

Title (en)

METHOD AND CASTING DEVICE FOR PRECISION CASTING

Title (de)

VERFAHREN UND GIESSEINRICHTUNG FÜR FEINGUSS

Title (fr)

PROCEDE ET DISPOSITIF DE MOULAGE D'OBJETS PAR COULEE DE PRECISION

Publication

**EP 0971805 B2 20090603 (DE)**

Application

**EP 98906787 A 19980317**

Priority

- CH 9800103 W 19980317
- CH 76597 A 19970403

Abstract (en)

[origin: WO9845071A1] The invention relates to a gas exchange method used for producing precision casting objects. A melting pot (1) and a casting mold (2) with at least partially porous walls are placed in a gas-tight container (5). The casting mold (2) with the cast cavity (3) is evacuated before the pouring-in process and then washed with a light gas, such as helium. After the cast cavity (3) has been filled, a second, heavy gas, such as argon is applied to the surface (18) of the cast in the casting mold (2) and said surface is exposed to an excess pressure, thereby improving the filling degree of the cast cavity (3) and the structure of the cast objects.

IPC 8 full level

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CPC (source: EP US)

**B22D 18/06** (2013.01 - EP US); **B22D 27/003** (2013.01 - EP US)

Citation (opposition)

Opponent :

- US 5335711 A 19940809 - PAINE BRIAN [GB]
- EP 0686443 A1 19951213 - ALD VACUUM TECHN GMBH [DE]
- DE 4420138 A1 19951214 - LEYBOLD DURFERRIT GMBH [DE]
- DE 19505689 A1 19960822 - ALD VACUUM TECHN GMBH [DE]
- DE 4433373 A1 19950323 - OROTIG S R L [IT]
- DE 19539922 A1 19960502 - HONDA MOTOR CO LTD [JP]
- EP 0728547 A2 19960828 - SCHULTHEISS GEORG ELECTRONIC [DE]

Cited by

DE112006003535B4

Designated contracting state (EPC)

CH DE IT LI

DOCDB simple family (publication)

**WO 9845071 A1 19981015**; CN 1072071 C 20011003; CN 1251543 A 20000426; DE 59802238 D1 20020110; EP 0971805 A1 20000119; EP 0971805 B1 20011128; EP 0971805 B2 20090603; JP 2001518847 A 20011016; JP 4275195 B2 20090610; US 6253828 B1 20010703

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**CH 9800103 W 19980317**; CN 98803885 A 19980317; DE 59802238 T 19980317; EP 98906787 A 19980317; JP 54220098 A 19980317; US 38173499 A 19990922