Title (en)

PROCESS FOR PRODUCING A MOULD FOR PREPARING ARTICLES WITH VERY SMALL DIMENSION

Publication

EP 0320811 B1 19920624 (FR)

Application

EP 88120579 A 19881209

Priority

FR 8717695 A 19871216

Abstract (en)

[origin: JPH01268805A] PURPOSE: To obtain a mold for very small parts having a complicated profile by machining a matrix to be a negative mold of a desired shell and forming a shell of a negative mold with a metallic powder containing mixture thereon. CONSTITUTION: A matrix 100, which includes a support body 102 and a portion 104 for a shape of objective parts and having a dimension slightly larger than the parts, is machined from a hard material. Next, the parts 104 are arranged in a cavity die 106 formed by assembling elements 108, 110, the matrix is held in the cavity die 106 with the support body 102. A mixture of one or more kinds of metallic powder and binder is filled into the cavity mold 106 from an orifice 112 of the element 108, a blank 116 is produced, it is heated to remove the binder and then is sintered. By contracting generated at this time, a desired mold dimension is obtained, a cavity mold 124 having objective shape dimension is formed in combining a cover 122, a material for manufacturing parts is charged into the cavity die 124 through a channel 118 arranged in the blank 116 by machining, etc.

IPC 1-7

B22F 3/00; B22F 3/22

IPC 8 full level

B29C 33/38 (2006.01); **B22F 3/02** (2006.01); **B22F 3/22** (2006.01); **B22F 5/00** (2006.01)

CPC (source: EP US)

B22F 3/22 (2013.01 - EP US); **B22F 3/225** (2013.01 - EP US); **B22F 5/007** (2013.01 - EP US); B22F 2998/00 (2013.01 - EP US)

Cited by

WO2013050374A1; EP0412743A1; CN107344236A; EP2579106A1; US6224816B1; WO9950038A1; WO9959790A1; US9533438B2

Designated contracting state (EPC)

CH DE FR GB IT LI

DOCDB simple family (publication)

EP 0320811 A1 19890621; **EP 0320811 B1 19920624**; DE 3872364 D1 19920730; DE 3872364 T2 19930121; FR 2624770 A1 19890623; FR 2624770 B1 19901228; JP H01268805 A 19891026; US 4923672 A 19900508

DOCDB simple family (application)

EP 88120579 A 19881209; DE 3872364 T 19881209; FR 8717695 A 19871216; JP 31519988 A 19881215; US 28403088 A 19881214