THERMAL SPRAY COATINGS FOR SEMICONDUCTOR APPLICATIONS

ABSTRACT

This invention relates to thermal spray coatings on a metal or non-metal substrate. The thermal spray coating comprises a partially or fully stabilized ceramic coating, e.g., yttria stabilized zirconia coating, and has sufficiently high thermodynamic phase stability to provide corrosion and/or erosion resistance to the substrate. This invention also relates to methods of protecting metal and non- metal substrates by applying the thermal spray coatings. The coatings are useful, for example, in the protection of integrated circuit manufacturing equipment, internal chamber components, and electrostatic chuck manufacture.

No Figure