

**UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.**

**Before The Honorable Bryan F. Moore
Administrative Law Judge**

**In the Matter of
CERTAIN SENSORS WITH PIXELS AND
PRODUCTS CONTAINING THE SAME**

Investigation No. 337-TA-1403

**RESPONDENTS SAMSUNG ELECTRONICS CO., LTD.;
SAMSUNG ELECTRONICS AMERICA, INC.; AND
SAMSUNG SEMICONDUCTOR, INC.'S INVALIDITY CONTENTIONS**

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D. Improper Inventorship

Samsung incorporates by reference its responses to Interrogatory No. 43.

VII. THE ASSERTED CLAIMS OF THE '737 PATENT ARE INVALID

A. Priority Date

Complainant has yet to satisfy its burden of proving that any of the Asserted Claims of the '737 Patent are entitled to a priority date prior to the filing date of its earliest parent application, November 19, 2013. Because Complainant has not shown that United States Provisional Patent Application No. 61/841,326 ("326 Provisional App.") provides written description support for the Asserted Claims, Complainant is not entitled to the priority date of June 29, 2013, the filing date of that application. Samsung reserves the right to supplement and amend its invalidity contentions should Complainant subsequently identify alleged support for its claimed priority date.

For example, the '326 Provisional App. does not support at least claims 16 and 32-55 of the '737 Patent because it lacks any disclosure of a device exhibiting a quantum efficiency of at least about 35% for electromagnetic radiation at a wavelength of about 940 nm, as required by these claims.

B. Invalidity Grounds Under 35 U.S.C. §§ 102 and 103

Samsung attaches as Appendix D to its invalidity contentions claim charts showing examples of how the cited references anticipate and/or render obvious the Asserted Claims of the '737 Patent under at least AIA 35 U.S.C. §§ 102 and 103 either expressly or inherently as understood by a person having ordinary skill in the art, or based on Complainant's apparent interpretation of the claims.

Ex.	Patent No. or Title (Primary Inventor/Author or Model Number)	Date of Issue/ Publication/Sale	Filing Date
D-1	U.S. Patent Application Publication No. 2012/0068289 ("Alie")	March 22, 2012	March 22, 2011

Ex.	Patent No. or Title (Primary Inventor/Author or Model Number)	Date of Issue/ Publication/Sale	Filing Date
D-2	U.S. Patent Application Publication No. 2011/0227138 (“Haddad138”)	September 22, 2011	September 17, 2010
D-3	U.S. Patent Application Publication No. 2006/0081900 (“Baggenstoss”)	April 20, 2006	December 5, 2005
D-4	U.S. Patent Application Publication No. 2012/0313204 (“Haddad204”)	December 13, 2012	June 11, 2012
D-5	U.S. Patent Application Publication No. 2010/0006969 (“Park”)	January 14, 2010	June 29, 2009
D-6	U.S. Patent Application Publication No. 2013/0207168 (“Edwards”)	August 15, 2013	February 15, 2013
D-7	U.S. Patent No. 7,928,389 (“Yap”)	April 19, 2011	August 20, 2009
D-8	U.S. Patent Application Publication No. 2009/0166628 (“Han”)	July 2, 2009	December 27, 2008
D-9	U.S. Patent Application Publication No. 2012/0146172 (“Carey”)	June 20, 2011	June 14, 2012
D-10	U.S. Patent Application Publication No. 2013/0134535 (“Lenchenkov”)	May 30, 2013	May 25, 2012
D-11	Samsung S5K3L1YX03 sensor (“S5K3L1YX03”)	May 2011	
D-12	International Publication Number WO 2012/122572 (“Jiang”)	September 13, 2012	March 12, 2012
D-13	U.S. Patent Application Publication No. 2009/0266973 (“Roy”)	October 29, 2009	April 24, 2009

Samsung identifies Samsung S5K3L1YX03 Imager Process Review, ©TechInsights Group (SECDS-ITC1403-00021984) (“S5K3L1YX03 Report”) as a document evidencing the structure of the S5K3L1YX03. Samsung identifies SECDS-ITC1403-00022163 as comprising sales records for S5K3L1YX03 for the period 2011 to 2013.

