



### PATENT OFFICE

MINISTRY OF COMMERCE AND INDUSTRY
Department of Industrial Policy and Promotion

It is hereby certified that annexed here to is a true copy of Complete Specification,
Abstract and Drawing of the patent application as filed and as detailed below:-

Date of Application

: 12/06/2014

Application No.

: 2866/CHE/2014

Applicant

: M/s. Channabasaveshwara Institute of Technology, an Indian Company of N.H.206, Gubbi 572 216. Karnataka

India.

In witness there of I have here unto set my hand

Dated this the 03<sup>rd</sup> day of September 2014 12<sup>th</sup> day of Bhadrapada, 1936(Saka)

By Authority of THE CONTROLLER GENERAL OF PATENTS, DESIGNS AND TRADE MARKS.

(O. PRASAD RAO)
ASSISTANT CONTROLLER OF PATENTS AND DESIGNS.

PATENT OFFICE INTELLECTUAL PROPERTY RIGHTS BUILDING G.S.T. ROAD, GUINDY CHENNAI – 600 032. Form 2 The patent Act 1970 (39 of 1970) AND Patent Rules 2003

### Complete Specification

Title : A SECURE MONITROING OF 46 HABIT FORMING

DRUGS USING ABE IN CLOUD

Applicants : 1. SHANTALA C.P.

Nationality : INDIAN

Address : Channabasaveshwara Institute of

Technology

N. H. 206, Gubbi 572 216.

Karnataka, India.

Phone No : +91 - 9686551730

E-mail : Shan1675@gmail.com

Applicant(s): SHANTALA C.P

# A SECURE MONITORING OF 46 HABIT FORMING DRUGS USING ABE IN CLOUD

### FIELD OF INVENTION

[0001] Present invention is related to the field of 'monitoring of 46 habit drugs in a chemist shop by cloud technology'. The government has sent a notification to each and every chemist shop, notification number (vide G.S.R 588(E) Dated 30.8.2013) and has listed 46 number (schedule H1 drugs). Such drugs should be sold only under doctor's prescription and data should be maintained in the prescribed format in the register such as drug name, quantity sold, patient name and address, doctor name and address, doctor registered number and bill number.

### BACKGROUND OF INVENTION

[0002] Drugs are sold with regulation and only on prescription.

[0003] The illegal use of drug in India can be avoided.

[0004 The existing mechanism is not dynamic, our research facilitates, the online report of the 46 habit forming drugs to the sub zonal office or DCA, region wise.

[0005] A Consolidated report of every chemist can be viewed and generated at any point of time.

[0006] DCA can inspect the usage and investigate the report online.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0007] The whole procedure of how our model actual model works is represented in the form of diagram. The whole process of work is explained in different modules, each module is given in the form of figures.

[0008] Drawing is used to represent both hardware and software architecture

Applicant(s): SHANTALA C.P.

that how the overall process take place.

[0009] Fig.1 represents the flow diagram where there will be N chemist [100]([101],[102],[103]), each and every chemist will generate a report in a required format given by DCA and sent to storage area technically it can be called as cloud[200], the cloud [200] will store the data in an encrypted format. The sub zonal officer from sub zonal office [300] will decrypt the information and can see the details of 46 habit forming drugs individually (region wise and chemist wise). Fig 2 shows the functionality of the people involved throughout the process.

### DEVELOPMENT OF THE CONCEPT

- [0010] Cloud computing [200] is the next stage in the internet's evolution, through which everything from computing power to computing infrastructure, applications, businesses processes to personal collaboration can be delivered to us as a service whenever and whatever we need.
- [0011] Attribute based encryption (ABE) is a public key-based one-to-many encryption that allows users to encrypt and decrypt the data based on users attributes.

# WORKING OF:A SECURE MONITORING OF 46 HABIT FORMING DRUGS USING ABE IN CLOUD.

- [0012] The new chemist [100] will get registered to the subzonal office[300], with his tin number, Every chemist [100] will get user id and password after registration for secure login and authentication.
- [0013] After successful login the chemist will enter the details in a prescribed format.
- [0014] The report is generated and the encrypted report is sent to drug control authority with a decryption key. The drug authority will enter the decrypt key and check out the details.

Applicant(a): SHANTALA C.P.

### SPECIAL FEATURES

- [0015] The cloud [200] has became the basic hardware to store each and every information with respect to internet, it is a 24/7 access.
- [0016] The cloud [200] is reliable, feasible, mobility, cost effective, efficient, secure.
- [0017] ABE encryption algorithm is used for efficient encrypt and decrypt of the information.

Flow of the fig 1.2 in modules [400] as shown bellow:-

Step 1:-The N chemist [100] will get registered to the sub zonal office [300].

Step 2:-Individual chemist [100] will get user id and password for secure login.

Step 3:-Enter the details of drugs sold and generate a report and sent to Sub zonal office [300].

Step 4:-The patient will get message about the drugs he buy.

Step 5:-Doctor will get a message details about the patient he prescribe.

### CLAIMS

### I/We Claim:

- 1. Provides a 24/7 access with mobility of information.
- 2. Huge amount of information can be stored and viewed.
- 3. Cloud provides high level security.
- 4. ABE is efficient algorithm to store the data.











### **CERTIFICATE**

Institution's Innovation Council (IIC) established at

Channabasaveshwara Institute of Technology, Tumkur

had undertaken various activities prescribed by Innovation Cell, Ministry of Education, Govt. of India to promote Innovation and Start-up in campus during the IIC calendar year 2020-21.

Prof. Anil D.Sahasrabudhe
Chairman
AICTE

Ablay The Dr. Abbay Ie

Dr. Abhay Jere Chief Innovation Officer MOE, Innovation Cell Mr. Dipan Sahu

Assistant Innovation Director MOE, Innovation Cell

Issued On: 2022-01-03

Certificate No: 1540



### Channabasaveshwara Institute of Technology

(Affiliated to VTU, Belgaum & Approved by AICTL, New Delhi) (NAAC Accredited & ISO 9001:2015 Certified Institution) NH 206 (B.H. Road), Gubbi, Turnkur - 572 216 Karnataka DEPARTMENT OF MECHANICAL ENGINEERING



5 amitted to The Director:

Report on SAE BAJA Competition: 2021 ZZ

E team by name TEAM GOLDEN EAGLE, Dept of Mech. Engg., CIT., Gubbi comprising of 15 udents and one staff took part in event called SAI BAJA. This was held at Peethampur, hadhyapradesh from 5th April 2022 to 12th April 2022. On 6th April-22 (Wednesday), the 15th dition of the BAJA SAEINDIA series by the Society of Automotive Engineers was augurated. Physically Eighty teams took part in the event out of 260 teams registered through crtual. On a day prior to the event started (i.e. day -1), BAJA aptitude test was conducted at cropolis Institute of Technology, Indore for all the participants of final year students i.e. almost round 650+ students across all the states of India. From our team golden eagle 12 final year tudents attended the BAJA Aptitude test out of which 9 students cleared the same. All 9 students are eligible for attending HR round of companies like Mahendra nad Mahendra Ltd, PRAVAIG Dynamics located at Bangalore, VARROC at Mumbai, Automotive Research Association of India (ARAI) and etc. 6 from 9 students got offer letter from Mahendra and Mahendra Ltd for R and D division posted at Chennai with a starting package of 6.5Lakhs per annum. PRAVAIG and VARROC completed the selection process and waiting for the result. Our Vehicle cleared the weight, engine est and technical inspections.







# LA SABINDIA soss





Burt Trem

As an privated to retried our manuscri regards to all the participants for (III) edition of RALE SALENCES.

All take the apportunity to entirely you all to NATRAX Facility. Followers: I'm are very began to been price here with an

Fire are about to embark on adult will be one of the most available experiences you will now have. I

Applicately over interest and enthusiases in competing for \$5<sup>th</sup> edition of BASA bARENERIA amount the

Ingring pendones and believe that you will find your experience to be fulfilling and worthwhile. The

will pain skills and experiences that will carry throughout your cursor and some memorable incompute

that you will characte for the rest of your life. There will be difficult times, when you doubt governable

and your decreases, but he strong, together as one team and stay faithful to the efforts you have put in

rection that is the only thing that has brought you to sohere you are

Fearns are requested to refer to the BAJA SALINDIA 2022 Guidelines and abide by the COPVED trolocols and the Rules & Regulations of the event at the NATRIP site. Arrive early at the location with all needed supplies and be ready to start at the scheduled time. In case of any guidance and appoint needed, you can contact your respective Alumni Coordinator or Mr. Anurag Singh (Co-Hinal Alumni Committee, BAJA SALINDIA 2022, Pithampur) at +91-8103485910.

sish headlong into the challenges and the various obstacles, which I am sure you all will face with y, poise and passion, and I'll see you on the other side of the whirlwind.

et's together make INDIA the best place for BAJA in the world.

est of Luck Teams!

