

Title (en)

Method for realization of castings of aluminium or its alloys with integrated runners.

Title (de)

Verfahren zur Gestaltung eines Gusstückes aus Aluminium oder seinen Legierungen mit eingegliederten Giessläufen.

Title (fr)

Procédé de réalisation d'une pièce moulée en aluminium ou ses alliages munie de canaux intégrés.

Publication

EP 0470021 B1 19950628 (FR)

Application

EP 91420284 A 19910731

Priority

FR 9010487 A 19900802

Abstract (en)

[origin: EP0470021A1] The invention relates to a method for production of castings of aluminium or its alloys comprising integrated runners intended for the distribution of a lubricant or for the circulation of a heat-exchange fluid. <??>The method is characterised in that: - one or more previously shaped tubes of aluminium or aluminium alloys are placed in a mould, the ends of the tube or tubes being outside the mould or the cores inserted therein; - the alloy is poured into the cavity of the mould; - after removal from the mould, the excess parts of the tube or tubes are removed. <??>This method applies to the mass-production of castings having a system of internal runners, such as cylinder heads, compressor cylinders, lubrication systems, convectors, etc. <IMAGE>

IPC 1-7

B22D 19/00

IPC 8 full level

B22D 19/00 (2006.01); **B22D 21/04** (2006.01); **B23P 19/02** (2006.01); **F02F 1/24** (2006.01)

CPC (source: EP US)

B22D 19/00 (2013.01 - EP US); **B22D 19/0072** (2013.01 - EP US); **F02F 1/24** (2013.01 - EP US)

Cited by

CN109648063A; EP0610020A1; EP2008740A1; EP1647417A1; WO2008028669A1; WO2010106043A1; US8371828B2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 0470021 A1 19920205; EP 0470021 B1 19950628; AT E124306 T1 19950715; BR 9105018 A 19930525; CA 2048187 A1 19920203; CA 2048187 C 19990427; DE 69110786 D1 19950803; DE 69110786 T2 19951123; ES 2074246 T3 19950901; FI 913671 A0 19910801; FI 913671 A 19920203; FI 96285 B 19960229; FI 96285 C 19960610; FR 2665384 A1 19920207; FR 2665384 B1 19921016; IE 76321 B1 19971022; IE 912728 A1 19920212; IS 1675 B 19971231; IS 3738 A7 19920203; JP 2986585 B2 19991206; JP H04251656 A 19920908; KR 100210171 B1 19990715; MX 9100475 A 19920401; NO 178918 B 19960325; NO 178918 C 19960703; NO 913006 D0 19910801; NO 913006 L 19920203; PT 98547 A 19930930; PT 98547 B 19990129; US 5305818 A 19940426

DOCDB simple family (application)

EP 91420284 A 19910731; AT 91420284 T 19910731; BR 9105018 A 19911119; CA 2048187 A 19910731; DE 69110786 T 19910731; ES 91420284 T 19910731; FI 913671 A 19910801; FR 9010487 A 19900802; IE 272891 A 19910801; IS 3738 A 19910801; JP 18881891 A 19910729; KR 910013295 A 19910801; MX 9100475 A 19910801; NO 913006 A 19910801; PT 9854791 A 19910801; US 73772191 A 19910730