FedEx

TRACK ANOTHER SHIPMENT

281575779931

ADD NICKNAME

Delivered
Wednesday, 28 July 2021 at 10:37

DELIVERED

Signed for by: J.I HEE KIM

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OBTAIN PROOF OF DELIVERY

FROM	TO
HODOGAYA-KU,YOKOHAMA, JP	SEOUL-SI YEONGDEUNGPO-GU, KR

Travel History

TIME ZONE
Local Scan Time

Wednesday, 28 July 2021		
10:37	SEOUL-SI YEONGDEUNGPO-GU KR	Delivered
09:29	SEOUL-SI SEOCHO-GU KR	On FedEx vehicle for delivery
08:49	SEOUL-SI SEOCHO-GU KR	At local FedEx facility
Tuesday, 27 July 2021		
22:47	SEOUL-SI SEOCHO-GU KR	In transit
21:13	INCHEON-SI KR	At local FedEx facility
18:32	SEOUL-SI GANGSEO-GU KR	In transit
13:42	SEOUL-SI GANGSEO-GU KR	In transit
09:03	SEOUL-SI GANGSEO-GU KR	At local FedEx facility
Monday, 26 July 2021		
09:56	SEOUL-SI GANGSEO-GU KR	At local FedEx facility
Saturday, 24 July 2021		
08:55	SEOUL-SI GANGSEO-GU KR	At local FedEx facility
Friday, 23 July 2021		
09:23	SEOUL-SI GANGSEO-GU KR	At local FedEx facility
Thursday, 22 July 2021		
09:40	SEOUL-SI GANGSEO-GU KR	At local FedEx facility

Wednesday, 21 July 2021		
18:27	SEOUL-SI GANGSEO-GU KR	At local FedEx facility
14:56	SEOUL-SI GANGSEO-GU KR	Operational Delay Incorrect Address
13:04	SEOUL-SI GANGSEO-GU KR	On FedEx vehicle for delivery
12:57	SEOUL-SI GANGSEO-GU KR	At local FedEx facility
12:00	SEOUL-SI GANGSEO-GU KR	In transit
09:34	INCHEON-SI KR	International shipment release - Import
09:19	INCHEON-SI KR	In transit Package available for clearance
08:25	INCHEON-SI KR	At destination sort facility
04:39	GUANGZHOU CN	In transit
04:30	GUANGZHOU CN	Departed FedEx hub
Tuesday, 20 July 2021		
05:45	GUANGZHOU CN	In transit
04:43	GUANGZHOU CN	Local Delay Delay beyond our control
01:56	GUANGZHOU CN	Arrived at FedEx hub
Monday, 19 July 2021		
21:49	NARITA-SHI JP	In transit
18:09	YOKOHAMA-SHI TSURUMI-KU JP	Left FedEx origin facility
15:51	YOKOHAMA-SHI TSURUMI-KU JP	Picked up
Sunday, 18 July 2021		
22:18		Shipment information sent to FedEx

Shipment Facts

TRACKING NUMBER 281575779931	**SERVICE** International Priority	**WEIGHT** 1.1 lbs / 0.5 kgs
DELIVERED TO Mailroom	**TOTAL PIECES** 1	**TOTAL SHIPMENT WEIGHT** 1.1 lbs / 0.5 kgs
TERMS Shipper	**PACKAGING** FedEx Envelope	**SPECIAL HANDLING SECTION** Deliver Weekday
SHIP DATE 19/07/2021	**STANDARD TRANSIT** 21/07/2021 before 18:00	**ACTUAL DELIVERY** 28/07/2021 at 10:37

Maxell, Ltd.
IP Innovation Business Unit

Yokohama Business Park (YBP)
North Square III
134 Godocho, Hodogaya-ku
Yokohama, 240-0005 Japan

July 19, 2021

VIA FEDEX

Mr. Hwi jae Cho
Vice President
Director LG Electronic's Intellectual Property Center
LG Electronics
128 Yeoui-daero, Yeoungdeungpo-gu, Twin Tower,
Seoul, 07336 Korea
Tel: +82 (2) 6912-6530

Re: Maxell's Smartphones, Tablets, Smartwatches, Streaming Devices, and Television Related Patents

Dear Mr. Hwi jae Cho,

I hope this correspondence finds you well.

