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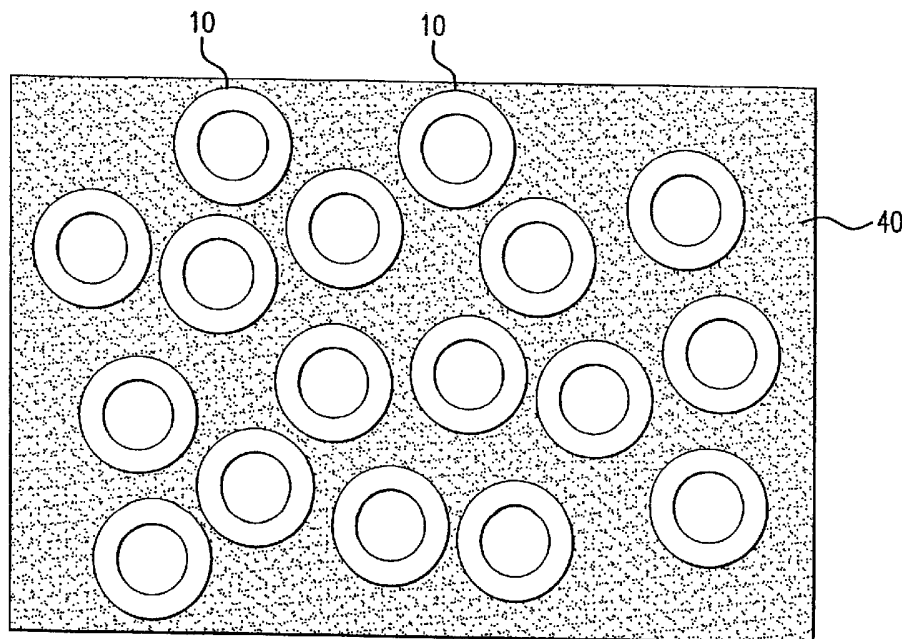
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Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE,

[Continued on next page]

(54) Title: IMPROVED INTEGRATED CIRCUIT SUBSTRATE MATERIAL AND METHOD



(57) Abstract: A semiconductor substrate is presented which is manufactured from hollow, gas-filled glass or ceramic microspheres, which are bound together in a dried or fired matrix. The microspheres may be glass-coated microspheres, which are bound together by sintering the outer layers of glass together. The semiconductor surface may be smoothed by glazing the surface.

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<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : H01L 29/00; H01L 21/00 US CL : 148/033; 438/800 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) U.S. : 148/033; 438/800</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) WEST, EAST</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>3M Scotchlite Glass Bubbles S and K series [retrieved on 2003-07-22] Retrived from the Internet <URL: www.3m.com/microspheres/s_k_1.html>.</td> <td>1-23</td> </tr> <tr> <td>Y</td> <td>3M Microspheres Electronics [retrieved on 2003-07-22] Retrived from the Internet <URL: www.3m.com/microspheres/prods/electro.html>.</td> <td>1-23</td> </tr> <tr> <td>Y</td> <td>3M Z-Light Spheres Ceramic Microspheres [retrieved on 2003-07-22] Retrived from the Internet <URL: www.3m.com/microspheres/z_gray.html>.</td> <td>1-23</td> </tr> <tr> <td>Y</td> <td>US 2001/0029974 A1 (COHEN et al) 18 October 2001 (18.10.201) paragraph 0006 and 0051-00068.</td> <td>2-23</td> </tr> <tr> <td>Y</td> <td>US 6,110,647 A (CARTER et al) 29 August 2000 (29.08.2000)</td> <td>7-23</td> </tr> <tr> <td>Y</td> <td>US 2002/0090514 A1 (LEROUX et al) 11 June 2002 (11.06.2002) abstract.</td> <td>10-12, 23</td> </tr> <tr> <td>Y</td> <td>US Re. 34,887 A (USHIFA et al) 28 March 1995 (28.03.1995) column 4</td> <td>13-15</td> </tr> </tbody> </table>			Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	Y	3M Scotchlite Glass Bubbles S and K series [retrieved on 2003-07-22] Retrived from the Internet <URL: www.3m.com/microspheres/s_k_1.html>.	1-23	Y	3M Microspheres Electronics [retrieved on 2003-07-22] Retrived from the Internet <URL: www.3m.com/microspheres/prods/electro.html>.	1-23	Y	3M Z-Light Spheres Ceramic Microspheres [retrieved on 2003-07-22] Retrived from the Internet <URL: www.3m.com/microspheres/z_gray.html>.	1-23	Y	US 2001/0029974 A1 (COHEN et al) 18 October 2001 (18.10.201) paragraph 0006 and 0051-00068.	2-23	Y	US 6,110,647 A (CARTER et al) 29 August 2000 (29.08.2000)	7-23	Y	US 2002/0090514 A1 (LEROUX et al) 11 June 2002 (11.06.2002) abstract.	10-12, 23	Y	US Re. 34,887 A (USHIFA et al) 28 March 1995 (28.03.1995) column 4	13-15
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<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. (703) 305-3230</p>		<p>Authorized officer <i>Craig A. Thompson</i> Telephone No. (571) 272-1650</p>																								