



(51) International Patent Classification:
B25J 9/16 (2006.01) *B25J 13/08* (2006.01)
B25J 13/00 (2006.01)

(21) International Application Number:
PCT/US2022/023170

(22) International Filing Date:
01 April 2022 (01.04.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/169,719 01 April 2021 (01.04.2021) US

(71) Applicant: **GIANT.AI, INC.** [US/US]; 901 Campisi Way, Campbell, California 95008 (US).

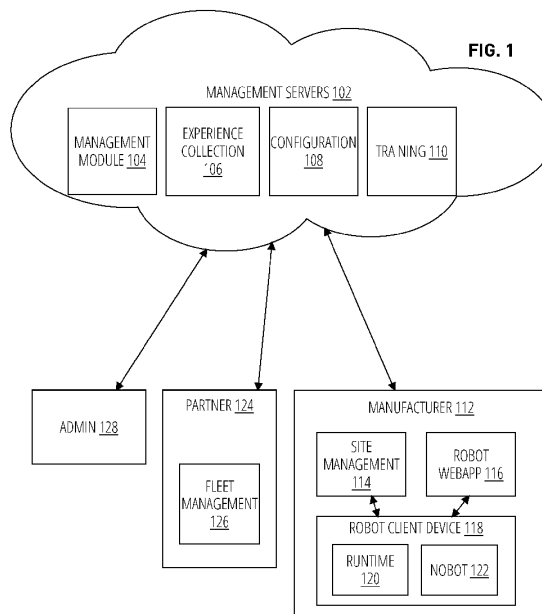
(72) Inventors: **WALES, Carolyn**; 901 Campisi Way, Campbell, California 95008 (US). **CIANCI, Chris**; 901 Campisi Way, Campbell, California 95008 (US). **BRADSKI, Christopher**; 901 Campisi Way, Campbell, California

95008 (US). **KRANSKI, Jeff**; 901 Campisi Way, Campbell, California 95008 (US). **KAHLER, Adrian**; 901 Campisi Way, Campbell, California 95008 (US).

(74) Agent: **TUCKER, Joshua**; Pillsbury Winthrop Shaw Pittman, LLP, PO Box 10500, McLean, Virginia 22102 (US).

(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, 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, IT, JM, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(54) Title: CONFIGURING AND MANAGING FLEETS OF DYNAMIC MECHANICAL SYSTEMS



(57) Abstract: Provided is a distributed robot management system, including: a first fleet of robots at a first facility; and a robot management server system remote from the first facility and communicatively coupled with the first fleet of robots via a network, wherein the robot management server system is configured to: provide configuration information to the first fleet of robots, maintain a remote representation of state of robots in the first fleet of robots, receive and store data from the first fleet of robots, and provide computing resources by which robots in the first fleet of robots are trained.

[Continued on next page]

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, 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, 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))*