



(51) International Patent Classification:
B64C 33/02 (2006.01) *B64C 39/02* (2006.01)

(21) International Application Number:
PCT/GB2010/052100

(22) International Filing Date:
15 December 2010 (15.12.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0922168.0 18 December 2009 (18.12.2009) GB

(72) Inventor; and

(71) Applicant : GREENYER, Guy, Thomas [GB/GB]; 143
Downside Avenue, Wothling, West Sussex BN14 0EY
(GB).

(74) Agent: JACK, Cundy; Gill Jennings & Every LLP, The
Broadgate Tower, 20 Primrose Street, London, Greater
London EC2A 2ES (GB).

(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, 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, IS, JP, KE, KG, KM, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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, SD, SL, SZ, TZ, UG,
ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: RESONANCE ENGINE

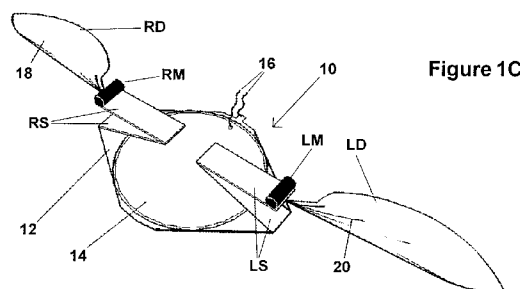


Figure 1C

(57) Abstract: A resonance engine is disclosed comprising: a driver plate (12), to which is coupled at least one oscillatory transducer (14); a drive signal generator connected to the oscillatory transducer for excitation thereof; a first spring-mass resonator, having a first natural resonant frequency, with a proximal end attached to the driver plate (12) and a free distal end; and a reaction means attached to the driver plate substantially opposite to the first spring-mass resonator. When the oscillatory transducer (14) is excited by a drive signal from the generator having a component at or close to said natural resonant frequency, the first spring-mass resonator oscillates at resonance, substantially in anti-phase to the driver plate (12). Small vibrational strains in the oscillatory transducer (14) are converted to large strains of controllable kinematic movements.

