

Title (en)

CASTING PROCESS AND SAND MOULD PROVIDED WITH AN INLET SYSTEM FOR PRODUCING AT LEAST PARTLY THIN WALLED ALUMINIUM CASTS WITH SAND MOULDING TECHNOLOGY BY MEANS OF GRAVITY CASTING

Title (de)

GIESSVERFAHREN UND SANDFORM MIT EINLASSSYSTEM ZUR HERSTELLUNG VON MINDESTENS TEILWEISE DÜNNWANDIGEN ALUMINIUMFORMEN MIT SANDFORMTECHNOLOGIE MITTELS SCHWERKRAFTGIESSEN

Title (fr)

PROCÉDÉ DE COULAGE ET MOULE EN SABLE POURVU D'UN SYSTÈME D'ADMISSION POUR PRODUIRE DES PIÈCES COULÉES EN ALUMINIUM À PAROIS AU MOINS PARTIELLEMENT MINCES AVEC LA TECHNOLOGIE DE MOULAGE AU SABLE AU MOYEN D'UN COULAGE PAR GRAVITÉ

Publication

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Application

EP 16774976 A 20160512

Priority

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Abstract (en)

[origin: WO2016181177A2] The subject of the invention is a process for the production of at least partly thin-walled and aluminium castings with sand moulding technology by gravity casting, which allows producing casts with 100 times or favourably 200-400 times larger overall dimensions in case of 1-3 mm wall thickness. The main idea of the process is that sand mould containing mould cavity is provided, melt of aluminium content is produced, the melt is introduced into the mould cavity at several points through a gating system of narrowing cross section. A further subject of the invention is a sand mould fitted with a gating system to produce at least partly thin-walled castings with sand moulding technology, by gravity casting. The wall thickness of thin-walled segments is 1-3 mm and the largest dimension is more than a 100 but favourably at least 200-400 multiple of the wall thickness. The main idea behind the sand mould with a gating system is that it contains a mould cavity allowing the production of at least partly thin-walled castings, and is equipped with a gating system, which is composed of at least two sprues and one ingate to each having a porthole into the mould cavity and in liquid contact with the sprues.

IPC 8 full level

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Citation (opposition)

Opponent :

- EP 0572058 B1 19970820 - GEN MOTORS CORP [US]
- KR 100907949 B1 20090716 - DONG NAM MOOL SAL CO LTD [KR]

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