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(54) Title: A SEMICONDUCTOR DEVICE FOR HIGH-POWER APPLICATIONS

(57) Abstract: Contemplated is a semiconductor device comprising: a substrate; a group (Ill)-nitride layer; a metal-group (Ill)-nitride layer deposited between the substrate and group (Ill)-nitride layer; and a metal-nitride layer deposited between the substrate and the metal-group (Ill)-nitride layer. Also a method for making a semiconductor device with the above mentioned structure is contemplated. Furthermore, the substrate can be a silicon on insulator (SOI) substrate; the metal-nitride layer can be an aluminium nitride layer; the metal-group (Ill)-nitride layer can be an aluminium gallium nitride layer; and the group (Ill)-nitride layer can be a gallium nitride layer.