METHOD FOR MANUFACTURING SEMICONDUCTOR SUBSTRATE AND METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE

ABSTRACT OF THE DISCLOSURE

An object is to manufacture a semiconductor substrate having a single crystal semiconductor layer with favorable characteristics, without requiring CMP treatment and/or heat treatment at high temperature. In addition, another object is to improve productivity of semiconductor substrates. Vapor-phase epitaxial growth is performed by using a first single crystal semiconductor layer provided over a first substrate as a seed layer, whereby a second single crystal semiconductor layer is formed over the first single crystal semiconductor layer, and separation is performed at an interface of the both layers. Thus, the second single crystal semiconductor layer is transferred to the second substrate to provide a semiconductor substrate, and the semiconductor substrate is reused by performing laser light treatment on the seed layer.

Figure 1B