ABSTRACT

METHOD TO FABRICATE A SINGLE GATE WITH DUAL WORK-FUNCTIONS

A method for forming a single gate having a dual work-function is described. A gate electrode is formed overlying a gate dielectric layer on a substrate. Sidewalls of the gate electrode are selectively doped whereby the doped sidewalls have a first work-function and whereby a central portion of the gate electrode not doped has a second work-function to complete formation of a single gate having multiple work-functions in the fabrication of integrated circuits.

FIGURE 5



