

METHOD OF FORMING GALLIUM ARSENIDE ON INSULATOR

ABSTRACT

A method of forming gallium arsenide (GaAs)-on-insulator including providing a substrate and forming a diffusion barrier layer of a compound of formula $\text{Al}_x\text{Ga}_{1-x}\text{As}$ on the substrate. A layer of GaAs is formed on the diffusion barrier layer of $\text{Al}_x\text{Ga}_{1-x}\text{As}$. The layer of $\text{Al}_x\text{Ga}_{1-x}\text{As}$ is substantially completely oxidised to transform the layer of $\text{Al}_x\text{Ga}_{1-x}\text{As}$ into an electrical insulator as well as a diffusion barrier.

[FIG. 1C]



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