5th Warm Regards.

r. Harshit Merchant

**MIDENCY** 

MA SALINDIA 2022, Pithampur

BAJA SAEINDIA

Indore Institute of Science and Technology | Oppo. IIM Indore | Pithampur Road | Rau Madhya Pradesh-453331 | Mob: +918602817114, +919926429334

www.bajasaeindia.co.in

BEINDIA

### BAJA SAEIHDIA 2022



### Phase 3 Event Schedule

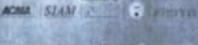
	Phase	1 I mBAJA Pithampur
Day	Date	Event
bes .	5" Ages, Evereles	BASA April ville Test
Dec 0	4" April Wednesday	Frest Meet - Augustation Segrates on Sectional Evaluation & Schooline Eugen
Det	T April Thursday	factions Evaluation Dynamic Evants GAS Evilla Cost Email: & varietimon Evant
Dey 2	E' April Freizy	Tachnical Evolvation, Dynamic Evants, the Grass. Decign Finals & Validation Evant
Dwy 1	William Seturge	Dynamic Events & Dimogrif Finals Joseph
Der e	Till agent Surviva	Endurance Karle & Valedictory
54.6	Monday & Tuesday	Hill Meet

2	Phase !	- II eBAJA, Bengaluru
Day	Date	Event
Day 4	4" May Wednersto,	BAJA Aptitude Test
Day 0	5" May Thursday	Freis Meet, Inauguration, Registration, technical Evaluation & Validation Count
Dey 1	6" May Friday	Technical Evaluation, Dynamic Events, CAT Fouli- Cost Finals & Validation Event
Day 2	7" May Seturday	Technical Evaluation, Dynamic Events Design Finals
Day 1	8" May Sunday	Erigurance Race & Valedictory
Day a & 5	9" May & 10" May Honday & Tuesday	HR Most









### TEAM GOLDEN EAGLE

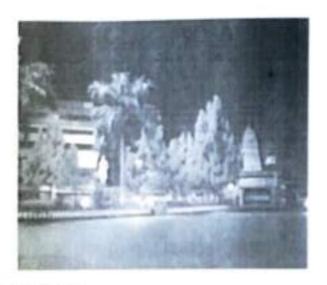
### Journey To SAEINDIA mBAJA Competition Pithampur

Dut sources with a team of 13 members and our beloved Head Of Mechanical Department

bur 5 Kurkern- for started on 02/04/2022 from Turnkur railway station on a Samparkranchi rail to Bhopai. Madhya

lay 1

During the section Brogue around 2:00 AM midnight on 04/04/2022. We took a private but to Indone from Bhopal Batton.



Madhumilan Circle Indore

We stayed in a hotel room in Mailhumlan circle which was sponsored for best price by CYO where all other documents from Karnataka stayed in same hotel.

# BAJA SAEINDIA

1

# BAJA Apritude Test Selected Candidates - Mahindra & Mahindra Ltd.

The latest latest like	Deliver Sept. Color	TOTAL DESIGNATION OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS	No. of Concession, Name of Street, or other Persons, Name of Street, or ot	The state of the s	The same of the sa	man but with	The latest hand to the	The second second		No. of Section	and a second second	The second second second		The second secon	D. O. Santa Street, St	and the latest and th	The state of the s	The beauty and	1	The second second	The section of	The last own town of the	The second section of the second	The part of the last	and the second second								The second of the second second		The same of the last	The second second	The same of the sa		The second second		
	part Table 11 degri par	the land of the state of the state of	Condition of the constitution	Nom S. (at Say), Consults	THE REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN	The state of the s	The last translated by the last last	the last transfer London to San .	A	The state of the s		The Paris Land	C. C. State of State		The state of the s	The state of the state of		100					Spirit of the Manney of the Spirit		100000000000000000000000000000000000000		The same of the sa	The same of the sa	Name of Street or other Designation of the Owner, where the Owner, which is the	The state of the s	And the state of t	The second secon	Married and Advanced in Columnia	States or reset or winds	September of Septe	Barrell by Street or Street	Total A Age   San and a second	Annual of the county and deposits the or Day.	hand a feet ship on those of select 1985.	The same and a second state of the	
														lon de	-	3	1	T	100	I	I	1	No. of Lot	To the last	100	-	-	-	-			į	Total Control	- Innered	7000	- Inner	1	1	-	Towns or the last	

the thead of Department. schange Department of Gutt Golden Eagle Of Gubb espected Sir subject. Requisition to permit to actively participate in SAE nda 3" Phase Baja event with respect to above subject, we the Team Golden Eagle are parested in participating Baja 3rd phase event conducted by SAE ada We request you to permit us in order to actively participate in the and held between 5th April 2022 to 11th April 2022 in Pithampur. Widhya Pradesh Dite + represent +2/04/22 pare " norval : 17/04/22 on 12/04/22 Manking You us Obediently A G. L. i. by point lie . I n Golden Eagle adophora K. T. 6 72/1/22

0.00	To	1	-	+		1	7.	7	7	2	1	4	w5	10
-	ICGTTMEDZ9	1CG17MEGRO	1CG17NE089	1CG17ME106	10.018ME010	10G18ME013	1CG18ME065	1CG18ME067	1CG18ME072	1CG18MEG77	1CG19ME403	10019ME437	1CG19ME030	1CG19ME032
	CH SAM	COUNTY SHEELAVANTAR	M STATE OF		AB Good of U.A.	SALES KT		NW Week	JULY DAREBIAN	ANTHO	E	1den	0841	DWH

.





E-Mail: chennai-patent@nic.in

Website: www.ipindia.nic.in

Telefax: 2250 2066

Telephone: 2250 2081 2250 2082

GOVERNMENT OF INDIA 2250 2082
PATENT OFFICE 2250 2083

PATENT OFFICE 2250 2083 INTELLECTUAL PROPERTY BUILDING 2250 2084

G.S.T ROAD, GUINDY CHENNAI - 600 032

NO.POC/CERTIFIED COPY/ 13202

Dated 2/2/08/2018

To

Mr. RAJENDRA C.J ASSISTANT PROFESSOR, DEPT. OF ECE, CHANNABASAVESHWARA INSTITUTE OF TECHNOLOGY, N.H. 206, GUBBI – 572 216, KARNATAKA, INDIA.

Sub:

Supply of Certified Copies in respect of Patent Application Nos.

201741046315.

Sir.

With reference to your letters dated 22/12/2017 on the above subject and to forward herewith Certified Copies for the above mentioned Patent Applications.

1

Yours faithfully

ASSISTANT CONTROLLER OF PATENT AND DESIGN

En

Encl: One Certified Copy





भारत सरकार
GOVERNMENT OF INDIA
वाणिज्य एवं उद्योग मंत्रालय
MINISTRY OF COMMERCE & INDUSTRY
पेटेंट कार्यालय
THE PATENT OFFICE

### जिस किसी से संबन्धित हो TO WHOMSOEVER IT MAY CONCERN

में, अधोहस्ताक्षरी जो पेटेंट अधिनियम, 1970 की धारा 73(3) के तहत महानियंत्रक एकस्व, लप एवं व्यापार चिट्टन की और से प्रमाणपत्र हस्ताक्षर व जारी करने के लिए प्राधिकृत अधिकारी हूँ वारा यह प्रमाणित करता(ती) हूँ कि निम्नलिखित पेटेंट आवेदन के संबंध में फाइल दस्तावेज(जॉ) ही प्रतिलिपि इसके साथ संलग्न हैं:

1. the undersigned, being an officer duly authorized to sign and issue the certificate on of the Controller General of Patents, Designs and Trademarks in accordance with the ions of Section 73(3) of the Patents Act, 1970, hereby certify that annexed hereto is Copy of the document(s) as filed in connection with the following Patent Application:

- क) आवेदान संख्याके) Application Number: 201741046315
  - ख) फाइल करने की तारीख/b) Date of Filing: 22/12/2017
  - ग) अनुरोधित दस्तावेज(जौ) का नाम:
  - C) Name of the document(s) requested: Complete Specification

णपत्र पेटेंट अधिनियम, 1970 की धारा 147(1) के अधीन मुझमे निहित शक्तियों के तहत जारी ए। है/This certificate is issued under the powers vested in me U/S 147(1) of The Patents

this 1st day of August 2018

नियंत्रक पेटेंट व डिजाइन/Controller of Natents will Designs (प्राधिकृत हस्ताक्षरी/Authorised signatory)



### FORM 1

### THE PATENTS ACT 1970 (39 of 1970)

The Patents Rules, 2003 APPLICATION FOR GRANT OF PATENT (See section 7, 54 & 135 and rule 20(1))

(FOR OFFICE USE ONL'\_,

Application No: 201741046315

Filing Date: 22/12/2017
Amount of Fee Paid: 17501
CBR No: 39398

1000						
S	_		_			
-	-0	•	m		w	•

I. APPLICANT(S)	and rule 20(1))	Signature
Name	Marianth	10/2
1. SURESH D. S.	Nationality	Address
2. RAJENDRA C J	INDIAN	Director & Principal Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India Assistant Professor
		Department of Electronics & Communication Engineering, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Kamataka, Indin
2. INVENTOR(S)		Kamataka, ment
Name	Nationality	Address
I. RAJENDRA C J	INDIAN	Assistant Professor Department of Electronics & Communication Engineering, Channabasseveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India
2. RAJU S	INDIAN	Foreman Department of Electronics & Communication Engineering, Channebasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India
3. DHEERAJ C P	INDIAN	Student Department of Electronics & Communication Engineering, Channabassveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India
I, MISBHARAHAT	INDIAN	Student Department of Electronics & Communication Engineering, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India
. BHAVYA S	INDIAN	Student Department of Electronics & Communication Engineering, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Kamataka, India
BHAGYANS NT OFFICE CHE	NNAI 26/	Student Department of Electronics & Communication Engineering, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Kamataka, India

