

Title (en)  
SINTERABLE METAL POWDER MIXTURE FOR THE PRODUCTION OF SINTERED COMPONENTS

Title (de)  
SINTERFÄHIGE METALLPULVERMISCHUNG ZUR HERSTELLUNG GESINTERTER BAUTEILE

Title (fr)  
MELANGE DE POUDRE METALLIQUE FRITTABLE SERVANT A PRODUIRE DES COMPOSANTS FRITES

Publication  
**EP 1470261 A1 20041027 (DE)**

Application  
**EP 02806652 A 20021030**

Priority  
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• EP 0212088 W 20021030

Abstract (en)  
[origin: WO03064710A1] The aim of the invention is to supply a sinterable powder mixture for producing sintered components, particularly in the automobile industry, by means of which components have both adequate mechanical strength properties and especially a high degree of hardness. Said aim is achieved by a powder mixture, 60 to 98.5 percent by weight of the total quantity of which consist of a basic Al powder made of metals and/or alloys thereof, comprising Al, 0.2 to 30 percent by weight of Mg, 0.2 to 40 percent by weight of Si, 0.2 to 15 percent by weight of Cu, 0.2 to 15 percent by weight of Zn, 0.2 to 15 percent by weight of Ti, 0.2 to 10 percent by weight of Sn, 0.2 to 5 percent by weight of Mn, 0.2 to 10 percent by weight of Ni, and/or less than 1 percent by weight of As, Sb, Co, Be, Pb, and/or B, the percentage by weight being in relation to the total quantity of the basic Al powder, and 0.8 to 40 percent by weight of a metal powder selected among a first group of metals and/or alloys thereof, consisting of Mo, W, Cr, V, Zr, and/or Y, the percentage being in relation to the total quantity of the powder mixture.

IPC 1-7  
**C22C 1/04**; **C22C 21/00**; **B22F 1/00**

IPC 8 full level  
**B22F 1/00** (2022.01); **B22F 3/10** (2006.01); **C22C 1/04** (2006.01); **C22C 21/00** (2006.01)

CPC (source: EP KR US)  
**B22F 1/00** (2013.01 - EP KR US); **B22F 1/09** (2022.01 - EP KR US); **C22C 1/04** (2013.01 - KR); **C22C 1/0416** (2013.01 - EP US); **C22C 21/00** (2013.01 - KR); **B22F 2003/026** (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP US)

C-Set (source: EP KR US)  
EP US  
1. **B22F 2998/10 + B22F 3/02 + B22F 3/1021 + B22F 3/02**  
2. **B22F 2998/10 + B22F 1/09 + B22F 3/02 + B22F 3/02 + B22F 3/10**  
KR  
**B22F 2998/10 + B22F 1/09 + B22F 3/02 + B22F 3/02 + B22F 3/10**

Citation (search report)  
See references of WO 03064710A1

Cited by  
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**WO 03064710 A1 20030807**; AT E300626 T1 20050815; BR 0215554 A 20041221; CN 1617940 A 20050518; DE 10203285 C1 20030807; DE 50203794 D1 20050901; EP 1470261 A1 20041027; EP 1470261 B1 20050727; ES 2244838 T3 20051216; JP 2005516118 A 20050602; KR 100696312 B1 20070319; KR 20040066937 A 20040727; MX PA04007248 A 20041029; US 2005034559 A1 20050217

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