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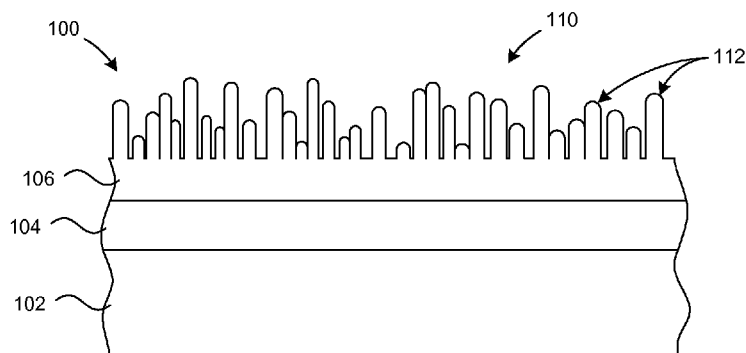


FIG. 1

(57) Abstract: Textured optoelectronic devices and associated methods of manufacture are disclosed herein. In several embodiments, a method of manufacturing a solid state optoelectronic device can include forming a conductive transparent texturing material on a substrate. The method can further include forming a transparent conductive material on the texturing material. Upon heating the device, the texturing material causes the conductive material to grow a plurality of protuberances. The protuberances can improve current spreading and light extraction from the device.

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A. CLASSIFICATION OF SUBJECT MATTER**H01L 27/14(2006.01)i, H01L 21/20(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

H01L 27/14; H01L 31/04; H01L 33/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: solid, state, optoelectronic, transducer, transparent, texture, protuberance, titanium, indium

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2010-034230 A (SUMITOMO METAL MINING CO LTD) 12 February 2010 See paragraphs [0013]-[0028] claim 1 fig. 1	1-27
A	JP 2008-177625 A (MURATA MASAYOSHI) 31 July 2008 See paragraphs [0032], [0072] fig. 1	1-27
A	US 2010-0051981 A1 (OSAWA HIROSHI et al.) 04 March 2010 See paragraphs [0120]-[0129], [0141]-[0142] claim 1 fig. 2	1-27

 Further documents are listed in the continuation of Box C. See patent family annex.

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INTERNATIONAL SEARCH REPORT

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2010-034230 A	12.02.2010	None	
JP 2008-177625 A	31.07.2008	WO 2009-136530 A1	12.11.2009
US 2010-0051981 A1	04.03.2010	US 7982232 B2	19.07.2011