

ABSTRACT OF THE DISCLOSURE

Disclosed is a semiconductor light emitting device including: a substrate; an n-type semiconductor layer giving an electron when receiving voltage; a p-type semiconductor layer giving a hole when receiving voltage; an active layer provided between the n-type semiconductor layer and the p-type semiconductor layer and including a quantum well structure to facilitate coupling between an electron and a hole; an n-type electrode including conductivity for applying voltage to the n-type semiconductor layer; a p-type electrode including conductivity for applying voltage to the p-type semiconductor layer; and an electric-current diffusion and hole injection layer provided between the p-type semiconductor layer and the p-type electrode and doped with n-type impurities and p-type impurities for diffusing an electric current and injecting a hole between the p-type electrode and the p-type semiconductor layer.

With this, ohmic contact is decreased, flow of an electric current is improved, diffusion of the electric current is more uniformized, and injection of a hole is improved between the electrode and the semiconductor layer of the semiconductor light emitting device, thereby maximizing efficiency of a device.