

Title (en)

Separating agent spraying device for a casting machine

Title (de)

Trennmittelsprühvorrichtung für eine Gießmaschine.

Title (fr)

Dispositif de pulvérisation d'agent séparateur pour une machine de coulée

Publication

EP 2065100 B1 20100915 (DE)

Application

EP 08020282 A 20081121

Priority

- EP 07023220 A 20071130
- EP 08020282 A 20081121

Abstract (en)

[origin: EP2065100A1] The device for spraying a release agent in a casting machine, comprises spray nozzles (1) and means designed for controlled discharge of release agent from the spray nozzle and comprising a dosing unit (3) assigned to the spray nozzle. The dosing unit: provides a release agent quantity to be discharged through the nozzle into a spraying substance by a release agent supply line (9); and comprises a release agent chamber (6), which is closably connected via the supply line with a release agent source and via a nozzle connecting line (11) with the spray nozzle, and a dosing element. The device for spraying a release agent in a casting machine, comprises spray nozzles (1) and means designed for controlled discharge of release agent from the spray nozzle and comprising a dosing unit (3) assigned to the spray nozzle. The dosing unit: provides a release agent quantity to be discharged through the nozzle into a spraying substance by a release agent supply line (9); and comprises a release agent chamber (6), which is closably connected via the supply line with a release agent source and via a nozzle connecting line (11) with the spray nozzle, and a dosing element, which limits the chamber and is movably arranged for changing the volume of the release agent. A check valve (10) is intended in the supply line and/or a check valve (12) is intended in the nozzle connecting line or a multiport valve is intended for optional closing of the connection of the chamber with the spray nozzle and for releasing the connection of the chamber with the source and/or releasing the connection the chamber with the spray nozzle and closing the connection of the chamber with the source. The dosing element is present in a common housing body and comprises a control medium chamber for controlling the movement of the dosing element, where the control medium chamber is connected with the source. The source comprises a means for controllably subjecting the dosing element with two different control pressures, where a first control pressure acts for dosing the release agent into the chamber and a second control pressure different from the first pressure acts for delivering the dosed release agent. The discharge means are arranged for adjusting different release agent quantities for different nozzles and/or for different spraying substances. An adjustable movement limiter is assigned to the dosing element for variably adjusting the release agent quantity per spraying substance. The dosing element comprises dosing pistons limiting the chamber or a dosing membrane limiting the chamber.

IPC 8 full level

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CPC (source: EP US)

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Cited by

FR2949983A1; EP2502853A1; WO2011030080A1

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