

(12) International Application Status Report

Received at International Bureau: 22 September 2018 (22.09.2018)

Information valid as of: 16 November 2018 (16.11.2018)

Report generated on: 29 January 2020 (29.01.2020)

(10) Publication number:

WO2019/046296

(43) Publication date:

07 March 2019 (07.03.2019)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/US2018/048334

(22) Filing Date:

28 August 2018 (28.08.2018)

(25) Filing language:

English (EN)

(31) Priority number(s):

15/689,207 (US)

(31) Priority date(s):

29 August 2017 (29.08.2017)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

B23H 11/00 (2006.01); **B23H 7/26** (2006.01); **B23B 1/00** (2006.01); **B23Q 1/00** (2006.01); **B23Q 3/00** (2006.01); **B23Q 17/00** (2006.01)

(71) Applicant(s):

STEVEN, Franklin, Barton [US/US]; 0-7196 124th Avenue Holland, MI 49424 (US) *(for all designated states)*

(72) Inventor(s):

STEVEN, Franklin, Barton; 0-7196 124th Avenue Holland, MI 49424 (US)

(74) Agent(s):

KING III, William, L.; King & Partners, PLC 170 College Avenue, Suite 230 Holland, MI 49423 (US)

(54) Title (EN): MULTI-AXIS ALIGNMENT TOOL

(54) Title (FR): OUTIL D'ALIGNEMENT À AXES MULTIPLES

(57) Abstract:

(EN): A multi-axis alignment tool including: a main body, a primary base, a puck, a first puck adjuster, a second puck adjuster, a puck retainer, a secondary base, a first pivot pin, a second pivot pin, a pivot block, a clamp head, an adjustment pin, a lock-down spacer, a first clamp finger, and a second clamp finger, wherein the multi-axis alignment tool is configured to at least one of clamp, align, and position a work part in three axes.

(FR): L'invention concerne un outil d'alignement à axes multiples, lequel outil comprend : un corps principal, une base primaire, une rondelle, un premier dispositif d'ajustement de rondelle, un second dispositif d'ajustement de rondelle, un élément de maintien de rondelle, une base secondaire, une première broche de pivot, une seconde broche de pivot, un bloc de pivot, une tête de serrage, une broche d'ajustement, un élément d'espacement de verrouillage, un premier doigt de serrage et un second doigt de serrage, l'outil d'alignement à axes multiples étant conçu de façon à serrer, à aligner et à positionner une pièce à travailler dans trois axes.

International search report:

Received at International Bureau: 10 November 2018 (10.11.2018) [US]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

European Patent Office (EPO) : AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM