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(56) **References Cited**

U.S. PATENT DOCUMENTS

6,158,884	A	12/2000	Lebby et al.	
6,454,608	B1	9/2002	Kitahara et al.	
6,459,890	B1	10/2002	Kim	
6,619,835	B2	9/2003	Kita	
6,634,786	B2	10/2003	Dinger et al.	
6,854,978	B2	2/2005	Noirjean et al.	
7,345,954	B2	3/2008	Ehrsam et al.	
7,513,038	B2	4/2009	Koh	
7,972,160	B2	7/2011	Jeong et al.	
8,414,337	B2	4/2013	Villareal et al.	
8,467,270	B2	6/2013	Gossweiler et al.	
8,908,479	B2 *	12/2014	Teng	G04G 19/02 368/204
8,976,628	B2	3/2015	Leoni et al.	
9,445,633	B2	9/2016	Tulloch et al.	
9,501,044	B2 *	11/2016	Jackson	G04G 9/007
2004/0081025	A1 *	4/2004	Chen	G04B 37/1486 368/10
2007/0064542	A1	3/2007	Fukushima et al.	
2009/0011652	A1	1/2009	Koh	
2009/0081898	A1	3/2009	Jeong et al.	
2012/0295487	A1	11/2012	Villarreal et al.	
2016/0088880	A1	3/2016	Heresztyn et al.	
2017/0085020	A1	3/2017	Tulloch et al.	

FOREIGN PATENT DOCUMENTS

EP	2230580	A1	9/2010
WO	2016053961	A1	4/2016

OTHER PUBLICATIONS

U.S. Appl. No. 14/703,575, "Notice of Allowance", dated May 20, 2016, 18 pages (of-record in parent application).

U.S. Appl. No. 14/703,575, "Supplemental Notice of Allowability", dated Jul. 20, 2016, 3 pages (of-record in parent application).

U.S. Appl. No. 15/269,876, "Non-Final Office Action", dated Jan. 11, 2017, 10 pages (of-record in parent application).

U.S. Appl. No. 15/269,876, "Notice of Allowance", dated Mar. 3, 2017, 8 pages (of-record in parent application).

U.S. Appl. No. 15/269,876, "Supplemental Notice of Allowance", dated Mar. 23, 2017, 4 pages (of-record in parent application).

201620504887.2, "Decision to Grant", dated Dec. 23, 2016, 2 pages (of-record in parent application).

CN201620504887.2, "Office Action", dated Sep. 30, 2016, 1 pages (of-record in parent application).

PCT/US2015/052823, "International Preliminary Report on Patentability", dated Apr. 13, 2017, 16 pages (of-record in parent application).

PCT/US2015/052823, "International Search Report and Written Opinion", dated Feb. 26, 2016, 19 pages (of-record in parent application).

PCT/US2015/052823, "Invitation to Pay Additional Fees, and Where Applicable, Protest Fee", Dec. 16, 2015, 7 pages (of-record in parent application).

* cited by examiner