

Title (en)

HYBRID DIE CAST SYSTEM FOR FORMING A COMPONENT USABLE IN A GAS TURBINE ENGINE

Title (de)

HYBRIDES DRUCKGUSSSYSTEM ZUM FORMEN EINES BAUTEILS FÜR EINEN GASTURBINENMOTOR

Title (fr)

SYSTÈME DE COULÉE SOUS PRESSION HYBRIDE POUR LA FORMATION D'UN ÉLÉMENT UTILISABLE DANS UNE TURBINE À GAZ

Publication

EP 3191241 A1 20170719 (EN)

Application

EP 14780658 A 20140908

Priority

US 2014054463 W 20140908

Abstract (en)

[origin: WO2016039715A1] A hybrid die cast system (10) having an inner liner insert (12) that enables the configuration of a component (18) produced by the system (10) to be easily changed by changing the inner liner insert (12) without having to rework the die housing (16) is disclosed. Because the inner liner insert (12) only need be removed and replaced to change the configuration of an outer surface (18) of a component (18) produced by the system (10), the cost savings is significant in contrast with conventional systems in which the die would have to be reworked. The system (10) may also include a cooling system (20) for controlling the casting process by controlling the rate of solidification and the rate of cooling of the casting. Local heating and cooling may be used to control the microstructure, enhance mold fill and reduce casting defects such as porosity.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2016039715A1

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