

Title (en)  
TUNGSTEN CARBIDE-COBALT COMPOSITE MATERIAL HAVING IMPROVED FRICTION PROPERTIES

Publication  
**EP 0237376 B1 19891213 (FR)**

Application  
**EP 87400255 A 19870204**

Priority  
FR 8601676 A 19860207

Abstract (en)  
[origin: EP0237376A1] 1. A ceramic/metal composite layer, having improved friction properties, containing tungsten carbide and cobalt, characterized in that it contains free carbon and its relative composition is 30 to 50 atoms of free carbon, 3 to 12 atoms of cobalt, and molecules of tungsten carbide to make up to 100.

IPC 1-7  
**C22C 29/02**; **C23C 4/06**; **C23C 4/12**

IPC 8 full level  
**C22C 29/02** (2006.01); **C22C 29/06** (2006.01)

CPC (source: EP)  
**C22C 29/02** (2013.01); **C22C 29/067** (2013.01)

Cited by  
CN110062861A; US6857861B2; US7841811B2; US7070363B2; WO03098042A1

Designated contracting state (EPC)  
BE DE ES GB IT

DOCDB simple family (publication)  
**FR 2594143 A1 19870814**; **FR 2594143 B1 19880527**; DE 3761149 D1 19900118; EP 0237376 A1 19870916; EP 0237376 B1 19891213; ES 2011803 B3 19900216; IE 59541 B1 19940309; IE 870314 L 19870807

DOCDB simple family (application)  
**FR 8601676 A 19860207**; DE 3761149 T 19870204; EP 87400255 A 19870204; ES 87400255 T 19870204; IE 31487 A 19870206