Title (en)

METHOD FOR THE PRODUCTION OF A SIDERURGICAL PRODUCT MADE OF CARBON STEEL WITH A HIGH COPPER CONTENT, AND SIDERURGICAL PRODUCT OBTAINED ACCORDING TO SAID METHOD

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES EISENHÜTTENPRODUKTS AUS UNLEGIERTEM STAHL MIT HOHEM KUPFERGEHALT UND DANACH ERHALTENES EISENHÜTTENPRODUKT

Title (fr)

PROCEDE DE FABRICATION D UN PRODUIT SIDERURGIQUE EN ACIER AU CARBONE RICHE EN CUIVRE, ET PRODUIT SIDERURGIQUE AINSI OBTENU

Publication

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Application

**EP 03712234 A 20030113**

Priority

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- FR 0200387 A 20020114

Abstract (en)

[origin: WO03057928A1] The invention relates to a method for producing a siderurgical product made of carbon steel having a high copper content, according to which: - a liquid steel having the composition: 0.0005 % </= C </= 1 %; 0.5 </= Cu </= 10 %; 0 </= Mn </= 2 %; 0 </= Si </= 5 %; 0 </= Ti </= 0.5 %; 0 </= Nb </= 0.5 %; 0 </= Ni </= 5 %; 0 </= Al </= 2 %, the remainder being iron and impurities, is produced; - said liquid steel is poured directly in the form of a thin strip having a thickness of no more than 10 mm; - the strip is subjected to forced cooling and/or is surrounded by a non-oxidizing atmosphere while having a temperature of more than 1000< C; - said thin strip is hot rolled at a reduction rate of at least 10 %, the temperature at the end of the rolling process being such that all of the copper is still in a solid solution in the ferrite and/or austenite matrix; - the strip is then subjected to forced cooling so as to maintain the copper in an oversaturated solid solution in the ferrite and/or austenite matrix; - and the strip is coiled. The invention also relates to a siderurgical product obtained according to said method.

IPC 8 full level

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US10301700B2; WO2016174020A1; EP2690183A1; WO2014016420A1; EP2690184A1; WO2014016421A1; EP2690183B1

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DOCDB simple family (application)

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