

Title (en)  
WORKING CYLINDER AND METHOD FOR THE PRODUCTION THEREOF

Title (de)  
ARBEITSZYLINDER UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)  
CYLINDRE DE TRAVAIL ET PROCÉDÉ POUR LE FABRIQUER

Publication  
**EP 4055279 A1 20220914 (DE)**

Application  
**EP 20824436 A 20201106**

Priority  
• DE 102019007754 A 20191108  
• DE 2020000267 W 20201106

Abstract (en)  
[origin: WO2021089069A1] The invention relates to a working cylinder (1) having a cylinder tube (2), a first closure part (3), a second closure part (4) and a piston unit (5), wherein the cylinder tube (2) has a first cylinder tube end (6) and a second cylinder tube end (7), the first closure part (3) being arranged on the first cylinder tube end (6), the second closure part (4) being arranged on the second cylinder tube end (7), the cylinder tube (2) and the closure parts (3, 4) forming a cylinder interior (8), the piston unit (5) forming at least one working chamber in the cylinder interior (8), the piston unit (5) pushing slidingly through the first closure part (3), characterized in that the first closure part (3) is integrally joined to the cylinder tube (2) by means of a first peripheral laser ring weld seam (9) and the second closure part (4) is integrally joined to the cylinder tube (2) by means of a second peripheral laser ring weld seam (10) and the laser ring weld seams (9, 10) each form a fluid-tight sealing plane (10). The invention furthermore relates to a method for producing such a working cylinder.

IPC 8 full level  
**F15B 15/14** (2006.01); **B23K 26/282** (2014.01); **F16J 10/02** (2006.01)

CPC (source: EP US)  
**B23K 26/282** (2015.10 - EP US); **F15B 15/1428** (2013.01 - US); **F15B 15/1438** (2013.01 - EP US); **F16J 10/02** (2013.01 - EP US); **B23K 2101/003** (2018.08 - EP); **B23K 2103/04** (2018.08 - EP); **F15B 2215/30** (2013.01 - EP)

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)  
**DE 102019007754 A1 20210512**; CN 114667397 A 20220624; EP 4055279 A1 20220914; JP 2023502012 A 20230120; US 2022397128 A1 20221215; WO 2021089069 A1 20210514

DOCDB simple family (application)  
**DE 102019007754 A 20191108**; CN 202080077626 A 20201106; DE 2020000267 W 20201106; EP 20824436 A 20201106; JP 2022526482 A 20201106; US 202017775436 A 20201106