4. ADDRESS FOR	CHANISM F		TUDES!	RY	TC EFFLUENT	
CON TOR		-		COST		
CORRESPONDEN	CE OF	Assiste	dra C.J			
APPLICANT/AUT	HORIZED	Chann	threatest	or, Depa	rtment of ECE,	
PATENT AGENT	IN INDIA	N.H. 2	06, Gubbi	wara Inst	itute of Technology	
		Karnat	aka, India	- 3/2 21	•	
		Teleph	one No - 0	8131 223	212	
		Lax M	08131	223177		
		Mobile	No : +91	9741724	290	
5. PRIORITY PAR	TICULARS O	F THE A	rajendracj PPLICA	@yahoo.	com	NTION COUNTRY
Country	A A SA PART MAN	11501	Filing D	late	Name of the	Title of the Invention
	Number	(44,44)		- Inc	Applicant	Title of the Invention
The second of th		G PATEN	VT COOL	PERATIO	ON TREATY (PCT	) NATIONAL PHASE
International applicat	tion number			Interna	tional filing date a	s allotted by receiving
				office.	A STATE OF THE STA	
. PARTICULARS	FOR FILING	DIVISIO	NAL API	PLICATI	ION	
Original (first) applic	ation number		100000000000000000000000000000000000000		filing of original (fir	st) application
. PARTICULARS	FOR FILING	PATENT	OF ADD	ITION		
dain application / Pa	tent Number		OI ADD		filing of main applic	ation
DECLARATION:	S:		_	-		
) Declaration by th	e Inventor(s)					
We, the above name eclare that the applic		/are the tr /are my/or	ue & first ur assigned	inventor( or legal	s) for this invention : representative.	und Q
		e.	5		John .	De se
) Date: 14/12/2017						
a) Date: 14/12/2017	inventor(s):	- dol	3	Dig.	is which	age Br.
s) Date: 14/12/2017 b) Signature(s) of the c) Name(s)	1,120.0	endra C J	Raju S I	Oheeraj (	P Mishharahat Bl	isgya H S Bhavya S
a) Date: 14/12/2017 b) Signature(s) of the c) Name(s) b) Declaration by the	: Rajo e <del>applicant(s)</del>	in the cor	vention e	ountry		
a) Date: 14/12/2017 b) Signature(s) of the c) Name(s) i) Declaration by the We, the applicant(s)	: Rajo e applicant(s) in the conventi	in the cor	vention e	ountry		
a) Date: 14/12/2017 b) Signature(s) of the c) Name(s) i) Declaration by the We, the applicant(s) y/our assignee or leg	: Rajo e applicant(s) in the conventi	in the cor	vention e	ountry		
a) Date: 14/12/2017 b) Signature(s) of the c) Name(s) i) Declaration by the We, the applicant(s) y/our assignce or leg ) Date	: Rajo e applicant(s) in the conventi	in the cor	vention e	ountry		
a) Date: 14/12/2017 b) Signature(s) of the c) Name(s) b) Declaration by the We, the applicant(s) by/our assignee or leg c) Date c) Signature(s)	: Raji e applicant(s) in the conventi al representation	in the cor	vention e	ountry		
a) Date: 14/12/2017 b) Signature(s) of the c) Name(s) c) Declaration by the We, the applicant(s) y/our assignee or leg c) Date c) Signature(s) Name(s) of the sign	: Raji e applicant(s) in the conventi al representation	in the cor on country	vention e	ountry		
a) Date: 14/12/2017 b) Signature(s) of the c) Name(s) i) Declaration by the We, the applicant(s) y/our assignee or leg ) Date ) Signature(s) ) Name(s) of the sign i) Declaration by the	: Rajo e applicant(s) in the conventi- cal representation intory e applicant(s):	in the cor on country re.	vention e	ountry		
a) Date: 14/12/2017 b) Signature(s) of the c) Name(s) i) Declaration by the We, the applicant(s) y/our assignee or leg ) Date c) Signature(s) i) Name(s) of the sign ii) Declaration by th We, the applicant(s)	: Rajo e applicant(s) in the conventi- tal representation intery e applicant(s): hereby declar	in the cor on country ie.	vention e	ountry hat-the ag	plicant(s) herein is/s	
a) Date: 14/12/2017 b) Signature(s) of the c) Name(s) i) Declaration by the We, the applicant(s) y/our assignee or leg ) Date ) Signature(s) ) Name(s) of the sign i) Declaration by th We, the applicant(s)	e applicant(s) in the conventi- tal representation intery e applicant(s): hereby declare are in posses	in the cor on country re.	declare to	ountry hat-the as	plicant(s) herein is/s	
a) Date: 14/12/2017 b) Signature(s) of the c) Name(s) b) Declaration by the We, the applicant(s) c) Date c) Signature(s) c) Name(s) of the sign d) Declaration by the We, the applicant(s) C I am/w C The pre-	e applicant(s) in the conventi- cal representation interpresentation interpresentati	in the cor on country re. : re(s) that: sion of the	declare to	ountry hat the ap entioned lating to	invention.	with this
a) Date: 14/12/2017 b) Signature(s) of the c) Name(s) i) Declaration by the We, the applicant(s) y/our assignee or leg ) Date ) Signature(s) ) Name(s) of the sign i) Declaration by the We, the applicant(s)  ☐ I am/w ☐ The pre-	e applicant(s) in the conventi- cal representation natory e applicant(s): hereby declar e are in posses ovisional/comp	in the cor on country re. re(s) that: sion of the lete specie	declare to	entioned	invention.	with this
Date: 14/12/2017  Signature(s) of the Name(s)  Declaration by the We, the applicant(s)  Dote Signature(s)  Dete Signature(s)  Name(s) of the sign We, the applicant(s)  The proposed of the pr	e applicant(s) in the conventi- cal representation natory e applicant(s): hereby declar re are in posses ovisional/comp	in the cor on country re. re(s) that: sion of the lete specie N A I	declare to	entioned	invention. the invention is filed 2 0 1 7 1 1 1	with this 4 2
a) Date: 14/12/2017 b) Signature(s) of the c) Name(s) i) Declaration by the We, the applicant(s) y/our assignee or leg ) Signature(s) ) Name(s) of the sign i) Declaration by the We, the applicant(s)  I am/w  I am/w  The pre- India assignee or leg  N T O F applicant India assignee or leg  I am/w  I am/	e applicant(s) in the conventi- tal representation e applicant(s): hereby declar e are in posses ovisional/comp vention as discland the necessar ted by me/us be	re(s) that: sion of the lete speci N A I esed in the	above-m fication re 2 6 /	entioned lating to 1 2 /	invention. the invention is filed 2 0 1.7 1.1	with this 4 2

1/100 132/20 174 10403 13/FOIT	The Note:- *To be mention *Tick *Name *Compano/cook *Strike	*Reper e signed oned. (\forall)/crose e of the plete ad de, state e out th	t boxes i by the a s (x) whi inventor dress of t and cou	or Chenna or case of pplicant(s chever is and applicant the inventional of the control of the manual of the case of the case o	more tha s) or by a applicab icaut sho tor and a	uthoriz le/not a uld be g pplican	pplication	able in f	in d	lecla	ration	in p	ara-	9.
YP AT	TENT	OF	FICE	CHE	NNA	2	6	1	2 /	20	17	1	1 :	4:

☐ I am/We are the assignce or legal representative of true & first inventors.	
The application or each of the applications, particulars of which are given in Para-	
5 was the first application in convention country/countries in respect of my/our	
invention —	
☐ 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.	
or by any person from which is we derive the title.	
☐ My/our application in India is based on international application under Patent	
Cooperation Treaty (PCT) as mentioned in Para-6.	
The application is divided out of my/our application, particulars of which are	
given in Para-7, and pray that this application may be treated as deemed to have	
been filed on under see. 16 of the Act	
The said invention is an improvement in or modification of the invention.	
particulars of which are given in Para-8.	_
10. Following are the attachments with the application:	
(a) Provisional specification / Complete specification	
(b) Complete specification (in conformation with the international application) (as emended	
before the International Preliminary Examination Authority (IPEA), as applicable (2 copies), No. of pages	
No. of claims	
(a) Drawings (in conformation with the interpretional application)/as amended before the	
International Preliminary Examination Authority (IPEA), as applicable (2 copies), No. of sheets	_
(d) Priority-documents	
(c) Translation of priority document/Specification/International Search Report	
(f) Statement and undertaking on Form 3	
(g) Power of Authority —	
(h) Declaration of inventorship on Form 5	
(i) Sequence listing in electronic form	
(i) Request for Certified Copy	
Fee Rs 2850/- in Cash / Cheque / Bank Draft bearing no. 344018 Date 12 12 2017 on Bank	
I/We hereby declare that to the best of my/our knowledge, information and belief the facts and	
matters stated herein are correct and I/We request that a patent may be granted to me/us for the	
said invention.	
agio in vintori.	
Dated this 14th day of December, 2017	
A	
Signature: No visual O O A F.	
A WINGE V want	
Name: - SURESHIDS RATENDRACI	
COMPAND CO	
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.	* 7
	ų.
*Tick (\forall )/cross (x) whichever is applicable/not applicable in declaration in para-9.	H
*Name of the inventor and applicant should be given in full, family name in the beginning.	
*Complete address of the inventor and applicant should be given stating the postal index	14
no./code, state and country.	11
*Strike out the column(s) which is/are not applicable.  *For fee: See First Schedule.	



