

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
22 June 2023 (22.06.2023)



(10) International Publication Number
WO 2023/114501 A1

(51) International Patent Classification:

H01L 21/683 (2006.01) B25J 15/00 (2006.01)
H01L 21/677 (2006.01) B25J 11/00 (2006.01)
H01L 21/687 (2006.01)

(21) International Application Number:

PCT/US2022/053222

(22) International Filing Date:

16 December 2022 (16.12.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

17/554,404 17 December 2021 (17.12.2021) US

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(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, 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, 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: ELECTROSTATIC END EFFECTOR FOR MANUFACTURING SYSTEM ROBOT

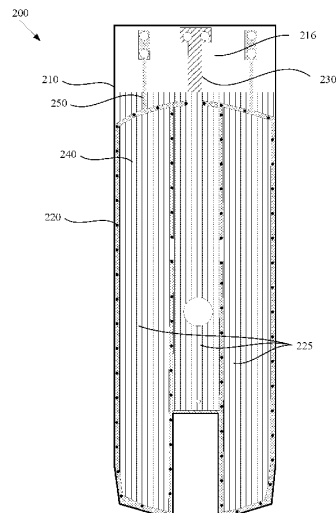


FIG. 2A

(57) Abstract: Disclosed herein are embodiments of an electrostatic end effector, and methods of manufacturing the same. In one embodiment, an electrostatic end effector comprises a ceramic base, a first electrode layer coupled to the ceramic base, and a second electrode layer coupled to the ceramic base. The electrostatic end effector is configured to generate an electrostatic force upon a substrate responsive to a voltage applied to the first electrode. The electrostatic force upon the substrate may increase the friction force upon the substrate which may allow the end effector to accelerate at faster rates than current technologies allow without the substrate slipping on the end effector.

WO 2023/114501 A1

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Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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))*