

Title (en)

Method for manufacturing an object of soft-magnetic material by bonding together a mass of powder grains.

Title (de)

Verfahren zur Herstellung eines Formkörpers aus weichmagnetischem Material durch Verbinden einer Pulvermasse.

Title (fr)

Procédé de fabrication d'un objet en matériau magnétique doux par agglomération d'une masse de poudre.

Publication

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Application

**EP 83102285 A 19830309**

Priority

SE 8201678 A 19820317

Abstract (en)

A method for manufacturing an object of soft-magnetic material by bonding together a mass of powder grains of iron-based soft-magnetic material in the form of pure iron or in the form of iron containing silicon, aluminium and/or titanium. The grains are provided either with a coating (2) containing iron oxide chemically bonded to the grains and, at least in those cases where the iron-based material consists of pure iron, containing in addition thereto an oxide of silicon, aluminium and/or titanium, or the grains are provided with a coating (2) containing a reaction product of iron oxide, which oxide is chemically bonded to the grains, and an oxide of silicon, aluminium and/or titanium. The grains provided with said coating are subjected to an isostatic pressing at a temperature of at most 900 DEG C and at a pressure necessary for forming a coherent, compact body of the powder mass. The coating preferably has a thickness of 0.01 - 0.5  $\mu$ m.

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IPC 8 full level

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CPC (source: EP US)

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Cited by

EP0378160A3; CN109119222A; DE10031923A1; EP0834370A1; US4696725A; EP0399529A1; US5350628A; DE19960095A1; US5348800A; EP0869517A1; US6102980A; EP0182010A1; US4620933A; EP1782779A4; US6060165A; CN100406166C; US5227235A; EP0145178A1; US4820338A; US7510766B2; US6300702B1; US6620376B1; EP0406580A1; US5183631A; US5352522A; EP0383035A3; EP0401836A1; US5164264A; WO2004070745A1; WO9950949A1; WO0122439A1; EP0401835B1

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