

Title (en)  
NOVEL COMPOSITE CERAMICS WITH IMPROVED TOUGHNESS.

Title (de)  
KOMPOSITKERAMIK MIT VERBESSERTER HÄRTE.

Title (fr)  
CERAMIQUE COMPOSITE NOUVELLE AVEC DURETE ACCRUE.

Publication  
**EP 0190346 A4 19870122 (EN)**

Application  
**EP 85905137 A 19850805**

Priority  
US 63881384 A 19840808

Abstract (en)  
[origin: WO8601196A1] A high density refractory body composite ceramic comprising a densified refractory body, possessing about 10 percent greater toughness than exhibited by other composite ceramics of similar composition and geometry, of a refractory material selected from the group consisting of oxides, carbides, nitrides, silicides, borides, sulfides and mixtures thereof, and a binder material capable of plastic deformation in a sufficient amount to at least partially fill the interstices between the particles of the refractory material and a method for producing said high density refractory body composite ceramics.

IPC 1-7  
**C04B 35/56**; C04B 35/58

IPC 8 full level  
**C04B 35/00** (2006.01); **C22C 1/05** (2006.01); **C22C 29/00** (2006.01); **C22C 29/02** (2006.01); **C22C 29/06** (2006.01); **C22C 29/08** (2006.01); **C22C 29/12** (2006.01); **C22C 29/14** (2006.01); **C22C 29/16** (2006.01); **C22C 29/18** (2006.01)

CPC (source: EP)  
**C22C 1/051** (2013.01); **C22C 29/00** (2013.01)

Citation (search report)  
• [X] E. KLAR: "Metals Handbook", 9th edition, vol. 7, Powder Metallurgy, June 1984, pages 441,387-389, American Society for Metals, Ohio, US;  
• See references of WO 8601196A1

Designated contracting state (EPC)  
BE DE FR GB IT NL

DOCDB simple family (publication)  
**WO 8601196 A1 19860227**; BR 8506869 A 19860923; CA 1244482 A 19881108; EP 0190346 A1 19860813; EP 0190346 A4 19870122;  
JP S61502901 A 19861211

DOCDB simple family (application)  
**US 8501458 W 19850805**; BR 8506869 A 19850805; CA 488194 A 19850807; EP 85905137 A 19850805; JP 50448985 A 19850805