The attached claim charts identify specific examples of disclosures that teach or suggest a given claim limitation. These identifications should be understood to be exemplary; the charts do not necessarily indicate every location within a particular prior art reference where a claim limitation may be disclosed or suggested. Samsung and its expert witnesses may rely on other portions of the prior art.

The chart below identifies references that invalidate the Asserted Claims and specifies which claims each reference anticipates (denoted by an asterisk) or renders obvious, either alone or as part of a specified combination. The discussion below sets forth rationale and motivation for combining the respective references with respect to the claimed features they disclose.

	<u>Asserted Claims of the '737 Patent</u>																			
<u>Prior Art</u>	2	3	4	5	6	7	12	13	16	18	19	20	21	22	24	26	28	29	30	
Alie (D-1)	X*	X*	X*	X*	X*	X*	X	X*	X*	X*	X*	X*	X*	X*	X*	X*	X*	X*	X*	
Alie (D-1) & Edwards (D-6)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Alie (D-1) & Lenchenkov (D-10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Alie (D-1) & Baggenstoss (D-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Alie (D-1) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Alie (D-1) & Park (D-5)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Alie (D-1) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Haddad138 (D-2)	X*	X*	X*	X*	X*	X*	X	X*	X*	X*	X*	X	X	X*	X	X	X	X	X	
Haddad138 (D-2) & Edwards (D-6)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Haddad138 (D-2) & Lenchenkov (D-10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Haddad138 (D-2) & Baggenstoss (D-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Haddad138 (D-2) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Haddad138 (D-2) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Haddad138 (D-2) & Park (D-5)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Haddad138 (D-2) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Baggenstoss (D-3)	X	X	X			X	X	X		X	X	X	X	X	X	X	X	X	X	
Baggenstoss (D-3) & Edwards (D-6)	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	

	<u>Asserted Claims of the '737 Patent</u>																		
<u>Prior Art</u>	2	3	4	5	6	7	12	13	16	18	19	20	21	22	24	26	28	29	30
Baggenstoss (D-3) & Lenchenkov (D-10)	X	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X
Baggenstoss (D-3) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Baggenstoss (D-3) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Baggenstoss (D-3) & Park (D-5)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Baggenstoss (D-3) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad204 (D-4) & Edwards (D-6)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad204 (D-4) & Lenchenkov (D-10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad204 (D-4) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad204 (D-4) & Baggenstoss (D-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad204 (D-4) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Park (D-5)	X*	X*	X		X	X*	X*	X*	X	X	X	X	X	X	X	X	X	X	X
Park (D-5) & Edwards (D-6)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Park (D-5) & Lenchenkov (D-10)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Park (D-5) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Park (D-5) & Baggenstoss (D-3)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Park (D-5) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Edwards (D-6)	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X
Edwards (D-6) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Edwards (D-6) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yap (D-7)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X*	X*	X*	X

	<u>Asserted Claims of the '737 Patent</u>																		
<u>Prior Art</u>	2	3	4	5	6	7	12	13	16	18	19	20	21	22	24	26	28	29	30
Yap (D-7) & Edwards (D-6)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yap (D-7) & Lenchenkov (D-10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yap (D-7) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yap (D-7) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Han (D-8)	X	X	X			X	X	X	X			X	X	X	X	X	X	X	X
Han (D-8) & Edwards (D-6)	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X
Han (D-8) & Lenchenkov (D-10)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Han (D-8) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Han (D-8) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Edwards (D-6)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Lenchenkov (D-10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Baggenstoss (D-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Park (D-5)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lenchenkov (D-10)	X	X	X		X	X	X							X	X	X	X	X	X
Lenchenkov (D-10) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lenchenkov (D-10) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S5K3L1YX03 (D-11)	X	X	X		X	X	X	X	X	X	X			X		X	X	X	X

