

Title (en)  
METHOD FOR QUICKLY CONVERTING A SINGLE-TRAIN CONTINUOUS CASTING PLANT FOR SLABS INTO A MULTI-TRAIN CONTINUOUS CASTING PLANT FOR BILLETS, AND VICE VERSA

Title (de)  
VERFAHREN ZUM RASCHEN UMBAU EINER EINSTRÄNGIGEN BRAMMEN-STRANGGIESSANLAGE IN EINE MEHRSTRÄNGIGE KNÜPPEL-STRANGGIESSANLAGE UND VICE VERSA

Title (fr)  
PROCÉDÉ DE TRANSFORMATION D'UNE INSTALLATION DE COULÉE DE BRAMES MONOBRIN EN UNE INSTALLATION DE COULÉE DE BILLETES MULTIBRIN ET VICE VERSA

Publication  
**EP 3197618 B1 20181010 (DE)**

Application  
**EP 15748193 A 20150723**

Priority  
• AT 506762014 A 20140923  
• EP 2015066820 W 20150723

Abstract (en)  
[origin: WO2016045818A1] The invention relates to a method for converting a single-train continuous casting plant for slabs (1) into a multi-train continuous casting plant for billets (101), and vice versa. The object of the invention is to reduce the time required for the conversion. The object of the invention is achieved by means of the following steps: i) decoupling the water supply from the mould (2) and decoupling the hydraulic system from the oscillating unit (3) of the continuous casting plant; ii) removing the mould (2) and the oscillating unit (3) and installing a common support frame (111) for a plurality of billet trains (K) in the region of the machine head of the continuous casting plant, wherein the common support frame (111) is connected to the main body (6) of the continuous casting plant; iii) installing one mould (102) for casting liquid steel into a billet train (K) and one oscillating unit (103) for oscillating the mould (102) per billet train (K), wherein a plurality of oscillating units (103) are connected to the common support frame (111); iv) coupling the water supply to the moulds (2) and coupling the hydraulic supply to the oscillating units (3); v) decoupling the water supply and hydraulic supply from the segments (4a...4n); vi) releasing the segments (4a...4n) from the rear construction (7) of the continuous casting plant, and removing the segments (4a...4n) from the continuous casting plant; vii) connecting roller pairs (104a...104i) for guiding a plurality of billet trains (K) to the rear construction (7), wherein the billet trains (K) are supported on both sides by a roller pair (104a...104i) and cooled by cooling nozzles; viii) coupling the cooling nozzles of the roller pairs (104a...104i) to the water supply; ix) connecting at least one extraction unit (108) for extracting a plurality of billet trains (K) from the moulds (102) to the rear construction (7); x) coupling the extraction unit (108) to the hydraulic supply.

IPC 8 full level  
**B22D 11/04** (2006.01); **B22D 11/14** (2006.01)

CPC (source: AT EP RU)  
**B21B 1/46** (2013.01 - AT); **B22D 11/04** (2013.01 - EP); **B22D 11/14** (2013.01 - AT RU); **B22D 11/141** (2013.01 - AT EP); **B22D 11/147** (2013.01 - AT EP)

Cited by  
CN107790657A

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)  
**WO 2016045818 A1 20160331**; AT 516300 A1 20160415; AT 516300 B1 20160915; EP 3197618 A1 20170802; EP 3197618 B1 20181010; RU 2017107961 A 20181024; RU 2017107961 A3 20181113; RU 2689259 C2 20190524

DOCDB simple family (application)  
**EP 2015066820 W 20150723**; AT 506762014 A 20140923; EP 15748193 A 20150723; RU 2017107961 A 20150723