

Title (en)

DENSE REFRACTORIES WITH IMPROVED THERMAL SHOCK RESISTANCE

Title (de)

DICHTE FEUERFESTE KÖRPER MIT VERBESSERTER THERMOSCHOCKBESTÄNDIGKEIT

Title (fr)

MATERIAUX REFRACTAIRES DENSES PRESENTANT UNE RESISTANCE AMELIOREE AUX CHOCS THERMIQUES

Publication

EP 1044177 A1 20001018 (EN)

Application

EP 98960906 A 19981218

Priority

- AU 9801049 W 19981218
- AU PP099097 A 19971218

Abstract (en)

[origin: WO9932417A1] The present invention discloses a dense refractory material, which includes a spinel matrix and a micro-crack initiating phase dispersed in the matrix. The micro-crack initiating material introduces micro-cracks into the refractory material, which inhibits catastrophic failure as a result of the effects of thermal shock. A method of manufacturing a dense refractory material which includes the steps of mixing precursor oxides for a spinel material, calcining the material, forming the spinel material into a green form of the product and firing the green form to produce the final form is also disclosed.

IPC 1-7

C04B 35/00

IPC 8 full level

C04B 35/00 (2006.01); **C04B 35/443** (2006.01); **C04B 35/48** (2006.01)

CPC (source: EP)

C04B 35/443 (2013.01)

Citation (search report)

See references of WO 9932417A1

Designated contracting state (EPC)

AT BE DE FR GB IT

DOCDB simple family (publication)

WO 9932417 A1 19990701; AU PP099097 A0 19980115; CA 2315398 A1 19990701; EP 1044177 A1 20001018; JP 2001526175 A 20011218; ZA 9811550 B 19991014

DOCDB simple family (application)

AU 9801049 W 19981218; AU PP099097 A 19971218; CA 2315398 A 19981218; EP 98960906 A 19981218; JP 2000525355 A 19981218; ZA 9811550 A 19981217