



(43) International Publication Date
25 September 2014 (25.09.2014)

- (51) International Patent Classification:
B60L 13/10 (2006.01) *B65G 54/02* (2006.01)
B66C 1/04 (2006.01)
- (21) International Application Number:
PCT/US2014/019956
- (22) International Filing Date:
3 March 2014 (03.03.2014)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
61/799,695 15 March 2013 (15.03.2013) US
14/069,359 31 October 2013 (31.10.2013) US
- (71) Applicant: ARX PAX, LLC [US/US]; 18 South 21st
Street, Suite 101, San Jose, California 95116 (US).
- (72) Inventor: HENDERSON, D. Gregory; 19605 Glen Una
Drive, Saratoga, California 95070 (US).
- (74) Agent: OLYNICK, David P.; 2000 Hearst Avenue, Ste
305, Berkeley, California 94709 (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, 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, LT, 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.

- (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, 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))

(54) Title: MAGNETIC LEVITATION OF A STATIONARY OR MOVING OBJECT

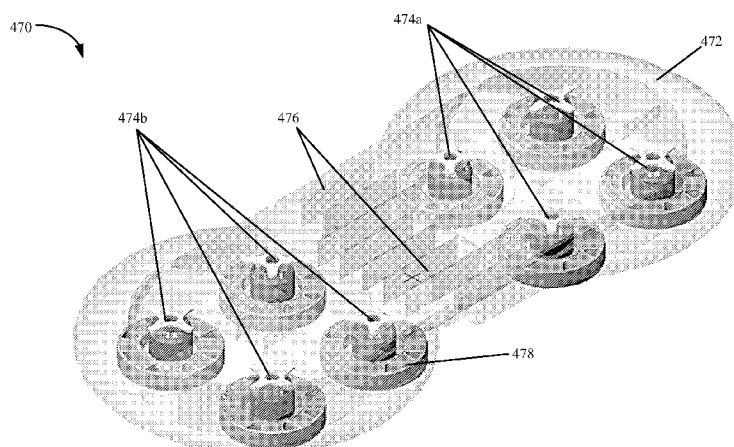


Figure 21

(57) Abstract: A magnetic lifting device is described. The magnetic lifting device can be configured to generate magnetic lift using a moving magnetic field to generate an eddy current effect in conductive substrate beneath the device. In one embodiment, the moving magnetic field can be generated by a rotor with arrangement of permanent magnets which is driven by a motor. In operation, the rotor can be spun up from rest to above a threshold velocity, which causes the magnetic lifting device to rise up from the conductive substrate, hover in place in free flight and move from location to location. In free flight, the magnetic lifting device can be configured to carry a payload, such as a person.