

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
05 July 2018 (05.07.2018)



(10) International Publication Number
WO 2018/122830 A1

(51) International Patent Classification:
B64C 39/00 (2006.01)

(21) International Application Number:
PCT/IB2018/051285

(22) International Filing Date:
28 February 2018 (28.02.2018)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/441,163 31 December 2016 (31.12.2016) US

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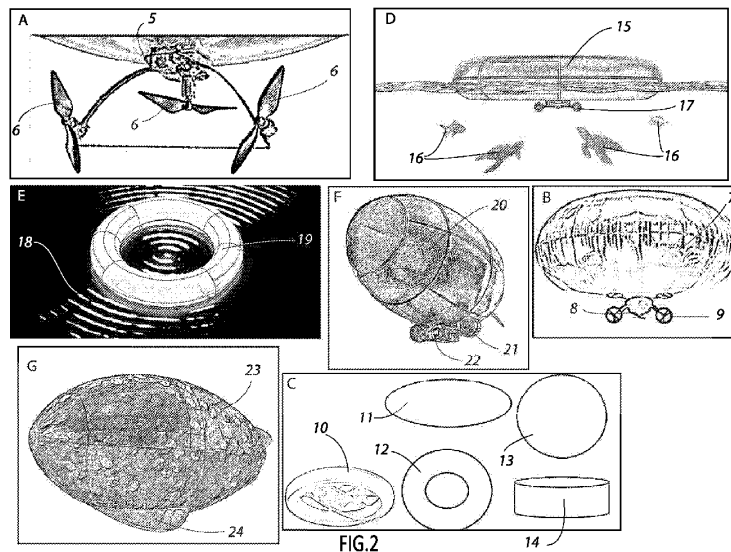
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(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,
CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,
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TR, 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, ST, SZ, TZ,
UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ,

(54) Title: HIGH ENDURANCE UNMANNED AERIAL VEHICLE



(57) Abstract: Overall efficiency and/or flight time of UAVs and Drones can be increased by adding elements containing lighter-than-air gasses; and/or by reducing and/or eliminating the power supplied to any combination of the motors to reduce overall power consumption. In an aspect the configuration of a blimp drone comprises at least one air cavity / chamber / container filled with lighter-than-air gasses. The 3D chambers are made from swept or extruded closed 2D geometry and are detachable from the Drone and can be transparent or camouflaged in color. To maintain control and altitude of the aircraft, lifting surfaces can be incorporated. Such lifting surfaces may include active and/or passive control surfaces to maintain flight stability. Additionally, cavities, fissures, orifices and valves may be added to the surface of the flying vehicle to gain other efficiency advantages.

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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).

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