

(12) International Application Status Report

Received at International Bureau: 01 April 2016 (01.04.2016)

Information valid as of: 24 June 2016 (24.06.2016)

Report generated on: 19 January 2021 (19.01.2021)

(10) Publication number:

WO2016/154446

(43) Publication date:

29 September 2016 (29.09.2016)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/US2016/024031

(22) Filing Date:

24 March 2016 (24.03.2016)

(25) Filing language:

English (EN)

(31) Priority number(s):

62/137,929 (US)

(31) Priority date(s):

25 March 2015 (25.03.2015)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

14/997,676 (US)

18 January 2016 (18.01.2016)

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

B66F 3/08 (2006.01); **B60S 9/00** (2006.01)

(71) Applicant(s):

K-LINE INDUSTRIES, INC. [US/US]; 315 Garden Avenue Holland, Michigan 49424 (US) *(for all designated states)*

(72) Inventor(s):

KAMPHUIS, Dwain L.; 315 Garden Avenue Holland, Michigan 49424 (US)

WOLTJER, Lukas T.; 315 Garden Avenue Holland, Michigan 49424 (US)

(74) Agent(s):

CALLAGHAN, Terry S.; Price Heneveld LLP 695 Kenmoor, S.E. P.O. Box 2567 Grand Rapids, Michigan 49501-2567 (US)

(54) Title (EN): JACK SYSTEM

(54) Title (FR): SYSTÈME DE VÉRIN

(57) Abstract:

(EN): The present jack apparatus is particularly adapted for heavy duty lifting. The jack apparatus includes a base; a pair of screw jacks; a yoke supported by the screw jacks; a lifting tube supported on the yoke; a shaft coupler coupling the screw jacks; a power unit driving one of the screw jacks and through the shaft coupler also driving the other screw jack; and a housing covering the screw jacks and other components. The pair of screw jacks each have threaded lifting shafts designed to eliminate risk of unexpected lowering of the jack's lifting tube even if power is lost. A jack system is described including two or more of the jack apparatus controlled by a single control for simultaneous operation.

(FR): La présente invention concerne un appareil de vérin, lequel appareil est particulièrement apte à un levage de forte puissance. L'appareil de vérin comprend une base ; une paire de vérins à vis ; une culasse supportée par les vérins à vis ; un tube de levage supporté sur la culasse ; un coupleur d'arbres couplant les vérins à vis ; un vérin de commande entraînant l'un des vérins à vis, et entraînant également, par l'intermédiaire du coupleur d'arbres, l'autre vérin à vis ; et un boîtier recouvrant les vérins à vis et d'autres composants. La paire de vérins à vis présentent chacun des arbres de levage filetés conçus pour éliminer le risque d'abaissement imprévu du tube de levage du vérin, même si de l'énergie est perdue. L'invention concerne également un système de vérin comprenant deux ou plusieurs des appareils de vérins commandés par une commande unique pour un fonctionnement simultané.

International search report:

Received at International Bureau: 23 June 2016 (23.06.2016) [RU]

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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, 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

Declarations:

Declaration made as applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate

Declaration made as applicant's entitlement, as at the international filing date, to claim the priority of the earlier application, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii))