Title (en)

ROLLED TUBULAR CENTRALIZER

Title (de)

GEWALZTE ROHRFÖRMIGE ZENTRIERVORRICHTUNG

Title (fr)

CENTREUR TUBULAIRE ROULÉ

Publication

EP 3027333 A4 20170426 (EN)

Application

EP 14832286 A 20140723

Priority

- US 201313957016 A 20130801
- US 201414283947 A 20140521
- US 2014047837 W 20140723

Abstract (en)

[origin: WO2015017212A1] A method of forming a centralizer where a flat plate is created into a tubular where the flat plate is typically rolled so that two sides of the plate contact one another and are then linked, typically by welding. Openings are then created in the tubular such that there are no comers or other points that stress cracks may originate. Once the openings are created the remaining material between adjacent openings forms ribs. The openings created in the tubular are generally aligned with the long axis of the tubular. The material, at the upper and lower end of the flat plate where openings were not created serve as circumferential collars. The ribs may be radially outwardly expanded in order to provide adequate stand-off. In many instances the ribs will also be hardened by heat treating or other hardening processes.

IPC 8 full level

B21D 5/12 (2006.01); **B21D 5/01** (2006.01); **B21D 5/10** (2006.01); **E21B 17/10** (2006.01)

CPC (source: EP)

B21D 5/015 (2013.01); **B21D 5/10** (2013.01); **B21D 5/12** (2013.01); **B21D 11/06** (2013.01); **E21B 17/1028** (2013.01); B21C 37/08 (2013.01); B21C 37/122 (2013.01); B21D 35/001 (2013.01); B21D 51/16 (2013.01)

Citation (search report)

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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)

WO 2015017212 A1 20150205; **WO 2015017212 A8 20160324**; CA 2920198 A1 20150205; CA 2920198 C 20220315; EP 3027333 A1 20160608; EP 3027333 A4 20170426; EP 3027333 B1 20180627

DOCDB simple family (application)

US 2014047837 W 20140723; CA 2920198 A 20140723; EP 14832286 A 20140723