Form 2 The patent Act 1970 (39 of 1970) AND Patent Rules 2003

### Complete Specification

Title

: PLC BASED AUTOMATIC EFFLUENT

TREATMENT MECHANISM FOR COIR

INDUSTRY

Applicants

: 1. SURESH D.S

2. RAJENDRA C.J

Nationality : INDIAN

Address

: Channabasaveshwara Institute of

Technology

N. H. 206, Gubbi 572 216.

Karnataka, India.

Phone No.

: +91 - 9741724290

E-mail

: rajendracj@yahoo.com

### PLC BASED AUTOMATIC EFFLUENT TREATMENT MECHANISM FOR COIR INDUSTRY

### FIELD OF INVENTION

[0001] Present invention is related to the field of 'Development of technologies for water purification'. A device named as 'PLC Based Automatic Effluent Treatment Mechanism for Coir Industry' is developed and built for purification of water in coir industry.

### BACKGROUND OF INVENTION

- [0002] Water is the basic necessity for human life and is equally important for the industries for manufacturing/production of materials.
- [0003] Generally the Coir Industry requires more quantity of water which are taken from rivers, lakes, bore wells etc. by paying huge amount of money, so it's necessarily important that conserving the water is in most priority. It makes us to understand that the used water must be recycled properly so that it can be used for the industries purpose.
- [0004] At present, the methodology for recycling the water is not properly defined/identified. So, calculation of the water source quantity required for the regular process also not done properly.
- [0005] The absence of defined mechanism for automatic purification of waste water from coir industry leads more water wastage.
- [0006] Due to the improper / approximate calculation of the water source requirements there is an enormous amount of water is wasted.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0007] Invention described herein is illustrated by way of example and not by way of limitation in the accompanying figures. For simplicity and clarity of illustrations, elements related in the figures are not necessarily

### Applicant(s): SURESH D. S. & RAJENDRA C. J.

drawn to scale. For example, the dimensions some elements may be exaggerated relative to other elements for clarity. Further, wherever considered appropriate, reference labels have been repeated among the figures to indicate corresponding or analogous elements.

- [0008] Drawing is used to illustrate the 'PLC Based Automatic Effluent Treatment Mechanism for Coir Industry' applicable in 'Waste water Management'.
- [0009] Fig.1 represents the flow diagram of complete hardware part of the prototype model of 'PLC Based Automatic Effluent Treatment Mechanism for Coir Industry' (2000) [here onwards called as PBAETMCI (2000)], consisting of a Main supply control switch (1000), PLC (2001), Water Pump 1 (2002), Water Pump 2 (2003), Solenoid Valve (2004), DC Motor (2005) and Water Pump 3 (3000).

### DETAILED DESCRIPTION

[0010] Following is the description of the device called, 'PLC Based Automatic Effluent Treatment Mechanism for Coir Industry' PBAETMCI (2000). Numerous specific details such as logic implementations, resource partitioning / sharing / duplication implementations, types and interrelationships of system components and logic partitioning / integration choices are set forth in order to provide a more clear understanding of the present invention.

It will be appreciated, however, by one skilled in the art that the invention may be practiced without such specific details. In other instances, constructional details and other such details have not been shown in detail in order to obscure the invention. Those of ordinary skill in the art, with the included descriptions, will be able to implement appropriate functionally without undue experimentation.

Applicant(s): SURESH D. S. & RAJENDRA C. J

# CONCEPT OF PLC BASED AUTOMATIC EFFLUENT TREATMENT MECHANISM FOR COIR INDUSTRY

[0011] Instant purified water will be achieved by using defined procedure with aid of Programmable Logic Controller.

# CONSTRUCTION OF PLC BASED AUTOMATIC EFFLUENT TREATMENT MECHANISM FOR COIR INDUSTRY

- [0012] 'PLC Based Automatic Effluent Treatment Mechanism for Coir Industry' PBAETMCI (2000), consisting of a Main supply control switch (1000), PLC (2001), Water Pump 1 (2002), Water Pump 2 (2003), Solenoid Valve (2004), DC Motor (2005) and Water Pump 3 (3000).
- [0013] PBAETMCI (2000), Main supply control switch (1000) and Water Pump 3 (3000) can be used for purification of water from waste coir water.

# WORKING OF PLC BASED AUTOMATIC EFFLUENT TREATMENT MECHANISM FOR COIR INDUSTRY

- [0014] As main supply control switch (1000) is on, the waste water collected is pumped to sedimentation process by using water pump 1 (2002). In sedimentation process the heavy particles get collected to the bottom of the tank and this sedimented water is pumped for filtering process using water pump 2 (2003) to remove further waste. This filtered water is sent for chlorination process by using Solenoid valve (2004) where chlorine is added to the filtered water and is mixed by using DC motor (2005).
- [0015] After chlorination the pure water is pumped using water pump 3 (3000) which is again used for cleaning of coir. The entire process is controlled and monitored by using PLC (2001).

Applicant(s): SURESH D. S. & RAJENDRA C. J

### SPECIAL FEATURES

[0016] No hazardous chemicals are used / involved throughout the process, so

it can be termed as atmospheric friendly method.

[0017] Low cost due to simplicity in construction and thus easily affordable.

### CLAIMS -

### I/We Claim:

- PLC Based Automatic Effluent Treatment Mechanism for Coir Industry'
   PBAETMCI is a Low cost due to its simplicity in construction and thus easily
   affordable.
- The method of claim 1 further comprising:
   The waste water is sedimented using suitable chemicals.
- The method of claim 2 further comprising:
   The sedimented water is filtered by filtering process.
- The method of claim 3 further comprising:
   The sedimented water is filtered by chlorination technique.
- The method of claim 3 further comprising:The entire process is controlled and monitored by using PLC.

Applicant(s): SURESH D. S. & RAJENDRA C. J

### ABSTRACT

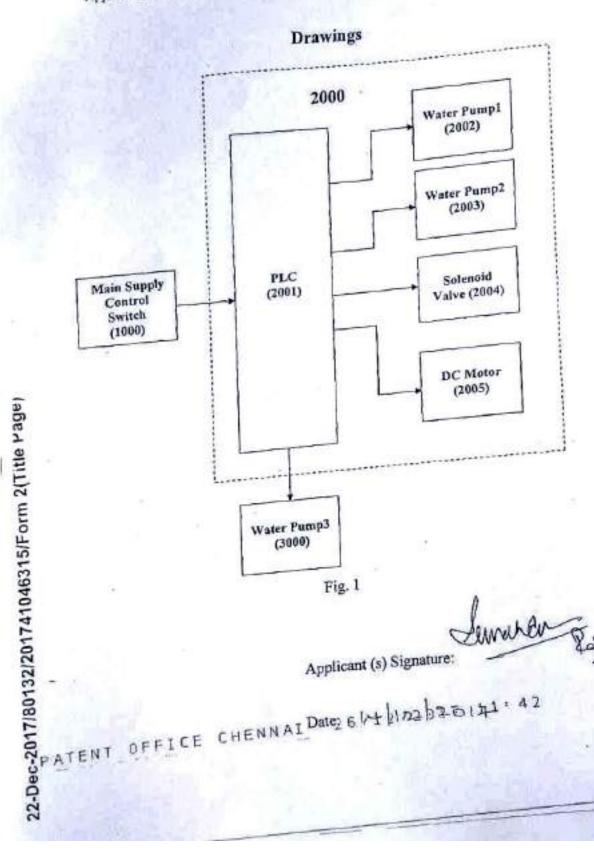
# PLC BASED AUTOMATIC EFFLUENT TREATMENT MECHANISM FOR COIR INDUSTRY

Water is the fundamental need of life which is utilized all over the place and by everybody all the time. Businesses by and large expend water from streams or lakes through the installment of tremendous duties, so it's fundamentally imperative that they reuse it with a specific end goal to diminish the cost and also to moderate it.

The primary maxim of this undertaking is to give mechanical computerization to clean the modern effluents (Exhausts) and furthermore to reuse the water for additionally use because of which the natural/water contamination can be adequately decreased. Subsequent to preparing of the items, businesses deliver wastewater which can be handled with the assistance of a progression of treatment forms alongside water reusing which causes us to economically deal with our most essential Natural asset (i.e., Water).

In this framework, we have proposed a completely mechanized process for the entire filtration and refinement of the waste water produced by the Coir Industries (to ret and drenching procedures of the dried crude coir filaments) the nation over. This PLC Based Automatic Effluent Treatment Mechanism for Coir Industry' (PBAETMCI) lessens the labor required by the business. The fundamental expectation is that the treated water can be thus utilized for some other household purposes and is savvy also. In this manner by the utilization of PLCs, all the information and yield field gadgets can be controlled consequently with the best possible programming of the gadget.

