

Title (en)
METHOD FOR SHOT PEENING A PIPE INNER WALL OF A CURVED WORKPIECE HAVING A WORKPIECE BORE, AND BLASTING NOZZLE UNIT AND BLASTING CHAMBER SYSTEM THEREFOR

Title (de)
VERFAHREN ZUM VERFESTIGUNGSSTRAHLEN EINER ROHRINNENWANDUNG EINES GEKRÜMMTEN WERKSTÜCKS MIT EINER WERKSTÜCKBOHRUNG SOWIE STRAHLDÜSENEINHEIT UND STRAHLKAMMERSYSTEM DAFÜR

Title (fr)
PROCÉDÉ DE SABLAGE D'UNE PAROI DE TUBE INTÉRIEURE D'UNE PIÈCE COURBÉE POURVUE D'UN PERÇAGE ET ENSEMBLE BUSE DE SABLAGE ET SYSTÈME DE CHAMBRE DE SABLAGE

Publication
EP 3107688 B1 20200506 (DE)

Application
EP 15715140 A 20150219

Priority
• DE 102014102147 A 20140219
• DE 2015100068 W 20150219

Abstract (en)
[origin: WO2015124147A1] For the shot peening of a pipe inner wall of a curved workpiece (200) having a workpiece bore (201), use is made of a flexible blasting abrasive feed hose (10) having blasting nozzle head (20). The latter is guided through a supporting element (30) which is applied to one workpiece end (203). The blasting abrasive feed hose (10) together with the blasting nozzle head (20) is introduced into the workpiece bore (201) and advanced along a blasting treatment section therein and subsequently retracted into the supporting element (30) again, wherein the blasting abrasive is emitted during the advancing movement and/or during the retraction movement. A blasting nozzle unit (100) suitable for carrying out the method comprises at least: - a flexible blasting abrasive feed hose (10); - a blasting nozzle head (20) connected to the blasting abrasive feed hose (10), said blasting nozzle head (20) having a plurality of nozzle openings (21) distributed around the circumference, wherein the outer circumference of the blasting nozzle head (21) is smaller than the inside diameter of the workpiece bore (201) in a workpiece (200) to be processed; - a supporting element (30) in which the blasting abrasive feed hose (10) is guided; and - a stationary bearing element (40) in which the supporting element (30) is guided in a displaceable manner.

IPC 8 full level
B24C 1/10 (2006.01); **B24C 3/32** (2006.01)

CPC (source: CN EP RU US)
B24C 1/10 (2013.01 - EP RU US); **B24C 3/325** (2013.01 - CN EP US); **B24C 5/04** (2013.01 - CN); **B24C 7/0046** (2013.01 - CN)

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 102014102147 A1 20150820; **DE 102014102147 B4 20170309**; CN 106102999 A 20161109; CN 106102999 B 20180508; EP 3107688 A1 20161228; EP 3107688 B1 20200506; ES 2809492 T3 20210304; HU E050262 T2 20201130; MX 2016010686 A 20161123; MX 369918 B 20191126; PL 3107688 T3 20201116; RU 2016136983 A 20180322; RU 2016136983 A3 20181001; RU 2690555 C2 20190604; US 11059146 B2 20210713; US 2017008151 A1 20170112; WO 2015124147 A1 20150827

DOCDB simple family (application)
DE 102014102147 A 20140219; CN 201580012905 A 20150219; DE 2015100068 W 20150219; EP 15715140 A 20150219; ES 15715140 T 20150219; HU E15715140 A 20150219; MX 2016010686 A 20150219; PL 15715140 T 20150219; RU 2016136983 A 20150219; US 201515119237 A 20150219