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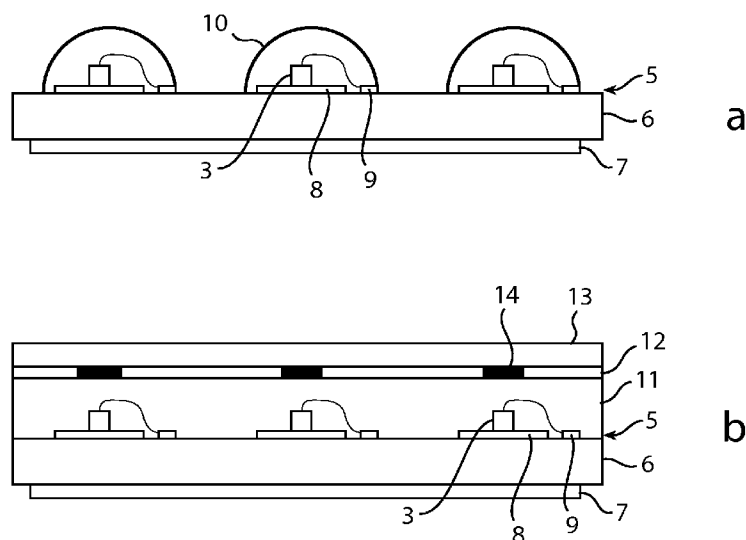
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[Continued on next page]

(54) Title: FLEXIBLE LED ARRAY



(57) Abstract: A light emitting device, comprising a flexible substrate (2) with a single, structured conductive layer (5), and a plurality of LEDs (3) arranged on said substrate (2), said structured conductive layer (5) forming electrodes for driving said LEDs (3). The structured conductive layer comprises a plurality of heat dissipating pads (8), each having an area significantly larger than the area of each LED (3), and each LED (3 a) is thermally connected to at least one of said pads (8a), and electrically connected in series between two pads (8a, 8b). Through this design, each LED is thermally connected to a relatively large heat dissipating area, and the thermal energy built up in the LED will be distributed over this area, and then dissipated upwards and downwards from this area. As the addressing can be handled by a single conducting layer, the flexibility of the substrate is improved compared to multilayer substrates. By connecting each LED in series between two pads, a very large portion of the conducting layer can be used for the pads, and very little area needs to be occupied by conducting tracks, which otherwise may be a problem with single layer designs.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 119 174 A (CHEN DER-JONG [TW]) 2 June 1992 (1992-06-02)	1,2,5
Y	column 2, line 12 - line 34; figures 1-3	3,4,6-9
Y	US 2003/072153 A1 (MATSUI NOBUYUKI [JP] ET AL) 17 April 2003 (2003-04-17)	3,4
A	paragraph [0035] - paragraph [0053]; figures 1-5	1,2,5-9
X	JP 06 310763 A (SANYO ELECTRIC CO; TOKYO SANYO ELECTRIC CO)	1,2,5
Y	4 November 1994 (1994-11-04)	6-9
A	abstract; figure 1	3,4
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☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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A	DE 100 63 876 A1 (SIEMENS AG [DE]) 4 July 2002 (2002-07-04) the whole document -----	1-9
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P,A	US 2005/276052 A1 (SHIMADA JUNICHI [JP] ET AL) 15 December 2005 (2005-12-15) paragraph [0049] - paragraph [0060]; figures 1,2,6,9 -----	1-9

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