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(54) Title: HIGH BRIGHTNESS LED UTILIZING A ROUGHENED ACTIVE LAYER AND CONFORMAL CLADDING

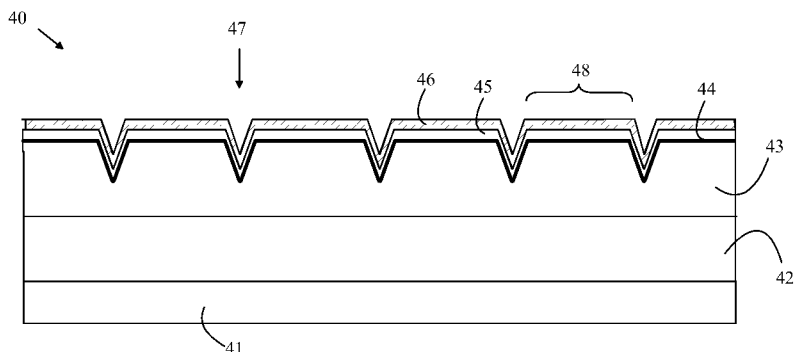


FIGURE 3

(57) Abstract: A light emitting device and method for making the same are disclosed. The device includes an active layer dis-
posed between first and second layers. The first layer has top and bottom surfaces. The top surface includes a first material of a
first conductivity type, including a plurality of pits in the substantially planar surface. The active layer overlies the top surface of
the first layer and conforms to the top surface, the active layer generating light characterized by a wavelength when holes and elec-
trons recombine therein. The second layer includes a second material of a second conductivity type, the second layer overlying the
active layer and conforming to the active layer. The device can be constructed on a substrate having a lattice constant sufficiently
different from that of the first material to give rise to dislocations in the first layer that are used to form the pits.