

Title (en)
METHOD FOR CONSOLIDATING TOUGH COATED HARD POWDERS

Title (de)
VERFAHREN ZUM KONSOLIDIEREN VON MIT RESISTENTER BESCHICHTUNG BESCHICHTETEN HARTPULVERN

Title (fr)
PROCEDE DE RENFORCEMENT DE POUDRES DURES A REVETEMENT RESISTANT

Publication
EP 1768804 A4 20100915 (EN)

Application
EP 04776430 A 20040610

Priority
US 2004018445 W 20040610

Abstract (en)
[origin: WO2006001791A1] A method of consolidating particulate materials into articles having combinations of properties not available by conventional processes by liquid phase sintering. These particulate materials are comprised of core particles individually coated with layers of a metal compound having a relatively higher fracture toughness than the core, such as WC or TaC. These coated particles include an outer layer comprised a metal, such as Co or Ni. The particles with these coatings are pressed to form an article and the article densified at pressures and temperatures where full density is achieved without the degradation of the material forming the core particle.

IPC 8 full level
B22F 1/16 (2022.01); **B22F 1/17** (2022.01)

CPC (source: EP KR US)
B22F 1/16 (2022.01 - EP KR US); **B22F 1/17** (2022.01 - EP KR US); **B22F 3/1035** (2013.01 - EP KR US); **B22F 7/02** (2013.01 - KR)

Citation (search report)

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