

Title (en)

METHOD FOR PRODUCING MOULD PARTS BY INJECTION AND A PLUGGED NEEDLE NOZZLE FOR AN INJECTION MOULD

Title (de)

VERFAHREN ZUM HERSTELLEN VON SPRITZGIESSARTIKELN UND NADELVERSCHLUSSDÜSE FÜR EIN SPRITZGIESSWERKZEUG

Title (fr)

PROCEDE DE PRODUCTION D'ARTICLES MOULES PAR INJECTION ET BUSE A OBTURATION A AIGUILLE POUR MOULE A INJECTION

Publication

EP 1599328 A1 20051130 (DE)

Application

EP 04710014 A 20040211

Priority

- EP 2004001265 W 20040211
- DE 10305756 A 20030211

Abstract (en)

[origin: WO2004071742A1] The invention relates to a needle-sealed nozzle (10) for an injection mould whose injection nozzle (20) for introducing a fluid molten material (S) into a mould cavity (50) can be sealed on the end thereof by a closing needle (30). Said closing needle is provided with an injection channel (60) extending to an outlet orifice (62) for injecting a fluid (F) into the molten material (s) which is introduced into the mould cavity. Said outlet orifice is formed on the end face (34) of the closing needle for the molten material and can be closed by a fluid closing needle (64) which is axially displaceable in the closing needle for the molten material (30). Said closing needle for the molten material (30) can be moved from an opening position to a first and second closing position by a drive (40) For this purpose, the cylindrical closing part (33) of the closing needle (30) enters, in an accurately adjusted manner, a sealing seat (D) which is preferably formed in the injection nozzle (20) or in the end bit (23) of the nozzle. In order to inject a fluid, the closing needle for the molten material (30) is placed in the first closing position and extends by the end thereof on the nozzle side towards the mould cavity (50) in such a way that the outlet orifice (62) for fluid (F) reaches the molten material (S) introduced in the mould cavity (50). The fluid being injected, the molten material (S) is extracted from the injection nozzle (20), if necessary and introduced in an injection hole (I) created by the fluid injection. For this purpose, the closing needle for the molten material (30) is displaced to the second closing position, the injection hole (I) being closed with the supplied molten material (s).

IPC 1-7

B29C 45/17

IPC 8 full level

B29C 45/17 (2006.01)

CPC (source: EP KR US)

B29C 45/17 (2013.01 - KR); **B29C 45/1735** (2013.01 - EP US)

Citation (search report)

See references of WO 2004071742A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004071742 A1 20040826; BR PI0407223 A 20060131; CA 2515404 A1 20040826; CN 1747825 A 20060315; DE 10305756 A1 20040819; EP 1599328 A1 20051130; JP 2006517148 A 20060720; KR 20050107422 A 20051111; MX PA05008453 A 20060405; PL 377602 A1 20060206; TW 200510159 A 20050316; US 2006159798 A1 20060720

DOCDB simple family (application)

EP 2004001265 W 20040211; BR PI0407223 A 20040211; CA 2515404 A 20040211; CN 200480003981 A 20040211; DE 10305756 A 20030211; EP 04710014 A 20040211; JP 2006501809 A 20040211; KR 20057014801 A 20050811; MX PA05008453 A 20040211; PL 37760204 A 20040211; TW 93103154 A 20040211; US 54594404 A 20040211