

SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING SAME

ABSTRACT

The embodiments of the present disclosure provide a semiconductor device, including: an active area that is located in a semiconductor substrate and includes a central area and a peripheral area surrounding the central area; a first strained layer that is formed in the peripheral area in an embedded manner, and includes at least a first sub-portion, a second sub-portion, a third sub-portion, and a fourth sub-portion, where the first sub-portion and the third sub-portion are separately arranged on two sides of the central area in a first direction, and the second sub-portion and the fourth sub-portion are separately arranged on the other two sides of the central area in a second direction, where the first direction is different from the second direction; and a gate that is located on the active area, extends in a first direction and covers at least a part of the central area, at least a part of the first sub-portion, and at least a part of the third sub-portion.

[Fig. 2a]