I am Tatsuya Yamamoto, General Manager, IP Innovation BU, and I oversee, among other matters, all patent licensing and litigation for Maxell, Ltd. ("Maxell"). This letter is to invite you to discuss a mutually beneficial intellectual property transaction between LGE and Maxell. In particular, as you may know, Maxell maintains and develops intellectual property assets related to various fields of technologies including but not limited to smartphones, tablets, smartwatches, and televisions. As a result, Maxell owns a large portfolio of patents related to such technologies, and our analysis of LG's lines of smartphones (*e.g.*, Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones), tablets (*e.g.*, G Pad series tablets), smartwatches (*e.g.*, W series), televisions (*e.g.*, OLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs), and related software and hardware demonstrates that your company makes, uses, sells, offers to sell, and/or imports products in the United States and other countries that would benefit from a license to many of Maxell's patents. Maxell would welcome the opportunity to enter into constructive discussions with LGE to determine whether the parties can agree to a mutually acceptable patent license agreement.

I. Maxell's Television Patent Portfolio

While Maxell continues to review its patent portfolio, we specifically call your attention to the following U.S. patents directed to televisions. To aid in your review of the patents listed below, we included representative claims. These claims, however, are not included to limit your review of Maxell's patents.

No.	U.S. Pat. No.	Claims	LG Products
1	9,578,369	1-18	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
2	9,883,225	1-16	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
3	9,794,629	1-20	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
4	10,110,944	1-40	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
5	10,116,984	1-40	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
6	10,219,020	1-14, 16-24	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
7	10,219,019	1-12, 14-30	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
8	10,200,735	1-20	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
9	10,200,736	1-20	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
10	10,271,085	1-10	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
11	10,271,086	1-20	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell

			TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
12	10,327,029	1-30	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
13	10,484,733	1-32	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
14	10,037,744	1, 2, 4, 9, 10, 12	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
15	10,354,612	1, 2, 6, 7, 8, 9, 13, 14	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
16	10,339,893	1, 2, 4, 5, 6, 7, 9, 10, 11, 12, 14, 15, 16, 17, 19, 20	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
17	9,686,578	1-5	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
18	9,942,596	1-10	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
19	9,420,272	1	LG 3D TVs
20	9,749,675	1	LG 3D TVs
21	10,200,743	1	LG 3D TVs
22	7,924,366	5, 6, 9	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
23	7,760,213	1-9	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
24	8,120,560	1-5, 8-12	LG SIGNATURE, OLED TVs,

			QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
25	9,924,124	1, 2	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
26	10,375,341	1-4	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
27	8,514,349	1, 2, 6, 7	QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
28	8,736,543	1, 2, 3, 5	QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
29	8,827,492	1, 2, 14, 15	QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
30	8,690,407	1, 2, 4, 5, 10	QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
31	8,732,594	1	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
32	8,107,007	1, 2, 4, 5, 8, 9, 10, 12	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
33	10,951,940	1-28	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
34	10,629,160	1, 2, 3, 6, 7, 8	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
35	10,650,780	1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 13, 14, 15, 16, 18, 19, 20	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs

36	10,685,622	1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 13, 14, 15, 16, 18, 19, 20	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
37	10,957,278	1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 13, 14, 15, 17, 18, 19	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
38	10,516,912	1	LG 3D TVs
39	10,542,232	1-24	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
40	9,613,580	1, 11, 17	QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
41	10,015,558	1, 9	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
42	10,109,035	1, 4, 6, 10	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
43	10,225,613	1, 2, 4, 7, 8, 9, 10, 13, 14,	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
44	10,237,454	1, 10, 14	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
45	10,321,206	1, 2, 3, 4, 5, 7, 8, 9, 10. 11, 12, 13, 15, 16, 17	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
46	7,738,041	1, 2, 6, 7, 12	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
47	7,986,858	1, 4, 7, 10	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs,

