23. The method in claim ~~21~~22 wherein epitaxially depositing comprises metal-organic chemical vapour deposition (MOCVD), molecular beam epitaxy (MBE), hydride vapour phase epitaxy (HVPE), phase-locked epitaxy (PLE), and any combined growth methods thereof.

24. The method in claim ~~21~~22 wherein depositing the first and second P type layers and first N type layer is at a lower temperature compared to a temperature for depositing an electron injecting layer.

25. The method in claim ~~21~~22 wherein depositing the first and second P type layers and first N type layer is at the same temperature or a higher temperature compared to a temperature for depositing an electron injecting layer.

26. A light emitting diode comprising

a PNP semiconductor material current spreading layer,

wherein a N-type semiconductor is configured to be completely or substantially depleted, leaving ionized Si atoms acting as current spreaders, wherein the PNP layer consumes no minority carriers, as a thickness of the N-type material is smaller than a diffusion length of minority carriers, and wherein a depletion voltage in the PNP layer exceeds a reach-through breakdown voltage minimising a voltage loss in the PNP layer.

23. The method in claim 22 wherein epitaxially depositing comprises metal-organic chemical vapour deposition (MOCVD), molecular beam epitaxy (MBE), hydride vapour phase epitaxy (HVPE), phase-locked epitaxy (PLE), and any combined growth methods thereof.

24. The method in claim 22 wherein depositing the first and second P type layers and first N type layer is at a lower temperature compared to a temperature for depositing an electron injecting layer.

25. The method in claim 22 wherein depositing the first and second P type layers and first N type layer is at the same temperature or a higher temperature compared to a temperature for depositing an electron injecting layer.

26. A light emitting diode comprising

a PNP semiconductor material current spreading layer,

wherein a N-type semiconductor is configured to be completely or substantially depleted, leaving ionized Si atoms acting as current spreaders, wherein the PNP layer consumes no minority carriers, as a thickness of the N-type material is smaller than a diffusion length of minority carriers, and wherein a depletion voltage in the PNP layer exceeds a reach-through breakdown voltage minimising a voltage loss in the PNP layer.