

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
04 July 2024 (04.07.2024)



(10) International Publication Number
WO 2024/141469 A1

(51) International Patent Classification:

C22C 38/44 (2006.01) C22C 38/00 (2006.01)
C22C 38/50 (2006.01) B23K 35/30 (2006.01)
C22C 38/02 (2006.01) B23K 35/02 (2006.01)
C22C 38/04 (2006.01) B23K 9/20 (2006.01)
C22C 38/58 (2006.01)

(21) International Application Number:

PCT/EP2023/087615

(22) International Filing Date:

22 December 2023 (22.12.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

22217262.9 30 December 2022 (30.12.2022) EP

(71) Applicant: **HILTI AKTIENGESELLSCHAFT** [LI/LI];
Feldkircherstrasse 100, 9494 Schaan (LI).

(72) Inventors: **WOLF, Iwan**; Quadergasse 9, 7204 Untervaz
(CH). **ELSER, Tobias**; Rainweg 10, 6820 Frastanz (AT).
GRAD, Patrick; Büelistrasse 1, 8884 Oberterzen (CH).

(74) Agent: **HILTI AKTIENGESELLSCHAFT**; Corporate
Intellectual Property, Feldkircherstrasse 100, 9494 Schaan
(LI).

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG,
KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY,
MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA,
NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO,
RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH,
TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS,
ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, CV,
GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST,
SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ,
RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ,
DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT,
LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE,
SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, KM, ML, MR, NE, SN, TD, TG).

(54) Title: STEEL ALLOY, ARTICLE OF MANUFACTURE AND METHOD

(57) Abstract: Disclosed are a steel alloy, an article of manufacture made of the steel
alloy, and a method for welding a welding stud to a base material.

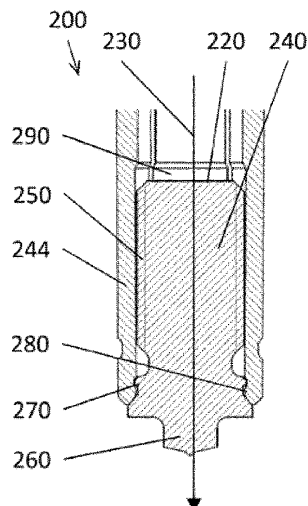


Fig. 2

WO 2024/141469 A1

[Continued on next page]

Published:

— with international search report (Art. 21(3))