			HDR TVs, Smart TVs, and HD TVs
48	8,203,650	1, 4, 7	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
49	8,952,881	1, 2, 10, 13, 14	QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
50	9,380,189	1, 8, 17	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
51	9,626,919	1, 2, 5, 6, 8	QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
52	9,966,022	1, 2, 6, 8	QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
53	10,078,989	1-14	QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
54	10,192,498	1, 2, 4, 5, 7, 10, 11, 14, 15, 16	QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
55	8,224,110	1, 9	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
56	9,025,903	1, 2, 3, 8, 12	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
57	10,958,971	1, 2, 3, 4, 5, 6, 7, 8, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 23, 24, 25, 26, 27	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
58	6,982,704	1, 2	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
59	7,151,535	1-10	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell

			TVs, 8K TVs, 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
60	7,227,543	1-10	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
61	7,701,475	1-11	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
62	7,227,559	1, 2, 3, 7, 8, 9, 10	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
63	7,719,551	1, 2, 3, 4, 5, 9, 10, 11, 12	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
64	7,898,557	1, 2, 3, 4, 5, 6, 10	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
65	7,876,301	1, 2, 3, 4, 5, 9, 10, 11	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
66	7,333,081	7	QNED MiniLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
67	7,730,507	1, 2, 10, 11, 13, 14, 15	LG SIGNATURE, OLED TVs, QNED MiniLED TVs, NanoCell TVs, 8K TVs, 4K Ultra HD TVs, HDR TVs, Smart TVs, and HD TVs
68	8,159,629	1, 2, 3, 7, 9	QNED MiniLED TVs, NanoCell TVs, 8K TVs, 4K Ultra HD TVs, Smart TVs and HD TVs
69	8,411,222	1, 2, 3, 7, 8	QNED MiniLED TVs, NanoCell TVs, 8K TVs, 4K Ultra HD TVs, Smart TVs and HD TVs

These patents are directed to technologies including, for example, casting, slideshows, 3D video, slim structures, dynamic contrast, brightness adjustment, black level correction, sound settings, TV-phone interface, image processing including performance and image quality improvements,

user experience including user settings and image presentation control and, streaming and viewing angles, and backlight units/light guide plates incorporated in LG's televisions and related hardware and software sold in the United States. Copies of each of these patents may be found by visiting the United States Patent and Trademark office website, www.uspto.gov. We would also like to bring to your attention the recent resolution of the matter between Maxell and Hisense (*Maxell, Ltd. v. Hisense Co., Ltd. et al*, 5:19-cv-00156 (EDTX)), confirming the value of Maxell's TV portfolio.

We encourage you to examine (or re-examine) these patents to determine whether LGE wishes to have a non-exclusive license under each of the patents identified. In particular, at least the identified patents in the above chart are believed to be practiced by many of LG's TV products, including but not limited to LG's OLED TVs, NanoCell TVs, 8K TVs, and 4K Ultra HD TVs.

II. Maxell's Smartphone Patent Portfolio

Further, we specifically call your attention to the following U.S. patents in Maxell's Smartphone Patent Portfolio that are infringed by LG's smartphones, tablets, smartwatches, and related hardware and software products:

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
1	7,139,533	1, 18	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series	**80**	10,529,372	1-6, 16-21, 31-36	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			tablets				
2	10,349,030	15-28	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**81**	8,037,161	6-10	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
3	6,612,488	1-2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio.	**82**	10,389,978	1, 2, 8	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; LG W series smartwatches				Journey, Solo, Escape and L series phones; G Pad series tablets
4	10,244,284	1-20	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**83**	10,854,237	1-7, 14, 19, 27, 32	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
5	7,104,444	1, 3	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ,	**84**	8,130,284	1-8	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; LG W series smartwatches				Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
6	7,403,226	1-2, 7	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and	**85**	8,170,394	1-5, 7-8	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			L series phones; G Pad series tablets				Pad series tablets
7	7,447,241	11-20, 25	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**86**	8,214,459	2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
8	7,047,052	2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute,	**87**	8,311,389	3-4, 7-8	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
9	10,264,456	9-15	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; LG W series smartwatches	**88**	7,362,952	1, 10, 14	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
10	7,577,417	1, 2	LG Velvet, Wing, K, Xpression,	**89**	8,477,850	16-20	LG Velvet, Wing, K, Xpression,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
11	7,054,649	10-11	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and	**90**	8,504,544	1-2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			L series phones; G Pad series tablets; LG W series smartwatches				Pad series tablets
12	7,187,374	1	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**91**	8,549,109	1-5	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
13	6,816,444	10-13	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q,	**92**	8,644,684	2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
14	8,156,077	1-9, 20	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**93**	8,654,093	1-7	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
15	8,112,503	1-6	LG Velvet, Wing, K, Xpression,	**94**	10,911,719	1-14	LG Velvet, Wing, K, Xpression,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
16	10,176,848	8-11, 13-20	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and	**95**	8,892,688	1-8	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			L series phones; G Pad series tablets				Pad series tablets
17	6,913,194	1-4	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; LG W series smartwatch es	**96**	8,982,086	1-4	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
18	9,099,154	1	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q,	**97**	9,083,942	1, 4, 7, 10, 13, 16, 19, 22	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
19	6,928,292	2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**98**	10,210,904	12-22	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
20	6,928,306	2, 5-6, 12-15	LG Velvet, Wing, K, Xpression,	**99**	9,124,758	1-4, 6-17	LG Velvet, Wing, K, Xpression,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
21	6,940,494	10-11	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and	**100**	9,197,917	9-16, 25-48	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			L series phones; G Pad series tablets				Pad series tablets
22	6,954,583	3, 6	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**101**	9,313,295	5-9,17-18	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
23	10,685,681	14-26	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute,	**102**	8,255,679	7-12	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
24	6,983,140	1-5	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**103**	9,418,704	6, 8-10	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
25	10,423,769	11-15	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ,	**104**	9,420,212	1-6	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; LG W series smartwatches				Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
26	10,298,737	3-4	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and	**105**	9,432,618	5-8	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			L series phones; G Pad series tablets				Pad series tablets
27	7,113,909	1-5, 12-16	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; LG W series smartwatches	**106**	6,987,978	4-5	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; LG W series smartwatches
28	7,116,438	1-7	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q,	**107**	9,489,985	10-12	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
29	7,190,833	1-20	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**108**	7,158,770	1-6	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; LG W series smartwatches
30	7,199,821	6	LG Velvet, Wing, K,	**109**	9,661,101	10-12	LG Velvet, Wing, K,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
31	8,289,450	2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo,	**110**	9,743,129	7-8	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Escape and L series phones; G Pad series tablets				phones; G Pad series tablets
32	7,203,517	9-10	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**111**	9,773,522	13-24	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
33	7,245,293	1-3	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo,	**112**	9,818,449	9-12	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
34	7,248,743	1, 7	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**113**	9,159,368	1-5	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
35	7,084,757	1, 5	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon,	**114**	7,719,417	1	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
36	7,312,791	1-7	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G	**115**	8,005,960	1, 3	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Pad series tablets				
37	7,324,487	1-5	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**116**	6,484,034	1, 8-9	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
38	7,952,645	1, 3, 4	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect,	**117**	7,072,673	5-14	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio.

