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(51) International classification

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(57) Abstract :

Discloses is an autonomous floor cleaning apparatus. The apparatus comprises a mechanical unit and an electronic unit. The mechanical unit comprises a chassis unit, a brushing unit, and a vacuum cleaning and dirt disposal unit. The electronic unit comprises a plurality of motor controllers, a vacuum cleaning controller, a brushing controller, a power supply unit, a battery meter, and a precautionary circuit. The autonomous floor cleaning apparatus acts like a robot which operates in an autonomous mode as well as in a manual mode. Further, the autonomous floor cleaning apparatus utilized in cleaning domestic items such as tube light, fan, table, etc. Additionally, the cleaning operations can be scheduled for a specific time and provide a bagless dirt container with auto-dirt disposal mechanism.

No. of Pages : 23 No. of Claims : 8



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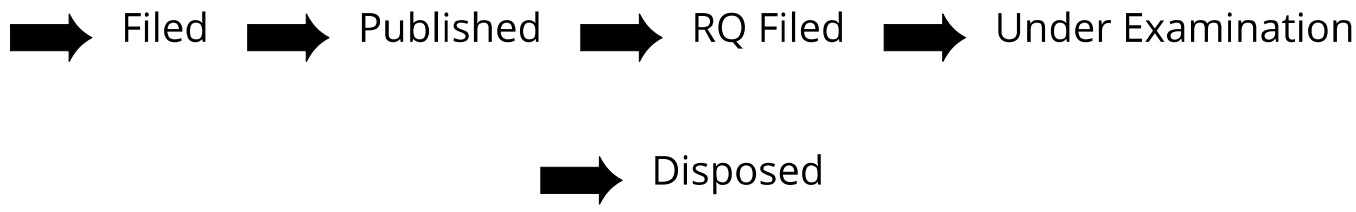


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DATE OF FILING	06/09/2018
APPLICANT NAME	1 . Dr. V. THIRUPPATHY KESAVAN 2 . Dr. D. DANALAKSHMI 3 . Dr.SYED JAHANGIR BADASHAH 4 . Dr.B.T.GEETHA 5 . Dr.D.R.V.A.SHARATH KUMAR
TITLE OF INVENTION	AUTONOMOUS FLOOR CLEANING APPARATUS
FIELD OF INVENTION	MECHANICAL ENGINEERING
E-MAIL (As Per Record)	vsasawat@gmail.com
ADDITIONAL-EMAIL (As Per Record)	vsasawat@yahoo.co.in
E-MAIL (UPDATED Online)	
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REQUEST FOR EXAMINATION DATE	18/11/2021
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Application Status	
APPLICATION STATUS	Application Awaiting Examination

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201841033568-FORM 3 [15-09-2018(online)].pdf	15/09/2018
201841033568-COMPLETE SPECIFICATION [06-09-2018(online)].pdf	06/09/2018
201841033568-DRAWINGS [06-09-2018(online)].pdf	06/09/2018
201841033568-FORM 1 [06-09-2018(online)].pdf	06/09/2018
201841033568-FORM-9 [06-09-2018(online)].pdf	06/09/2018

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 (<input type="checkbox"/>) at the appropriate category]					
Ordinary (<input checked="" type="checkbox"/>)		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	
Dr. V. THIRUPPATHY KESAVAN		Indian	India	S/o T. VENKATASAMY, PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING, GMR INSTITUTE OF TECHNOLOGY, GMR NAGAR, RAJAM - 532127, SRIKAKULAM DISTRICT, ANDHRA PRADESH, INDIA	
Dr. D. DANALAKSHMI		Indian	India	D/o A. DURAIRAJ, ASSOCIATE PROFESSOR, DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING, GMR INSTITUTE OF TECHNOLOGY, GMR NAGAR, RAJAM - 532127, SRIKAKULAM DISTRICT, ANDHRA PRADESH, INDIA	
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Dr.D.R.V.A.SHARATH KUMAR		Indian	India	S/o D.KRISHNAMA CHARYULU, H.NO:3-83/1/G1,SRUSHTI RESIDENCY ,NIZAMPET,HYDERABAD,TELANGANA-500090, INDIA	

