

Title (en)

METHOD AND DEVICE FOR COATING SCALED FORMING PRODUCTS WITH A LUBRICANT

Title (de)

VERFAHREN UND VORRICHTUNG ZUM BESCHICHTEN VON ZUNDERBEHAFTETEM UMFORMGUT MIT EINEM SCHMIERSTOFF

Title (fr)

PROCÉDÉ ET DISPOSITIF DE REVÊTEMENT D'UN PRODUIT À FAÇONNER CALAMINÉ AU MOYEN D'UN LUBRIFIANT

Publication

EP 3016755 B1 20170719 (DE)

Application

EP 14741823 A 20140702

Priority

- DE 102013213251 A 20130705
- EP 2014064048 W 20140702

Abstract (en)

[origin: WO2015000951A2] The invention relates to a metallurgical method and device for coating scaled strand-shaped metal forming products with a lubricant for a forming process in a downstream drawing process. The aim of the invention is to develop a method and a device which allow scaled strand-shaped metal forming products to be coated with a solid lubricant for the purpose of a forming process in a downstream drawing process while preventing the removal of scale layers present on the metal forming product or solid layers which contain scale. At the same time, the prerequisites for substantially improving the stability of the downstream drawing process and the quality of the produced products should be met. In the method according to the invention, the scaled forming product is coated with a solid lubricant prior to the downstream drawing process and formed with a degree of deformation ε of $> 3\%$. The forming product is then drawn by means of at least one accumulation chamber in order to mix the scale particles produced from the scale layer as a result of the forming process with the lubricant provided on the forming product after said forming process. In order to carry out the method, the invention also relates to a device for coating a scaled forming product with a solid lubricant under the effect of pressure and to one or more downstream drawing dies and a downstream accumulation chamber for mixing the scale particles produced from the scale layer as a result of the forming process with the lubricant provided on the forming product after said forming process.

IPC 8 full level

B21C 9/00 (2006.01)

CPC (source: EP RU US)

B21C 9/00 (2013.01 - RU); **B21C 9/005** (2013.01 - EP US)

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)

DE 102013213251 A1 20150108; DE 102013213251 B4 20160929; CN 105431239 A 20160323; CN 105431239 B 20180306; EP 3016755 A2 20160511; EP 3016755 B1 20170719; RU 2016103741 A 20170810; RU 2667190 C2 20180917; US 2016303628 A1 20161020; WO 2015000951 A2 20150108; WO 2015000951 A3 20150226

DOCDB simple family (application)

DE 102013213251 A 20130705; CN 201480038553 A 20140702; EP 14741823 A 20140702; EP 2014064048 W 20140702; RU 2016103741 A 20140702; US 201414902395 A 20140702