			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