The PLC utilized, mechanizes the succession of operations to maintain a strategic distance from human obstruction because of which, precision is enhanced and additionally the speed of handling (throughput) is expanded. Additionally, the proficiency of the assembling procedure increments through the usage of this task. Likewise the other reason is to give mechanical and little endeavors with sewage treatment innovation with high exactness, unwavering quality, comfort, adaptable control and adaptability Characteristics.





# Channabasaveshwara Institute of Technology

(Affiliated to VTU, Belgaum & Recognized by A.I.C.T.E. New Delhi) (NAAC Accredited & An ISO 9001:2015 Certified Institution)

NH 206, (B.H. Road), Gubbi, Tumkur – 572 216. Kamataka



### REPORT

On

# Mega ATV Championship

Mechies Autosports India Private Limited, Organizing committee, Mega ATV Championship-Season-5, GOA

# LETTER OF RECOGNITION



# Autosp

MECHIES AUTOSPORTS INDIA (P) LIMITED Registered U/S 7 of companies Act. 2013

CIN-U50404OR2015PTC018953

Ref: ASI/BBSR/ADMN/MAC0 /2019

Date: Nov. 9, 2019

## TO WHOM SO EVER IT MAY CONCERN

Certified that "Team Golden Eagle" of "Channabasaveshwara Institute of Technology, from 572216, is a registered participant of "Mega ATV Championship" Season-5.

"Mega ATV Championship" is an Engineering Design, Manufacturing, Racing and utility based competition in which participant Teams from all over the country has to design and fabricate an ATV useful to serve for mankind.

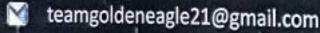
We wish Team all the success in future.

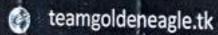
Regards

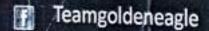
Director,

For, Mechies Autosports India (P) Limited.

# Contact us







Teamgoldeneagle

9886411590, 9538332337 7022572924, 9972089417



Sri Channahasaveshwara Swamy Rural Education Society (Regd.) ಚನ್ನಬಸವೇಶ್ವರ ತಾಂತ್ರಿಕ ಮಹಾವಿದ್ಯಾಲಯ, ಗುಬ್ಬಿ, ತುಮಕೂರು - 572 216.



Channabasaveshwara Institute of Technology (NAAC Accredited & ISO 9001 : 2015 Certified Institution)

( NAAC ( NAAC )

( Affiliated to Viscovaraya Technological University, Belgamin & Recognited by A.L.C.T.E. New Delhi.) (Affiliated to Viscosvaraya Technologia, Ph. 08131 - 223818, 223365, 223144 Fox: 08131 - 223177.

N.H. 206, (B.H. Road), Gubbi, TUMKUR - 572 216, Karnalaka, Ph. 08131 - 223818, 223365, 223144 Fox: 08131 - 223177.

URL: www.cittumkur.org e-mail: hr@cittumkur.org, Mobile 10.131 - 223177. MKUR - 572 210, Markur.org e-mail : hr@cittumkur.org , Mahile : 9449637843 URL: www.cittumkur.org e-mail : hr@cittumkur.org , Mahile : 9449637843

Ret. No. CIT/Gen/2021-22/004

05

### TO WHOMSOEVER IT MAY CONCERN

This is a vehicle (All terrain vehicle named Garuda 1.0) created by the students of our college for research & development, and are transporting for the event Mega ATV Championship at Paliyem, Querim Beach, Keri Beach, Paliyem Panchayat, North Goa, Goa from 9th to 13th April, 2021 for exhibition and racing purpose only and will be returning to our college after the event. The vehicle is not for sale, hence bears no commercial value and not subject to road or any other tax.

Signature: \

Designation: Principal

PHINCIPAL,

Seal: Channabesaveshwere Institute of Technology. GUBBI TUMKUR 57221A Date: 7.4.2021

Place: Gubbi

SAE E	ent (Mega ATV Championship at Goa from 9th to 13th	
Sl. No.	Event	Position
1	Endurance Race	9th Place
2	Dirt Race	19th Place
3	Drag Race	29th Place
4	Armagaddon Race	Participation
	All India ranking	23 <sup>rd</sup> Place

# DIRT RACE #<u>19</u>

Pos	Car No	Team Name	College Name
H	0	Team Phoenix	Start Guzu Gotand Singha Institute of Engineering and Technology
2	-	TEAM ASSASSING	R.C.MITEL INSTITUTE OF TECHNOLOGY, SHIRPUR
904	65	Team Bruiser Heads	Gokaraju Rangareju Institute of Engineering Technology
4	52	Toom SportX Racing	Saver Oak College Of Engineering And Technology
-	24	TEAM INDRA	SANDIP INSTITUTE OF TECHNOLOGY AND RESEARCH CONTRE
6	95	Team CZAR	Pandit Deendayal Energy University
9	61	The Rocksteer Racing	Sri Sai Ram Engineering college
	23	TEAM BLACOWAYS	LILET
200	三 5 法	WCEBAJA	Vidyavardhaka college angineering
10	64	AEROSTEON RACING 2.0	SALESHWAR COLLEGE OF ENGINEERING
41	16	Artemis Racing India	VIVA INSTITUTE OF TECHNOLOGY
12	80	TONCAR VIKINGS	INOUS UNIVERSITY
11	34	Recline racing	K.S. GROUP OF INSTITUTIONS
14	62	Toars Tornadoes Racing	Stards University
8	8	TYROVELOCE RACING	St. Joseph's College of Engineering and Technology, Palal
16	62	Turtionites	Loyola - ICAM College of Engineering And Technology
17	78	Toars Synergy Racing	G L Bujaj institute of technology and management
18	93	Swarzjya Motorsport	N. B. Navele Sinhard College of Engineering, Kegaon, Solapur
101	Box 100	TEAM GOLDEN BAGLE	Granutiesavestware Institute of Technology





Autosports





# Certificate Of Participation

This is to certify that BHOOMIKA K P of team TEAM GOLDEN EAGLE representing Channabasaveshwara Institute of Technology has participated in the Mega ATV Championship held from 10th April - 13th April 2021 at Pernem, Goa.

figur Many

Dr. Priyam Mohanty (Chairman) Autosports India Der

Mr. Aditya Deshprabu (Rept. Convenor) Mega ATV Championship

Raged kun Sele

Mr. Ranjit sinha (National Head) Briggs & stratton India

















### GOVERNMENT OF INDIA

### PATENT OFFICE

MINISTRY OF COMMERCE AND INDUSTRY
Department of Industrial Policy and Promotion

It is hereby certified that annexed here to is a true copy of Complete Specification

Abstract and Drawings of the patent application as filed and as detailed below:-

Date Of Application

19/11/2015

Application No.

6234/CHE/2015

Applicant

: Mr. Suresh D.S, an Indian citizen of Channabasaveshwara

Institute of Technology N.H. 206, Gubbi 572 216.

Karnataka, India.

In witness there of I have here unto set my hand

Dated this the 30<sup>th</sup> day of November 2015 09<sup>th</sup> day of Agrahayana 1937(Saka)

By Authority of THE CONTROLLER GENERAL OF PATENTS, DESIGNS AND TRADE MARKS.

(DR.S.P.SUBRAMANIYAN)
ASST.CONTROLLER OF PATENTS AND DESIGNS

PATENT OFFICE INTELLECTUAL PROPERTY RIGHTS BUILDING G.S.T. ROAD, GUINDY CHENNAI - 600 032.





Form 2 The patent Act 1970 (39 of 1970) AND Patent Rules 2003

### Complete Specification

Title : PLC BASED WASTE MANAGEMENT ROBOT

Applicants : 1. SURESH D.S

Nationality : INDIAN

Address : Channabasaveshwara Institute of

Technology

N. H. 206, Gubbi 572 216.

Karnataka, India.

Phone No. : +91 - 9686550488

E-mail : sureshtumkur@yahoo.co.in

TPG CHENNAI 19112015 16:38

# PLC BASED WASTE MANAGEMENT ROBOT

# FIELD OF INVENTION

[0001] Present invention is related to the field of 'Waste Management'. A device named as 'Waste management Robot' is developed and built for preparing manure from the kitchen waste.

# BACKGROUND OF INVENTION

[0002] Waste handling is a tedious task.

[0003] If the waste is not properly handled it may spoil the environment.

[0004] At present, natural decomposition method is adopted. Since the waste is kept in open air, decomposition will be delayed in rainy season and it may cause air pollution.

[0005] The existing method is season/weather/climate dependent and it consumes more time.

[0006] Definite mechanism for preparing instant manure is not available.

# BRIEF DESCRIPTION OF THE DRAWINGS

[0007] Invention described herein is illustrated by way of example and not by way of limitation in the accompanying figures. For simplicity and clarity of illustrations, elements related in the figures are not necessarily drawn to scale. For example, the dimensions some elements may be exaggerated relative to other elements for clarity. Further, wherever considered appropriate, reference labels have been repeated among the figures to indicate corresponding or analogous elements.

