

METHOD OF INTEGRATING SUBSTRATE CONTACT ON SOI WAFERS WITH STI PROCESS

Abstract

A method for forming a substrate contact (35) in a substrate (39) that includes a silicon (7) on insulator region. A shallow isolation trench is formed in the silicon (7) on insulator substrate. The shallow isolation trench is filled. Photoresist (17) is deposited on the substrate. A contact trench (19) is formed in the substrate through the filled shallow isolation trench, silicon (7) on insulator, and silicon substrate (3) underlying the silicon (7) on insulator region. The contact trench (19) is filled, wherein the material filling the contact trench (19) forms a contact (35) to the silicon substrate (39).

Fig 1