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(54) **Title:** MONOLITHIC LED PIXEL

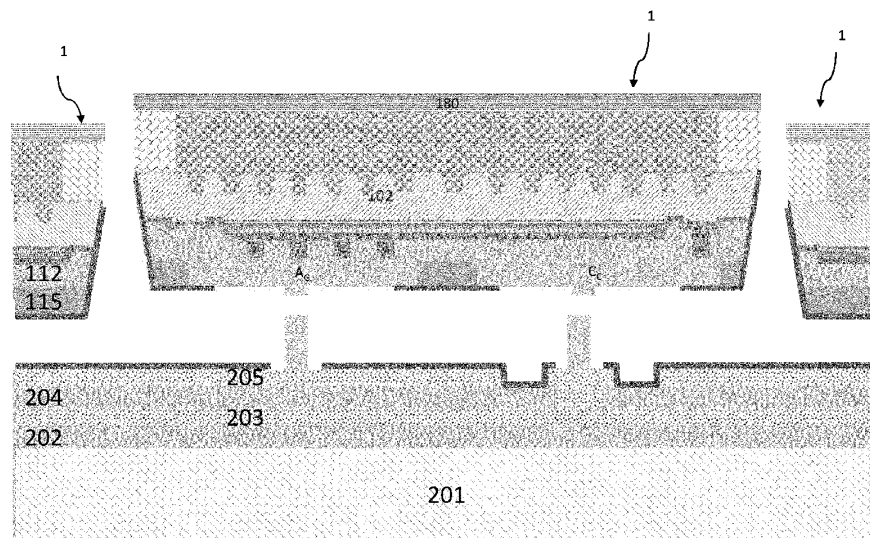


FIG. 30

(57) **Abstract:** A method of forming a plurality of monolithic light emitting diode (LED) pixels (1) for a LED display is provided. The method comprises forming a common (102) semiconducting layer comprising a Group III- nitride on a sacrificial substrate and forming an array of light emitting diode (LED) subpixels on a surface of the common semiconducting layer. The method further includes forming a planarising dielectric layer on the array of LED subpixels. The array of the LED subpixels is divided into a plurality of monolithic LED pixels by etching a grid of pixel defining trenches to the sacrificial substrate, wherein each monolithic LED pixel comprises at least two LED subpixels. A sacrificial dielectric layer is formed on the pixel trenches to form a bonding surface. A handling substrate is bonded to the bonding surface, wherein first portions of the sacrificial substrate are selectively removed for separating each of the monolithic LED pixels. Light extraction features are formed for each of the monolithic LED pixels comprising: selectively removing

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second portions of the sacrificial substrate aligned with each of the LED subpixels and the sacrificial dielectric layer is removed to separate each monolithic LED pixel from the handling substrate.