July 7, 2021

VIA COURIER

Maxell, Ltd.
IP Innovation Business Unit

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

Samsung Electronics Co., Ltd.
Intellectual Property Center
Corporate Legal Office
(Seoul R&D Campus, Umyeon dong)
33, Seongchon-gil, Seocho-gu,
Seoul, 06765, Korea
Attn: Corporate EVP / Head of Center
Tel +82-2-6147-8120

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

Dear Mr. Injung Lee,

I am Tatsuya Yamamoto, General Manager of IP Innovation Business Unit of Maxell, Ltd., 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 Samsung and Maxell to build on the prior dealings.

Maxell currently owns Smartphone and TV patent portfolio and succeeded the portfolio which were previously owned by Hitachi Consumer Electronics Co., Ltd. ("HCE") in July 2013. As a prior TV patent licensee, and a prior purchaser of patents from Maxell's smartphone portfolio, Samsung obviously appreciates the value of Maxell's patents and unique portfolios as they related to Samsung's smartphone and TV business units. For example, and as Samsung is aware, 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 Samsung Electronics, Inc. ("Samsung") line of smartphones (*e.g.*, Galaxy A or S series, Galaxy Note Series, Galaxy Z Fold Series), tablets (*e.g.*, Galaxy Tab), smartwatches (*e.g.*, Galaxy Watch), and televisions demonstrates that Samsung makes, uses, sells, offers to sell, or imports products in the U.S. that might benefit from a license to certain of Maxell's patents. Indeed, Samsung and HCE entered into a license agreement in March 2013 licensing certain Maxell's patents directed to televisions. That agreement expired in 2018 and certain Maxell patents in the television portfolio are still not licensed to Samsung as Lifetime Licensed Patents. Similarly, Samsung and HCE entered into a patent purchase agreement in 2011, in which Samsung purchased certain HCE's patents directed to feature phones and obtained a license to other current Maxell patents. That agreement expired in 2016 and a large number of Maxell patents directed to the smartphone/tablet/smartwatches portfolio are still not licensed to Samsung. Since the parties' prior agreements, the value of Maxell's patents has increased substantially as more devices, such as Samsung's line of smartphones and smart TVs, have adopted more and more

features and functionalities covered by Maxell's patents. This has borne out in through Maxell's recent licensing and litigation successes, which Samsung is surely aware of.

Building on the prior agreements, Maxell would welcome the opportunity to open negotiations with Samsung and enter into constructive discussions to determine whether the parties can agree to a mutually acceptable patent license agreements covering one or more of Maxell's patent portfolios identified below.

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 in Maxell's Television Patent Portfolio:

No.	U.S. Pat. No.	Claims	Samsung Products
1	10,555,042	1, 2, 6, 10	Neo QLED 8K SmartTVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
2	10,129,580	1-5	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD

			Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
3	10,638,189	1	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
4	10,659,833	1	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart

			TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
5	10,321,186	1, 3, 4	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
6	10,425,681	1, 3	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
7	9,930,397	1, 2, 7, 8	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs,

			Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
8	9,743,034	1, 2, 3, 5, 6, 7, 8	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
9	10,678,843	1, 6, 7	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED

			4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
10	10,306,295	1, 3	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
11	10,735,801	1, 4, 7, 10	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K

			UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
12	9,613,580	1, 11, 17	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
13	10,015,558	1, 9	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart

			TVs, Smart Full HD TVs, HD TVs
14	10,109,035	1, 4, 6, 10	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
15	10,225,613	1, 2, 4, 7, 8, 9, 10, 13, 14	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
16	10,237,454	1, 10, 14	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs,

			QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
17	10,321,206	1, 2, 3, 4, 5, 7, 8, 9, 10. 11, 12, 13, 15, 16, 17	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
18	7,738,041	1, 2, 6, 7, 12	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs,

			QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
19	7,986,858	1, 4, 7, 10	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
20	8,203,650	1, 4, 7	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs,

			Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
21	8,952,881	1, 2, 10, 13, 14	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
22	9,380,189	1, 8, 17	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart

			TVs, Smart Full HD TVs, HD TVs
23	9,626,919	1, 2, 5, 6, 8	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
24	9,966,022	1, 2, 6, 8	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
25	10,078,989	1-14	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs,

			QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
26	10,192,498	1, 2, 4, 5, 7, 10, 11, 14, 15, 16	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
27	8,224,110	1, 9	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs,

			QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs
28	9,025,903	1, 2, 3, 8, 12	Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, HD TVs

These patents are directed to technologies including 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. 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)), establishing the value of Maxell's portfolio.

