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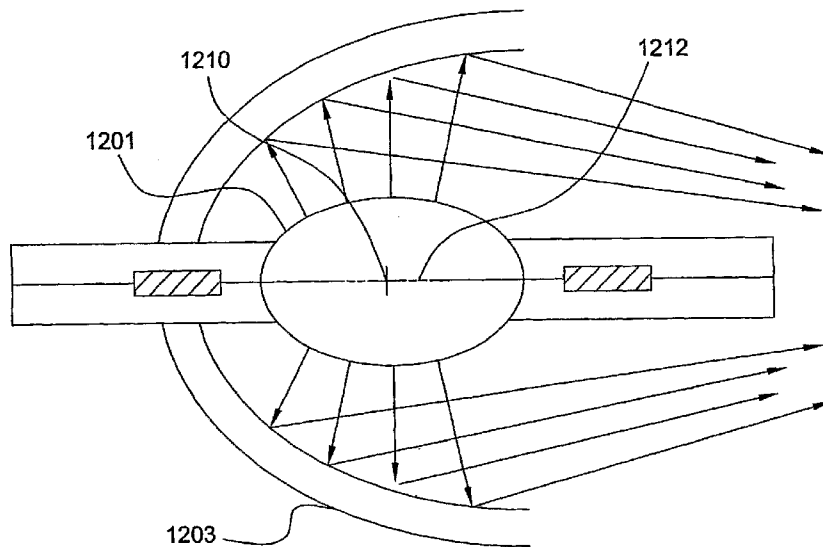
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(54) Title: PROJECTION LIGHT SOURCE AND METHODS OF MANUFACTURE



(57) Abstract: A projection light source may include a housing and an arc tube supported by the housing. The arc tube may include an arc tube body having a bulbous chamber intermediate sealed end portions, a pair of electrodes, a fill gas contained within the chamber, a fill material contained within the chamber, and a generally ellipsoidal reflector supported by the housing. The arc tube and the reflector may be positioned so that a focus of the generally ellipsoidal reflector lies on an axis extending between the interior tips of the electrodes of the arc tube.



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<p><b>A. CLASSIFICATION OF SUBJECT MATTER</b>                  IPC(8) - G03B 21/26 (2007.01)                  USPC - 353/94                  According to International Patent Classification (IPC) or to both national classification and IPC</p>																							
<p><b>B. FIELDS SEARCHED</b></p> <p>Minimum documentation searched (classification system followed by classification symbols)                  USPC - 353/94</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched                  USPC: 362/264,294,346,518 (text searched - see terms below)</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)                  PubWEST(USPT,PGPB,EPAB,JPAB); Google Patents                  Search Terms Used: arc, halide, reflector, watts, lumens, etendue, color wheel, fill, electrode</p>																							
<p><b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:10%;">Category*</th> <th style="width:70%;">Citation of document, with indication, where appropriate, of the relevant passages</th> <th style="width:20%;">Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X ----- Y</td> <td>US 5,942,850 A (Rutan et al.) 24 August 1999 (24.08.1999), entire document</td> <td>14-15,17-28, 39-44, 45-46, and 48-52 ----- 1-13, 16, 38</td> </tr> <tr> <td>X</td> <td>US 2003/0227578 A1 (Imahase et al.) 11 December 2003 (11.12.2003), entire document, especially paragraphs [0004] and [0021]</td> <td>29-31</td> </tr> <tr> <td>X ----- Y</td> <td>US 2002/0186350 A1 (Peterson) 12 December 2002 (12.12.2002), entire document, especially paragraph [0007]</td> <td>32-37 ----- 38</td> </tr> <tr> <td>X</td> <td>US 5,291,100 A (Wood) 1 March 1994 (01.03.1994), entire document, especially Column 3, Lines 1-30</td> <td>47</td> </tr> <tr> <td>Y</td> <td>US 5,059,146 A (Thomas et al.) 22 October 1991 (22.10.1991), entire document, especially Column 8, Lines 40-55</td> <td>1-13</td> </tr> <tr> <td>Y</td> <td>US 5,629,585 A (Altmann et al.) 13 May 1997 (13.05.1997), entire document, especially Figure 1</td> <td>16</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X ----- Y	US 5,942,850 A (Rutan et al.) 24 August 1999 (24.08.1999), entire document	14-15,17-28, 39-44, 45-46, and 48-52 ----- 1-13, 16, 38	X	US 2003/0227578 A1 (Imahase et al.) 11 December 2003 (11.12.2003), entire document, especially paragraphs [0004] and [0021]	29-31	X ----- Y	US 2002/0186350 A1 (Peterson) 12 December 2002 (12.12.2002), entire document, especially paragraph [0007]	32-37 ----- 38	X	US 5,291,100 A (Wood) 1 March 1994 (01.03.1994), entire document, especially Column 3, Lines 1-30	47	Y	US 5,059,146 A (Thomas et al.) 22 October 1991 (22.10.1991), entire document, especially Column 8, Lines 40-55	1-13	Y	US 5,629,585 A (Altmann et al.) 13 May 1997 (13.05.1997), entire document, especially Figure 1	16
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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. 571-273-3201</p>		<p>Authorized officer:                  Lee W. Young                  PCT Helpdesk: 571-272-4300                  PCT OSP: 571-272-7774</p>																					