

Title (en)
SUBSTRATE OF THE SEMI-CONDUCTOR-ON-INSULATOR TYPE FOR RADIOFREQUENCY APPLICATIONS

Title (de)
SUBSTRAT VOM HALBLEITER-AUF-ISOLATORTYP FÜR HOCHFREQUENZANWENDUNGEN

Title (fr)
SUBSTRAT DE TYPE SEMI-CONDUCTEUR SUR ISOLANT POUR DES APPLICATIONS RADIOFRÉQUENCES

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Abstract (en)
[origin: WO2020128354A1] The present invention relates to a substrate (1) of the semi-conductor-on-insulator type for radiofrequency applications, comprising: - a carrier substrate (2) of silicon, - an electrically insulating layer (3) which is arranged on the carrier substrate, - a monocrystalline layer (4) which is arranged on the electrically insulating layer, the substrate (1) mainly being characterised in that it further comprises a layer of silicon carbide SiC (5) which is arranged between the carrier substrate (2) and the electrically insulating layer (3), which has a thickness between 1 nm and 5 nm, the surface (6) of the layer of silicon carbide SiC which is at the side of the electrically insulating layer (3) being rough.

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