

Title (en)  
METHOD FOR PRODUCING A METAL STRIP

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES METALLISCHEN BANDES

Title (fr)  
PROCÉDÉ DE FABRICATION D'UNE BANDE MÉTALLIQUE

Publication  
**EP 2991783 A1 20160309 (DE)**

Application  
**EP 14720168 A 20140430**

Priority  

- DE 102013208145 A 20130503
- DE 102013221072 A 20131017
- DE 102013019698 A 20131126
- EP 2014058935 W 20140430

Abstract (en)  
[origin: WO2014177664A1] The invention relates to a method for producing a metal strip (1), in which the strip (1) is rolled in a multi-stand rolling mill, is removed behind the final rolling stand (2) of the rolling mill in the direction of conveyance (F), and is cooled in a cooling device (3). In order to achieve a favourable grain structure and a high degree of surface evenness, the strip or metal sheet (1) is subjected to additional rapid cooling (4) immediately after passing the working rollers of the final rolling stand (2), wherein the strip or the metal sheet (1) is cooled at least partially within the extent of the final rolling stand (2) in the direction of conveyance (F), wherein rapid cooling is performed by applying a coolant to the strip or metal sheet (1) from above and from below, wherein the volume flow of coolant that is applied to the strip or metal sheet (1) from below measures at least 120 % of the volume flow of coolant that is applied to the strip or metal sheet (1) from above.

IPC 8 full level  
**B21B 45/02** (2006.01)

CPC (source: EP RU US)  
**B21B 45/0218** (2013.01 - EP US); **B21B 45/02** (2013.01 - RU); **B21B 2201/06** (2013.01 - EP US)

Citation (search report)  
See references of WO 2014177664A1

Cited by  
WO2021245355A1; FR3112296A1; FR3112297A1

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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**DE 102013019698 A1 20141106**; CN 105324190 A 20160210; CN 105324190 B 20171031; EP 2991783 A1 20160309; EP 2991783 B1 20170301; JP 2016516590 A 20160609; JP 6138347 B2 20170531; KR 101759915 B1 20170720; KR 20150139612 A 20151211; RU 2015151581 A 20170608; RU 2635500 C2 20171113; US 2016082491 A1 20160324; US 9833823 B2 20171205; WO 2014177664 A1 20141106

DOCDB simple family (application)  
**DE 102013019698 A 20131126**; CN 201480034931 A 20140430; EP 14720168 A 20140430; EP 2014058935 W 20140430; JP 2016511080 A 20140430; KR 20157032087 A 20140430; RU 2015151581 A 20140430; US 201414888787 A 20140430