	<u>Asserted Claims of the '737 Patent</u>																		
<u>Prior Art</u>	2	3	4	5	6	7	12	13	16	18	19	20	21	22	24	26	28	29	30
S5K3L1YX03 (D-11) & Edwards (D-6)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S5K3L1YX03 (D-11) Lenchenkov (D-10)	X	X	X		X	X	X	X	X	X	X			X	X	X	X	X	X
S5K3L1YX03 (D-11) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S5K3L1YX03 (D-11) & Baggenstoss (D-3)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S5K3L1YX03 (D-11) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S5K3L1YX03 (D-11) & Park (D-5)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S5K3L1YX03 (D-11) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jiang (D-12)	X*	X*	X*	X*	X*	X*	X	X*	X*	X*	X*	X	X	X*	X	X	X	X	X
Jiang (D-12) & Edwards (D-6)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jiang (D-12) & Lenchenkov (D-10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jiang (D-12) & Baggenstoss (D-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jiang (D-12) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jiang (D-12) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jiang (D-12) & Park (D-5)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Roy (D-13)	X	X	X		X	X	X		X	X	X	X		X	X	X	X	X	X
Roy (D-13) & Edwards (D-6)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Roy (D-13) & Lenchenkov (D-10)	X	X	X		X	X	X	X	X	X	X	X		X	X	X	X	X	X
Roy (D-13) & Baggenstoss (D-3)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Roy (D-13) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

	<u>Asserted Claims of the '737 Patent</u>																		
<u>Prior Art</u>	2	3	4	5	6	7	12	13	16	18	19	20	21	22	24	26	28	29	30
Roy (D-13) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Roy (D-13) & Park (D-5)	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Roy (D-13) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

	<u>Asserted Claims of the '737 Patent</u>													
<u>Prior Art</u>	33	35	36	38	39	43	44	45	48	49	50	51	52	54
Alie (D-1)	X*	X*	X*	X*	X*	X	X*	X*	X*	X*	X*	X*	X*	X*
Alie (D-1) & Edwards (D-6)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Alie (D-1) & Lenchenkov (D-10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Alie (D-1) & Baggenstoss (D-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Alie (D-1) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Alie (D-1) & Park (D-5)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Alie (D-1) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad138 (D-2)	X*	X*	X*	X*	X*	X	X*	X*	X*	X*	X	X	X*	X
Haddad138 (D-2) & Edwards (D-6)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad138 (D-2) & Lenchenkov (D-10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad138 (D-2) & Baggenstoss (D-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad138 (D-2) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad138 (D-2) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad138 (D-2) & Park (D-5)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad138 (D-2) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X

	<u>Asserted Claims of the '737 Patent</u>													
<u>Prior Art</u>	33	35	36	38	39	43	44	45	48	49	50	51	52	54
Baggenstoss (D-3)	X	X		X	X	X	X	X	X	X	X	X	X	X
Baggenstoss (D-3) & Edwards (D-6)	X	X		X	X	X	X	X	X	X	X	X	X	X
Baggenstoss (D-3) & Lenchenkov (D-10)	X	X		X	X	X	X	X	X	X	X	X	X	X
Baggenstoss (D-3) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Baggenstoss (D-3) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Baggenstoss (D-3) & Park (D-5)	X	X		X	X	X	X	X	X	X	X	X	X	X
Baggenstoss (D-3) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad204 (D-4) & Edwards (D-6)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad204 (D-4) & Lenchenkov (D-10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad204 (D-4) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad204 (D-4) & Baggenstoss (D-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Haddad204 (D-4) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Park (D-5)	X	X		X	X	X	X	X	X	X	X	X	X	X
Park (D-5) & Edwards (D-6)	X	X		X	X	X	X	X	X	X	X	X	X	X
Park (D-5) & Lenchenkov (D-10)	X	X		X	X	X	X	X	X	X	X	X	X	X
Park (D-5) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Park (D-5) & Baggenstoss (D-3)	X	X		X	X	X	X	X	X	X	X	X	X	X
Park (D-5) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Edwards (D-6)	X	X		X	X	X	X	X	X	X	X	X	X	X
Edwards (D-6) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X