While Samsung is aware of many of these patents from prior dealings, we encourage you to examine these patents again and think you will agree that a non-exclusive license is needed under each of the patents identified. In particular, at least the identified patents in the above

chart are believed to be practiced by Samsung's Neo QLED 8K Smart TVs, Neo QLED 4K Smart TVs, Frame QLED 4K Smart TVs, QLED 4K Smart TVs, Frame QLED 4K UHD HDR Smart TVs, Terrace QLED 4K UHD HDR Smart TVs, Sero QLED 4K UHD HDR Smart TVs, QLED 4K UHD HDR Smart TVs, QLED 8K UHD HDR Smart TVs, QLED 8K UHD Smart TVs, Serif QLED 4K UHD HDR Smart TVs, Crystal UHD 4K Smart TVs, 4K Crystal UHD HDR Smart TVs, Crystal UHD Smart TVs, QLED 4K UHD Smart TVs, Smart Full HD TVs, and 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:

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
1	7,139,533	1, 18	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series Galaxy Tab A, Tab X, Book series tablets	**73**	10,529,372	1-6, 16-21, 31-36	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series Galaxy Tab A, Tab X, Book series tablets
2	10,349,030	15-28	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series Galaxy Tab A, Tab X, Book series tablets	**74**	8,037,161	1, 3, 6	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series Galaxy Tab A, Tab X, Book series tablets, SmartThings
3	6,612,488	1-5	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series Galaxy Tab A, Tab X,	**75**	10,389,978	1, 2, 8	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Book series tablets, Galaxy Watch, Active, Fit smartwatches, Samsung Pay				
4	10,244,284	1-20	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**76**	10,854,237	1-7, 14, 19, 27, 32	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
5	7,104,444	1, 3	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets, Galaxy Watch, Active, Fit smartwatches, Samsung Pay	**77**	8,130,284	1-8	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
6	7,403,226	1-2, 7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**78**	8,170,394	1-5, 7-8	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
7	7,447,241	1, 3-4, 5, 17, 21	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**79**	8,214,459	1-2	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
8	7,047,052	2	Galaxy A, S, Z, Note series phones; Galaxy Tab A,	**80**	8,311,389	3-4, 7-8	Galaxy A, S, Z, Note series phones; Galaxy Tab