[0008] Drawing is used to illustrate the 'Waste Management Robot' applicable in 'Waste Management'.

IPO CHENNAL 19112615 16-38

[0009]

Fig.1 represents the flow diagram of complete hardware part of the prototype model of 'Waste Management Robot' (3000) [here onwards called as WMR (3000)], consisting of a Kitchen Waste (1000), Main supply control switch (2000), Grinding Machine (3001), water inlet (3002), Heating Coil (3003), Programmable Logical Controller (3004), Voice enabled Status monitoring system (3005) and Processed manure collecting area (4000).

#### DETAILED DESCRIPTION

· Following is the description of the device called, 'Waste Management'

Robot' WMR (3000). Numerous specific details such as logic implementations, resource partitioning / sharing / duplication

implementations, types and interrelationships of system components

and logic partitioning /integration choices are set forth in order to

provide a more clear understanding of the present invention.

It will be appreciated, however, by one skilled in the art that the invention may be practiced without such specific details. In other instances, constructional details and other such details have not been shown in detail in order to obscure the invention. Those of ordinary skill in the art, with the included descriptions, will be able to implement appropriate functionally without undue experimentation.

# CONCEPT OF PLC BASED WASTE MANAGEMENT ROBOT

[0011] Instant manure preparation technique is achieved by using programmable Logical Controller.

19-Nov-2015/36935/6234-CHE-2015/Form 2(Title Page)

TPO CHENNAL 19112015 16:38

# CONSTRUCTION OF PLC BASED WASTE MANAGEMENT ROBOT

- [0012] 'Waste Management Robot' WMR (3000), consisting of a Kitchen Waste (1000), Main supply control switch (2000), Grinding Machine (3001), water inlet (3002), Electric heater (3003), Programmable Logical Controller (3004), Voice enabled Status monitoring system (3005) and Processed manure collecting area (4000).
- [0013] Both WMR (3000) and Cell / Main supply control switch (2000) /
  Processed manure collecting area (4000) are portable devices and it can
  be used for preparing manure from the kitchen waste.

## WORKING OF PLC BASED WASTE MANAGEMENT ROBOT

- [0014] As the kitchen waste (1000) is dumped in to the device WMR (3000) and main supply control switch (2000) is on, the waste will be processed / grinded properly by grinding machine (3001) with sufficient / required amount of water through water inlet (3002).
- [0015] The processed kitchen waste (grinded pulp) has been heated up by using an electric heater (3003).
- [0016] The heated manure will be collected in the Processed / Composed
  Collecting area (4000). The overall operation is been monitored /
  controlled by PLC (3004). The individual process of preparation of
  manure will be tracked with the help of Voice enabled status
  monitoring system (3005)

# SPECIAL FEATURES

- [0017] WMR (3000) is a portable device and it will be used in kitchen for the individual houses, hotels and apartments etc.
- [0018] WMR (3000) is a user friendly device.
- [0019] Lower cost due to simplicity in construction and thus easily affordable.

TPO CHENNAI 19112015 16:38

#### CLAIMS

#### I/We Claim:

- PLC Based Waste Management Robot' WMR is a portable device and it will be used in houses, hotels and apartments etc.
- The method of claim 1 further comprising:
   The waste from the kitchen has been processed / grinded properly by adding sufficient / required amount of water.
- The method of claim 2 further comprising:
   The processed kitchen waste (grinded pulp) has been heated up by using an electric heater.
  - 4. The method of claim 3 further comprising:
    The heated manure has been collected in the Processed / Composed Collecting area. The overall operation is been monitored / controlled by PLC.
  - 5. The method of claim 3 further comprising:
    The individual process of preparation of manure has been tracked with the help of Voice enabled status monitoring system

Nov-2015/36835/6234-CHE-2015/Form 2(Title Page)

# ABSTRACT

# PLC BASED WASTE MANAGEMENT ROBOT

Kitchen waste handling is a tedious task. If the waste is not properly handled it may spoil the environment. At present, natural decomposition method is adopted. Since the waste is kept in open air, decomposition will be delayed in rainy season and it may cause air pollution. The existing method is season / weather / climate dependent and it consumes more time. Definite mechanism for preparing instant manure is not available. The proposed PLC based Waste Management Robot (WMR) addresses the above said issues. WMR is a portable device and it will be used in houses, hotels and apartments etc.

The waste from the kitchen has been processed / grinded properly by adding sufficient / required amount of water. The processed kitchen waste (grinded pulp) has been heated up by using an electric heater.

The heated manure has been collected in the Processed / Composed Collecting area. The overall operation is been monitored / controlled by PLC. The individual process of preparation of manure has been tracked with the help of Voice enabled status monitoring system.

IPO CHENNAT, 19112015, 16:38

# Drawings

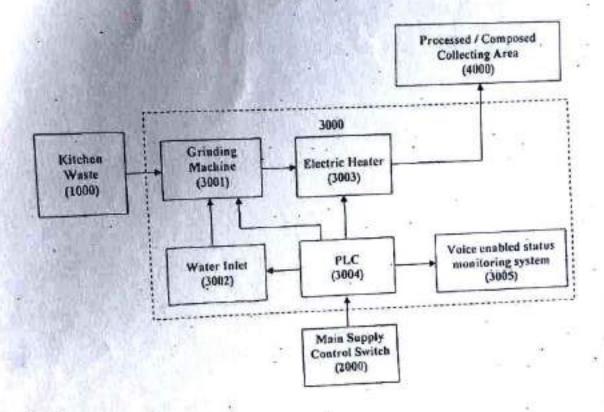


Fig. 1.1

Applicant (s) Signature:

Date: 16/11/2015

IPO CHENNAL 19112015 16:38



E-Mail: chennai-patent@nic.in Website: www.ipindia.nic.in

Telefax: 2250 2066



Telephone: 2250 2081

2250 2082

2250 2083

2250 2083

PATENT OFFICE INTELLECTUAL PROPERTY BUILDING G.S.T ROAD, GUINDY CHENNAI - 600 032

GOVERNMENT OF INDIA

NO.POC/CERTIFIED COPY/H13/98

Dated: 04/01/2016

To

M/r. Suresh D.S Director & Principal, Channabasaveshwara Institute of Technology N.H. 206, Gubbi – 572 216, Karnataka, India.

Sub: Supply of Certified Copy in respect of Application No. 6234/CHE/2015.

Sri,

With reference to your letter dated 19/11/2015 on the above subject and to forward herewith Certified Copy for the above mentioned Patent Applications as desired by you.

Yours faithfully

DEPUTY. CONTROLLER OF PATENT & DESIGNS

Encl: One Certified Copy.

March 24, 2021

To,
The Controller of Patents
The Patent Office,
Intellectual Property Office Building,
G.S.T. Road, Guindy,
Chennai-600032,

Re: Application for Patent.

Title: VOICE BASED TOUCH FREE VENDING MACHINE

Our Reference: DSS-006

Dear Sir.

Please find enclosed following documents along with this cover letter for necessary action

action		
<ol> <li>Request for certified copy</li> </ol>	1 Page	
2. Form 1	3 Page	(In Duplicate)
<ol><li>Form 3 (Declaration under Sec 8)</li></ol>	1 Page	(In Duplicate)
4. Form 2 (complete specification)	6 Pages	(In Triplicate)
5. Drawings	1 Pages	(In Triplicate)
Also please find enclosed DD for Rs. 285	0 (1750+1100)	in the name of Controller of
Draft details: No. 916128 UNION	BANK OF	NOA Dated 2415 2021
The navment of Ks 2530/- is computed as		
Filing Fee for natural persons (claims not specification/drawing not exceeding 30 p.	exceeding 10	and number of pages in 0.00
Certified copy of the specification =	Rs 110	0.00

Total

Rs 2850.00

For any further communication and/or for any clarification, you may please contact,

1. SURESH D. S.

Professor, Dept. of ECE, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India 2. Rajendra C J

Assistant Professor, Dept. of ECE, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India Ph. +91 - 9741724290 08131 223818, 08131 223177

Thanking You. Yours Sincerely

SURESH D. S:

2. RAJENORA CJ.

#### March 24, 2021

To,
The Controller of Patents
The Patent Office,
Intellectual Property Office Building,
G.S.T. Road, Guindy,
Chennai-600032.

Re: Request for certified copy of the specification

Title: VOICE BASED TOUCH FREE VENDING MACHINE

Our Reference: DSS-006

Dear Sir,

Request you to issue the certified copy of the patent application being made herewith.

A prescribed fee of Rs 2850 is included in the DD for the purpose.

