

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 2065099 A1 20090603 (DE)

Application

EP 07023220 A 20071130

Priority

EP 07023220 A 20071130

Abstract (en)

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. 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.

Abstract (de)

Die Erfindung bezieht sich auf eine Trennmittelsprühvorrichtung für eine Gießmaschine mit einer oder mehreren Sprühdüsen (1) sowie Austragmitteln zum gesteuerten Austrag von Trennmittel aus der jeweiligen Sprühdüse. Erfindungsgemäß beinhalten die Austragmittel wenigstens eine Dosiereinheit (3), die wenigstens einer Sprühdüse zugeordnet ist und eine durch die wenigstens eine zugeordnete Sprühdüse in einem jeweiligen Sprühstoß auszutragende Trennmittelmenge vorab festlegt und separat von einer Trennmittelzufuhr zum Austragen im nächsten Sprühstoß bereitstellt.

IPC 8 full level

B05B 7/12 (2006.01); **B05B 9/04** (2006.01); **B05B 12/02** (2006.01); **B05B 12/08** (2006.01); **B22D 17/20** (2006.01)

CPC (source: EP US)

B05B 7/1263 (2013.01 - EP US); **B05B 9/0413** (2013.01 - EP US); **B05B 12/02** (2013.01 - EP US); **B05B 12/088** (2013.01 - EP US); **B22D 17/2007** (2013.01 - EP US); **B05B 9/04** (2013.01 - EP US)

Citation (applicant)

- DE 3238201 A1 19840620 - FRECH OSKAR GMBH & CO [DE]
- EP 1468745 A1 20041020 - FRECH OSKAR GMBH & CO KG [DE]

Citation (search report)

- [X] US 3888420 A 19750610 - BOELKINS WALLACE G
- [XA] EP 0627268 A2 19941207 - BALDWIN GEGENHEIMER GMBH [DE]

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Designated extension state (EPC)

AL BA HR MK RS

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DOCDB simple family (application)

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