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Tab X, Book series tablets				A, Tab X, Book series tablets
9	10,264,456	1-3, 5-20	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets, Galaxy Watch, Active, Fit smartwatches	**81**	7,362,952	1, 10, 14	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
10	7,577,417	1, 2	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**82**	8,477,850	1, 16, 17, 18, 20	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
11	7,054,649	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets, Galaxy Watch, Active, Fit smartwatches	**83**	8,504,544	1-2	smartphones Galaxy Tab A, Tab X, Book series tablets
12	7,187,374	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**84**	8,549,109	1-5	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
13	6,816,444	4, 10	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**85**	8,644,684	1-2	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
							Book series tablets
14	8,156,077	1, 10, 15, 20	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**86**	8,654,093	1-7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
15	8,112,503	1, 9	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**87**	10,911,719	1-14	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
16	10,176,848	8-11, 13-20	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**88**	8,892,688	1-8	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
17	6,913,194	1-4	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets Galaxy Watch, Active, Fit smartwatches, Samsung Pay	**89**	8,982,086	1-4	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
18	9,099,154	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**90**	9,083,942	1, 4, 7, 10, 13, 16, 19, 22	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
19	6,928,292	1-2	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**91**	10,210,904	1, 7, 12, 18	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
20	6,928,306	2, 5-6, 12-15	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**92**	9,124,758	1-4, 6-17	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
21	6,940,494	1-11	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**93**	9,197,917	9-16, 25-48	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
22	6,954,583	1, 3	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**94**	9,313,295	1, 5-10, 13-14, 17-18	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
23	10,685,681	1, 8, 14, 21	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**95**	8,255,679	1, 7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
24	6,983,140	1-5	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**96**	9,418,704	1-10	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
							Book series tablets
25	10,423,769	1-15	Galaxy A, S, Z, Note series phones; Galaxy Watch, Active, Fit smartwatches	**97**	9,420,212	1-6	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
26	10,298,737	1, 3	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**98**	9,432,618	1-8	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
27	7,113,909	1, 2, 6-7, 12-13	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets, Galaxy Watch, Active, Fit smartwatches, SmartThings	**99**	6,987,978	1, 5	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets, Galaxy Watch, Active, Fit smartwatches
28	7,116,438	1-7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**100**	9,489,985	1-12	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
29	7,190,833	1-20	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**101**	7,158,770	1, 7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
							Galaxy Watch, Active, Fit smartwatches
30	7,199,821	1, 4, 7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**102**	9,661,101	1-12	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
31	8,289,450	2	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**103**	9,743,129	1-8	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
32	7,203,517	9-10	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**104**	9,773,522	13-14, 16-17, 19-20, 22-23	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
33	7,245,293	1-3	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**105**	9,818,449	1-16	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
34	7,248,743	1, 7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**106**	9,159,368	1-5	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
35	10,679,674	1, 9, 17, 23	Galaxy A, S, Z, Note series	**107**	16/883,124 (allowed)	1, 9, 16, 21	Galaxy A, S, Z, Note series

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			phones; Galaxy Tab A, Tab X, Book series tablets				phones; Galaxy Tab A, Tab X, Book series tablets
36	7,312,791	1-7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**108**	8,005,960	1, 3	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
37	7,324,487	1-5	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**109**	6,484,034	1, 8-9	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
38	7,952,645	1, 3, 4	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**110**	7,072,673	1-4, 9, 15	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
39	7,464,170	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**111**	9,723,268	1-4	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
40	7,457,529	1-41	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**112**	10,084,991	1-16	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
41	7,509,139	1, 7-14	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**113**	9,066,058	1, 2, 4, 5	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
42	7,515,810	1, 2, 6	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**114**	9,369,761	1, 2, 5-6, 9	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
43	7,551,209	1-6	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**115**	8,571,392	1-6	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
44	7,613,383	1-4	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**116**	10,057,371	1-12	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
45	7,626,498	1-22	Galaxy Watch, Active, Fit smartwatches	**117**	10,070,099	1, 6	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
46	7,671,901	1-2	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**118**	10,129,590	1-10	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
							Book series tablets
47	7,689,201	1-4, 7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**119**	10,212,586	1-3, 6-11, 13-20	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets, Galaxy Watch, Active, Fit smartwatches
48	7,508,760	2	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**120**	10,418,069	1, 6-12	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
49	8,334,933	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**121**	7,584,431	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
50	7,293,294	17-20	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**122**	10,645,424	1, 7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
51	10,747,832	1	Galaxy A, S, Z, Note series phones; Galaxy Watch, Active, Fit smartwatches	**123**	10,199,072	1, 6, 11, 16	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
52	7,084,757	1, 5	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**124**	7,719,417	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
53	9,032,438	2	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**125**	7,562,231	1-3	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
54	8,180,198	1, 6	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**126**	8,526,791	1, 8, 15	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
55	15/898,351 (allowed)	1, 5	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**127**	9,942,483	1, 8	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
56	8,059,177	1-2	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**128**	9,704,389	1, 5	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets; SmartThings
57	9,774,776	1, 3, 4, 5, 7-10	Galaxy A, S, Z, Note series phones; Galaxy Tab A,	**129**	10,511,757	1-8	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Tab X, Book series tablets				Book series tablets
58	9,721,462	1, 9, 11	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets; SmartThings	**130**	7,084,880	1, 14, 16	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
59	8,111,263	1, 12	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**131**	7,421,188	1-9	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
60	10,783,228	1-6, 12-17	Galaxy A, S, Z, Note series phones; Galaxy Watch, Active, Fit smartwatches	**132**	10,462,278	1-17	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
61	10,812,646	1-8, 13-20	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**133**	7,639,706	1, 2, 4	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
62	10,834,459	1-13	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**134**	10,915,220	1, 7	Galaxy Watch, Active, Fit smartwatches
63	10,757,344	1, 3	Galaxy A, S, Z, Note series phones; Galaxy Tab A,	**135**	8,599,244	1, 8, 14	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X,

