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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/144,275	07/12/2011	Alexander Olegovich Maiboroda	GAP-PT015	4226
3624	7590	03/10/2014	EXAMINER	
VOLPE AND KOENIG, P.C. UNITED PLAZA 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103			SWIATEK, ROBERT P	
			ART UNIT	PAPER NUMBER
			3643	
			NOTIFICATION DATE	DELIVERY MODE
			03/10/2014	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eoffice@volpe-koenig.com

## Office Action Summary

Application No.  
13/144,275

Applicant(s)  
MAIBORODA, ALEXANDER  
OLEGOVICH

Examiner  
Rob Swiatek

Art Unit  
3643

AIA (First Inventor to File)  
Status  
No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1)  Responsive to communication(s) filed on 12 July 2011.  
 A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on \_\_\_\_\_.
- 2a)  This action is **FINAL**.                      2b)  This action is non-final.
- 3)  An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims\*

- 5)  Claim(s) 1 and 2 is/are pending in the application.  
5a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 6)  Claim(s) \_\_\_\_\_ is/are allowed.
- 7)  Claim(s) 1 and 2 is/are rejected.
- 8)  Claim(s) \_\_\_\_\_ is/are objected to.
- 9)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

\* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).

### Application Papers

- 10)  The specification is objected to by the Examiner.
- 11)  The drawing(s) filed on 12 July 2011 is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

### Priority under 35 U.S.C. § 119

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

#### Certified copies:

- a)  All    b)  Some\*\*    c)  None of the:
- Certified copies of the priority documents have been received.
  - Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1)  Notice of References Cited (PTO-892)
- 2)  Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)  
Paper No(s)/Mail Date 7-12-11.
- 3)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 4)  Other: \_\_\_\_\_.

### DETAILED ACTION

The present application is being examined under the pre-AIA first to invent provisions.

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. In claim 1, line 6, the phrase "and disposing the accelerating cargoes" is unclear in that when the cargoes are "disposed," they are not accelerating (absent acceleration due to Earth's gravity), as acceleration would seem to occur only after the cargoes have been disposed and captured by the container spacecraft; moreover, the step of disposing the cargoes as recited in claim 1, line 5, is confusing as it implies the container spacecraft itself disposes the cargoes; in claim 1, line 13, the step of "discharging the cargo" is seemingly redundant with "disposing the accelerating cargoes" in line 6 (to overcome the rejection, the latter step should be amended to recite that disposing the cargoes further includes discharging them in a plurality of small portions distributed along a specified segment of the spacecraft's path), in line 13, "the cargo" lacks a prior antecedent basis, in line 15, "the receiving device" lacks a prior antecedent basis, in line 16, the phrase "braking medium container sequentially as separate portions" is unclear; in claim 2,

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lines 12-14 are unclear in that they recite a propulsion system in the form of either an electrodynamic tether system or a jet system, while parent claim 1, lines 18-20, states both types of propulsion systems are present; moreover, it is unclear if the "propulsion system" of claim 2, lines 12, 13, is in addition to the propulsion systems recited in claim 1 or is one of the two recited systems.

A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.

The disclosure is objected to because of the following informalities: On page 2, line 8, "gasses" is a misspelling, in line 24, the term "componentry" is unclear; paragraph [0020] is difficult to understand; reference numerals 2-4 have each been used twice to designate two different elements, which is improper; on page 7, line 27, "casted" is a misspelling.

Appropriate correction is required.

The abstract is objected to because use of the term "said" should be avoided.

The drawings are objected to because reference numerals 2, 3, 4 each have been used twice to identify two different elements. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief

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description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims 1, 2 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), 2nd paragraph, set forth in this Office action.

The patents to Kantrowitz et al. (US 3,818,700), Criswell (US 5,224,663), and Leyre (US 8,251,315 B2) have been cited to provide examples of prior art aircraft propulsion systems and a two-satellite arrangement intended for formation flight.

/Rob Swiatek/  
Primary Examiner, Art Unit 3643

Ph.: 571/272-6894  
24 February 2014