

A CRYSTALLINE ALKALINE EARTH
METAL OXIDE INTERFACE WITH SILICON

Abstract of the Disclosure

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A semiconductor structure comprises a silicon substrate (10), one or more layers of single crystal oxides (26), and an interface (14) between the silicon substrate and the one or more layers of single crystal
10 oxides, the interface manufactured with a crystalline material which matches the lattice constant of silicon. The interface is an atomic layer of silicon, oxygen, and a metal in the form XSiO_2 , where X is a metal.

15 Fig. 10 to accompany the abstract.