पेटेंट कार्यालय
शासकीय जर्नल

OFFICIAL JOURNAL
OF
THE PATENT OFFICE

निर्गमन सं. 06/2020	शुक्रवार	दिनांक: 07/02/2020
ISSUE NO. 06/2020	FRIDAY	DATE: 07/02/2020

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

INTRODUCTION

In view of the recent amendment made in the Patents Act, 1970 by the Patents (Amendment) Act, 2005 effective from 01st January 2005, the Official Journal of The Patent Office is required to be published under the Statute. This Journal is being published on weekly basis on every Friday covering the various proceedings on Patents as required according to the provision of Section 145 of the Patents Act 1970. All the enquiries on this Official Journal and other information as required by the public should be addressed to the Controller General of Patents, Designs & Trade Marks. Suggestions and comments are requested from all quarters so that the content can be enriched.

(Om Prakash Gupta)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

7TH FEBRUARY, 2020

CONTENTS

THE PATENT OFFICE
KOLKATA, 07/02/2020
Address of the Patent Offices/Jurisdictions
The following are addresses of all the Patent Offices located at different places having their Territorial Jurisdiction on a Zonal basis as shown below:-

1	Office of the Controller General of Patents, Designs & Trade Marks, Boudhik Sampada Bhavan, Near Antop Hill Post Office,S.M.Road,Antop Hill, Mumbai – 400 037 Phone: (91)(22) 24123311, Fax : (91)(22) 24123322 E-mail: cgpdtm@nic.in	4	The Patent Office, Government of India, Intellectual Property Rights Building, G.S.T. Road, Guindy, Chennai – 600 032. Phone: (91)(44) 2250 2081-84 Fax : (91)(44) 2250 2066 E-mail: chennai-patent@nic.in ❖ The States of Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu and the Union Territories of Puducherry and Lakshadweep.
2	The Patent Office, Government of India, Boudhik Sampada Bhavan, Near Antop Hill Post Office,S.M.Road,Antop Hill, Mumbai – 400 037 Phone: (91)(22) 24137701 Fax: (91)(22) 24130387 E-mail: mumbai-patent@nic.in ❖ The States of Gujarat, Maharashtra, Madhya Pradesh, Goa and Chhattisgarh and the Union Territories of Daman and Diu & Dadra and Nagar Haveli	5	The Patent Office (Head Office), Government of India, Boudhik Sampada Bhavan, CP-2, Sector –V, Salt Lake City, Kolkata- 700 091 Phone: (91)(33) 2367 1943/44/45/46/87 Fax: (91)(33) 2367 1988 E-Mail: kolkata-patent@nic.in ❖ Rest of India
3	The Patent Office, Government of India, Boudhik Sampada Bhavan, Plot No. 32., Sector-14, Dwarka, New Delhi – 110075 Phone: (91)(11) 25300200 & 28032253 Fax: (91)(11) 28034301 & 28034302 E.mail: delhi-patent@nic.in ❖ The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttaranchal, Delhi and the Union Territory of Chandigarh.		

Website: www.ipindia.nic.in
www.patentoffice.nic.in

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 and The Patents (Amendment) Act, 2005 or by the Patents (Amendment) Rules, 2006 will be received only at the appropriate offices of the Patent Office.

Fees: The Fees may either be paid in cash or may be sent by Bank Draft or Cheques payable to the Controller of Patents drawn on a scheduled Bank at the place where the appropriate office is situated.

पेटेंट कार्यालय
कोलकाता, दिनांक 07/02/2020
• कार्यालयों के क्षेत्राधिकार के पते

विभिन्न जगहों पर स्थित पेटेंट कार्यालय के पते आंचलिक आधार पर दर्शित उनके प्रादेशिक अधिकार क्षेत्र के साथ नीचे दिए गए है:-

1	कार्यालय : महानियंत्रक, एकस्व, अभिकल्प तथा व्यापार चिहन, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, भारत, फोन: (91) (22) 24123311 फ़ैक्स: (91) (22) 24123322 ई. मेल: cgpdtm@nic.in	4	पेटेंट कार्यालय, भारत सरकार इंटेलेक्चुअल प्रॉपर्टी राइट्स बिल्डिंग, इंडस्ट्रियल इस्टेट एसआईडीसीओ आरएमडी गोडाउन एरिया एडजसेन्ट टु ईगल फ्लास्क, जी. एस. टी. रोड, गायन्डी चेन्नई - 600 032. फोन: (91)(44) 2250 2081-84 फ़ैक्स: (91)(44) 2250-2066 ई. मेल: chennai-patent@nic.in ❖ आन्ध्र प्रदेश, तेलंगाना, कर्नाटक, केरल, तमिलनाडु तथा पुडुचेरी राज्य क्षेत्र एवं संघ शासित क्षेत्र, लक्षदीप
2	पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, एंटोप हिल डाकघर के समीप, एस. एम. रोड, एंटोप हिल, मुम्बई- 400 037, फोन: (91) (22) 24137701 फ़ैक्स: (91) (22) 24130387 ई. मेल: Mumbai-patent@nic.in ❖ गुजरात, महाराष्ट्र, मध्य प्रदेश, गोवा तथा छत्तीसगढ़ राज्य क्षेत्र एवं संघ शासित क्षेत्र, दमन तथा दीव, दादर और नगर हवेली.	5	पेटेंट कार्यालय, भारत सरकार कोलकाता, (प्रधान कार्यालय) बौद्धिक संपदा भवन, सीपी-2, सेक्टर- V, साल्ट लेक सिटी, कोलकाता-700 091, भारत. फोन: (91)(33) 2367 1943/44/45/46/87 फ़ैक्स:/Fax: (91)(33) 2367 1988 ई. मेल: kolkata-patent@nic.in ❖ भारत का अवशेष क्षेत्र
3	पेटेंट कार्यालय, भारत सरकार बौद्धिक संपदा भवन, प्लॉट सं. 32, सेक्टर- 14, द्वारका, नई दिल्ली- 110 075. फोन: (91)(11) 25300200, 28032253 फ़ैक्स: (91)(11) 28034301, 28034302 ई. मेल: delhi-patent@nic.in हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब,राजस्थान, उत्तर प्रदेश, दिल्ली तथा उत्तरांचल राज्य क्षेत्रों, एवं संघ शासित क्षेत्र चंडीगढ़		

