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(54) Title: APPARATUS, METHOD AND COMPUTER-READABLE MEDIUM FOR TESTING A PANEL OF INTERFEROMETRIC MODULATORS

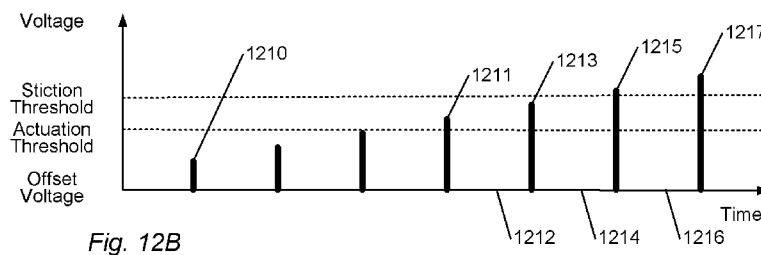


Fig. 12B

(57) Abstract: In some embodiments, each interferometric modulator has a stiction threshold voltage. If a voltage above the stiction threshold voltage is applied to the interferometric modulator, the interferometric modulator enters a stiction state permanently, i.e., becomes "stuck," and the interferometric modulator becomes inoperable. Disclosed are apparatuses, methods and computer-readable media for testing a panel of interferometric modulators. A ramped voltage waveform is applied to a plurality of interferometric modulators of the panel. In response to applying the ramped voltage, the stiction threshold voltage is identified. At or above this voltage, the number of stuck interferometric modulators in the panel reaches or exceeds a first threshold number, for example, 50% of the total number of the interferometric modulators constituting the panel. The embodiments can be used to establish stiction benchmark for panel manufacturing processes, to collect data for generating statistical distribution, etc.

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INTERNATIONAL SEARCH REPORT

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

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2007/075942 A1 (MARTIN ERIC [US] ET AL) 5 April 2007 (2007-04-05)	1,6-12, 17-23, 26-32
Y	figures 1-3,5 paragraphs [0012] - [0016], [0025] - [0027]	2-5, 13-16, 24,25
Y	US 2006/077401 A1 (KOTHARI MANISH [US] ET AL) 13 April 2006 (2006-04-13)  figures 8-10	2-5, 13-16, 24,25

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Information on patent family members

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