

ABSTRACT OF THE DISCLOSURE

METHOD OF MANUFACTURING III-V GROUP COMPOUND SEMICONDUCTOR

When a crystal layer of III-V Group nitride compound semiconductor is formed, a nitride compound semiconductor layer is first overlaid on a substrate to form a base layer and a III-V Group nitride compound semiconductor represented by the general formula $\text{In}_x\text{Ga}_y\text{Al}_z\text{N}$ (where $0 \leq x \leq 1$, $0 \leq y \leq 1$, $0 \leq z \leq 1$, $x + y + z = 1$) is epitaxially grown on the base layer by hydride vapor phase epitaxy at a deposition pressure of not lower than 800 Torr. By making the deposition pressure not lower than 800 Torr, the crystallinity of the III-V Group nitride compound semiconductor can be markedly improved and its defect density reduced.

(Figure 3)



G00002



162162