METHOD FOR MANUFACTURING SEMICONDUCTOR LAYER AND SEMICONDUCTOR DEVICE

ABSTRACT OF THE DISCLOSURE

An object is that a region separated from a semiconductor substrate when a supporting substrate is larger than the semiconductor substrate does not easily move. A method for manufacturing a semiconductor layer includes the steps of: irradiating a plurality of semiconductor substrates with ions to form embrittlement layers in the plurality of semiconductor substrates; forming bonding layers on respective surfaces of the plurality of semiconductor substrates; placing, over a supporting substrate, the surfaces of the plurality of semiconductor substrates on which the bonding layers are formed; placing a cover including depressed portions which house the plurality of semiconductor substrates over the plurality of semiconductor substrates; and heating the plurality of semiconductor substrates housed in the depressed portions of the cover, and thereby collecting semiconductor layers fixed to the supporting substrate, and regions separated from the plurality of semiconductor substrates along with the embrittlement layers.

Figure 1A