co., LTD. | Pending |
| 3529 | 1201003551          | TH | Samsung Electronics Co., LTD. | Pending |
| 3530 | US 8792561          | US | Samsung Electronics Co., LTD. | Granted |
| 3531 | US 9055299          | US | Samsung Electronics Co., LTD. | Granted |
| 3532 | US 9124903          | US | Samsung Electronics Co., LTD. | Granted |
| 3533 | US 9118915          | US | Samsung Electronics Co., LTD. | Granted |
| 3534 | US 9118916          | US | Samsung Electronics Co., LTD. | Granted |
| 3535 | US15/044672         | US | Samsung Electronics Co., LTD. | Pending |
| 3536 | 1-2012-02398        | VN | Samsung Electronics Co., LTD. | Pending |
| 3537 | 1-2015-01712        | VN | Samsung Electronics Co., LTD. | Pending |
| 3538 | 1-2015-01713        | VN | Samsung Electronics Co., LTD. | Pending |
| 3539 | 1-2015-01714        | VN | Samsung Electronics Co., LTD. | Pending |
| 3540 | 1-2015-01715        | VN | Samsung Electronics Co., LTD. | Pending |
| 3541 | CN ZL201180008129.1 | CN | Samsung Electronics Co., LTD. | Granted |
| 3542 | 201510159484.9      | CN | Samsung Electronics Co., LTD. | Pending |
| 3543 | 201510159349.4      | CN | Samsung Electronics Co., LTD. | Pending |
| 3544 | 201510159110.7      | CN | Samsung Electronics Co., LTD. | Pending |
| 3545 | 201510158068.7      | CN | Samsung Electronics Co., LTD. | Pending |
| 3546 | 201510158600.5      | CN | Samsung Electronics Co., LTD. | Pending |
| 3547 | KR 1495724          | KR | Samsung Electronics Co., LTD. | Granted |
| 3548 | P20150095375        | KR | Samsung Electronics Co., LTD. | Pending |
| 3549 | PI2012003259        | MY | Samsung Electronics Co., LTD. | Pending |
| 3550 | 1-2012-501453       | PH | Samsung Electronics Co., LTD. | Pending |
| 3551 | 1-2015-500871       | PH | Samsung Electronics Co., LTD. | Pending |
| 3552 | 1-2015-500873       | PH | Samsung Electronics Co., LTD. | Pending |
| 3553 | 1-2015-500872       | PH | Samsung Electronics Co., LTD. | Pending |
| 3554 | 1-2015-500874       | PH | Samsung Electronics Co., LTD. | Pending |
| 3555 | 1201003925          | TH | Samsung Electronics Co., LTD. | Pending |
| 3556 | US15/140731         | US | Samsung Electronics Co., LTD. | Pending |
| 3557 | 1-2016-00163        | VN | Samsung Electronics Co., LTD. | Pending |
| 3558 | 1-2016-00162        | VN | Samsung Electronics Co., LTD. | Pending |



|   |  |
|---|--|
| <b>Disclosure of Information</b>  |  |
| <p>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;</p> <ul style="list-style-type: none"> <li>- an identification of each patent or patent application that is the subject matter of the Essential Claim;</li> </ul>  |  |
| <ul style="list-style-type: none"> <li>- an identification of specific section(s) or text of the Specification Document that are relevant to the Essential Claim; and</li> <li>- an identification of each patent or patent application claim covering the Specification Document.</li> </ul> <p>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.</p> |  |
|   |  |
| <b>Completed By:</b>  |  |
| <b>Name of Participant</b>  | <u>Samsung Electronics Co., LTD.</u>   |
| <b>Name of Representative</b>   | <u>Heungmo Lee</u>   |
| <b>Title of Representative</b>  | <u>Senior Vice President</u>   |
| <b>Signature</b>  | <u></u> |
| <b>Place, Date</b>  | <u>Seoul, Korea, 2018 / 04 / 13</u>  |