United States Patent [19]

Grunke

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[54] **METHOD OF MAKING A CERAMIC TURBINE WHEEL AND TURBINE WHEEL MADE THEREBY**

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[30] **Foreign Application Priority Data**

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[51] **Int. Cl.**[2] **C04B 35/58**

[52] **U.S. Cl.** **264/60**; 156/89; 264/65; 264/241; 264/332

[58] **Field of Search** 264/65, 332, 60, 241; 156/89

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[57] **ABSTRACT**

A method of making a ceramic turbine wheel which includes making a ceramic ring, and providing a ceramic disc within the ring by supporting the external periphery of the ring and hot pressing a ceramic powder within the ring. Ceramic blades are then sintered to the external surface of the ring using a layer of metallic silicon between each blade and the ring. The ring and blades are produced by a reaction-sintering process.

5 Claims, 3 Drawing Figures