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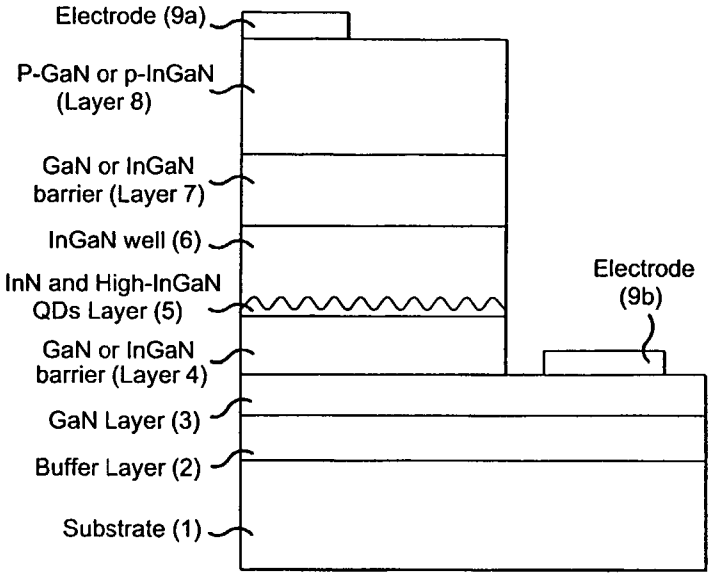
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(54) **Title:** GROUP III NITRIDE WHITE LIGHT EMITTING DIODE



(57) **Abstract:** A white light-emitting diode is fabricated by metal organic chemical vapor deposition (MOCVD), which can produce a broad band emission covering all the visible range in the spectrum by capping the Indium nitride (InN) and Indium-rich Indium Gallium Nitride (InGaN) quantum dots (QDs) in single or multiple $In_xGa_{1-x}N/In_yGa_{1-y}N$ quantum wells (QWs) by introducing bursts of at least one of Trimethylindium (TMIn), Triethylindium (TEIn) and Ethyldimethylindium (EDMIn), which serve as nuclei for the growth of QDs in QWs. The diode can thus radiate white light ranging form 400nm to 750nm by adjusting the In burst parameters.

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