

Title (en)
MACHINE FOR JOINING THE ENDS OF STEEL STRIPS WHICH MACHINE IS SUITED TO THE INDUCTION HEAT TREATMENT OF JOINING WELDS

Title (de)
FÜR INDUKTIONSWÄRMEBEHANDLUNG VON SCHWEISSNÄHTEN GEEIGNETE MASCHINE ZUR VERBINDUNG DER ENDEN VON BANDSTAHL

Title (fr)
MACHINE DE RABOUTAGE DE BANDES D'ACIER ADAPTEE AU TRAITEMENT THERMIQUE PAR INDUCTION DE SOUDURES DE RABOUTAGE

Publication
EP 2560784 A1 20130227 (FR)

Application
EP 10743112 A 20100812

Priority
• EP 10290218 A 20100423
• EP 2010061784 W 20100812
• EP 10743112 A 20100812

Abstract (en)
[origin: WO2011131253A1] The present invention relates to a joining machine intended for joining the ends of successive strips (11, 12) in a strip treatment installation, said joining machine comprising the device that welds a first end of a strip (11) to a second end of another strip (12), two pairs of respectively symmetrically arranged clamping jaws (21, 22, 31, 32), a first pair of clamping jaws (21, 31) comprising a first upper clamping jaw (21) and a first lower clamping jaw (31) which are capable of gripping said first end of strip (11), and a second pair of clamping jaws (22, 32) comprising a second upper clamping jaw (22) and a second lower clamping jaw (32) which are capable of gripping said second end of strip (12), said clamping jaws (21, 22, 31, 32) being intended to hold and to position said first end of strip (11) facing said second end of strip (12) so that said ends of strip (11, 12) can be welded together, characterized in that at least two clamping jaws (21, 22, 31, 32) of said two pairs of clamping jaws each comprise a part (222, 322, 212, 312) capable of contacting one of said ends of strip (11) that is intended to be welded to another end of strip (12), said part (222, 322, 212, 312) being characterized by a geometry and at least one constituent material each of which is able to reduce the strength of the eddy currents likely to be created in said clamping jaw as a result of electromagnetic induction.

IPC 8 full level
B23K 26/26 (2006.01); **B23K 26/42** (2006.01); **B23K 31/02** (2006.01); **C21D 1/42** (2006.01)

CPC (source: EP KR US)
B21B 15/0085 (2013.01 - KR); **B23K 26/26** (2013.01 - EP KR US); **B23K 26/702** (2015.10 - EP KR US); **B23K 31/02** (2013.01 - EP KR US); **C21D 1/42** (2013.01 - EP KR US); **B21B 15/0085** (2013.01 - EP US); **B23K 2101/16** (2018.07 - EP KR US); **B23K 2103/04** (2018.07 - KR); **Y02P 10/25** (2015.11 - EP KR US)

Citation (search report)
See references of WO 2011131253A1

Citation (examination)
JP H0985307 A 19970331 - KAWASAKI STEEL CO, et al

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 SE SI SK SM TR

DOCDB simple family (publication)
WO 2011131253 A1 20111027; BR 112012026921 A2 20160712; BR 112012026921 B1 20180206; CN 102858488 A 20130102; CN 102858488 B 20150805; EP 2560784 A1 20130227; JP 2013528493 A 20130711; JP 5843847 B2 20160113; KR 101771763 B1 20170825; KR 20130060183 A 20130607; RU 2012149924 A 20140527; RU 2554833 C2 20150627; US 2013037530 A1 20130214; US 9149888 B2 20151006

DOCDB simple family (application)
EP 2010061784 W 20100812; BR 112012026921 A 20100812; CN 201080066404 A 20100812; EP 10743112 A 20100812; JP 2013505344 A 20100812; KR 20127027454 A 20100812; RU 2012149924 A 20100812; US 201013642969 A 20100812