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[54] **METHOD FOR PRODUCING THICK CERAMIC FILMS BY A SOL GEL COATING PROCESS**

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[57] **ABSTRACT**

A method for producing thick ceramic films of greater than 10 μm on selected substrates is described. Conventional sol gel solutions are loaded with up to about 90% by weight of finely divided ceramic particles and mixed. The resulting slurry or paint can be either spun or dip coated or sprayed or painted onto a planar or other substrate, fired to remove the organic materials and to develop a microcrystalline structure. The fired film may then be heated. Composite films are also contemplated.

26 Claims, No Drawings