HIGH VOLTAGE DEVICE

ABSTRACT

A method of forming a device is presented. A substrate prepared with an active device region is provided. The active device region includes gate stack layers of a gate stack that includes at least a gate electrode layer over a gate dielectric layer. An implant mask is formed on the substrate with an opening exposing a portion of a top gate stack layers. Ions are implanted through the opening and gate stack layers into the substrate to form a channel well. The substrate is patterned to at least remove portion of a top gate stack layer unprotected by the implant mask.

Fig. 1