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Campos

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(54) **LATERALLY STRUCTURED HIGH RESOLUTION MULTICOLOR ORGANIC ELECTROLUMINESCENCE DISPLAY DEVICE**

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(52) **U.S. Cl.** **313/512**; 313/483; 313/504; 313/506

(58) **Field of Search** 313/501, 502, 313/504, 505, 506, 507, 509, 512, 110, 113–114, 483, 498

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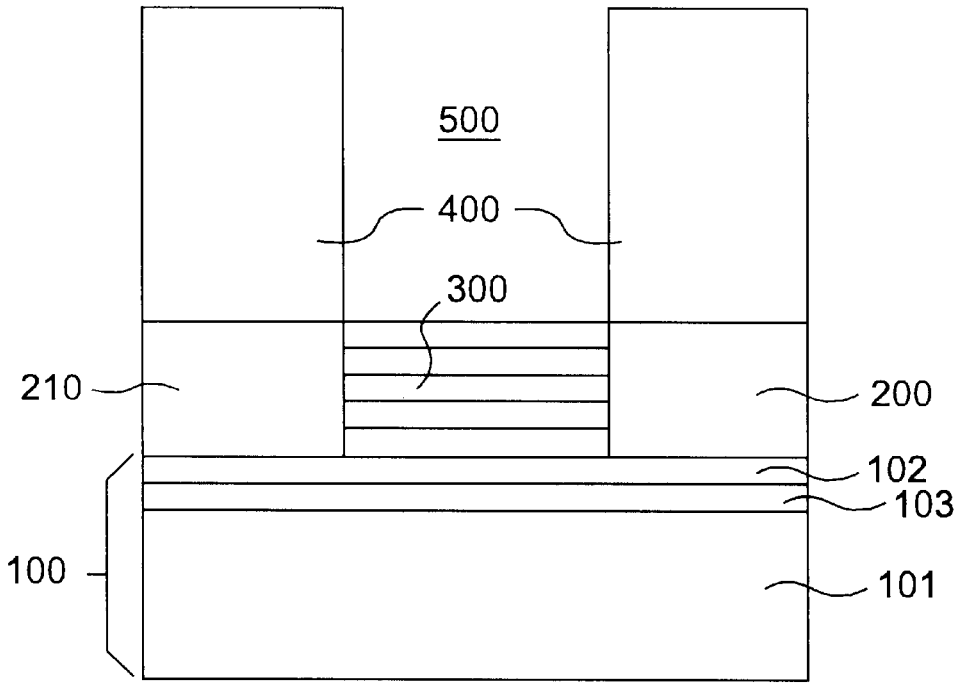
(57) **ABSTRACT**

An organic light emitting device for a multicolor image display. The elements of the device are arranged laterally along the substrate surface in a pillar and channel arrangement, rather than the traditional method of vertical stacking. The invention's pillar and channel architecture provides a rugged structure which can be efficiently encapsulated. The lateral arrangement of the various elements along the substrate reduces sheet resistance and increases external efficiency by allowing the typical transparent conductor layer to be replaced with a conventional metal.

23 Claims, 5 Drawing Sheets