(56) **References Cited**

U.S. PATENT DOCUMENTS

2010/0182223	A1*	7/2010	Choi	G09G 3/3233 345/76
2011/0199351	A1*	8/2011	Kurokawa	G09G 3/3648 345/207
2011/0304311	A1*	12/2011	Takahashi	H01L 27/1225 323/311
2012/0228596	A1*	9/2012	Fujita	H01L 27/3276 257/40
2013/0001564	A1*	1/2013	Choi	H01L 27/3276 257/59
2013/0021549	A1*	1/2013	Fujita	G02F 1/133617 349/41
2014/0049522	A1	2/2014	Mathew et al.	
2014/0138651	A1	5/2014	Oh	
2014/0152685	A1*	6/2014	Iwaki	G09G 3/2007 345/589
2014/0183491	A1	7/2014	Shin et al.	
2014/0217397	A1	8/2014	Kwak et al.	
2014/0231761	A1	8/2014	Kim et al.	
2014/0299884	A1	10/2014	Park et al.	
2015/0001483	A1*	1/2015	Namkung	H01L 27/3244 257/40
2015/0055051	A1*	2/2015	Osawa	H01L 27/1225 349/48

FOREIGN PATENT DOCUMENTS

EP	1640765	9/2005
JP	2010224403	10/2010

* cited by examiner