वेबसाइट: http://www.ipindia.nic.in
www.patentoffice.nic.in

पेटेंट अधिनियम, 1970 तथा पेटेंट (संशोधन) अधिनियम, 2005 अथवा पेटेंट (संशोधन) नियम, 2006 द्वारा वांछित सभी आवेदन, सूचनाए, विवरण या अन्य दस्तावेज़ या कोई शुल्क पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में स्वीकृत होंगे।
शुल्क: शुल्क या तो नगद रूप में या Controller of Patents के नाम में देय बैंक ड्राफ्ट या चेक के द्वारा भेजी जा सकती है जो उसी स्थान के किसी अनुसूचित बैंक में प्रदत्त हो जहाँ उपयुक्त कार्यालय स्थित है ।

SPECIAL NOTICE

18 Months publication as required under Section 11A of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005.

Notice is hereby given that any person at any time before the grant of Patent may give representation by way of opposition to the Controller of Patents at appropriate office on the ground and in a manner specified under section 25(1) of the Patents (Amendment) Act, 2005 read with Rule 55 of the Patents (Amendment) Rules, 2006.

Notice is also given that if any interested person requests for copies of the complete specification, drawing and abstract of any application already published, the photocopy of the same can be supplied by the Patent Office as per the jurisdiction on payment of prescribed fees of Rs.8/- per page. If any further details are required to be obtained, the same can be provided by the respective Patent Offices on request.

(Om Prakash Gupta)
CONTROLLER GENERAL OF PATENTS, DESIGNS & TRADE MARKS

SPECIAL NOTICE

Under the new provision of the Patents Act, 1970 as amended by the Patents (Amendment) Act, 2005 and Rules there under, Publication of the matter relating to Patents in the Official Gazette of India Part III, Section 2 has been discontinued and instead The Official Journal of the Patent Office is being published containing all the activities of The Patent Office such as publication of all the patent applications after 18th months , grant of patents & all other information in respect of the proceedings as required under the provisions of the Patents (Amendment) Act, 2005 and Rules thereunder on weekly basis on every **Friday**.

The Journal is uploaded in the website every Friday. So Paper form and CD-ROM form of the Journal are discontinued from 01/01/2009.

SPECIAL NOTICE

Every effort is being taken to publish all the patent applications under section 11(A) of the Patents Act. However, if duplication of publication of any application is found, then earlier date of publication will be taken for the purpose of provisional protection for applicant and Patent Office will grant Patent not before six months from the date of second publication, provided that there is there is no third party representation.

FORM 9

THE PATENT ACT, 1970
(39 of 1970)
&
THE PATENTS RULES, 2003

REQUEST FOR PUBLICATION

[See section 11A (2) rule 24A]

I/We **Dr. A RAVEENDRADr. YOGESH MADARIAN. RISHI KANTHDr. T RAMACHANDRANDr. HALESH KOTIDr. G.BIKSHADr. SHAIK HUSSAINDr. N.VISHNU MURTHYDr. B DHATREYIMR. S UDAYA BASKAR** hereby request for early publication of my/our [Patent Application No.] 202041003637DATED**27 Jan 2020** UNDER SECTION 11A(2) OF THE ACT.

Dated this(Final Payment Date):----------

Signature
(.....)

To,
The Controller of Patents,
The Patent Office
AT **CHENNAI**

This form is electronically generated.

FORM 1 THE PATENTS ACT, 1970 (39 of 1970) & THE PATENTS RULES, 2003 APPLICATION FOR GRANT OF PATENT [See sections 7,54 & 135 and rule 20(1)]	(FOR OFFICE USE ONLY) Application No.: ..... Filing Date: ..... Amount of Fee Paid: ..... CBR No.: ..... Signature: .....

1. APPLICANT(S):

Sr.No.	Name	Nationality	Address	Country	State
1	Dr. A RAVEENDRA	India	DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA, SECUNDERABAD 500100 TELANGANA STATE , INDIA "	India	Telangana
2	Dr. YOGESH MADARIA	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA, SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana
3	N. RISHI KANTH	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA, SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana
4	Dr. T RAMACHANDRAN	India	"DEPARTMENT OF	India	Telangana

			MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA, SECUNDERABAD 500100 TELANGANA STATE , INDIA"		
5	Dr. HALESH KOTI	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA, SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana
6	Dr. G.BIKSHA	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA, SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana
7	Dr. SHAIK HUSSAIN	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA, SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana
8	Dr. N.VISHNU MURTHY	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS)	India	Telangana

			MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA"		
9	Dr. B DHATREYI	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana
10	MR. S UDAYA BASKAR	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana

2. INVENTOR(S):

Sr.No.	Name	Nationality	Address	Country	State
1	Dr. A RAVEENDRA	India	DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA "	India	Telangana
2	Dr. YOGESH MADARIA	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE	India	Telangana

			(AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA"		
3	N. RISHI KANTH	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana
4	Dr. T RAMACHANDRAN	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana
5	Dr. HALESH KOTI	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana
6	Dr. G.BIKSHA	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana

7	Dr. SHAIK HUSSAIN	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA, SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana
8	Dr. N.VISHNU MURTHY	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA, SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana
9	Dr. B DHATREYI	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA, SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana
10	MR. S UDAYA BASKAR	India	"DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA, SECUNDERABAD 500100 TELANGANA STATE , INDIA"	India	Telangana

3. TITLE OF THE INVENTION: AN EXTENDABLE AND HEIGHT ADJUSTABLE CEILING FAN WITH EJECT ABLE BLADES

4. ADDRESS FOR CORRESPONDENCE OF APPLICANT / AUTHORISED PATENT AGENT IN INDIA:

325 17th Main B Block 3rd Stage Vijayanagar Mysuru 570030

Telephone No.: 08212500422
Fax No.:
Mobile No: .....
E-mail: sgowthami12@gmail.com