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
39	7,464,170	1	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**118**	9,723,268	1-4	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
40	7,457,529	1-3, 7-13, 17-26, 33-38, 41	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime,	**119**	10,084,991	8-14	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
41	7,509,139	1-10	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**120**	9,066,058	1, 2, 4, 5	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
42	7,515,810	1, 2, 6	LG Velvet,	**121**	9,369,761	1, 2, 5-	LG Velvet,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets			6, 9	Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
43	7,551,209	1-6	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey,	**122**	8,571,392	5-6	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Solo, Escape and L series phones; G Pad series tablets				and L series phones; G Pad series tablets
44	7,613,383	1-2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**123**	10,057,371	10-12	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
45	6,973,334	4-6	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus,	**124**	10,070,099	6-10	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
46	7,671,901	1-2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**125**	10,129,590	9-10	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
47	7,689,201	1-4, 7	LG Velvet, Wing, K, Xpression, Phoenix,	**126**	10,212,586	9-15	LG Velvet, Wing, K, Xpression, Phoenix, V,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; LG W series smartwatches
48	7,508,760	2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and	**127**	10,418,069	1-20	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			L series phones; G Pad series tablets				Pad series tablets
49	8,334,933	1-8	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**128**	7,584,431	1	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
50	7,293,294	12, 16, 18, 20	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute,	**129**	10,645,424	7-12	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
51	10,747,832	1	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; LG W series smartwatches	**130**	10,199,072	11-15	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
52	10,679,674	9-22	LG Velvet, Wing, K, Xpression,	**131**	16/883,124 (allowed)	9-20	LG Velvet, Wing, K, Xpression,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
53	9,032,438	2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and	**132**	7,562,231	1-3	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			L series phones; G Pad series tablets				Pad series tablets
54	8,180,198	6	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**133**	8,526,791	8, 15	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
55	15/898,351 (allowed)	5	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute,	**134**	9,942,483	8	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
56	8,059,177	1-2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**135**	9,704,389	5	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; SmartThings
57	9,774,776	1, 3, 4, 5, 7-10	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ,	**136**	10,511,757	8	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
58	9,721,462	11	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series	**137**	7,084,880	16	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			tablets; SmartThings				
59	8,111,263	1, 12	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**138**	7,421,188	4-6	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
60	10,783,228	12, 17	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony,	**138**	10,462,278	12-17	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; LG W series smartwatches				Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
61	10,812,646	14, 20	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**140**	7,639,706	1, 2, 4	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
62	10,834,459	1-13	LG Velvet, Wing, K, Xpression, Phoenix,	**141**	6,697,563	5, 6	LG Velvet, Wing, K, Xpression, Phoenix, V,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
63	10,757,344	1, 3	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series	**142**	8,599,244	1, 8, 14	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			phones; G Pad series tablets				tablets
64	9,503,648	5-8	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**143**	8,724,962	1, 2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
65	7,391,964	11, 19	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony,	**144**	8,139,927	3-4	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
66	7,196,986	1, 3, 4	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**145**	7,995,897	1-3, 10-12	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
67	6,347,068	1-2	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena,	**146**	6,424,795	1-2, 5-7	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
68	8,339,493	10-14	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**147**	8,417,088	3-4	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
69	8,736,729	3-4	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**148**	6,754,440	1-4	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
70	9,544,517	8-11	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune,	**149**	6,856,760	4-9	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Journey, Solo, Escape and L series phones; G Pad series tablets				Solo, Escape and L series phones; G Pad series tablets
71	10,915,220	7-8	LG W series smartwatches	**150**	7,626,498	1-22	LG W series smartwatches
72	10,728,362	1, 7	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**151**	8,566,890	1	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
73	9,154,545	1, 4, 7	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ,	**152**	9,154,003	1, 7, 14, 15	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
74	10,050,474	1, 4, 5, 6, 11	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series	**153**	8,099,136	1	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			tablets				
75	7,283,671	1, 19	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets	**154**	9,591,261	1, 5, 10	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets
76	10,726,159	1	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio.	**155**	16/080,313 (allowed)	1	LG W series smartwatches

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				
77	10,467,515	1	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets				
78	10,635,962	1	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W,				

