

Title (en)
Process of preparation of a composite material made from metal powder

Title (de)
Verfahren zur Herstellung eines Metallpulver-Verbundwerkstoffs

Title (fr)
Procédé de préparation d'un matériau composite à partir de poudre métallique

Publication
EP 1236808 B1 20090819 (DE)

Application
EP 01130567 A 20011221

Priority
DE 10110341 A 20010303

Abstract (en)
[origin: EP1236808A2] Metal powder composite material contains at least two oxides enclosing metal powder particles. The oxides form a common phase. An Independent claim is also included for a process for the production of a composite material comprising pressing a starting material into molded bodies, pyrolyzing the separating agent by heating in a non-reducing atmosphere to oxides, and reacting the oxides with each other forming a common phase. Preferred Features: The metal powder is made from iron. The common phase is a silicate- or boron-containing glass or a defined compound selected from mixed oxides with a spinal structure, metal phosphates and metal silicates. The mixed oxides are selected from Al₂MgO₄, Al₂ZnO₄, Al₂MnO₄, Al₂FeO₄, Fe₂MgO₄, Fe₃O₄, Fe₂ZnO₄, Fe₂MnO₄, Fe₂NiO₄, Cr₂FeO₄ and Cr₂MgO₄.

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Citation (examination)
WO 9805453 A1 19980212 - HOEGANAES AB [SE], et al

Cited by
CN107396630A; WO2016162383A1

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DE FR GB IT

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