

ABSTRACT:**"A Method of Fabricating Semiconductor Structures and a Semiconductor Structure Formed Thereby"**

A method of fabricating a silicide layer on a silicon region of a semiconductor structure, the method comprising the steps of: providing a semiconductor structure having at least one silicon region on a surface thereof; depositing a layer comprising nickel and platinum on the at least one silicon layer; annealing the semiconductor structure and the nickel/platinum layer to react the nickel and the platinum with underlying silicon to form a nickel-platinum silicide, wherein the annealing step takes place at temperature of between 680°C and 720°C.

[FIGURE 1]