PROVIDING DUAL WORK FUNCTION DOPING

ABSTRACT

Dual work function doping is provided by doping a selected number of gate structures (3) having self-aligned insulating layer (4) on top of the structures (3) through at least one side wall (5) of the gate structures (3) with a first conductivity type to thereby provide an array of gate structures (3) whereby some are doped with the first conductivity type and others of the gate structures (3) are doped with a second and different conductivity type. Also provided is an array of gate structures whereby the individual gate structures (3) contain self-aligned insulating layer (4) on their top portion and wherein some of the gate structures (3) are doped with a first conductivity type (8) and other of the gate structures are doped with a second and different conductivity type (3).

Fig.5