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(54) **Title:** CERAMIC POWDERS AND THERMAL BARRIER COATINGS

(57) **Abstract:** This invention relates to ceramic powders comprising a zirconia-based component, e.g., yttria-stabilized zirconia, and an (alumina + silica)-based component, e.g., mullite. The ceramic powders are useful for forming thermal shock resistant coatings having the same composition, through deposition by thermal spray devices. This invention also relates to thermal barrier coating systems suitable for protecting components exposed to high temperature environments, such as the thermal environment of a gas turbine engine. This invention further relates to forming free-standing solid ceramic articles.

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