

Title (en)  
COMPOSITE OF TiB<sub>2</sub>-GRAPHITE.

Title (de)  
TiB<sub>2</sub>-GRAPHIT-KOMPOSIT.

Title (fr)  
COMPOSITE DE TiB<sub>2</sub>-GRAPHITE.

Publication  
**EP 0084059 A4 19840517 (EN)**

Application  
**EP 82902609 A 19820722**

Priority  
• US 28712481 A 19810727  
• US 28712981 A 19810727

Abstract (en)  
[origin: WO8300347A1] Titanium diboride graphite composite articles are produced by mixing TiO<sub>2</sub>, petroleum coke and a binder to form a plastic dispersion. Articles are shaped by molding or extrusion and baked to carbonize the binder to form a baked carbon-TiO<sub>2</sub> composite. The article is impregnated with a molten or dispersed boron compound, or with a boron compound mixed with carbon black, then heated to drive TiB<sub>2</sub> forming reaction. The article is then further heated to a graphitizing temperature to form a graphite-TiB<sub>2</sub> composite useful as a cathode component in a Hall aluminum reduction cell.

IPC 1-7  
**C25C 3/06**; B05D 5/12

IPC 8 full level  
**C04B 35/52** (2006.01); **C04B 35/58** (2006.01); **C25C 3/08** (2006.01)

CPC (source: EP)  
**C04B 35/52** (2013.01); **C04B 35/532** (2013.01); **C04B 35/58071** (2013.01); **C04B 35/64** (2013.01); **C04B 35/645** (2013.01); **C25C 3/08** (2013.01)

Citation (search report)  
• [Y] US 3676371 A 19720711 - ZOLLNER DIETER, et al  
• [YPD] WO 8201018 A1 19820401 - GREAT LAKES CARBON CORP [US]  
• [A] US 3351428 A 19671107 - LESLIE TITUS, et al

Designated contracting state (EPC)  
AT BE CH DE FR GB LI SE

DOCDB simple family (publication)  
**WO 8300347 A1 19830203**; BR 8207804 A 19830719; EP 0084059 A1 19830727; EP 0084059 A4 19840517; JP S58501173 A 19830721

DOCDB simple family (application)  
**US 8201003 W 19820722**; BR 8207804 A 19820722; EP 82902609 A 19820722; JP 50262682 A 19820722