

ABSTRACT OF THE DISCLOSURE

A semiconductor device may include a gate electrode structure on a first region of a substrate including the first region and a second region, a capping structure covering an upper surface of the gate electrode structure, the capping structure including a capping pattern and a first etch stop pattern covering a lower surface and a sidewall of the capping pattern, an alignment key on the second region of the substrate, the alignment key including an insulating material, and a filling structure on the second region of the substrate, the filling structure covering a sidewall of the alignment key, and including a first filling pattern, a second filling pattern covering a lower surface and a sidewall of the first filling pattern and a second etch stop pattern covering a lower surface and a sidewall of the second filling pattern.

FIG. 20