We request you to send the certified copy to the address noted below

1. Rajendra C J

Assistant Professor, Dept. of ECE, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India Ph. +91 - 9741724290 08131 223818 08131 223177

Thanking You. Yours Sincerely,

1. SURESH D.S

2 RAJENDRA CI

#### FORM 1

## THE PATENTS ACT 1970 (39 of 1970)

R

The Patents Rules, 2003
APPLICATION FOR GRANT OF PATENT

(See section 7, 54 & 135 and rule 20(1))

## (FOR OFFICE USE ONLY)

Application No. Filing Date

Amount of Fee Paid:

CBR No: Signature

Name	Nationality	Address
L SURESH D. S.	INDIAN	Professor, Dept. of ECE,
		Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Kamataka, India
2. RAJENDRA C.J.	INDIAN	Assistant Professor, Department of ECE, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Kamataka, India
2. INVENTOR(S)		The state of the s
Name	Nationality	Address
1. RAJENDRA C.J.	INDIAN	Assistant Professor, Department of ECE, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India
2. SEKAR R	INDIAN	Assistant Professor, Department of ECE, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India
3. RAJU S	INDIAN	Foreman, Department of ECE, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India
4. NIHARIKA R.K	INDIAN	Student, Department of ECE, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India
5, DARSHINI C.V	INDIAN	Student, Department of ECE, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India
6. KAVANA R.C	INDIAN	Student, Department of ECE, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India
7. MANISHA G	INDIAN	Student, Department of ECE, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India

3. TITLE OF THE INVENTION: VOICE BASED TOUCH FREE VENDING MACHINE

4. ADDRESS FOR CORRESPONDENCE OF APPLICANT/AUTHORIZED PATENT AGENT IN INDIA		Rajendra C J Assistant Professor, Dept. of ECE, Channabasaveshwara Institute of Technology N.H. 206, Gubbi - 572 216 Karnataka, India Telephone No.: 08131 223818 Ext. 208 Fax No.: 08131 223177 Mobile No.: +91 9741724290			
5. PRIORITY P	ARTICULARSO	E TUE	rajendracj@yahoo	o.com	ENTION COUNTRY
Country	Applicat	ion /	APPLICATION(S	) FILED IN CONVI	ENTION COUNTRY
	Number	Kan .	Filing Date	Name of the Applicant	Title of the Invention
6. PARTICULA	RS FOR FILING	PATEN	T COOPERATIO	ON TREATY (DCT	NATIONAL PHASE
APPLICATION				ON TREATT (PCT)	NATIONAL PHASE
International appl	ication number		Interna office.	ational filing date as	allotted by receiving
7. PARTICULAI	RS FOR FILING	DIVISIO	NAL APPLICAT	TION	
Original (first) app	olication number			f filing of original (fir	st) application
					- Approximate
8 PARTICULAR	e cop en pic e				
Main application /	RS FOR FILING P	ATENI			
Treament,	1 accest 14millions		Date of	f filing of main applic	ation
					74
declare that the app (a) Date: (b) Signature(s) of the in (c) Name(s)	nventor(s)	3 60	A Nil	kat to medini C)	YOUGHAR MANISHAG
				ARCK DARSHINICY K	AVANARC MANISHAG
(ii) Declaration by	the applicant(s) in	the con	vention country		
/ We, the applicant(	s) in the convention	country	declare that the ap	pplicant(s) herein is/a	re
ny/our assignee or l	legal representative				
a) Date					
b) Signature(s)	_				
c) Name(s) of the si	ignatory				
iii) Declaration by					
We, the applicant		(a) that			
	/we are in possession			4.500004600	
D The	we are in possession	on or the	above-mentioned	invention.	
☐ The appli	provisional/co <del>mple</del> ication.	ie specif	ication relating to	the invention is filed	with this
		ed in the	specification	the biological mater	100
India	and the necessary	permissi	on from the come	ctent authority shall b	iai from
-subm	inted by me'us before	ne the w	ant of extent to	more shall b	
□ Then	e is no lawful orous	nd of ohi	an or patent to in	Crus.	71.7
C -tom	We see the see	a or only	action to the owner	of the Decree	
			ection to the grant	of the Patent to me/u	8.
5 mm	we are the assigne	or lega	representative of	true & first inventors	15.10
	application or each	of the ap	representative of plications, particul	true & first inventors	m in Purus
-400,000	pplication or each of the first application	of the ap	representative of plications, particul	true & first inventors	m in Paras
-inven	pplication or each the first application	of the ap	representative of plications, particul vention country/ce	true & first inventors	m in Para-

Convention country/countries and
of the invention had been made in a convention country before that date by me/us  My/our molicular.
or by any person from which I/We derive the title.
J. Cold disprisons in the state of the state
Cooperation Treaty (PCT) as mentioned in Para-6.
The application is divided out of my/our application, particulars of which are
Private in Page 7
given in Para*7, and pray that this application may be treated as deemed to have  been filed on under see. 16 of the Ast
been filed on under see, 16 of the Act.
THE STATE OF THE S
-particulars of which are given in Para-8.  10. Following are the attachment of the invention
10. Following are the attachments with the application:
(a) Previsional specification / Complete specification:
twiore the International Preliminary Exemperation Academic International application) / as amended
No. of claims No. of page (2 copies) No. of page
Lawings (in conformation with the
international Preliminary Examination Authority (IPEA), as applicable (2 copies), No. of
slicets Authority (PEA), as applicable (2 copies), No. of
(d) Priority documents
Tel Franslation of primite 4
(e) Franslation of priority document/Specification/International Search Report
(g) Power of Authority
rint Production 6
(ir) Declaration of inventorship on Form 5
(i) Sequence listing in electronic form
(j) Request for Certified Copy
Fee Rs 2850/- in Cash / Cheque / Bank Draft bearing no. 916128 Date 24 03/2021,  No. 100 Gents OF 1000 Bank.  No. 100 Bank.  No. 100 Bank Draft bearing no. 916128 Date 24 03/2021,  Bank.  No. 100 Bank Draft bearing no. 916128  Bank Draft bearing no. 9162128  Bank
Dated this day of Pacett 2021
Signature: Juniform Rajendra C.J.  Name: - SURESH D.S RAJENDRA C.J.
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 (\$\sqrt{y}\$)/cross (x) whichever is applicable/not applicable in declaration in para-9.  *Name of the inventor and applicant should be given in full, family name in the beginning.  *Complete address of the inventor and applicant should be given stating the postal index no./code, state and country.
*Strike out the column(s) which is/are not applicable.
*For fee: See First Schedule.

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

# STATEMENT OF UNDERTAKING UNDER SECTION 8

		(See S	ec 8 and rule 12)	DER SECTIO	N 8	
Applicant(s)		Profes Chann N.H. 2 Karna  2. RAJ Assists Chann N.H. 2 Karna hereby declare:	SESH D. S. sor, Dept. of ECE, abasaveshwara Ins 06, Gubbi - 572 216 taka, India ENDRA C.J ant Professor, Dept. abasaveshwara Ins 06, Gubbi - 572 216 taka, India	of ECE, titute of Technology		
2. Name, Add nationality of applicant:		That I/we who have made this application. No Dated alone/jointly with 2:		That I/we who have made this application. No. Dated alone/jointly with 2:  Made for the same / substantially same, application(s) for patent in the off		
Name of the Country	Date of application	Application Number	Status of the Application	Date of Publication	Date of Grant	
3. Name and a Assignee	address of the	SURESH D. S.     Director & H O D of Electronics & Communication Engineering Channabasaveshwara Institute of Technology     N.H. 206, Gubbi - 572 216     Karnataka, India     RAJENDRA C.J     Assistant Professor, Dept. of ECE,     Channabasaveshwara Institute of Technology     N.H. 206, Gubbi - 572 216     Karnataka, India		incering		
4. To be signed by the applicant(s) or authorized patent Agent  5. Name of Natural person who has signed.		I/we would keep applications for filing of such app	patent filed outside la plication lay of March 2021	Signature R	atent, by the controller, sgarding corresponding onths from the Date of	
			A	opticants		

To, The Controller of patents The Patent Office, At Chennai.

# Form 2 The patent Act 1970 (39 of 1970) AND Patent Rules 2003

# Complete Specification

Title

: VOICE BASED TOUCH FREE VENDING MACHINE

Applicants : 1. SURESH D.S

2. RAJENDRA C.J

Nationality : INDIAN

Address

: Channabasaveshwara Institute of Technology

N. H. 206, Gubbi 572 216.

Karnataka, India.

Phone No.

: +91 - 9741724290

E-mail

: rajendracj@yahoo.com

supplicant(s): SURESH D.S. & RAJENDRA C.J.

# VOICE BASED TOUCH FREE VENDING MACHINE

## TIELD OF INVENTION

Present invention is related to the field of 'Automation'. A device named as 'Voice based Touch free Vending Machine' is developed and built for public's heightened concern on hygiene and safety.

# BACKGROUND OF INVENTION

- Safety and hygiene issues are important aspects in the wake of COVID-19, there is a growing demand for voice based contactless and mobile/wireless payment options.
- [0003] At present, touchless vending machines are available, which is enabled with cell/mobile phone based product selection.
- [0004] Unless cell/mobile phone camera is pointed to the screen of vending machine, it will not initiate the process of dispensing.
- [0005] The existing mechanism is not voice based.

# BRIEF DESCRIPTION OF THE DRAWINGS

- [0006] Invention described herein is illustrated by way of example and not by way of limitation in the accompanying figures. For simplicity and clarity of illustrations, elements related in the figures are not necessarily drawn to scale. For example, the dimensions some elements may be exaggerated relative to other elements for clarity. Further, wherever considered appropriate, reference labels have been repeated among the figures to indicate corresponding or analogous elements.
- [0007] Drawing is used to illustrate the 'Voice Based Touch Free Vending Machine' applicable in 'Automation'.