5. PRIORITY PARTICULARS OF THE APPLICATION(S) FILED IN CONVENTION COUNTRY:

Sr.No.	Country	Application Number	Filing Date	Name of the Applicant	Tilte of the Invention

6. PARTICULARS FOR FILING PATENT COOPERATION TREATY (PCT) NATIONAL PHASE APPLICATION:

International Application Number	International Filing Date as Allotted by the Receiving Office
PCT//	

7. PARTICULARS FOR FILING DIVISIONAL APPLICATION

Original (first) Application Number	Date of Filing of Original (first) Application

8. PARTICULARS FOR FILING PATENT OF ADDITION:

Main Application / Patent Number:	Date of Filing of Main Application

9. DECLARATIONS:

(i) Declaration by the inventor(s)

I/We ,Dr. A RAVEENDRA,Dr. YOGESH MADARIA,N. RISHI KANTH,Dr. T RAMACHANDRAN,Dr. HALESH KOTI,Dr. G.BIKSHA,Dr. SHAIK HUSSAIN,Dr. N.VISHNU MURTHY,Dr. B DHATREYI,MR. S UDAYA BASKAR, 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: -----

(b) Signature(s) of the inventor(s): .....

(c) Name(s): Dr. A RAVEENDRA,Dr. YOGESH MADARIA,N. RISHI KANTH,Dr. T RAMACHANDRAN,Dr. HALESH KOTI,Dr. G.BIKSHA,Dr. SHAIK HUSSAIN,Dr. N.VISHNU MURTHY,Dr. B DHATREYI,MR. S UDAYA BASKAR

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

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 singnatory: Dr. A RAVEENDRA,Dr. YOGESH MADARIA,N. RISHI KANTH,Dr. T RAMACHANDRAN,Dr. HALESH KOTI,Dr. G.BIKSHA,Dr. SHAIK HUSSAIN,Dr. N.VISHNU MURTHY,Dr. B DHATREYI,MR. S UDAYA BASKAR

(iii) Declaration by the applicant(s)

- **The Complete specification relationg to the invention is filed with this application.**
- **I am/We are, in the possession of the above mentioned invention.**
- **There is no lawful ground of objection to the grant of the Patent to me/us.**

10. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION:

Sr.	Document Description	FileName

I/We hereby declare that to the best of my/our knowledge, information and belief the fact and matters stated hering are correct and I/We request that a patent may be granted to me/us for the said invention.

Dated this(Final Payment Date): ----------

Signature: .....

Name: Gowthami S

To The Controller of Patents

The Patent office at CHENNAI

This form is electronically generated.

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :27/01/2020

(21) Application No.202041003637 A
(43) Publication Date : 07/02/2020

(54) Title of the invention : AN EXTENDABLE AND HEIGHT ADJUSTABLE CEILING FAN WITH EJECT ABLE BLADES

(51) International classification :F04D0025080000,E05B0077260000,F24F0011770000,F24F0007007000,F24F0007060000
(31) Priority Document No :NA
(32) Priority Date :NA
(33) Name of priority country :NA
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)Dr. A RAVEENDRA
Address of Applicant :DEPARTMENT OF MECHANICAL ENGINEERING, MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA Telangana India
2)Dr. YOGESH MADARIA
3)N. RISHI KANTH
4)Dr. T RAMACHANDRAN
5)Dr. HALESH KOTI
6)Dr. G.BIKSHA
7)Dr. SHAIK HUSSAIN
8)Dr. N.VISHNU MURTHY
9)Dr. B DHATREYI
10)MR. S UDAYA BASKAR
(72)**Name of Inventor :**
1)Dr. A RAVEENDRA
2)Dr. YOGESH MADARIA
3)N. RISHI KANTH
4)Dr. T RAMACHANDRAN
5)Dr. HALESH KOTI
6)Dr. G.BIKSHA
7)Dr. SHAIK HUSSAIN
8)Dr. N.VISHNU MURTHY
9)Dr. B DHATREYI
10)MR. S UDAYA BASKAR

(57) Abstract :
An extendable and height adjustable ceiling fan with eject able blades is essential to make the ceiling fans to suit any living space irrespective of the size of the living room or height of the ceiling of the living room. The invention aims at designing and implementing a height adjustable ceiling fan which is based on Internet of Things to save the usage data regarding the fan from time to time. Also the fan is enclosed with plurality of sensors to control the fan from the mobile phone of the user along with child lock mechanism. The height of the piston is adjusted using an actuator and the blades of the fans are also extended to suit the living space. The important aspect of the invention is to save Non- renewable energy resource and to record the usage of fan data on daily basis. The data regarding the usage of fan will be saved on a cloud server that can be used for future references.

No. of Pages : 21 No. of Claims : 6

FORM 2

THE PATENTS ACT, 1970

(39 OF 1970)

AND

THE PATENT RULES, 2003

COMPLETE SPECIFICATION

(See section 10 and rule 13)

Title of Invention:

"AN EXTENTABLE AND HEIGHT ADJUSTABLE CEILING FAN WITH EJECTABLE BLADES"

Name of Applicant	Nationality	Address
Dr. A RAVEENDRA	**Indian**	**DEPARTMENT OF MECHANICAL ENGINEERING MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA**
Dr. YOGESH MADARIA	**Indian**	**DEPARTMENT OF MECHANICAL ENGINEERING MALLA REDDY ENGINEERING COLLEGE(AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA**
N RISHI KANTH	**Indian**	**DEPARTMENT OF MECHANICAL ENGINEERING MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA**

Dr. T RAMACHANDRAN	**Indian**	**DEPARTMENT OF MECHANICAL ENGINEERING MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA**
Dr. HALESH KOTI	**Indian**	**DEPARTMENT OF MECHANICAL ENGINEERING MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA**
Dr. G BIKSHA	**Indian**	**DEPARTMENT OF MECHANICAL ENGINEERING MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA**
Dr. SHAIK HUSSAIN	**Indian**	**DEPARTMENT OF MECHANICAL ENGINEERING MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA**
Dr. N VISHNU MURTHY	**Indian**	**DEPARTMENT OF MECHANICAL ENGINEERING MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA**
Dr. B DHATREYI	**Indian**	**DEPARTMENT OF MECHANICAL ENGINEERING MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA**

S UDAYA BASKAR	**Indian**	**DEPARTMENT OF MECHANICAL ENGINEERING MALLA REDDY ENGINEERING COLLEGE (AUTONOMOUS) MAISAMMAGUDA , SECUNDERABAD 500100 TELANGANA STATE , INDIA**

The following specification describes the invention and the manner in which it is to be performed.

