

Title (en)

METHOD FOR PRODUCING STEEL SLABS

Title (de)

VERFAHREN ZUM ERZEUGEN VON BRAMMEN AUS STAHL

Title (fr)

PROCEDE DE FABRICATION DE BRAMES D'ACIER

Publication

EP 1307309 B1 20040526 (DE)

Application

EP 01955369 A 20010725

Priority

- DE 10039016 A 20000810
- EP 0108577 W 20010725

Abstract (en)

[origin: WO0211925A1] The invention relates to a method for producing steel slabs, whereby the strand leaves an ingot mold with melt enclosed by a strand shell and, in a strand guide located downstream, the opening width of guide rolls mounted in segments with upper and lower frames can be set in a continuous manner with successive steps by adjusting elements that join said guide rolls. An oscillation around a center line of the opening width serves to modify the opening width in order to render the dynamic influences on the guide rolls negligibly small. The amplitude of the opening width oscillation is set to a quantity, which does not provoke any plastic deformation of the strand shell. The actual opening width of the guide rolls is detected and the actuating force of the adjusting elements as well as the amplitude of the actuating force are determined at the same time. In the case of an increasing amplitude of the actuating force, the opening width is set to a predetermined measure and/or guided in a pressure controlled manner via at least one adjusting element. A force/path diagram of the opening width setting is then determined from a multitude of force/path measurements along the strand. Said diagram is composed, in a chain-like manner, of a multitude of small force/path curves, which are each provided in the form of a hysteresis and which can be individually determined using an oscillation with a comparatively small amplitude.

IPC 1-7

B22D 11/128; B22D 11/20

IPC 8 full level

B22D 11/128 (2006.01); **B22D 11/20** (2006.01)

CPC (source: EP KR US)

B22D 11/128 (2013.01 - EP KR US); **B22D 11/20** (2013.01 - EP US); **Y10T 29/49991** (2015.01 - EP US)

Cited by

WO2007115744A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0211925 A1 20020214; AT E267654 T1 20040615; AU 7755201 A 20020218; CN 1234483 C 20060104; CN 1446135 A 20031001; DE 10039016 A1 20020221; DE 10039016 B4 20100225; DE 50102426 D1 20040701; EP 1307309 A1 20030507; EP 1307309 B1 20040526; JP 2004505776 A 20040226; KR 100817173 B1 20080327; KR 20030020460 A 20030308; RU 2262412 C2 20051020; UA 74589 C2 20060116; US 2004006862 A1 20040115; US 6935408 B2 20050830

DOCDB simple family (application)

EP 0108577 W 20010725; AT 01955369 T 20010725; AU 7755201 A 20010725; CN 01813955 A 20010725; DE 10039016 A 20000810; DE 50102426 T 20010725; EP 01955369 A 20010725; JP 2002517248 A 20010725; KR 20037001858 A 20030208; RU 2003106433 A 20010725; UA 2003032064 A 20010725; US 34405303 A 20030619