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series tablets; LG W series smartwatches				
79	16/260,879 (allowed)	1	LG Velvet, Wing, K, Xpression, Phoenix, V, Neon, G, ThinQ, Arena, Prime, Stylo, W, Q, Optimus, Aristo, Tribute, Harmony, Reflect, Risio. Fortune, Journey, Solo, Escape and L series phones; G Pad series				

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			tablets				

The patents in Maxell's smartphone portfolio are directed to technologies, including imaging/camera components, image processor, proximity sensors, touch screen, power management, wireless communications including Bluetooth, WiFi, NFC, and cellular communications, biometric authentication, positioning, user interfaces, content management incorporated in LG's smartphones, tablets, smartwatches, and related hardware and software sold in the United States. Copies of each of these patents may be found by visiting the United States Patent and Trademark office website, www.uspto.gov.

We encourage you to examine these patents considering the features of LG's smartphones, tablets, and smartwatches. We are confident you will agree that a nonexclusive license is needed under each of the patents identified. In particular, at least the identified claims in the above chart are believed to be practiced by the identified LG products. Further, many of these patents were the subject of various litigations, including, for example, *Maxell, Ltd. v. Huawei Devices USA, Inc., et al*., C.A. Nos. 5:16-CV-00178-RWS (E.D. Tex.) and 5:18-CV-00033-RWS (E.D. Tex); *Maxell, Ltd. v. ZTE Corp., et al*., C.A. Nos. 5:16-CV-00179-RWS (E.D. Tex.) and 5:18-CV-00034 (E.D. Tex.); *Maxell, Ltd. v. ASUSTeK Computer, Inc*., C.A. No. 3:18-CV-01788 (N.D. Cal.); *Maxell, Ltd. v. Blu Products, Inc*., C.A. No. 1:18-CV-21231 (S.D. Fla.); *Maxell, Ltd. v. Blackberry Corp., et al*., C.A. No. 1:17-CV-01446 (D. Del.); *Maxell, Ltd. v. Olympus Corp., et al.,* C.A. No. 1:18-CV-00310-JFB-SRF (D.Del.); *Maxell, Ltd. v. Apple Inc.,* C.A. No. 5:19-CV-00036-RWS (E.D. Tex.); *Maxell, Ltd. v. Apple Inc.,* C.A. No. 6:21-CV-00158-ADA (W.D. Tex.); I*n the Matter of Certain Mobile Electronic Devices And Laptop Computers*, Inv. No. 337-TA-1215; and numerous foreign proceedings in Germany and Japan. Each of these litigations has now concluded with very favorable results for Maxell. For example, the ZTE litigation resulted in a $43.3 million verdict on seven patents in its portfolio, including U.S. Patent Nos. 6,748,317 ("'317 Patent"); 8,339,493 ("'493 Patent"); 8,736,729 ("'729 Patent"); 6,408,193 ("'193 Patent"); 6,329,794 ("'794 Patent"); 6,816,491 ("'491 Patent"); and 8,098,695 ("'695 Patent") and the Apple litigation resulted in a settlement shortly after jury selection. In addition to the litigation successes, we also note that numerous patents in Maxell's Smartphone portfolio have been subject to IPR petitions that were not instituted by the PTAB. We encourage you to review these matters. Because LG's infringing products operate in substantially the same manner as the products accused of infringement in these case, additional detail regarding LG's infringing activities can be gained from reviewing the complaints and allegations in these matters.

Maxell is focused on addressing these issues without the need for costly and protracted litigation, and it would welcome the opportunity to have constructive discussions with LG to determine whether a mutually acceptable patent license agreement can be reached. Maxell is prepared to commence discussions with you or your representative at your earliest convenience, at which

time Maxell can set forth its basic licensing structure for your consideration. I look forward to your reply and the opportunity to discuss these matters with you or your representative.

Sincerely,

Tatsuya Yamamoto

General Manager
IP Innovation Business Unit
Maxell, Ltd.
(email to: t-yamamoto@maxell.co.jp)