FIELD OF INVENTION:

[0001] The present invention relates to the field of Extendable and height adjustable ceiling fan. The proposed invention is also an Internet of Things based ceiling fan in which have Bluetooth and Wi-Fi connectivity to the mobile phone of users to communicate the information regarding usage data. Also the present invention aims at providing a ceiling fan that is height adjustable and the rod can be heightened or shortened depending on the requirement of the user.

BACKGROUND OF INVENTION:

[0002] Background description includes information that may be useful in understanding the present invention. It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

[0003] Ceiling fans are an important home appliance which is mandatorily present in each and every house, hospital, restaurants and to sum up ant space where human beings are around. But the necessity of fan varies from place to place depending on the number of persons who's currently present around the region, the height of the ceiling and the total area of the room or hall in which the particular fan is fixed.

[0004] The existing ceiling fans are fixed to a certain height and the shaft of the fan is

fixed to a particular distance from ceiling. There should be an option to use the fan in a user friendly manner and to save electricity since it is responsible of every human being to save the non-renewable energy resources. Also the shaft of the fan should be adjustable to serve irrespective of the height of the ceiling. There is also need to operate the fan from the mobile phones and save the data of their usage on a cloud server.

[0005] A number of different types of system and methods are available for Non-invasively monitoring health parameters in the prior art. For example, the following patents are provided for their supportive teachings and are all incorporated by reference.

[0006] In this disclosure, 201911050263 TEMPERATURE CONTROLLED SMART CEILING FAN SYNCHRONIZED WITH HUMIDIFIER AND DE-HUMIDIFIER Disclosed is a temperature controlled smart ceiling fan synchronized with humidifier and de-humidifier. The present invention consists of a master unit installed with ceiling fan; a slave unit in humidifier; a slave unit in de-humidifier; a temperature and humidity sensor in the master unit; a wireless connecting media. This invention uses the temperature and humidity sensor in master unit installed in the ceiling fan to measure the temperature and humidity of the room and if temperature is not equal to threshold level then controls the fan speed. If humidity is less than the threshold then signal is wirelessly transmitted to humidifier to activate otherwise de-humidifier activates to make the room environment pleasant. This invention is easy to install and easy to operate as no human intervention is involved to control the fan speed.

[0007] In yet another disclosure, 201941013008 discloses invention that relates to novel SMART ROOM - A METHOD AND A DEVICE FOR OPERATING A FAN AND LIGHTS WITH SMART DEVICE Interne of Things (IoT) is a hot research subject, as showed by the expanding consideration and the extensive overall speculations dedicated to it. Society is moving towards a "constantly associated" worldview, where the Internet client is moving from people to things, prompting the supposed Internet of Things (IoT) situation. The IoT vision coordinates an expansive number of innovations and predicts to epitomize an assortment of shrewd questions around us, (for example, sensors, actuators, cell phones, RFID, and so forth.). Nowadays everything is monitored with the help of sensors. In this work, we proposed a system to identify the visitor counter in a room. Based on the visitor counter, IoT system detects the environment and all appliances are controlled using sensors. This system is useful for controlling the lights and fans and automatically controls the lights based on the intensity of the room. And also, if there is any fire accident it gives alarm and automatically blows up water into the fired place.

[0008] In yet another disclosure, 201841028853 discloses invention that relates to novel INTELLIGENCE SMART INTERACTIVE FAN An automatic smart interactive fan system which is user friendly in nature and comprises a rotor hub, plurality of blades, a power supply, a microcontroller, plurality of sensors, dc converter, a motor driver, a remote, control drive and plurality of relay. The automatic smart interactive fan system having on and off control, speed variation control, direction changing control and expandable/collapsing mode where microcontroller and sensors, process and controls the system by the coding communication. The sensors can be a speed sensor, a proximity

sensor, a motion sensor and a temperature sensor and these sensors are used to identify the humans or object in the room/hall and give higher quantity of air to specified place. The blade of the automatic smart interactive fan system changes its direction where the temperature is differed from the normal temperature and automatically expands or collapse according to the occupancy of people. In collapsible mode blades rolls over the rotor hub and the diameter of the rotor hub increases and gives higher speed and focused cooling air whereas the automatic smart interactive fan system distributes the air at entire hall in expandable mode. This automatic smart interactive fan system is controlled by a remote.

[0009] In yet another disclosure, 2524/MUM/2014 discloses invention that relates to novel SMART FAN. In the system we are using the PIR sensor, relay, transistor, resistor and a bypass switch. PIR sensor is operated over 5V only. PIR (pyroelectric infrared radiation) sensor is used to detect the presence of moving human. Relay is used to switch the fan ON and OFF. Transistor is used to energies the coil of the relay. Bypass switch is used for using the fan in either automatic or manual mode. When a human presence is detected by the PIR sensor, it generates voltage on its output pin. The output of the PIR sensor is given to the base of the transistor through a resistor. Transistor acts as a switch here. On detection of human presence the signal coming from PIR sensor switches on the transistor and hence the relay. Relay is connected to the transistor. The relay is also connected to the fans wire. Relay used here acts as a switch for switching the fan ON and OFF. By the use of this system, the fan will be ON only in the presence of any human. The only limitation is that sensor detects moving human only. To overcome this, strategy

used is, if a human cannot move continuously then move the sensor continuously. This strategy made the system perfect. Sometimes there is a condition or requirement where we want to run the fan in absence of human also. To achieve this condition, we have used a bypass switch. The bypass switch used for operating the fan in manual mode is connected in parallel with this relay. Since, relay is used to control the power supplied to the fan in the presence of human being, we are bypassing this relay and operating the fan in manual mode.

