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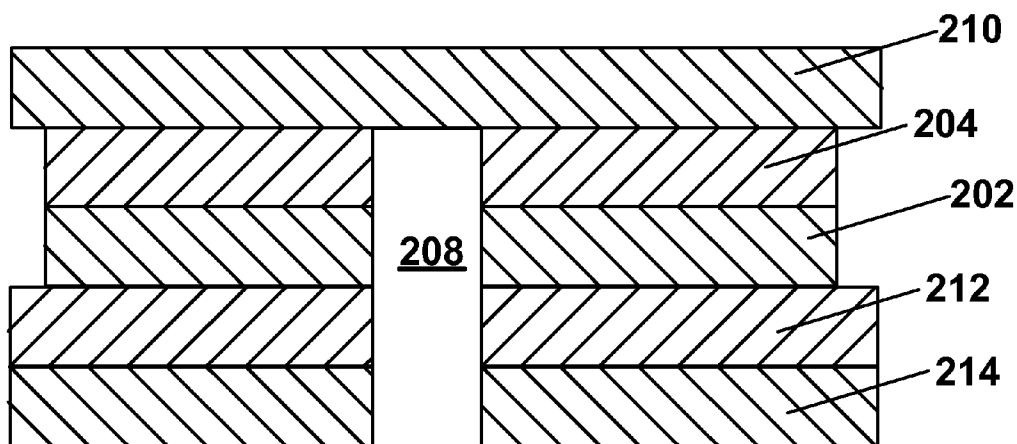
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- Declaration under Rule 4.17:**
— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
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(54) Title: METHODS FOR PRODUCTION OF ELECTRO-OPTIC DISPLAYS



(57) Abstract: A front plane laminate (see International Application Publication No. WO 2003/104884) is produced by forming a sub-assembly comprising a lamination adhesive layer and an electro-optic layer, forming an aperture through the sub-assembly, and securing a light-transmissive electrode layer to the sub-assembly so that the electrode layer extends across the aperture. Alternatively, formation of the aperture is omitted, and the electrode layer has a tab portion extending beyond the edges of the lamination adhesive and electro-optic layers. When a front plane laminate is secured to a backplane to form an electro-optic display, a stiffening layer may be attached to either part to increase its stiffness, then removed after the lamination. An electro-optic display or front plane laminate may use an adhesive layer comprising separate layers of cross-linked and non-cross-linked adhesive.

WO 2007/104003 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US07/63551

<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - G02B 26/00 (2008.01) USPC - 216/24 According to International Patent Classification (IPC) or to both national classification and IPC</p>																				
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) IPC(8) - G02B 26/00 (2008.01) USPC - 216/24,25; 345/55-111; 349/187; 359/296; 438/29,30</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) USPTO EAST System (US, USPG-PUB, EPO, JPO, FPRS, DERWENT), GoogleScholar</p>																				
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>US 2004/0027327 A1 (LeCAIN et al) 12 February 2004 (12.02.2004) entire document</td> <td>1-8,10-14</td> </tr> <tr> <td>Y</td> <td>US 6,480,182 B2 (TURNER et al) 12 November 2002 (12.11.2002) column 3, lines 15-24</td> <td>1-8,10-14</td> </tr> <tr> <td>Y</td> <td>US 2004/01558527 A1 (DUTHALER et al) 12 August 2004 (12.08.2004) paragraph [0124]</td> <td>7,13</td> </tr> <tr> <td>Y</td> <td>US 6,636,186 B1 (YAMAGUCHI et al) 21 October 2003 (21.10.2003) column 4, lines 39-60</td> <td>14</td> </tr> <tr> <td>A</td> <td>US 6,825,829 B1 (ALBERT et al) 30 November 2004 (30.11.2004) column 3, lines 54-65</td> <td>1-14</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	Y	US 2004/0027327 A1 (LeCAIN et al) 12 February 2004 (12.02.2004) entire document	1-8,10-14	Y	US 6,480,182 B2 (TURNER et al) 12 November 2002 (12.11.2002) column 3, lines 15-24	1-8,10-14	Y	US 2004/01558527 A1 (DUTHALER et al) 12 August 2004 (12.08.2004) paragraph [0124]	7,13	Y	US 6,636,186 B1 (YAMAGUCHI et al) 21 October 2003 (21.10.2003) column 4, lines 39-60	14	A	US 6,825,829 B1 (ALBERT et al) 30 November 2004 (30.11.2004) column 3, lines 54-65	1-14
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<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/></p>																				
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<p>Date of the actual completion of the international search 14 February 2008</p>		<p>Date of mailing of the international search report 27 MAR 2008</p>																		
<p>Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201</p>		<p>Authorized officer: <i>B. Copenheaver</i> Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774</p>																		

INTERNATIONAL SEARCH REPORT

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PCT/US07/63551

Continuation of Box III.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claims 1-14, drawn to a process comprising forming a subassembly having an aperture and securing an electrode to the subassembly so that the electrode extends across the aperture.

Group II, claims 15-20, drawn to a process comprising forming a subassembly and securing an electrode having a tab portion which extends beyond the periphery of the layers of the subassembly.

Group III, claims 21-22, drawn to a process and apparatus comprising forming a backplane including an electrode, a front plane laminate, laminating together the front and backplanes, the process characterized in that a stiffening layer is secured to at least one of the front and backplane laminates.

Group IV, claims 23-26, drawn to an electro-optic display having at least one electrode, a first layer of non-cross-linked adhesive in contact with the backplane; a second layer of cross-linked adhesive on the opposed side of the first layer from the backplane; and a layer of electro-optic medium on the opposed side of the second layer from the first layer.

The inventions listed as Groups I, II, III and IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention: securing an electrode across the aperture of the subassembly as claimed therein is not present in the invention of Groups II-IV. The special technical feature of the Group II invention: an electrode having a tab portion which extends beyond the periphery of the layers of the subassembly as claimed therein is not present in the invention of Groups I or III-IV. The special technical feature of the Group III invention: a stiffening layer secured to at least one of the front and backplane laminates as claimed therein is not present in the invention of Groups I, II or IV. The special technical feature of the Group IV invention: layers of non-cross linked adhesives as claimed therein is not present in the invention of Groups I, II or III.

The limitations of "a front plane laminate used in an electro-optic display and having a subassembly comprising a layer of lamination adhesive and a layer of electro-optic medium and securing an electrode to the subassembly" are not considered a novel linking special technical feature as this limitation is clearly disclosed by US 6,825,829 B1 (ALBERT et al) 30 November 2004 column 3, lines 54-65.

Since none of the special technical features of the Group I, II, III or IV inventions are found in more than one of the inventions, unity of invention is lacking.