

Title (en)
TWIN ROLL CASTER WITH TAPERED NOZZLE

Title (de)
ZWEI-WALZEN-GIESSANLAGE MIT ABGESCHRÄGTER GIESSDÜSE

Title (fr)
MACHINE DE COULÉE À DEUX ROULEAUX AVEC BUSE CONIQUE D'ALIMENTATION DE MÉTAL FONDU

Publication
EP 1818120 B1 20110420 (EN)

Application
EP 05795467 A 20051020

Priority
• JP 2005019282 W 20051020
• JP 2004311962 A 20041027

Abstract (en)
[origin: EP1818120A1] A nozzle end is provided with an extension 11 which has a lower portion immersed in a molten metal pool and extends toward a side weir 2 such that a stagnation area disappears on a free liquid surface of molten metal. The extension 11 is in the form of a quadrangular pyramid lying sidelong and is converged to a point P1 extremely close to the side weir 2. According to this molten metal feed nozzle, a stagnation area on a free liquid surface of molten metal is displaced by the extension 11 contiguous with the nozzle end to suppress generation of an unwanted solidification shell. Thus, no unwanted solidification shell is pinched as foreign matter by solidification' shells generated on outer peripheries of chilled rolls 1 for production of a strip, and break of a strip derived from enlargement of nip between the rolls can be averted.

IPC 8 full level
B22D 11/06 (2006.01)

CPC (source: EP KR US)
B22D 11/0642 (2013.01 - EP KR US); **B22D 11/10** (2013.01 - KR); **B22D 11/1287** (2013.01 - KR); **B22D 41/50** (2013.01 - KR)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 1818120 A1 20070815; EP 1818120 A4 20080507; EP 1818120 B1 20110420; AU 2005298039 A1 20060504; AU 2005298039 B2 20100304; CN 101048247 A 20071003; CN 101048247 B 20110209; DE 602005027603 D1 20110601; JP 2006122933 A 20060518; JP 4720145 B2 20110713; KR 100947756 B1 20100318; KR 20070068440 A 20070629; US 2009126895 A1 20090521; WO 2006046459 A1 20060504

DOCDB simple family (application)
EP 05795467 A 20051020; AU 2005298039 A 20051020; CN 200580036925 A 20051020; DE 602005027603 T 20051020; JP 2004311962 A 20041027; JP 2005019282 W 20051020; KR 20077009936 A 20051020; US 57788205 A 20051020