## ABSTRACT OF THE DISCLOSURE

PLASMA ENHANCED CHEMICAL VAPOR DEPOSITED (PECVD) SILICON NITRIDE BARRIER LAYER FOR HIGH DENSITY PLASMA CHEMICAL VAPOR DEPOSITED (HDP-CVD) DIELECTRIC LAYER

A method for forming a dielectric layer within a microelectronics fabrication. There is first provided a substrate. There is then formed over the substrate a polysilicon resistor. There is then formed over the polysilicon resistor a first dielectric layer formed of a silicon nitride dielectric material deposited employing a plasma enhanced chemical vapor deposition (PECVD) method other than a high density plasma chemical vapor deposition (HDP-CVD) method. Finally, there is then formed over the first dielectric layer a second dielectric layer deposited employing a high density plasma chemical vapor deposition (HDP-CVD) method, where first dielectric layer attenuates a decrease in resistance of the polysilicon resistor incident to forming the second dielectric layer over the first dielectric layer.

(FIGURE 1 IS SUGGESTED FOR PUBLICATION)