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(54) Title: TEMPORARY UNDERFILL-BASED SELECTIVE MASS TRANSFER FOR MICROLED FABRICATION

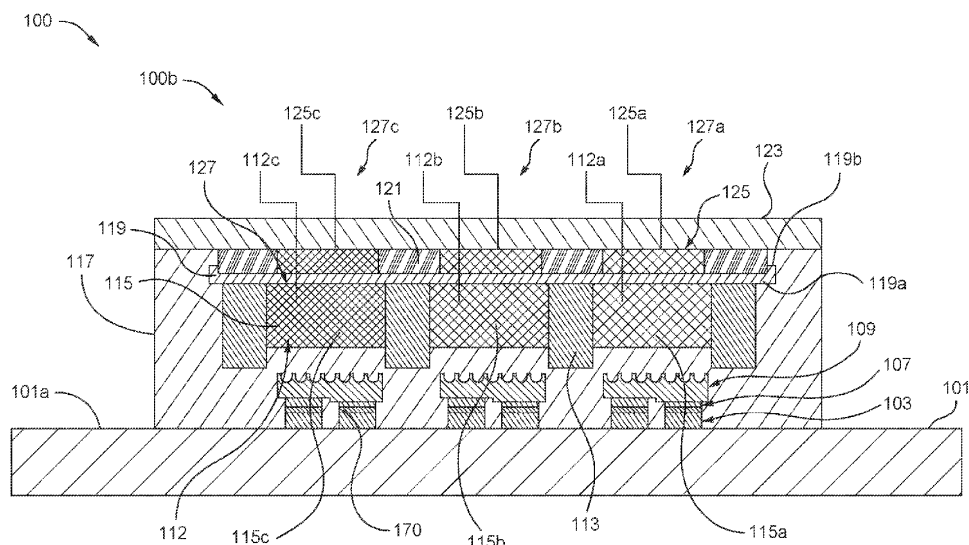


FIG. 1B

(57) **Abstract:** Embodiments of the present disclosure generally relate to LED pixels and methods of fabricating LED pixels. A device, includes micro-LEDs, micro-LED isolation structures, a transparent material, and an isolation substrate. The micro-LEDs are disposed over a backplane. Each micro-LED is coupled to at least one backplane electrode of the backplane. The micro-LED isolation structures are disposed over the backplane. Each micro-LED isolation structure is disposed between the at least one backplane electrode of adjacent micro-LEDs. The transparent material is disposed over the backplane between backplane electrodes, between the micro-LEDs, and over an emitting surface of each of the micro-LEDs. The isolation substrate has subpixel isolation (SI) structures disposed therein. The SI structures define wells of subpixels. The subpixels have a color conversion material disposed in wells and on the isolation substrate. The transparent material is between the color conversion materials.

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