

Title (en)
WELDING DEVICE AND WELDING METHOD

Title (de)
SCHWEISSVORRICHTUNG UND -VERFAHREN

Title (fr)
DISPOSITIF ET PROCÉDÉ DE SOUDAGE

Publication
EP 3691820 A1 20200812 (DE)

Application
EP 18779380 A 20181001

Priority
• EP 17195137 A 20171006
• EP 2018076602 W 20181001

Abstract (en)
[origin: WO2019068620A1] Disclosed are a device (10) and a method for welding a weld stud (20) to a substrate (30) A welding current (61, 62) is applied to a weld stud (20) between the weld stud (20) and the substrate (30) such that a material of the weld stud (20) and of the substrate (30) partially liquefies. The weld stud (20) is then immersed into the solidifying material of the weld stud (20) and/or of the substrate (30) so as to establish an integral bond between the weld stud (20) and the substrate (30).

IPC 8 full level
B23K 9/095 (2006.01); **B23K 9/10** (2006.01); **B23K 9/20** (2006.01)

CPC (source: EP KR US)
B23K 9/0953 (2013.01 - EP KR US); **B23K 9/1087** (2013.01 - EP KR); **B23K 9/202** (2013.01 - EP KR US); **B23K 37/00** (2013.01 - US)

Citation (search report)
See references of WO 2019068620A1

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

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EP 3466582 A1 20190410; CN 111163892 A 20200515; CN 111163892 B 20221021; EP 3691820 A1 20200812; JP 2020535973 A 20201210; KR 102595016 B1 20231026; KR 20200063206 A 20200604; US 11623293 B2 20230411; US 2020261998 A1 20200820; WO 2019068620 A1 20190411

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EP 17195137 A 20171006; CN 201880064181 A 20181001; EP 18779380 A 20181001; EP 2018076602 W 20181001; JP 2020519684 A 20181001; KR 20207012661 A 20181001; US 201816649310 A 20181001