ABSTRACT

ENCAPSULATED INSTRUMENTED SUBSTRATE APPARATUS FOR ACQUIRING MEASUREMENT PARAMETERS IN HIGH TEMPERATURE PROCESS APPLICATIONS

An apparatus includes an instrumented substrate apparatus, a substrate assembly including a bottom and top substrate mechanically coupled, an electronic assembly, a nested enclosure assembly including an outer and inner enclosure wherein the outer enclosure encloses the inner enclosure and the inner enclosure encloses the electronic assembly. An insulating medium between the inner and outer enclosure and a sensor assembly communicatively coupled to the electronic assembly including one or more sensors disposed at one or more locations within the substrate assembly wherein the electronic assembly is configured to receive one or more measurement parameters from the one or more sensors.

(Fig 1A.)