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ABSTRACT

A METHOD OF REDUCING SUBSTRATE COUPLING/NOISE FOR RFCMOS COMPONENTS IN SEMICONDUCTOR TECHNOLOGY BY BACKSIDE TRENCH AND FILL

A method of reducing substrate coupling and noise for one or more RFCMOS components comprising the following steps. A substrate having a frontside and a backside is provided. One or more RFCMOS components are formed over the substrate. One or more isolation structures are formed within the substrate proximate the one or more RFCOMS components. The backside of the substrate is etched to form respective trenches within the substrate and over at least the one or more isolation structures. The respective trenches are filled with dielectric material whereby the substrate coupling and noise for the one or more RFCMOS components are reduced.

FIGURE 7