

Title (en)

Coated cores and metal casting therewith

Title (de)

Beschichtete Form zur Herstellung von Metall-Gussteil

Title (fr)

Noyaux avec revêtement pour le moulage d'objets en métal

Publication

**EP 0810046 A1 19971203 (EN)**

Application

**EP 97108688 A 19970530**

Priority

US 65586796 A 19960531

Abstract (en)

Beryllium alloys, particularly beryllium-aluminum alloys during melt casting, have been found to react with and corrode materials used to form cores and some molds. Selected coatings have been found which protect the core (and mold when necessary) material during casting of the molten alloys. Of particular interest are alloys of beryllium and aluminum having from about 20 to about 80% by weight beryllium. Cores are formed from metals or ceramics, particularly stainless steels or silica-based ceramics. Coatings found to be stable and to protect such cores (and molds) against the molten alloy during casting include selected oxides, borides, nitrides and cermets.

IPC 1-7

**B22C 3/00**; **B22D 21/00**

IPC 8 full level

**B22C 1/00** (2006.01); **B22C 3/00** (2006.01)

CPC (source: EP)

**B22C 3/00** (2013.01)

Citation (search report)

- [A] US 4947927 A 19900814 - HORTON ROBERT A [US]
- [X] DATABASE WPI Section Ch Week 8450, Derwent World Patents Index; Class L02, AN 84-311590, XP002039778

Cited by

CN109014025A; EP1788121A3; CN108441717A; CN114394854A; US7025111B2; WO0192600A1

Designated contracting state (EPC)

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**EP 0810046 A1 19971203**; CA 2206487 A1 19971130; JP H1052733 A 19980224

DOCDB simple family (application)

**EP 97108688 A 19970530**; CA 2206487 A 19970529; JP 14427697 A 19970602