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
			Tab X, Book series tablets				Book series tablets
64	9,503,648	1-8	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**136**	8,724,962	1, 2	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
65	7,391,964	1, 9, 11, 19	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**137**	8,139,927	1-4	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
66	10,728,362	1, 7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**138**	8,566,890	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
67	9,154,545	1, 4, 7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**139**	9,154,003	1, 7, 14, 15	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets; wireless charging pads
68	10,050,474	1, 4, 5, 6, 11	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets; wireless charging pads	**140**	8,099,136	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
69	7,283,671	1, 19	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**141**	9,591,261	1, 5, 10	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
70	10,726,159	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**142**	16/080,313 (allowed)	1	Galaxy Watch, Active, Fit smartwatches
71	10,467,515	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**143**	10,635,962	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
72	16/260,879 (allowed)	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets				

In addition, we also call your attention to the following expired U.S. patents in Maxell's Smartphone Patent Portfolio, which may be applicable to Samsung's products in view of the method claims included in these patents and/or Samsung's prior knowledge of these patents in view of Samsung's prior purchase agreement:

No.	U.S. Pat. No.	Claims	Accused Product(s)	No.	U.S. Pat. No.	Claims	Accused Product(s)
1	5,396,443	1-5, 7-8, 11, 12, 14-16, 22-24	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X,	**15**	7,196,986	1, 3, 4	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X,

			Book series tablets				Book series tablets
2	6,243,340	1	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**16**	7,295,767	1-18	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets, SmartThings
3	6,329,794	1-3, 5-14	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**17**	7,995,897	1-12	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
4	6,347,068	1-2	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets, laptops	**18**	6,917,823	1-7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
5	6,408,193	1-7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets,	**19**	8,098,695	1, 4	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets, laptops
6	6,424,795	1-7	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets,	**20**	8,339,493	1, 4-6, 10	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X,

							Book series tablets
7	6,430,498	1-13	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets; Galaxy Watch, Active, Fit smartwatches	**21**	8,417,088	1-4	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
8	6,580,999	1-6	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets; Galaxy Watch, Active, Fit smartwatches	**22**	8,736,729	1,2	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
9	6,754,440	1-8	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**23**	9,100,604	1-5	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
10	6,765,616	13-15, 18	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**24**	9,451,229	1-12	9,451,229
11	6,816,491	1-2, 7-9	Galaxy A, S, Z, Note series phones; Galaxy Tab	**25**	9,544,517	1-11	Galaxy A, S, Z, Note series phones;

			A, Tab X, Book series tablets, laptops				Galaxy Tab A, Tab X, Book series tablets
12	6,856,760	1, 3-4, 6-7, 9-10, 12-13, 15	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**26**	6,697,563	1, 3, 5, 7, 9, 10	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets
13	6,973,334	1,3-4, 6	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series tablets	**27**	6,898,078	1-11	Galaxy Book
14	7,068,503	1-29	Galaxy A, S, Z, Note series phones; Galaxy Tab A, Tab X, Book series 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 Samsung'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.

As with the TV patents, we encourage you to examine these patents again, considering of course the significant advancements in Samsung smartphones since 2013. We are confident you will agree 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 Samsung 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 Samsung's infringing products operate in substantially the same manner as the products accused of infringement in these case, additional detail regarding Samsung'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 Samsung 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 terms for renewal for your consideration. Maxell looks forward to your reply and the opportunity to discuss these matters with you or your representative.

Sincerely yours,



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