

Title (en)

Lost foam low-pressure casting of aluminium-alloy pieces.

Title (de)

Niederdruck-Vollformgiessverfahren von Gegenstände aus Aluminiumlegierung.

Title (fr)

Procédé de moulage à mousse perdue et sous basse pression de pièces en alliage d'aluminium.

Publication

EP 0461052 A1 19911211 (FR)

Application

EP 91420178 A 19910605

Priority

FR 9007736 A 19900607

Abstract (en)

The invention relates to lost-foam casting of metal pieces, particularly from aluminium alloy. <??>It relates to aluminium-alloy pieces having a wide solidification range (gap) and having a high ratio of length to modulus over the path between the point where the contraction cavity forms and the riser (feeder) and consists in applying a gaseous pressure to the mould of between 0.1 and 0.5 MPa. <??>It permits the production, in particular, of motor-vehicle cylinder heads having no pinholes (pitting) or porous (spongy) contraction cavity, and of all pieces with high-performance mechanical properties. <IMAGE>

IPC 1-7

B22C 9/04; B22C 9/08; B22D 27/13

IPC 8 full level

B22D 18/00 (2006.01); **B22C 9/04** (2006.01); **B22C 9/08** (2006.01); **B22D 27/13** (2006.01); **C22C 21/00** (2006.01)

CPC (source: EP KR US)

B22C 9/046 (2013.01 - EP US); **B22C 9/08** (2013.01 - EP US); **B22D 18/04** (2013.01 - KR); **B22D 27/13** (2013.01 - EP US)

Citation (search report)

- [A] EP 0274964 A1 19880720 - PECHINEY ALUMINIUM [FR]
- [A] FR 887120 A 19431104 - SILUMIN GES M B H

Cited by

CN102380608A; DE10104339A1; DE10104340A1; US6915834B2; US6874562B2

Designated contracting state (EPC)

AT BE CH DE DK ES GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0461052 A1 19911211; EP 0461052 B1 19940727; AT E109046 T1 19940815; AU 632935 B2 19930114; AU 7607391 A 19911212; BG 94584 A 19931224; BR 9102233 A 19920107; CA 2041682 A1 19911208; CA 2041682 C 19960116; CN 1021304 C 19930623; CN 1057981 A 19920122; CS 173091 A3 19920219; DE 69103095 D1 19940901; DE 69103095 T2 19941117; ES 2056608 T3 19941001; FI 912724 A0 19910606; FI 912724 A 19911208; HU 208270 B 19930928; HU T57108 A 19911128; IE 911935 A1 19911218; JP H04251633 A 19920908; JP H0732947 B2 19950412; KR 920000413 A 19920129; MX 171021 B 19930924; NO 911985 D0 19910523; NO 911985 L 19911209; PL 290532 A1 19911216; PT 97874 A 19930831; RU 1838042 C 19930830; US 5161595 A 19921110; YU 47535 B 19951003; YU 99691 A 19940610

DOCDB simple family (application)

EP 91420178 A 19910605; AT 91420178 T 19910605; AU 7607391 A 19910429; BG 9458491 A 19910606; BR 9102233 A 19910531; CA 2041682 A 19910502; CN 91104632 A 19910607; CS 173091 A 19910606; DE 69103095 T 19910605; ES 91420178 T 19910605; FI 912724 A 19910606; HU 149491 A 19910503; IE 193591 A 19910606; JP 23368691 A 19910607; KR 910009442 A 19910605; MX 2591691 A 19910524; NO 911985 A 19910523; PL 29053291 A 19910604; PT 9787491 A 19910605; SU 4895536 A 19910606; US 69064591 A 19910424; YU 99691 A 19910605