ABSTRACT OF THE DISCLOSURE

GROUP III-V COMPOUND SEMICONDUCTOR AND LIGHT-EMITTING DEVICE

A Group III-V compound semiconductor of high crystallinity and high quality, and a light-emitting device using the same, which has high luminous efficacy are obtained by providing a specific ground layer composed of at least three layers between the luminous layer and substrate.

A light-emitting device capable of inhibiting formation of a misfit dislocation on the interface of the luminous layer and easily emitting light having a longer wavelength is also obtained by controlling the AlN mixed crystal ratio of at least one layer between the luminous layer and the substrate within a specific range and controlling the lattice constant of the luminous layer to a value larger than that of the ground layer, the luminous layer having a compressive strain is formed in contact with the ground layer.

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