ABSTRACT

SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME

An object is to provide a structure of a transistor which has a channel formation region formed using an oxide semiconductor and a positive threshold voltage value, which enables a so-called normally-on switching element. The transistor includes an oxide semiconductor stack in which at least a first oxide semiconductor layer and a second oxide semiconductor layer with different energy gaps are stacked and a region containing oxygen in excess of its stoichiometric composition ratio is provided.

Fig. 1