

Title (en)

Injection moulding composition containing metal oxide for making metal shapes

Title (de)

Metalloxide enthaltende Spritzgiessmassen zur Herstellung von Metallformkörpern

Title (fr)

Masse à moulage d'injection en contenant des oxides métalliques pour la fabrication d'objets en métaux

Publication

**EP 0853995 B1 20011121 (DE)**

Application

**EP 98100066 A 19980105**

Priority

DE 19700277 A 19970107

Abstract (en)

[origin: US6080808A] The molding composition contains, in a flowable binder, from 20 to 50% by vol., based on the total volume of the molding composition, of a powder comprising one or more metal oxides and, if desired, metal carbides and/or metal nitrides which cannot be reduced using hydrogen, where at least 65% by vol. of the powder has a maximum particle size of 0.5  $\mu\text{m}$  and the remainder of the powder has a maximum particle size of 1  $\mu\text{m}$ , and at least 90% by vol. of the powder comprises metal oxides which can be reduced using hydrogen. The metal oxides which can be reduced using hydrogen are  $\text{Fe}_2\text{O}_3$ ,  $\text{FeO}$ ,  $\text{Fe}_3\text{O}_4$ ,  $\text{NiO}$ ,  $\text{CoO}$ ,  $\text{Co}_3\text{O}_4$ ,  $\text{CuO}$ ,  $\text{Cu}_2\text{O}$ ,  $\text{Ag}_2\text{O}$ ,  $\text{Bi}_2\text{O}_3$ ,  $\text{WO}_3$ ,  $\text{MoO}_3$ ,  $\text{SnO}$ ,  $\text{SnO}_2$ ,  $\text{CdO}$ ,  $\text{PbO}$ ,  $\text{Pb}_3\text{O}_4$ ,  $\text{PbO}_2$  or  $\text{Cr}_2\text{O}_3$ , or mixtures thereof.

IPC 1-7

**B22F 3/11**; **C22C 1/04**; **C22C 1/05**; **C04B 35/638**; **C04B 35/65**

IPC 8 full level

**C04B 35/00** (2006.01); **B22F 3/00** (2006.01); **B22F 3/02** (2006.01); **B22F 3/11** (2006.01); **B22F 3/22** (2006.01); **C04B 35/638** (2006.01); **C04B 35/65** (2006.01); **C22C 1/04** (2006.01); **C22C 1/05** (2006.01)

CPC (source: EP KR US)

**B22F 3/001** (2013.01 - EP KR US); **B22F 3/22** (2013.01 - EP US); **B22F 3/225** (2013.01 - EP KR US); **B22F 2998/00** (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP KR US); **B22F 2999/00** (2013.01 - EP KR US)

Cited by

WO2021132854A1; WO2013113880A1; US10961384B2; WO2014170242A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI NL

DOCDB simple family (publication)

**US 6080808 A 20000627**; AT E209076 T1 20011215; DE 19700277 A1 19980709; DE 59802182 D1 20020103; EP 0853995 A1 19980722; EP 0853995 B1 20011121; ES 2168690 T3 20020616; JP H10298606 A 19981110; KR 100516081 B1 20051206; KR 19980070378 A 19981026; TW 495532 B 20020721

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**US 283398 A 19980105**; AT 98100066 T 19980105; DE 19700277 A 19970107; DE 59802182 T 19980105; EP 98100066 A 19980105; ES 98100066 T 19980105; JP 157098 A 19980107; KR 19980000178 A 19980107; TW 87100140 A 19980107