

Application Details

APPLICATION NUMBER	201741040612
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	14/11/2017
APPLICANT NAME	Institute of Aeronautical Engineering
TITLE OF INVENTION	DI-COPTOR AND ARMS MECHANISM THEREOF
FIELD OF INVENTION	GENERAL ENGINEERING
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PRIORITY DATE	NA
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	25/10/2019

Application Status

APPLICATION STATUS	Application Published
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Patent Search

Invention Title	DI-COPTOR AND ARMS MECHANISM THEREOF
Publication Number	43/2019
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Priority Country	
Priority Date	
Field Of Invention	GENERAL ENGINEERING
Classification (IPC)	B64C 27/54

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Applicant

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Abstract:

A di-copter with arms comprises mechanical arms set (7, 14, 23) located in a triangular formation, ducted fans (10, 21) arranged on either side of the copter as a flight controlling mechanism, propellers (18) co-axially arranged and connected to motors (5), landing gear mechanism (1, 16, 19) having landing legs suitably locked for ensuring strength by means of lockers (6) arranged on top of each arm (7, 14, 23). All the three arms (7, 14, 23) are powered to move with the help of servos such that the three arms meet at a point (48) in order to hold an object (37) accurately, to operate manually, to maintain balance and also to make the CGs of the bodies parallel. Each propeller is connected to respective motor (45). The two landing gears (42, 50) are connected to a protective chamber (41) which also protects the propellers (18) and an image capturing device (54) is located at a central position atop the three arms (7,14,23) for better vision of these operating arms while the copter is away from control position. To be continued with Fig. 1

Complete Specification

DESC:FORM – 2

THE PATENTS ACT, 1970
(39 of 1970)
AND
THE PATENTS RULES, 2003

COMPLETE SPECIFICATION

(See Section 10; rule 13)

TITLE OF THE INVENTION

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FORM 1 THE PATENTS ACT 1970 (39 of 1970) and THE PATENTS RULES, 2003 APPLICATION FOR GRANT OF PATENT (See section 7, 54 and 135 and sub-rule (1) of rule 20)			(FOR OFFICE USE ONLY)		
			Application No.:		
			Filing Date:		
			Amount of Fee Paid:		
			CBR No.:		
			Signature:		
1. APPLICANT'S REFERENCE / IDENTIFICATION NO. (AS ALLOTTED BY OFFICE)					
2. TYPE OF APPLICATION [Please tick (✓) at the appropriate category]					
Ordinary (✓)		Convention ()		PCT-NP ()	
Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()
3A. APPLICANT(S)					
Name in full		Nationality	Country of Residence	Address of the Applicant	
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3B. CATEGORY OF APPLICANT [Please tick (✓) at the appropriate category]					
Natural Person ()		Other than Natural Person			
		Small Entity ()		Startup ()	Others (✓)
4. INVENTOR(S) [Please tick (✓) at the appropriate category]					
Are all the inventor(s) same as the applicant(s) named above?		Yes ()		No (✓)	
If "No", furnish the details of the inventor(s)					
Name in full		Nationality	Country of Residence	Address of the Inventor	
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				Country	India

			Pin code	500043	
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			Country	India	
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5. TITLE OF THE INVENTION					
DI-COPTOR AND ARMS MECHANISM THEREOF					
6. AUTHORISED REGISTERED PATENT AGENT(S)		IN/PA No.	2647		
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8. IN CASE OF APPLICATION CLAIMING PRIORITY OF APPLICATION FILED IN CONVENTION COUNTRY, PARTICULARS OF CONVENTION APPLICATION					
Country	Application Number	Filing date	Name of the applicant	Title of the invention	IPC (as classified in the convention country)
9. IN CASE OF PCT NATIONAL PHASE APPLICATION, PARTICULARS OF INTERNATIONAL APPLICATION FILED UNDER PATENT CO-OPERATION TREATY (PCT)					
International application number			International filing date		
10. IN CASE OF DIVISIONAL APPLICATION FILED UNDER SECTION 16, PARTICULARS OF ORIGINAL (FIRST) APPLICATION					
Original (first) application No.			Date of filing of original (first) application		
11. IN CASE OF PATENT OF ADDITION FILED UNDER SECTION 54, PARTICULARS OF MAIN APPLICATION OR PATENT					
Main application/patent No.			Date of filing of main application		
12. DECLARATIONS:					
(i) Declaration by the Inventor (s)					
(In case the applicant is an assignee: the inventor(s) may sign herein below or the applicant may upload the assignment or enclose the assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period).					