[0010] In yet another disclosure, 201811019774 discloses invention that relates to novel INTERNET OF THINGS (IOT) BASED WIRELESS ROTARY SYSTEM FOR REGULATING SPEED OF FAN The present invention describes an Internet of Thing (IOT) based system for regulating speed of a fan either using conventional rotary mechanism or wirelessly through a user device. The system comprises a user device, a wireless control switching module, one or more switching relays, and a regulating circuit. The user device is adapted to provide one or more speed regulating signals. The wireless control switching module is wirelessly connected to the user device adapted to process one or more speed regulating signals received at an input port. The one or more switching relays is connected to an output port of the wireless control switching module for receiving one or more trigger signals. The trigger signal triggers at east one switching relay from the one or more switching relays. The regulating circuit connected to the one or more switching relays for providing controlled current to the fan, thereby regulating the speed of the fan.

[0011] In yet another disclosure, 201711038747 discloses invention that relates to novel CEILING FAN WITH ADJUSTABLE FAN BLADE ANGLES A system (200) for manipulating pitch of blades (102) of a ceiling fan (100) is provided. The system (200) comprises a control unit (202) capable of controlling each operation performed by the ceiling fan (100); a first motor to rotate blades (102) of the ceiling fan (100); an input power source (106) for manipulating power supplied to the first motor; an electronic device (206) in electronic communication with the control unit (202); a gear assembly (210) for manipulating pitch of each blade (102) of the ceiling fan (100); and a second motor (208) to power each gear of the gear assembly (210). The second motor (202) operationalizes the gear assembly (210) to manipulate pitch of each blade (102) of the ceiling fan (100) in response to an electronic signal received by the control unit (202) from the electronic device (206).

[0012] In yet another disclosure, 201841002446 discloses invention that relates to novel AUTOMATIC CEILING FAN BLADE CLEANING ATTACHMENT An automatic Fan blade cleaning attachment for a ceiling fan having a plurality of clamp used to attach the arrangement to the existing fan centre rod. A rack and pinion arrangement is attached to the plurality of clamp using pin. The pinion is driven by a DC motor and controlled by microcontroller circuit. The DC motor and pinion house inside a slider which slides over the rack. The slider is attached to a U shaped frame arrangement also slides along with the slider. The U shaped frame is attached with nylon cleaning brush. In normal operation of the fan the U shaped frame along with cleaning brush is at the top and during cleaning the fan is switched of then the nylon brush is brought down and the U shaped cleaning

brush with inside top and bottom having multiplicity of thin nylon brush, After the U shaped cleaning brush is aligned with fan blade. The fan is switched on at slow speed. During running the fan blade pass through the multiplicity of thin nylon brush in the U shaped frame. This removes the dust in the fan blades. After some time the fan is switched off. Wait until the blade come to rest. Now take back the U shaped frame arrangement to the top by rotating the DC motor in opposite direction.

[0013] In yet another disclosure, 5148/DELNP/2010 discloses invention that relates to novel DEVICE FOR CHANGING a PITCH OF a BLADE OF AN IMPELLER/PROPELLER AND a FAN COMPRISING THE DEVICE A device for changing a pitch of a blade of an impeller/propeller is disclosed. It comprises at least one linear actuator. A first bearing is mounted to a non rotary mechanical element with the first portion, and a second bearing is mounted to the second portion, allowing a relative axial movement between the first bearing and second bearing. The first bearing is mounted between a supporting structure of the rotor shaft and the non rotary mechanical element, allowing a relative rotation between the supporting structure and the at least one linear actuator. The second bearing is mounted between the second portion and a lever means having a rotary point at the supporting structure. When operating the at least one linear actuator, the second portion is moved axially, leading to an angular movement of the lever means causing a change of the pitch of a blade, and when operating the at least one linear actuator, a force is generated that acts upon the non rotary element, so that the rotor shaft is unaffected by the force. Also, a fan comprising the device is disclosed.

[0014] In yet another disclosure, US20190003480 discloses invention that relates to novel Programmable Fan: A fan assembly is disclosed. The fan assembly is comprised of a fan with a motor and a blade as to create an airflow, and an actuator which is adapted to move the fan in vertical and horizontal directions, such that the fan directs airflow below it. The fan further comprises a controller adapted to control the adapter, and a remote control which is adapted to control the controller. The remote control sends signals to direct the controller, and both are adapted such that the movement of the fan can be programmed to a path set by a user and can also be manipulated to a static position set by the user. Preferably, the remote control is a smart device, such as a smart phone.

[0015] In yet another disclosure, US20100278637 discloses invention that relates to novel Ceiling fan with variable blade pitch and variable speed control A fan comprises a hub, fan blades, and inserts. The hub comprises outwardly extending mounting tabs that lie along a common horizontal plane. The fan blades are hollow, such that each mounting tab is inserted in the hollow interior of a corresponding fan blade. Each insert is positioned in the hollow interior of each fan blade, between each mounting tab of the hub and the interior surface of the corresponding fan blade. Each insert is configured to position and maintain the chord line of each corresponding fan blade at an oblique angle relative to the horizontal plane of the hub. A kit may include several insert sets to choose from to provide adjustable angle of attack. A fan control system includes a dimmer switch and a control module, which allows the dimmer switch to be used to infinitely adjust the speed of a fan motor within a range.

[0016] Though varieties of fans exist, there are yet drawbacks that can be addressed and innovated to give an inventive ceiling fan. The present invention aims at providing a ceiling fan that is height adjustable and the rod can be heightened or shortened depending on the requirement of the user. The height of the ceiling fan will be adjusted using a remote control mechanism.

[0017] Also, the blades of the ceiling fan will be designed in such a way that they can be pushed inside the base and they are not visible all the time. The blades can be ejected out from the base of the fan as and when required. The fan will have Bluetooth and Wi-Fi connectivity to the mobile phone of users to communicate the information regarding usage data. Also fan can be even switched on or off using the Mobile of the user, it helps the mothers to monitor the fan speed their babies are using from workplace or wherever they are. It will also have daily and monthly based usage data. The report will be sent to the registered phone number.

