

Title (en)  
ULTRASONIC WELDING DEVICE

Title (de)  
ULTRASCHALL-SCHWEISSEINRICHTUNG

Title (fr)  
DISPOSITIF DE SOUDAGE PAR ULTRASONS

Publication  
**EP 3678809 A1 20200715 (DE)**

Application  
**EP 18765012 A 20180814**

Priority  
• DE 102017215483 A 20170904  
• EP 2018072049 W 20180814

Abstract (en)  
[origin: WO2019042765A1] The invention relates to an ultrasonic welding device comprising a horn (14) transmitting ultrasonic vibrations and an anvil (15) arranged on an anvil carrier (17). The anvil (15) is arranged exchangeably on the anvil carrier (17), in such a way that a contact surface (21) of the anvil (15) bears against a support surface (22) of the anvil carrier (17) by means of a normal force generated by a pretensioning device. The contact surface (21) of the anvil (15) has a surface hardness that is greater than the surface hardness of the support surface (22) of the anvil carrier (17). The contact surface (21) has a surface structure at least in the region of a partial area, and the contact surface (21) has a surface roughness where  $R_z/R_a \geq 2$ , at least in the region of the partial area.

IPC 8 full level  
**B23K 20/10** (2006.01); **B23K 37/04** (2006.01); **B29C 65/00** (2006.01); **B29C 65/08** (2006.01); **H01R 43/02** (2006.01)

CPC (source: EP KR US)  
**B23K 20/10** (2013.01 - EP US); **B23K 20/106** (2013.01 - KR); **B23K 37/04** (2013.01 - EP KR); **B29C 65/08** (2013.01 - US); **B29C 66/81264** (2013.01 - US); **B29C 66/81265** (2013.01 - US); **B29C 66/8167** (2013.01 - US); **H01R 43/0207** (2013.01 - EP KR); **B29C 65/08** (2013.01 - EP); **B29C 66/81264** (2013.01 - EP); **B29C 66/81265** (2013.01 - EP); **B29C 66/81433** (2013.01 - EP); **B29C 66/8167** (2013.01 - EP)

Citation (search report)  
See references of WO 2019042765A1

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 102017215483 A1 20190307**; **DE 102017215483 B4 20190328**; CN 111065484 A 20200424; EP 3678809 A1 20200715; JP 2020532430 A 20201112; JP 7237937 B2 20230313; KR 102574555 B1 20230904; KR 20200051613 A 20200513; MX 2020002387 A 20200722; US 11225033 B2 20220118; US 2021154948 A1 20210527; WO 2019042765 A1 20190307

DOCDB simple family (application)  
**DE 102017215483 A 20170904**; CN 201880057168 A 20180814; EP 18765012 A 20180814; EP 2018072049 W 20180814; JP 2020512803 A 20180814; KR 20207006621 A 20180814; MX 2020002387 A 20180814; US 201816641856 A 20180814