# METHOD FOR MANUFACTURING SEMICONDUCTOR SUBSTRATE

ABSTRACT OF THE DISCLOSURE

A step of forming an insulating film over a semiconductor substrate and forming an embrittled region in the semiconductor substrate by irradiating the semiconductor substrate with accelerated ions through the insulating film; a step of disposing a surface of the semiconductor substrate and a surface of a base substrate opposite to each other and bonding the surface of the insulating film to the surface of the base substrate; a step of forming a semiconductor layer over the base substrate with the insulating film interposed therebetween by causing separation along the embrittled region by performing heat treatment after the surface of the insulating film and the surface of the base substrate are bonded to each other; a step of performing etching treatment on the semiconductor layer; a step of irradiating the semiconductor layer subjected to the etching treatment with a laser beam; and a step of irradiating the semiconductor layer irradiated with the laser beam with plasma.

Fig. 2C