ABSTRACT

A MOS TRANSISTOR HAVING A COMPOSITE GATE ELECTRODE AND METHOD OF FABRICATION

A novel, reliable, high performance MOS transistor with a composite gate electrode which is compatible with standard CMOS fabrication processes. The composite gate electrode comprises a polysilicon layer formed on a highly conductive layer. The composite gate electrode is formed on a gate insulating layer which is formed on a silicon substrate. A pair of source/drain regions are formed in the substrate and are self-aligned to the outside edges of the composite gate electrode.

(Figure 3)