	<u>Asserted Claims of the '737 Patent</u>													
<u>Prior Art</u>	33	35	36	38	39	43	44	45	48	49	50	51	52	54
Edwards (D-6) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yap (D-7)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yap (D-7) & Edwards (D-6)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yap (D-7) & Lenchenkov (D-10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yap (D-7) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Yap (D-7) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Han (D-8)	X	X		X	X	X	X	X			X	X	X	X
Han (D-8) & Edwards (D-6)	X	X		X	X	X	X	X	X	X	X	X	X	X
Han (D-8) & Lenchenkov (D-10)	X	X		X	X	X	X	X	X	X	X	X	X	X
Han (D-8) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Han (D-8) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Edwards (D-6)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Lenchenkov (D-10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Baggenstoss (D-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Park (D-5)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Carey (D-9) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lenchenkov (D-10)	X	X		X	X	X		X					X	X
Lenchenkov (D-10) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X

	<u>Asserted Claims of the '737 Patent</u>													
<u>Prior Art</u>	33	35	36	38	39	43	44	45	48	49	50	51	52	54
Lenchenkov (D-10) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S5K3L1YX03 (D-11)	X	X		X	X	X	X	X	X	X			X	
S5K3L1YX03 (D-11) & Edwards (D-6)	X	X		X	X	X	X	X	X	X	X	X	X	X
S5K3L1YX03 (D-11) Lenchenkov (D-10)	X	X		X	X	X	X	X	X	X			X	X
S5K3L1YX03 (D-11) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S5K3L1YX03 (D-11) & Baggenstoss (D-3)	X	X		X	X	X	X	X	X	X	X	X	X	X
S5K3L1YX03 (D-11) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S5K3L1YX03 (D-11) & Park (D-5)	X	X		X	X	X	X	X	X	X	X	X	X	X
S5K3L1YX03 (D-11) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jiang (D-12)	X*	X*	X*	X*	X*	X	X*	X*	X*	X*	X	X	X*	X
Jiang (D-12) & Edwards (D-6)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jiang (D-12) & Lenchenkov (D-10)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jiang (D-12) & Baggenstoss (D-3)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jiang (D-12) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jiang (D-12) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jiang (D-12) & Park (D-5)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Roy (D-13)	X	X		X	X	X		X	X	X	X		X	X
Roy (D-13) & Edwards (D-6)	X	X		X	X	X	X	X	X	X	X	X	X	X
Roy (D-13) & Lenchenkov (D-10)	X	X		X	X	X	X	X	X	X	X		X	X

	<u>Asserted Claims of the '737 Patent</u>													
<u>Prior Art</u>	33	35	36	38	39	43	44	45	48	49	50	51	52	54
Roy (D-13) & Baggenstoss (D-3)	X	X		X	X	X	X	X	X	X	X	X	X	X
Roy (D-13) & Alie (D-1)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Roy (D-13) & Haddad204 (D-4)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Roy (D-13) & Park (D-5)	X	X		X	X	X	X	X	X	X	X	X	X	X
Roy (D-13) & Jiang (D-12)	X	X	X	X	X	X	X	X	X	X	X	X	X	X

For each specified combination, Samsung relies on the references herein, as well as the knowledge of a person of ordinary skill in the art, including that which will be discussed through expert discovery. Although Samsung provides exemplary disclosures and motivations to combine below, Samsung will present expert opinion in accordance with the procedural schedule. Samsung reserves the right to supplement or modify the anticipation and obviousness grounds in response to, for example, Complainant's positions regarding the scope and meaning of the asserted claims taken in this Investigation, before the PTAB, or during prosecution of pending matters related to the Asserted Patents, claim construction determinations made in this Investigation or other proceedings involving the Asserted Patents, updates or changes to Complainant's infringement and/or technical domestic industry positions, and materials later obtained during discovery, including from Complainant or in response to any third party subpoenas.

In support of its invalidity contentions, Samsung incorporates by reference its petitions for inter partes review of the '737 Patent (IPR2024-01430 & 01431), filed with the PTAB on September 24, 2024. In particular, Samsung incorporates the arguments in its petitions, the expert