Natural Person (<input checked="" type="checkbox"/>)				Other than Natural Person	
		Small Entity ()	Startup ()	Others ()	
4. INVENTOR(S) [Please tick (<input type="checkbox"/>) at the appropriate category]					
Are all the inventor(s) same as Applicant(s) named above the applicant(s) named above?		Yes (<input checked="" type="checkbox"/>)		No (<input type="checkbox"/>)	
If "No", furnish the details of the inventor(s)					
Name in Full		Nationality	Country of Residence	Address of the Inventor	
5. TITLE OF THE INVENTION					
AUTONOMOUS FLOOR CLEANING APPARATUS					
6. AUTHORISED REGISTERED PATENT AGENT(S)			IN/PA No.	1407	
			Name	Vikas Asawat	
			Mobile No.	9915231179	
7. ADDRESS FOR SERVICE OF APPLICANT IN INDIA			Name	Vikas Asawat	
			Postal Address	Vikas Asawat, Registered Patent Agent & Advocate, 3/183, Ganesh Talab, Basant, Vihar Kota, Rajasthan Pin 324009 India	
			<i>Telephone No.</i>	9915231179	
			Mobile No.	9461084126	
			Fax No.	07442401322	
			E-mail ID	vsasawat@gmail.com	
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)
Nil	Nil	Nil	Nil	Nil	Nil
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		
Nil			Nil		
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		
Nil			Nil		

11. IN CASE OF PATENT OF ADDITION FILED UNDER SECTION 54, PARTICULARS OF MAIN NOT APPLICABLE	
Main application/patent No.	Date of filing of main application
12. DECLARATIONS	
<p>(i) Declaration by the inventor(s) (NOT APPLICABLE) (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.</p> <p>(a) Date</p>	
<p>(ii) Declaration by the applicant(s) in the convention country : (NOT APPLICABLE) (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)</p> <p>I/We, the applicant(s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative.</p> <p>(a) Date (b) Signature(s) (c) Name(s) of the signatory</p>	
<p>(iii) Declaration by the applicant(s) I/We the applicant(s) hereby declare(s) that: -</p> <p><input checked="" type="checkbox"/> I am/ We are in possession of the above-mentioned invention. <input checked="" type="checkbox"/> The Complete specification relating to the invention is filed with this application. <input checked="" type="checkbox"/> 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. NA <input checked="" type="checkbox"/> There is no lawful ground of objection(s) to the grant of the Patent to me/us. <input checked="" type="checkbox"/> I am/we are the true & first inventor(s). <input checked="" type="checkbox"/> I am/we are the assignee or legal representative of true & first inventor(s). <input checked="" type="checkbox"/> 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). NA <input checked="" type="checkbox"/> 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. NA <input checked="" type="checkbox"/> My/our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in Paragraph-9. NA <input checked="" type="checkbox"/> The application is divided out of my /our application particulars of which is given in Paragraph-10 and pray that this application may be treated as deemed to have been filed on DD/MM/YYYY under section 16 of the Act. NA <input checked="" type="checkbox"/> The said invention is an improvement in or modification of the invention particulars of which are given in Paragraph-11. NA</p>	

13. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION			
(a) Form 2			
Item	Details	Fee	Remarks
Complete/ provisional specification)#	No. of pages: 17		
No. of Claim(s)	No. of claims 8 and No. of pages 4		
Abstract	No. of pages 1		
No. of Drawing(s)	No. of drawings 1 No. of pages 1		
# 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 ₹ Rs. 1600/- deposited vide Net banking

Dated this 06/09/2018

Vikas Asawat
Patent Agent & Advocate
On Behalf of Applicant
Digitally Signed

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.

With intime

NEEP
S. Singh
21/9/18

Vikas Asawat
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Basant Vihar, Kota Rajasthan
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Email: vsasawat@gmail.com
Ph No.: 0744- 2401322

Ref: Patent Application Number 201841033568 dated 06/09/2018

To
Controller of Patents,
Intellectual Property Office
Chennai-600032

Copy
24/9/18

P/69118



Sub: - Submission of Form 5 for online filing of Patent Application Number 201841033568 dated 06/09/2018

Dear Sir,

We have filed Online Patent Application No. 201841033568 dated 06/09/2018.

In reference to the above, please find attached the following,

- 1. Submission of Form 5 (Copy already filed vide e filing)

Thanking You,

Date: 15/09/2018

Yours Sincerely

Vikas Asawat
Patent Agent INPA 1407

Enclosure:
As above

24-Sep-2018/69118/201841033568/OTHERS