[0018] The above information is presented as background information only to assist with an understanding of the present disclosure. No determination has been made, no assertion is made, and as to whether any of the above might be applicable as prior art with regard to the present invention.

[0019] In the view of the foregoing disadvantages inherent in the known types of Smart Fans that are used to as household appliances now present in the prior art, the present invention provides an improved system. As such, the general purpose of the present

invention, which will be described subsequently in greater detail, is to provide a new and improved Extendable Internet Of Things based Ceiling fan which has all the advantages of the prior art and none of the disadvantages.

SUMMARY OF THE INVENTION:

[0020] In the view of the foregoing disadvantages inherent in the known types of ceiling fans now present in the prior art, the present invention provides an improves extendable, height adjustable and Internet of Things Based Ceiling fan. As such, the general purpose of the present invention, which will be described subsequently in greater detail, is to provide a new and improved Internet of Things Based ceiling fan which has all the advantages of the prior art and none of the disadvantages.

[0021] The main objective of the invention is to design and implement a ceiling fan which will be operated according to the needs of the user. The proposed fan will adjust the height of the fan and expand the blades accordingly.

[0022] Yet another object of the invention is that the fan includes actuators to support the process of elongation and expansion of piston and blades respectively.

[0023] Another object of the invention is that it includes a remote sensor and a child lock mechanism sensor which will communicate with the mobile phone of the user and takes

the input of the user.

[0024] Yet another object of the invention is that the proposed invention also has a cloud server to record the data associated with the usage of fan from time to time which can be used for report generation and analysis purpose.

BRIEF DESCRIPTION OF DRAWINGS:

[0025] The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

[0026] Figure 1, illustrates the Exploded view of the extendable and expandable ceiling fan; according to an embodiment herein.

[0027] Figure 2, illustrates the Front view of the extendable and expandable ceiling fan; according to an embodiment herein.

[0028] Figure 3, illustrates the Top view of the extendable and expandable ceiling fan; according to an embodiment herein.

DETAILED DESCRIPTION OF THE INVENTION:

[0029] In the following detailed description, reference is made to the accompanying drawings which form a part hereof, and in which is shown by way of illustration specific embodiments in which the invention may be practiced. These embodiments are described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that the embodiments may be combined, or that other embodiments may be utilized and that structural and logical changes may be made without departing from the spirit and scope of the present invention. The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is defined by the appended claims and their equivalents.

[0030] While the present invention is described herein by way of example using several embodiments and illustrative drawings, those skilled in the art will recognize that the invention is neither intended to be limited to the embodiments of drawing or drawings described, nor intended to represent the scale of the various components. Further, some components that may form a part of the invention may not be illustrated in certain figures, for ease of illustration, and such omissions do not limit the embodiments outlined in any way. It should be understood that the drawings and detailed description thereto are not intended to limit the invention to the particular form disclosed, but on the contrary, the invention covers all modification/s, equivalents and alternatives falling within the spirit and scope of the present invention as defined by the appended claims. The headings are used for organizational purposes only and are not meant to limit the

scope of the description or the claims. As used throughout this description, the word "may" is used in a permissive sense (i.e. meaning having the potential to), rather than the mandatory sense (i.e. meaning must). Further, the words "a" or "an" mean "at least one" and the word "plurality" means one or more, unless otherwise mentioned. Furthermore, the terminology and phraseology used herein is solely used for descriptive purposes and should not be construed as limiting in scope. Language such as "including," "comprising," "having," "containing," or "involving," and variations thereof, is intended to be broad and encompass the subject matter listed thereafter, equivalents, and any additional subject matter not recited, and is not intended to exclude any other additives, components, integers or steps. Likewise, the term "comprising" is considered synonymous with the terms "including" or "containing" for applicable legal purposes. Any discussion of documents, acts, materials, devices, articles and the like is included in the specification solely for the purpose of providing a context for the present invention.

[0031] In this disclosure, whenever an element or a group of elements is preceded with the transitional phrase "comprising", it is understood that we also contemplate the same element or group of elements with transitional phrases "consisting essentially of, "consisting", "selected from the group consisting of", "including", or "is" preceding the recitation of the element or group of elements and vice versa.

[0032] The proposed invention aims at designing and implementing a height adjustable ceiling fan which is essential to save the non-renewable energy resource that is

electricity. Also the invention aims at implementing a fan whose blades are extended to suit the living space and cover its area to the maximum. Especially in function and convention halls we would have seen that N numbers of fans are used to cover up the entire space. The usage of electricity will be obviously high.

[0033] The main objective of the invention is to reduce the number of fans that are used along with an option to operate the fan using his/her mobile phone. The proposed fan also includes a child lock mechanism to design a fan that is safe to a maximum extent. The piston rod will elongate according to the need of the user with a help of an actuator sensor. Also the blades are expanded according to the need of the user with a help of plurality of actuators and sensors. The fan is designed to include an Internet of things based concept to record the usage of fan usage from time to time.

[0034] Reference will now be made in detail to the exemplary embodiment of the present disclosure. Before describing the detailed embodiments that are in accordance with the present disclosure, it should be observed that the embodiment resides primarily in combinations arrangement of the system according to an embodiment herein and as exemplified in FIG. 1.

[0035] Figure 1 illustrates the exploded view of the proposed ceiling fan 100. The ceiling fan 100 is attached to the ceiling using the fan holder 108. The ceiling fan 100 has a piston 102 which will adjust its height in accordance with actuator 101. Whenever the user customizes the ceiling fan 100 by using his mobile phone or any electronic

gadget, the remote sensor 107 will in turn actuate the actuator 101 to elongate the fan accordingly. The blades 105a, 105b and 105c of the ceiling fan 100 are actuated to expand to the need of the user using the actuators 104a, 104b and 104c respectively. The Microcontroller 106 is responsible for handling all the functionalities and establishes communication with the cloud server 109. The remote sensor also encloses an option for child lock mechanism and ceases the fan according to the lock set.

