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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
04 September 2025 (04.09.2025)

WIPO | PCT

(10) International Publication Number
WO 2025/180974 A1

(51) International Patent Classification:
B66C 13/18 (2006.01) *B66F 11/04* (2006.01)
B66C 13/40 (2006.01)

(21) International Application Number:
PCT/EP2025/054683

(22) International Filing Date:
21 February 2025 (21.02.2025)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
18/592,879 01 March 2024 (01.03.2024) US

(71) Applicant: **PALFINGER AG** [AT/AT]; Lamprechtshausener Bundesstrasse 8, 5101 Bergheim bei Salzburg (AT).

(72) Inventors: **TIEFENTHALER, Andreas**; Am Höribach 18-7, 5310 St. Lorenz (AT). **RIESS, Gerald**; Martin-Schachinger-Weg 10, 4942 Gurten (AT). **MATHÉ, Ewald**; Ehrenbachstraße 27m, 5161 Elixhausen (AT). **KRANZINGER, Hannes**; Josef Klampfer Straße 6, 5203 Köstendorf (AT). **THÖNY, Daniel**; Hans Schmidinger Straße 13, 5303 Thalgau (AT).

(74) Agent: **2SPL PATENTANWÄLTE PARTG MBB**; Landaubogen 3, 81373 München (DE).

(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, UY, 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,

(54) Title: CONTROL CIRCUITRY FOR A CRANE, CRANE, REMOTE CONTROL UNIT FOR A CRANE AND METHOD TO OPERATE A CRANE

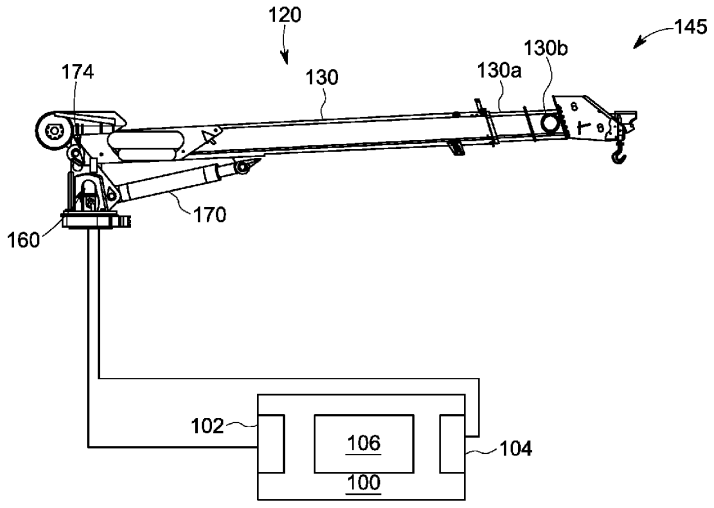


FIG. 1

(57) Abstract: Control circuitry for a crane, comprises an input interface (102) configured to receive readings of sensors (174, 520) sensing operating parameters of the crane and an output interface (104) to output control data to cause actuators of the crane to perform a movement. A compute circuit (106) is configured to control the movement of the actuators in a first operation mode and in a second operation mode, wherein at least one kinematic parameter of the actuators is limited in the second mode as compared to the first mode.

WO 2025/180974 A1

[Continued on next page]

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).

Published:

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

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*