

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
30 December 2021 (30.12.2021)



(10) International Publication Number
WO 2021/262220 A1

(51) International Patent Classification:
H02K 49/10 (2006.01) *H02K 49/00* (2006.01)
H02K 51/00 (2006.01)

(74) Agent: **MILLER, Steven J.**; The Miller Law Offices PLC,
4000 Ponce de Leon Blvd - Suite 470, Coral Gables, FL
33146 (US).

(21) International Application Number:
PCT/US2020/060073

(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, 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.

(22) International Filing Date:
12 November 2020 (12.11.2020)

(25) Filing Language: English

(26) Publication Language: English

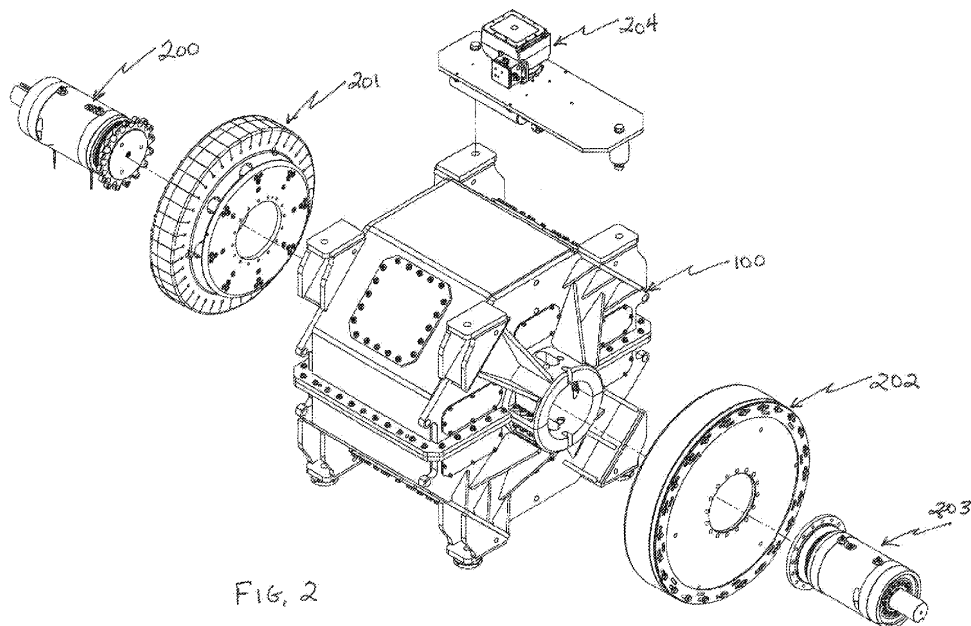
(30) Priority Data:
16/909,989 23 June 2020 (23.06.2020) US

(71) Applicant: **FLUX DRIVE LLC** [US/US]; 1201 N. Orange
Street - Suite 600, Wilmington, DE 19801 (US).

(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,

(72) Inventors: **CORBIN III, Philip**; 2100 Lake Washington
Blvd N - Apt 1-108, Renton, WA 98036 (US). **BRAUN, Richard**; 4116 S Tiller Road, Port Angeles, WA 98362 (US). **SPARKS, Michael Troy**; 16606 35th Avenue SE - Unit 3A, Bothell, WA 98012 (US).

(54) Title: IMPROVED MAGNETIC DRIVE



(57) Abstract: An improved liquid cooled apparatus for transferring large torques magnetically with a primary rotary member and a secondary rotary member as is set forth in US 7294947. The primary rotary member has permanent magnets, the secondary rotary member with electro-conductive materials. Both of said rotors being encased in a liquid tight casing enclosure and said rotors both being liquid cooled to allow for power transfers in excess of 260 KW and 1000 ft. lb torque.

[Continued on next page]

WO 2021/262220 A1

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

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))*