[0036] Figure 2 illustrates the Front view of the ceiling fan 100. The fan 100 is fixed using the fan holder 108. The piston 102 is expanded in response to the actuator 101. The motor 103 encloses a Microcontroller 106 along with a remote sensor 107. The blades 105a, 105b and 105c are actuated by the actuators 104a, 104b and 104c respectively.

I/WE CLAIM:

1. An extendable and height adjustable ceiling fan with eject able blades comprises of a motor, a Microcontroller, plurality of actuators, a cloud server, Plurality of sensors and a fan holder.

2. As claimed in claim 1, the ceiling fan will be operated using the mobile phone of the user through communicating with the remote sensor.

3. As claimed in claim 1, the fans height is adjusted using the piston which works as per the instruction of the actuator which will actuate it.

4. As claimed in claim 1, the blades as the fan are expanded using the actuators that are place in them. Whenever the user customizes the setting using his/her mobile phone the blades are expanded accordingly.

5. As claimed in claim 1, the fan encloses the motor to support the process of rotating the fan, extending and elongating.

6. As claimed in claim 1, the ceiling fan encloses a Microcontroller which will be used to carry out the proposed features of the fan along with communicating with remote sensor and cloud sensor.

ABSTRACT

"**AN EXTENDABLE AND HEIGHT ADJUSTABLE CEILING FAN WITH EJECT ABLE BLADES"**

An extendable and height adjustable ceiling fan with eject able blades is essential to make the ceiling fans to suit any living space irrespective of the size of the living room or height of the ceiling of the living room. The invention aims at designing and implementing a height adjustable ceiling fan which is based on Internet of Things to save the usage data regarding the fan from time to time. Also the fan is enclosed with plurality of sensors to control the fan from the mobile phone of the user along with child lock mechanism. The height of the piston is adjusted using an actuator and the blades of the fans are also extended to suit the living space. The important aspect of the invention is to save Non- renewable energy resource and to record the usage of fan data on daily basis. The data regarding the usage of fan will be saved on a cloud server that can be used for future references.

Applicants: Dr. A RAVEENDRA
Dr. YOGESH MADARIA
N RISHI KANTH
Dr. T RAMACHANDRAN
Dr. HALESH KOTI
Dr. G BIKSHA
Dr. SHAIK HUSSAIN
Dr. N VISHNU MURTHY
Dr. B DHATREYI
S UDAYA BASKAR

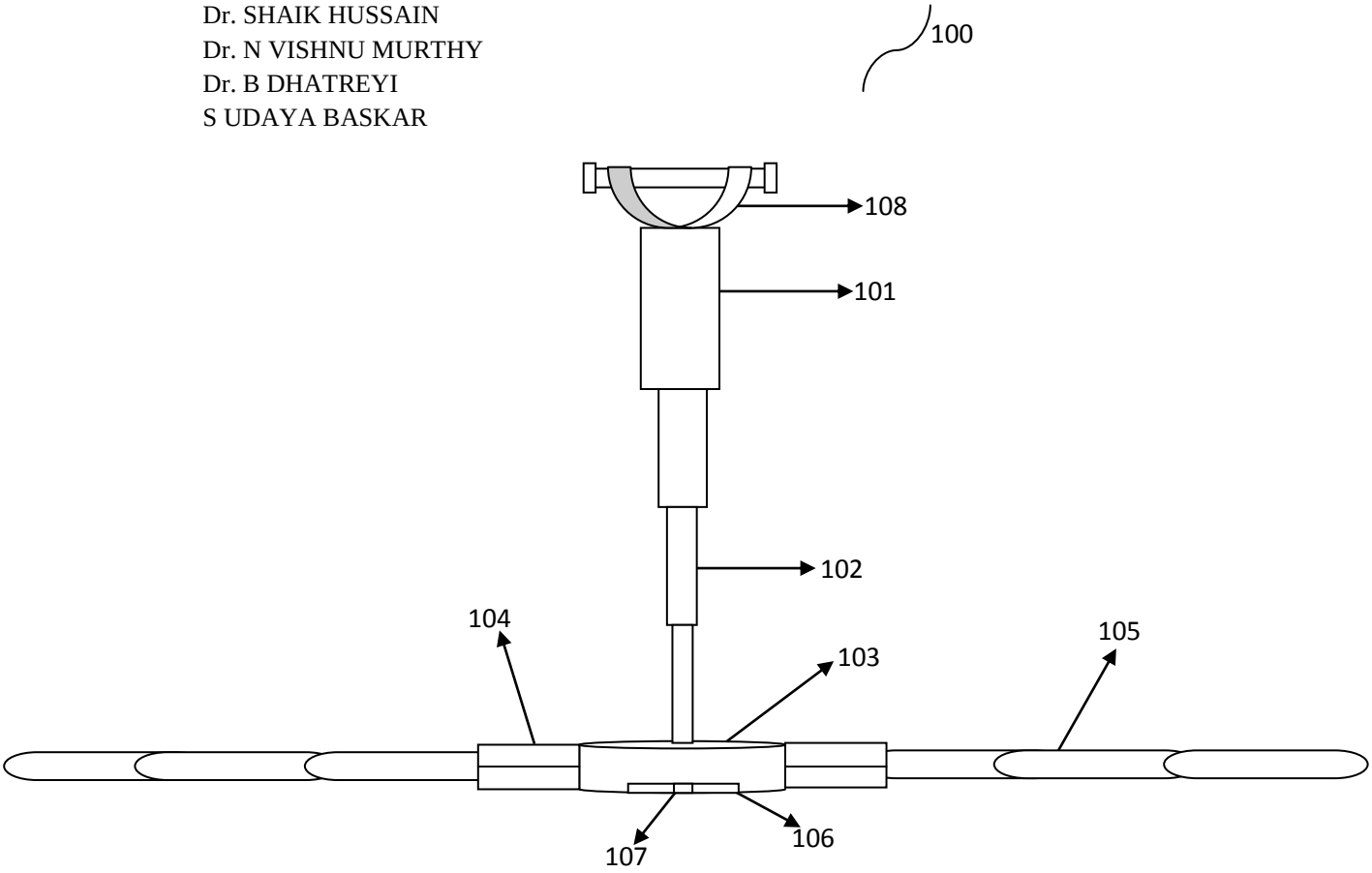

Fig 1 Exploded View

Dated: 27/01/2020

Applicants: Dr. A RAVEENDRA
Dr. YOGESH MADARIA
N RISHI KANTH
Dr. T RAMACHANDRAN
Dr. HALESH KOTI
Dr. G BIKSHA
Dr. SHAIK HUSSAIN
Dr. N VISHNU MURTHY
Dr. B DHATREYI
S UDAY BASKAR

