

Title (en)
Method for manufacturing a casting mould

Title (de)
Verfahren zur Herstellung einer Gussform

Title (fr)
Procédé de fabrication d'un moule

Publication
EP 1920858 A1 20080514 (DE)

Application
EP 08000499 A 20041227

Priority
EP 04030823 A 20041227

Abstract (en)
The production of a mold for the production of components of a gas turbine/turbine blade/heat shield element, comprises producing a recess (46) in a surface (58) of a wax model (43) of a component to be produced by the mold in an intermediate step, introducing a shaped material into a part of the recess to produce a part of a hole of the component during molding, completely filling the recess with a material, which results projection of the mold, hardening the material in the recess and connecting the hardened material with an internal wall (25) or an external wall of the mold. The production of a mold for the production of components of a gas turbine or turbine blade or heat shield element, comprises producing a recess (46) in a surface (58) of a wax model (43) of the component to be produced by the mold in an intermediate step, introducing a shaped material into a part of the recess to produce a part of a hole of the component during molding, completely filling the recess with a material, which results projection of the mold, hardening the material in the recess, connecting the hardened material with an internal wall (25) or an external wall of the mold, bringing the recess into the model before a wall (44) is mounted, partially and continuously extending the recess by a wall of the model and bringing the external wall in connection with the model, which is removed, so that the mold results. The mold consists of a core. The recess is filled with material during mounting the internal wall, the core or the external wall. The internal wall or the core is already arranged in the model, when the recesses are produced. The recess is an angular hole.

Abstract (de)
Durchgangslöcher in Bauteilen werden nach dem Stand der Technik oft nach dem Herstellungsvorgang (Gießen) des Bauteils eingebracht. Dies bedeutet einen zusätzlichen zeitlichen und apparativen Aufwand. Der zeitliche Aufwand kann erheblich verkürzt werden, wenn eine Gussform (16) so ausgebildet wird, dass sich zumindest teilweise das Durchgangsloch (13) bildet, indem den Durchgangslöchern entsprechende Vorsprünge (19, 19') an der inneren Wand (25) und/oder der äußeren Wand (28) der Gussform (16) ausgebildet werden.

IPC 8 full level
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CPC (source: EP US)
B22C 7/02 (2013.01 - EP US); **B22C 9/04** (2013.01 - EP US); **B22C 9/108** (2013.01 - EP US)

Citation (applicant)
• US 6329015 B1 20011211 - FEHRENBACH JEFFREY ARNOLD [US], et al
• US 6024792 A 20000215 - KURZ WILFRIED [CH], et al
• EP 0892090 A1 19990120 - SULZER INNOTECH AG [CH]

Citation (search report)
[X] EP 0559251 A1 19930908 - GEN MOTORS CORP [US]

Designated contracting state (EPC)
CH DE GB IT LI

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EP 1674174 A1 20060628; **EP 1674174 B1 20090211**; DE 502004008983 D1 20090326; DE 502004009738 D1 20090820;
EP 1920858 A1 20080514; EP 1920858 B1 20090708; US 2006162893 A1 20060727

DOCDB simple family (application)
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