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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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,

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- 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:**
17 March 2016

- (15) **Information about Correction:**

[Continued on next page]

- (54) **Title:** AERIAL DEVICE CAPABLE OF CONTROLLED FLIGHT AND METHODS OF USING SUCH A DEVICE

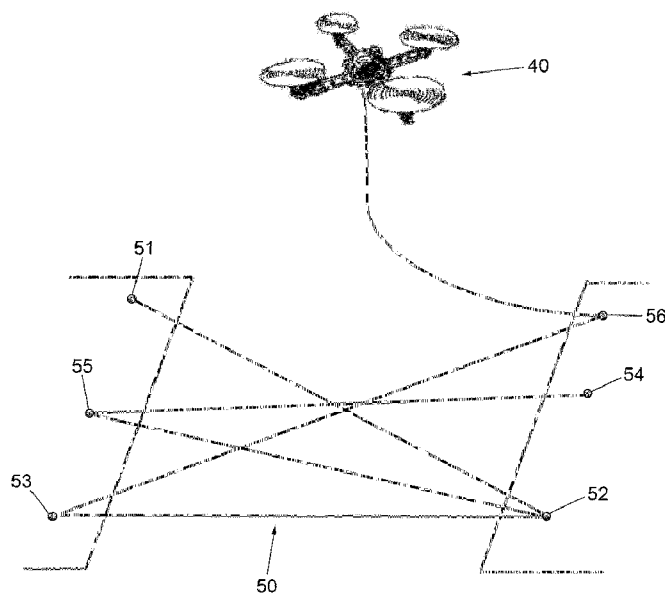


Fig. 4

(57) **Abstract:** There is provided a method of using a device (40) capable of controlled flight in a surrounding environment, the device (40) comprising: lifting means for providing lift to the device (40); the device (40) may comprise object-retaining means for holding an object to be affixed to a target site and a dispensing assembly for dispensing an adhesive, wherein the method comprises: controlling the lifting means so as to controllably fly the device (40) in the surrounding environment; the method may comprise using the device (40) to affix an object held by the object-retaining means to a target site in the surrounding environment by dispensing an adhesive from the dispensing assembly. Thus, an aerial device (40), for example a robotic device (40), may be used to fly to a desired location and affix an object at the desired location, by dispensing, ejecting or otherwise applying an adhesive.

Previous Correction:

see Notice of 21 January 2016

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2015/060128

A. CLASSIFICATION OF SUBJECT MATTER
 INV. B64C39/02
 ADD.

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)
 B64C B64F

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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 8 167 234 B1 (MOORE MICHAEL [US]) 1 May 2012 (2012-05-01) abstract column 8, line 22 - column 9, line 15 column 11, line 60 - column 12, line 17 column 13, line 13 - column 14, line 2 figures 2b, 2c, 3a, 3b, 3c -----	1,6-9, 13-20
X	WO 2013/171735 A1 (YOFFE MEIR [IL]) 21 November 2013 (2013-11-21) abstract page 8, lines 3-5 page 32, line 13 - page 33, line 23 page 41, line 20 - page 42, line 10 figures 2, 5A-5F ----- -/-	1-5,12, 18



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

5 November 2015

Date of mailing of the international search report

22/01/2016

Name and mailing address of the ISA/

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Authorized officer

Weber, Ingo

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2015/060128

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2005/042342 A2 (INSITU GROUP [US]; SLIWA STEVEN M [US]; VON FLOTOW ANDREAS H [US]; DEN) 12 May 2005 (2005-05-12) figures 8E, 8F	1
A,P	----- HUNT GRAHAM ET AL: "3D printing with flying robots", 2014 IEEE INTERNATIONAL CONFERENCE ON ROBOTICS AND AUTOMATION (ICRA), IEEE, 31 May 2014 (2014-05-31), pages 4493-4499, XP032650080, DOI: 10.1109/ICRA.2014.6907515 the whole document	1-20
A	----- EP 2 465 582 A2 (MARCUS ROBERT [US]) 20 June 2012 (2012-06-20) the whole document	1-20
A	----- WO 02/076826 A1 (BAE SYSTEMS PLC [GB]; HARRISON RICHARD GEORGE [GB]) 3 October 2002 (2002-10-03) the whole document -----	1-20

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2015/060128

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-20

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-20

Suspending an aerial device from a support structure

2. claims: 21-31

Synchronising the trajectories of a plurality of aerial devices

3. claims: 32-45

Connecting elongate flexible members using a plurality of aerial devices

4. claims: 46-63

Affixing an object to a target site using a device capable of controlled flight

5. claims: 64-76

Dispensing a curable substance using a device capable of controlled flight

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2015/060128

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 8167234	B1	01-05-2012	NONE
WO 2013171735	A1	21-11-2013	AU 2013261044 A1 27-11-2014 KR 20150023397 A 05-03-2015 SG 11201407622P A 30-12-2014 US 2015129716 A1 14-05-2015 WO 2013171735 A1 21-11-2013
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