

LIGHT EMITTING DIODES WITH N-POLARITY AND ASSOCIATED METHODS OF MANUFACTURING

ABSTRACT OF THE DISCLOSURE

Light emitting diodes ("LEDs") with N-polarity and associated methods of manufacturing are disclosed herein. In one embodiment, a method for forming a light emitting diode on a substrate having a substrate material includes forming a nitrogen-rich environment at least proximate a surface of the substrate without forming a nitrodizing product of the substrate material on the surface of the substrate. The method also includes forming an LED structure with a nitrogen polarity on the surface of the substrate with a nitrogen-rich environment.

Figure 3B