

Title (en)

Metal casting with hard material insert

Title (de)

Metallgussformkörper mit eingegossenem Hartstoffkörper

Title (fr)

Pièce moulée métallique avec d'insert en matériaux durs

Publication

EP 1256403 A3 20040915 (DE)

Application

EP 02009288 A 20020429

Priority

DE 10122886 A 20010511

Abstract (en)

[origin: EP1256403A2] Metal cast molded body comprises an active surface (2) made from a composite material. The composite material has a porous hard material body (7) in a cast matrix (4) made from metallic cast material. An Independent claim is also included for a process for the production of a metal cast molded body. Preferably the matrix is a wear-resistant iron-based alloy, preferably a wear-resistant cast iron. The hard material body is a ceramic body made from carbides, oxides and/or nitrides, preferably a carbide of Si, Cr, W, Mo, V, Nb, Ti, Zr, Ta or Hf in an amount of 20-70 wt.%. The cast matrix has a bainite and/or martensite structure.

IPC 1-7

B22D 19/00; **C22C 1/10**; **C22C 33/00**

IPC 8 full level

B02C 7/12 (2006.01); **B02C 15/00** (2006.01); **B22D 19/00** (2006.01); **B22D 19/06** (2006.01); **C22C 1/10** (2006.01); **C22C 37/00** (2006.01)

CPC (source: EP US)

B02C 7/12 (2013.01 - EP US); **B02C 15/003** (2013.01 - EP US); **C22C 1/1021** (2023.01 - EP); **C22C 1/1036** (2013.01 - EP US); **B02C 2210/02** (2013.01 - EP US); **C22C 1/1021** (2023.01 - US)

Citation (search report)

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- [X] US 5743033 A 19980428 - GEGEL GERALD A [US]
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DOCDB simple family (application)

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