

ABSTRACT

INTEGRATED CIRCUIT SYSTEM WITH HIGH VOLTAGE TRANSISTOR AND METHOD OF MANUFACTURE THEREOF

5 A method of manufacture of an integrated circuit system includes: providing a semiconductor substrate having an active region, implanted with impurities of a first type at a first concentration; forming an isolation region around the active region; forming a parasitic transistor by applying a gate electrode, implanted with impurities of a second type at a second concentration, over the active region and the isolation region; and applying an isolation edge
10 implant, with the impurities of the first type at a third concentration greater than or equal to the second concentration, for suppressing the parasitic transistor.

Fig. 1