

Title (en)

METHOD AND APPARATUS FOR FORMING STEEL PIPE USING THREE-POINT BENDING-PRESS FORMING

Title (de)

STAHLROHRFORMVERFAHREN UND FORMVORRICHTUNG MIT DREIPUNKT-BIEGEN

Title (fr)

PROCÉDÉ DE FORMAGE DE TUBE EN ACIER ET DISPOSITIF DE FORMAGE UTILISANT UNE FLEXION EN TROIS POINTS

Publication

EP 3127625 A1 20170208 (EN)

Application

EP 15773059 A 20150330

Priority

- JP 2014070703 A 20140331
- JP 2015046083 A 20150309
- JP 2015059835 W 20150330

Abstract (en)

Provided is a method for forming a steel pipe for forming a steel plate as raw material into a substantially cylindrical shape, by first half forming performing three-point bending-press a plurality of times from one plate width end portion of the steel plate as raw material toward a plate width center, second half forming performing three-point bending-press a plurality of times from the other plate width end portion toward the plate width center, and final forming performing the three-point bending-press on the plate width central portion, wherein the first half forming is divided into preceding forming performed before the second half forming and succeeding forming performed after the second half forming, and a ratio of a forming range in the preceding forming to the steel plate width is set in a range of more than 0.17 to less than 0.46. Thus, a producible maximum diameter of the steel pipe is enlarged without modifying the equipment of the existing pressing machine.

IPC 8 full level

B21D 5/01 (2006.01); **B21C 37/08** (2006.01)

CPC (source: EP KR RU)

B21C 37/08 (2013.01 - RU); **B21C 37/0815** (2013.01 - EP KR); **B21D 5/01** (2013.01 - RU); **B21D 5/015** (2013.01 - EP KR)

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)

EP 3127625 A1 20170208; EP 3127625 A4 20170802; EP 3127625 B1 20200129; BR 112016022005 A2 20170815;
BR 112016022005 B1 20210202; CN 106132578 A 20161116; CN 106132578 B 20180105; JP 2015199125 A 20151112;
JP 6112740 B2 20170412; KR 101852704 B1 20180426; KR 20160127119 A 20161102; RU 2016142577 A 20180503;
RU 2016142577 A3 20180503; RU 2655511 C2 20180528; SA 516371949 B1 20200223; WO 2015152108 A1 20151008

DOCDB simple family (application)

EP 15773059 A 20150330; BR 112016022005 A 20150330; CN 201580016930 A 20150330; JP 2015046083 A 20150309;
JP 2015059835 W 20150330; KR 20167026910 A 20150330; RU 2016142577 A 20150330; SA 516371949 A 20160929