

Title (en)

NOZZLE ROW ARRANGEMENT AND NOZZLE FIELD FOR INSTALLING IN A ROLLER GAP BETWEEN TWO STRAND GUIDE ROLLERS

Title (de)

DÜSENREIHENANORDNUNG UND DÜSENFELD ZUM EINBAU IN ROLLENSPALTE ZWISCHEN ZWEI STRANGFÜHRUNGSROLLEN

Title (fr)

ENSEMBLE DE RANGÉES DE BUSES ET CHAMP DE BUSES DESTINÉS À ÊTRE MONTÉS DANS DES FENTES SITUÉES ENTRE DEUX ROULEAUX DE CORSET DE GUIDAGE

Publication

EP 3419778 B1 20190807 (DE)

Application

EP 17706475 A 20170221

Priority

- DE 102016202880 A 20160224
- DE 102016215977 A 20160825
- EP 2017053961 W 20170221

Abstract (en)

[origin: WO2017144481A1] The invention relates to a nozzle row arrangement and to a nozzle field for installing in a roller gap (212) between two strand guide rollers (214) in a strand guide (210) of a strand casting plant. Known nozzle row arrangements typically have at least one one-material nozzle (110) in a center region G of the roller gap (212) and at least one further nozzle (120) to the right and to the left of the center region in the roller gap, as viewed in the casting direction R. The nozzles are used to apply coolant M1, M2 to a cast strand (300) guided by the strand guide rollers (214). In order to improve the quality of the cast strand (300) and at the same time reduce the costs for secondary cooling, the nozzle row arrangement (100) according to the invention provides that the further nozzles (120) to the right and to the left of the center region in the roller gap are designed as multiple-material nozzles, wherein the at least one one-material nozzle has a smaller control ratio than the multiple-material nozzles (120).

IPC 8 full level

B22D 11/124 (2006.01); **B22D 11/041** (2006.01)

CPC (source: EP)

B22D 11/1246 (2013.01); **B22D 11/041** (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

DE 102016215977 A1 20170824; EP 3419778 A1 20190102; EP 3419778 B1 20190807; WO 2017144481 A1 20170831

DOCDB simple family (application)

DE 102016215977 A 20160825; EP 17706475 A 20170221; EP 2017053961 W 20170221