

ABSTRACT OF THE DISCLOSURE

A semiconductor may include a first inter metal dielectric (IMD) layer, a first blocking layer on the first IMD layer, a metal wiring and a second blocking layer. The first inter metal dielectric (IMD) layer may be formed on a substrate, the first IMD layer may include a low-k material having a dielectric constant lower than a dielectric constant of silicon oxide. The first blocking layer may be formed on the first IMD layer. The first blocking layer may include an oxide having a dielectric constant higher than the dielectric constant of the first IMD layer. The metal wiring may be through the first IMD layer and the first blocking layer. The second blocking layer may be formed on the metal wiring and the first blocking layer. The second blocking layer may include a nitride. The first and second blocking layers may reduce or prevent from the out gassing, so that a semiconductor device may have good characteristics.

FIG. 1