

Title (en)
Rheocasting method and apparatus

Title (de)
Rheogießverfahren und -vorrichtung

Title (fr)
Procédé et appareil de rhéomoulage

Publication
EP 2574411 A3 20130501 (EN)

Application
EP 12186494 A 20120928

Priority
IT MI20111767 A 20110930

Abstract (en)
[origin: EP2574411A2] A rheocasting method and apparatus are disclosed for die-casting metal alloy pieces. A metal alloy in semi-solid state is injected into a mould (3) by a vertical die-casting system comprising a mixing device (10) and a rotating table (4) provided with injection units (5), each provided with a container (8) for preparing the metal alloy in semi-solid state and injecting the metal alloy in semi-solid state into the mould (3); the injection units (5) are transferred in sequence, with step forward movement, between a loading station (6), where each injection container (8) is filled with a liquid metal alloy which is then stirred mechanically and simultaneously cooled to a semi-solid state by the mixing device (10), an injection station (7) where the semi-solid alloy is injected into the cavity of a mould (3), and a station (6') for removing cast pieces.

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Citation (search report)
• [Y] US 6470955 B1 20021029 - RICHARD KEVIN L [US], et al
• [Y] EP 1649951 A1 20060426 - HONDA MOTOR CO LTD [JP]

Cited by
CN108788061A; CN115178728A; CN109175291A; CN112620595A; EP3138933A4

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