

Title (en)
METHOD FOR PRODUCING DIE-CAST PARTS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON DRUCKGUSSTEILEN

Title (fr)
PROCÉDÉ DE FABRICATION DE PIÈCES MOULÉES SOUS PRESSION

Publication
EP 2393619 B1 20130403 (DE)

Application
EP 10743166 A 20100819

Priority

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Abstract (en)
[origin: WO2011116838A1] In a method for producing die-cast parts from an aluminum alloy, the aluminum alloy is exposed to high shear forces in a mixing and kneading machine (30) having a housing (31) having a working chamber (34) enclosed by an inner housing jacket (32) and a worm shaft (36), which rotates about a longitudinal axis (x) and moves back and forth in a translational manner along the longitudinal axis (x) in the inner housing jacket (32) and which is provided with kneading blades (38), and having kneading pins (38), which are fastened to the inner housing jacket (32) and which protrude into the working chamber (34), wherein liquid aluminum alloy is fed into the working chamber (34) at one end of the housing (31) and removed from the working chamber (34) as partially solidified aluminum alloy having a specified solid fraction at the other end of the housing (31), transferred into a filling chamber (12) of a die-casting machine (10), and pushed into a mold by means of a piston (20), wherein the solid fraction of the aluminum alloy is set to the specified solid fraction in the working chamber (34) by specific cooling and heating of the working chamber (34).

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