



(51) International Patent Classification:
B64D 45/00 (2006.01)

(21) International Application Number: PCT/IL2012/050068

(22) **International Filing Date:** 1 March 2012 (01.03.2012)

(25) **Filing Language:** English

(26) **Publication Language:** English

(30) Priority Data:
211512 2 March 2011 (02.03.2011) IL

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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, 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, QA, RO, RS, RU, RW, 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, 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))

- 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))

(88) **Date of publication of the international search report:**
20 February 2014

(54) Title: REDUCING BIRD DAMAGE TO AN AIRPLANE

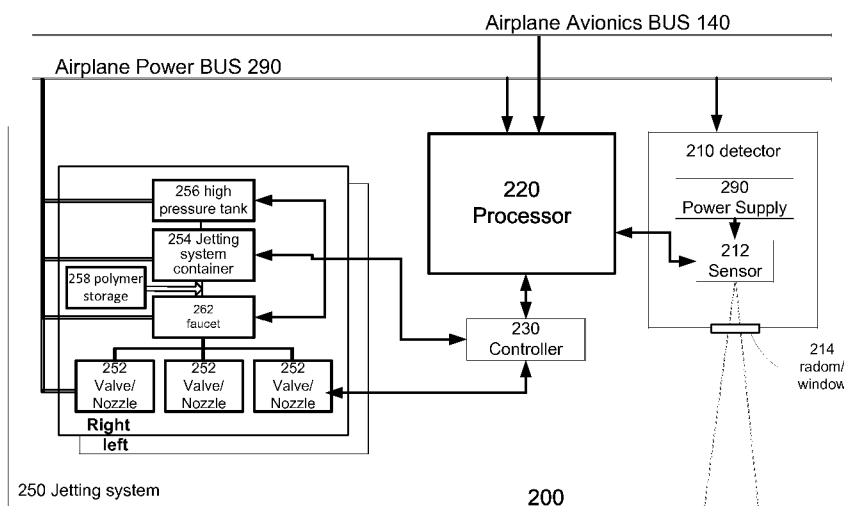


FIG. 1

(57) Abstract: The presently disclosed subject matter includes, inter alia, a method and system for reducing damage to an airplane by birds. A high pressure jet is selectively triggered on to birds by a jetting system that is mounted on the airplane. Information indicative of motion of a bird in a vicinity of the airplane is received and analyzed and the high pressure jet is selectively triggered onto the bird in response to a result of the analysis of the information.

INTERNATIONAL SEARCH REPORT

International application No
PCT/IL2012/050068

A. CLASSIFICATION OF SUBJECT MATTER
ADD. B64D45/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
B64D A01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 774 088 A (KREITHEN MELVIN L [US]) 30 June 1998 (1998-06-30) abstract figures 1, 4	1-42
A	----- US 2010/096471 A1 (DJORDJIC MOMCILO [US]) 22 April 2010 (2010-04-22) figures 1, 4 paragraph [0003] paragraph [0030]	1-42
A	----- EP 0 236 267 A2 (STEFFEN RUDIGER) 9 September 1987 (1987-09-09) abstract figures pages - ----- -/-	1-42



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Date of the actual completion of the international search

16 December 2013

Date of mailing of the international search report

03/01/2014

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INTERNATIONAL SEARCH REPORT

International application No

PCT/IL2012/050068

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 964 331 A (HALEVY EYAL [US] ET AL) 23 October 1990 (1990-10-23) abstract figure 1 figures -----	1-42

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IL2012/050068

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5774088	A	30-06-1998	NONE
US 2010096471	A1	22-04-2010	NONE
EP 0236267	A2	09-09-1987	AU 584565 B2 25-05-1989
		AU 6886787 A	10-09-1987
		BR 8700945 A	29-12-1987
		CA 1265110 A1	30-01-1990
		CH 669162 A5	28-02-1989
		DE 3766724 D1	31-01-1991
		EP 0236267 A2	09-09-1987
		GR 3001215 T3	30-07-1992
		JP 2755575 B2	20-05-1998
		JP S62210199 A	16-09-1987
		SU 1722223 A3	23-03-1992
		US 4736907 A	12-04-1988
US 4964331	A	23-10-1990	NONE