

Title (en)

METHOD AND CASTING NOZZLE FOR CASTING-ON A METAL STRIP WHICH IS CLOSE TO FINAL DIMENSIONS

Title (de)

VERFAHREN UND GIESSDÜSE ZUM ANGIESSEN EINES ENDABMESSUNGSNAHEN METALLBANDES

Title (fr)

PROCEDE ET TUYERE DE COULEE POUR LA COULEE D'UNE BANDE METALLIQUE AUX DIMENSIONS VOISINES DES DIMENSIONS FINALES

Publication

EP 1034057 A1 20000913 (DE)

Application

EP 98954188 A 19980911

Priority

- DE 9802763 W 19980911
- DE 19746728 A 19971013

Abstract (en)

[origin: US6357637B1] A method and a casting nozzle for starting the casting of a metal strip close its final dimensions. The method includes leading a melt via a melt-feed vessel into a pouring chamber of a siphon vessel. The melt from the pouring chamber is led onto a cooled transport belt via casting nozzle and a main chamber of the siphon vessel which can be put under vacuum. The pouring chamber and the main chamber of the siphon vessel are filled with the melt up to a top of the siphon. Before the melt flows over the top of the siphon a vacuum is induced in the main chamber by actuating a vacuum device connected to the main chamber. After the melt has flowed over the top of the siphon the melt stream is led through the casting nozzle so that the nozzle cross-section closes in the manner of a plug. The vacuum is increased depending on position of the plug in the casting nozzle until there is in the melt stream a hydraulic connection between the steam inlet and the stream outlet. The vacuum is adjusted so that the melt flows out of the opening of the casting nozzle. The melt level in the pouring chamber is kept to the value at which an inflowing melt stream is equal to an outflowing melt stream.

IPC 1-7

B22D 11/06

IPC 8 full level

B22D 11/06 (2006.01)

CPC (source: EP US)

B22D 11/0631 (2013.01 - EP US)

Citation (search report)

See references of WO 9919098A1

Cited by

EP2308615A1

Designated contracting state (EPC)

AT DE GB IT

DOCDB simple family (publication)

US 6357637 B1 20020319; AT E248671 T1 20030915; AU 1143099 A 19990503; DE 19746728 C1 19981029; DE 59809512 D1 20031009; EP 1034057 A1 20000913; EP 1034057 B1 20030903; JP 2001519243 A 20011023; JP 4348009 B2 20091021; WO 9919098 A1 19990422

DOCDB simple family (application)

US 52952300 A 20000725; AT 98954188 T 19980911; AU 1143099 A 19980911; DE 19746728 A 19971013; DE 59809512 T 19980911; DE 9802763 W 19980911; EP 98954188 A 19980911; JP 2000515715 A 19980911