I/We, the above named inventor(s) is/are the true & first inventor(s) for this Invention and declare that the applicant(s) herein is/are my/our assignee or legal representative.

(a) Date: 12-10-2017

(b) Signature(s):

(c) Name(s): Mr. Vadupu Siva Sai Siddartha Mr. Nidadavolu Virinchi Dr. P. Srinivasa Rao Dr. Dussa Govardhan

(ii) Declaration by the applicant (s) in the convention country

(In case the applicant in India is different than the applicant in the convention country: the applicant in the convention country may sign herein below or applicant in India may upload the assignment from the applicant in the convention country or enclose the said assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period)

I/We, the applicant(s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative.

(a) Date

(b) Signature(s)

(c) Name(s) of the signatory

(iii) Declaration by the applicant(s)

I/We the applicant(s) hereby declare(s) that: -

- ☐ I am/ We are in possession of the above-mentioned invention.
- ☐ The provisional/complete specification relating to the invention is filed with this application.
- ☐ The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by me/us before the grant of patent to me/us.
- ☐ There is no lawful ground of objection(s) to the grant of the Patent to me/us.
- ☐ I am/we are the true & first inventor(s).
- ☐ I am/we are the assignee or legal representative of true & first inventor(s).
- ☐ The application or each of the applications, particulars of which are given in Paragraph-8, was the first application in convention country/countries in respect of my/our invention(s).
- ☐ I/We claim the priority from the above mentioned application(s) filed in convention country/countries and state that no application for protection in respect of the invention had been made in a convention country before that date by me/us or by any person from which I/We derive the title.
- ☐ My/our application in India is based on international application under Patent Cooperation Treaty(PCT) as mentioned in Paragraph-9.
- ☐ The application is divided out of my /our application particulars of which is given in Paragraph-10 and prays that this application may be treated as deemed to have been filed on DD/MM/YYYY under section 16 of the Act.
- ☐ The said invention is an improvement in or modification of the invention particulars of which are given in Paragraph-11.

13. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION

a) Form 2

Item	Details	Fee	Remarks
Complete/ provisional specification)#: Provisional	No. of pages: 8	8000/-	
No. of Claim(s): —	No. of pages: —		

Abstract: —	No. of pages: —		
No. of Drawing(s): —	No. of pages: —		

In case of a complete specification, if the applicant desires to adopt the drawings filed with his provisional specification as the drawings or part of the drawings for the complete specification under rule 13(4), the number of such pages filed with the provisional specification are required to be mentioned here.

- b) Complete specification (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).
- c) Sequence listing in electronic form
- d) Drawings (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).
- e) Priority document(s) or a request to retrieve the priority document(s) from DAS (Digital Access Service) if the applicant had already requested the office of first filing to make the priority document(s) available to DAS.
- f) Translation of priority document/Specification/International Search Report/International Preliminary Report on Patentability.
- g) Statement and Undertaking on Form 3
- h) Declaration of Inventorship on Form 5
- i) Power of Authority
- j)

Total fee ₹.....in Cash/ Banker's Cheque /Bank Draft bearing No.....Date.....on
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I/We hereby declare that to the best of my/our knowledge, information and belief the fact and matters stated herein are correct and I/We request that a patent may be granted to me/us for the said invention.

Dated this 12th day of October 2017

Signature:

Name: M P Venkata Kiran Kumar

To,
The Controller of Patents
The Patent Office, at Chennai

Note: -

- * Repeat boxes in case of more than one entry.
- * To be signed by the applicant(s) or by authorized registered patent agent otherwise where mentioned.
- * Tick (✓)/cross (x) whichever is applicable/not applicable in declaration in paragraph-12.
- * Name of the inventor and applicant should be given in full, family name in the beginning.
- * Strike out the portion which is/are not applicable.
- * For fee: See First Schedule";