

Abstract

There is provided a semiconductor device including an active pattern extending in a first direction, and a plurality of gate structures spaced apart from each other in the first direction on the active pattern. Each gate structure comprises a gate electrode extending in a second direction and a gate spacer on a sidewall of the gate electrode and a source/drain pattern disposed between adjacent gate structures. The gate structure comprises a semiconductor liner layer and a semiconductor filling layer on the semiconductor liner layer. The semiconductor filling layer comprises an upper portion protruding in a third direction beyond an upper surface of the active pattern. The semiconductor liner layer comprises an outer surface in contact with the active pattern and an inner surface facing the semiconductor filling layer. In a plan view, the inner surface of the semiconductor liner layer comprises a concave region.

FIG. 2