

Title (en)
DEVICE FOR POLISHING METAL PIPE INNER SURFACE, AND METAL PIPE

Title (de)
VORRICHTUNG ZUM POLIEREN EINER INNENOberFLÄCHE EINES METALLROHRES UND METALLROHR

Title (fr)
DISPOSITIF DE POLISSAGE DE SURFACE INTERNE DE TUYAU MÉTALLIQUE ET TUYAU MÉTALLIQUE

Publication
EP 3991914 A4 20230719 (EN)

Application
EP 20832886 A 20200625

Priority
• JP 2019117385 A 20190625
• JP 2020025109 W 20200625

Abstract (en)
[origin: EP3991914A1] A jig 21 includes an elastic brush 44 protruding in a radial direction orthogonal to an axis 23 and a tube 46 provided on the inner side of the brush 44 in the radial direction. The length between the leading end of the brush 44 and the axis 23 is equal to or longer than a half of the inner diameter of a stainless steel pipe 1. In a state in which the jig 21 is provided inside the stainless steel pipe 1, the tube 46 presses the brush 44 outward in the radial direction, with the result that the leading end portion of the brush 44 applies internal pressure to the inner surface of the stainless steel pipe 1 while being in contact with the inner surface of the stainless steel pipe 1, in a state in which the leading end portion of the brush 44 stands up. As a result of this, a polishing agent supplied from the pump 12 is adhered to the inner surface of the stainless steel pipe 1. The polishing agent adhered to the inner surface of the stainless steel pipe 1 is pressed onto the inner surface of the stainless steel pipe 1 by the brush 44.

IPC 8 full level
B24B 5/40 (2006.01); **B24B 29/00** (2006.01); **B24B 29/08** (2006.01); **B24B 57/02** (2006.01); **B24D 13/10** (2006.01)

CPC (source: CN EP)
B24B 5/40 (2013.01 - EP); **B24B 29/005** (2013.01 - EP); **B24B 29/08** (2013.01 - EP); **B24B 37/02** (2013.01 - CN); **B24B 37/11** (2013.01 - CN); **B24B 37/27** (2013.01 - CN); **B24B 37/34** (2013.01 - CN); **B24B 57/02** (2013.01 - CN EP); **B24D 13/10** (2013.01 - EP)

Citation (search report)
• [XY] CN 108453101 A 20180828 - NINGBO ZHIGUO TECH CONSULTING SERVICES CO LTD
• [Y] US 2017362917 A1 20171221 - ESSLEMONT ALEXANDER [US], et al
• [X] JP H0538629 A 19930219 - NEC CORP
• [X] JP H10263932 A 19981006 - SHINKO TOKUSHU KOKAN KK, et al
• See also references of WO 2020262562A1

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)
EP 3991914 A1 20220504; **EP 3991914 A4 20230719**; CN 114007811 A 20220201; CN 114007811 B 20231208; JP 2021003748 A 20210114; JP 6663067 B1 20200311; WO 2020262562 A1 20201230

DOCDB simple family (application)
EP 20832886 A 20200625; CN 202080046512 A 20200625; JP 2019117385 A 20190625; JP 2020025109 W 20200625