Method for fabricating a germanium on insulator (GeOI) type wafer

ABSTRACT

The invention relates to a method for fabricating a germanium on insulator type wafer comprising the steps of providing a germanium substrate or a substrate comprising an epitaxial germanium layer, providing a dielectric layer on or in one main surface of the germanium substrate, attaching the source substrate to a handle substrate to form a source-handle-compound and detaching the substrate at the predetermined splitting area, previously provided inside the source substrate and being essentially parallel to the main surface, from the source-handle-compound to thereby create the germanium on insulator wafer. To improve the dielectric film quality and at the same time to achieve a more cost-effective fabrication process it is proposed to provide a germanium oxynitride layer as dielectric layer in between the germanium substrate and the handle substrate.

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