

Title (en)

Top fill casting.

Title (de)

Giessen von oben.

Title (fr)

Moulage par le haut.

Publication

EP 0569627 A1 19931118 (EN)

Application

EP 92304196 A 19920511

Priority

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Abstract (en)

The apparatus for casting comprises a pressure vessel (12) and a device for evacuating and pressurizing the vessel (14,19). The evacuating and pressurizing device is in fluidic connection with the vessel. The apparatus is also comprised of a chamber (16) disposed in the pressure vessel within which material (18) is melted. There is a mold (20) with a passage (24) such that the melted material in the chamber can be forced down into the mold through the passage as the pressurizing device pressurize the vessel. The passage contains a filter (26) such that the melted material is prevented from entering the interior of the mold prior to pressurization. Additionally, the apparatus is comprised of a device (28) for heating material in the chamber and the mold such that material is melted in the chamber and stays melted as it is forced down into mold while the pressurizing device pressurizes the vessel. The heating device is disposed in the vessel. The apparatus is comprised of a chill plate (30) for cooling the mold and a chill plate lifter (32) for selectively moving the chill plate into and out of contact with the bottom of the mold during operation. Additionally, the invention is a method for casting fiber reinforced materials (22) which disclose a top fill and the step of cooling the mold after infiltration. <IMAGE>

IPC 1-7

B22D 19/14; **B22D 27/13**; **B22D 27/04**; **C22C 1/10**

IPC 8 full level

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CPC (source: EP)

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