Title (en)

METHOD FOR PRODUCING PIG-IRON BASED STAINLESS STEEL WITHOUT USING A SUPPLY OF ELECTRICAL ENERGY

Title (de)

VERFAHREN ZUR ROSTFREISTAHLERZEUGUNG OHNE ELEKTRISCHE ENERGIEZUFUHR AUF DER BASIS VON ROHEISEN

Title (fr)

PROCÉDÉ POUR PRODUIRE DE LA FONTE BRUTE À BASE D'ACIER INOXYDABLE SANS UTILISER DE l'ÉNÉRGIE ÉLECTRIQUE

Publication

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Application

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Abstract (en)

[origin: CA2671074A1] The aim of the invention is to produce stainless steel for all stainless steel products both in the austenitic and the ferritic range, based on liqui d pig-iron and FeCr solids, without using a supply of electrical energy. Acc ording to the invention, the liquid pig-iron, after being pre-treated in a b last furnace (1), is subjected to a DDD treatment (dephosphorisation, desili conisation and desulphuration), is heated, finished or alloyed and deoxidate d. The quantity of slag-free liquid pig-iron that has been pre-treated in th e blast furnace (1) is separated and introduced into two classic "twin" AOD- L converters (2, 3), where the required chemical process steps (of the DDD t reatment and of the heating, decarburisation and alloying stages) take place in parallel contrary processes using autogenous chemical energy, the DDD tr eatment being carried out first in the first twin AOD-L converter (2) and th e decarburisation being carried out first in the second twin AOD-L converter (3).

IPC 8 full level

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