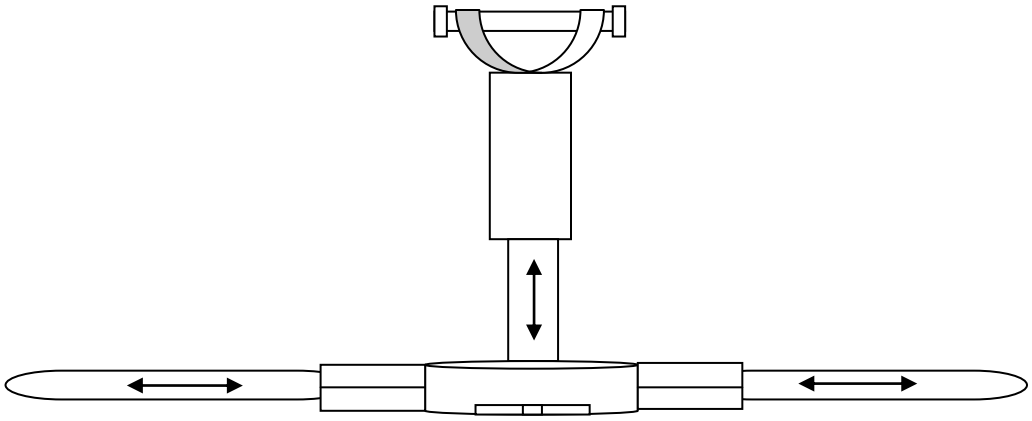

Fig 2 Front View

Dated: 27/01/2020

Applicants: Dr. A RAVEENDRA
Dr. YOGESH MADARIA
N RISHI KANTH
Dr. T RAMACHANDRAN
Dr. HALESH KOTI
Dr. G BIKSHA
Dr. SHAIK HUSSAIN
Dr. N VISHNU MURTHY
Dr. B DHATREYI
S UDAY BASKAR

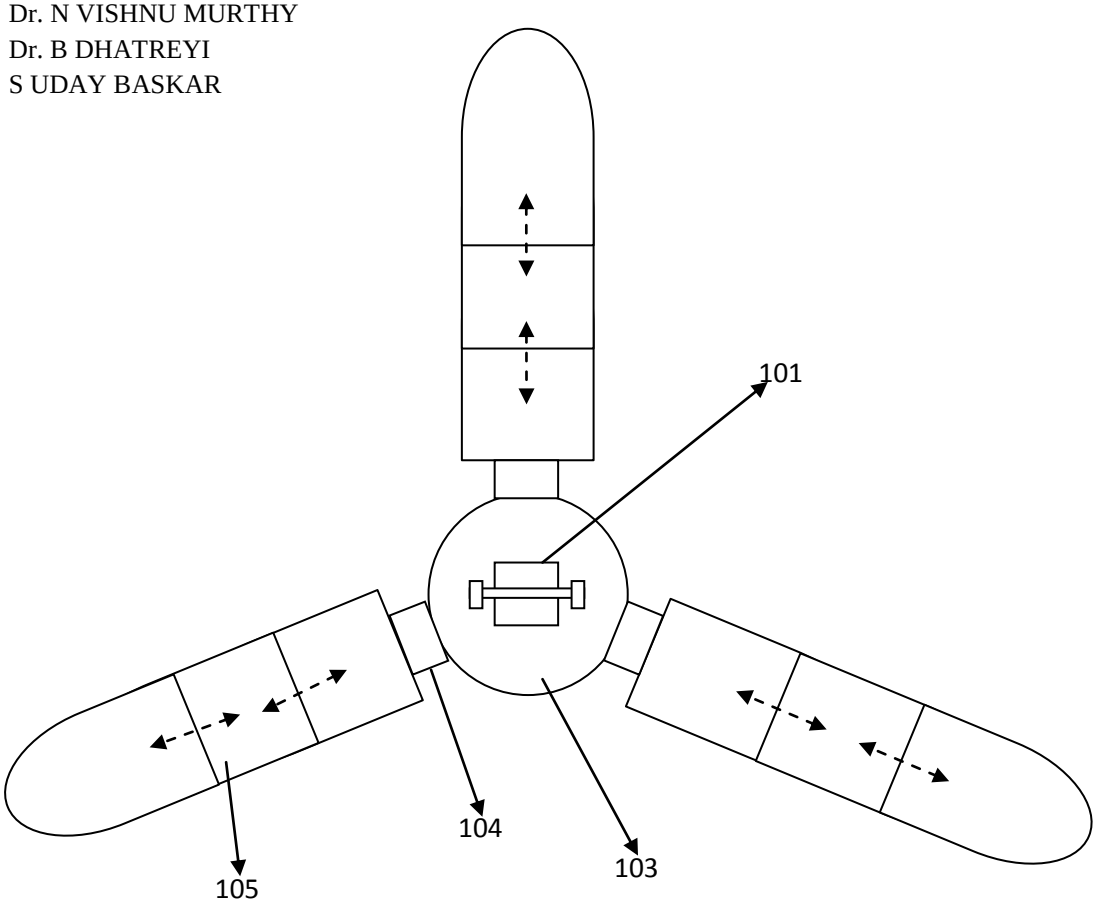

Fig 3 Top View

Gowthami S
Patent Agent
INPA 3797
On behalf of Applicant
Digitally Signed

Dated: 27/01/2020