# SURESH D.S. & RAJENDRA C.J.

Fig.1 represents the flow diagram of complete hardware part of the prototype model of 'Voice Based Touch Free Vending Machine' (1000) [here onwards called as VBTFVM (1000)], consisting of a ultrasonic sensor (1001), Audio & Voice Recognition Kit (1002), Microcontroller (1003), Contactless Payment card (1004), LCD (1005) and Material Dispenser (1006).

## DETAILED DESCRIPTION

Following is the description of the device called, 'Voice Based Touch Free Vending Machine' VBTFVM (1000). Numerous specific details such as logic implementations, resource partitioning/ sharing /duplication implementations, types and interrelationships of system components and logic partitioning /integration choices are set forth in order to provide a more clear understanding of the present invention.

It will be appreciated, however, by one skilled in the art that the invention may be practiced without such specific details. In other instances, constructional details and other such details have not been shown in detail in order to obscure the invention. Those of ordinary skill in the art, with the included descriptions will be able to implement appropriate function without undue experimentation.

# CONCEPT OF VOICE BASED TOUCH FREE VENDING MACHINE

[0010] Customers simply move their hand near the ultrasonic sensor and the machine asks the user credentials and their need. Then the user have to give voice command from which they can control the vending machine in real time such as selection of products, viewing their relevant information and finally touch free checkout.

# ONSTRUCTION OF VOICE BASED TOUCH FREE VENDING MACHINE

- Voice Based Touch Free Vending Machine' VBTFVM (1000), consisting of a ultrasonic sensor (1001), AUDIO & VOICE RECOGNITION KIT (1002), Microcontroller (1003), Contactless Payment card (1004), LCD (1005) and Material Dispenser (1006).
- 'Voice Based Touch Free Vending Machine' VBTFVM (1000), is a portable / fixed device and it can be used in Hospitals, Educational Institutes, Shopping Malls, Bus /Railway stations, Hotels etc.

# WORKING OF VOICE BASED TOUCH FREE VENDING MACHINE

- [0013] VBTFVM (1000) detects the movement of hand kept near the ultrasonic sensor (1001), displays the item information through LCD (1005) and Audio & Voice Recognition Kit (1002).
- [0014] Once vending machine asks for the input, the user needs to give voice command through Audio & Voice Recognition Kit (1002) regarding the product required.
- Once the product is selected and confirmed by the customer, the device VBTFVM (1000) ask for payment through Audio & Voice Recognition Kit (1002). The customer needs to pay the total amount through contactless Payment card (1004).
- [0015] Once the payment is done the VBTFVM (1000) will dispense the respective product through Material Dispenser (1006) and customer can proceed their sign out option.

# SPECIAL FEATURES

[0016] 'Voice Based Touch Free Vending Machine' VBTFVM (1000) is a portable / fixed device and it can be used in Hospitals, Educational Institutes, Shopping Malls, Bus/Railway stations and Hotels etc.

# Jugani(s): SURESH D.S. & RAJENDRA C.J.

- VBTFVM (1000) is a voice based user friendly device.
  - Low cost due to its simple in construction and it is easily affordable.

#### LAIMS

## 1 We Claim:

- Voice Based Touch Free Vending Machine' VBTFVM is an automated electronic portable / fixed device and it can be used in Hospitals, Educational Institutes, Shopping Malls, and Hotels etc.
- 2. The method of claim 1 further comprising: VBTFVM works on the innovative concept (voice recognition and play back mechanism)
- The method of claim 2 further comprising:Voice based model will attract the user
- 4. The method of claim 3 further comprising:
  The entire process is completely touch free with low cost
- The method of claim 4 further comprising: More reliable operation and user friendly

preheant(s): SURESH D.S. & RAJENDRA C.J.

## ABSTRACT

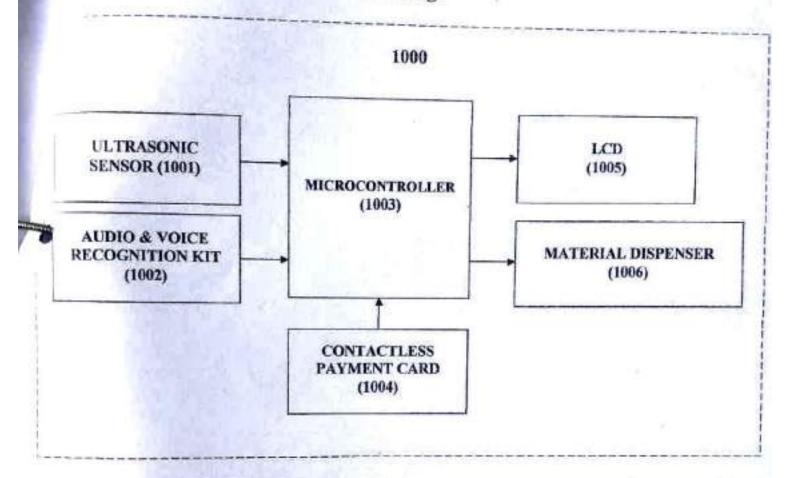
# VOICE BASED TOUCH FREE VENDING MACHINE

The post COVID situation made the entire life style of the human being solated from their routine life style process. As an extension, we use to prefer the daily needs dispensing system also through machine, and many of the process are converted from the human intervention to machine. In which, at least any one of the operation use to be in touch mode such as payment, selection of the item etc. This proposed product also an attempt to design a touch free vending machine which is operating completely using the voice.

Even so many innovative methods are deployed to construct the vending machines, this voice based machine with the facility of user recognition and touch free payment mode of operation are unique features of this product.

In addition, the user can verify their choices using the display board attached with it. Further, the user identification mechanism will save malfunction of the system and save the electricity using its additional features. The simple in construction of the product made the cost lower and reduced the complexity in design.

# **Drawings**



Applicant (s) Signature:

Date: 24/03/2021





# PATENT OFFICE

MINISTRY OF COMMERCE AND INDUSTRY Department of Industrial Policy and Promotion

It is hereby certified that annexed here to is a true copy of Complete Specification Abstract and Drawing of the patent application as filed and as detailed below:-

Date of Application

: 22/02/2016

Application No.

: 201641006047

Applicant

: M/s. Channabasaveshwara Institute of Technology., an

Indian Company Of N. H. 206, Gubbi 572 216.

Karnataka, India.

In witness there of I have here unto set my hand

Dated this the 07th day of March 2016 17th day of Phalguna, 1937(Saka)

By Authority of THE CONTROLLER GENERAL OF PATENTS, DESIGN AND TRADE MARKS.

(DR.S.P.SUBRAMANIYAN)
DEPUTY CONTROLLER OF PATENT & DESIGNS

PATENT OFFICE INTELLECTUAL PROPERTY RIGHTS BUILDING G.S.T. ROAD, GUINDY CHENNAI - 600 032.



Form 2 The patent Act 1970 (39 of 1970) AND Patent Rules 2003

# Complete Specification

Title : AUTOMATED BRAKE CONTROL SYSTEM

Applicants : 1. SURESH D.S

Nationality : INDIAN

Address : Channabasaveshwara Institute of

Technology

N. H. 206, Gubbi 572 216.

Karnataka, India.

Phone No. : +91 - 9686550488

E-mail : sureshtumkur@yahoo.co.in

### AUTOMATED BRAKE CONTROL SYSTEM

## FIELD OF INVENTION

[0001] Present invention is related to the field of 'Automobile Engineering'. A device named as 'Automated Brake Control System' is developed and built for control/stop the vehicle when the brake failure occurs during driving.

# BACKGROUND OF INVENTION

- [0002] Control/stop the brake failure vehicle during driving is a risky operation.
- [0003] After realizing the brake failure by the driver, bringing the vehicle immediately to the safer zone is impossible (due to the traffic engaged in the adjacent traffic lane).
- [0004] At present, there is no controlling mechanism to stop the vehicle during the brake failure.
- [0005] Definite mechanism for alerting the driver at the time of brake failure in the vehicle is not available.

#### BRIEF DESCRIPTION OF THE DRAWINGS

- [0006] Invention described herein is illustrated by way of example and not by way of limitation in the accompanying figures. For simplicity and clarity of illustrations, elements related in the figures are not necessarily drawn to scale. For example, the dimensions some elements may be exaggerated relative to other elements for clarity. Further, wherever considered appropriate, reference labels have been repeated among the figures to indicate corresponding or analogous elements.
- [0007] Drawing is used to illustrate the 'Automated Brake Control System' applicable in 'Automobile Engineering'.

[0008] Fig.1 represents the flow diagram of complete hardware part of the prototype model of 'Automated Brake Control System' (2000) [here onwards called as ABCS (2000)], consisting of a Brake pedal/hand lever (1001), Brake Drum (1002), Brake Wire (1003), Continuity detector (2001), Microcontroller (2002), Servo motor (2003), GSM (2004), Driver Authentication Switch (2005) and Buzzer (2006).

# DETAILED DESCRIPTION

[0009] Following is the description of the device called, 'Automated Brake Control System- ABCS (2000). Numerous specific details such as logic implementations, resource partitioning / sharing / duplication implementations, types and interrelationships of system components and logic partitioning /integration choices are set forth in order to provide a more clear understanding of the present invention.

It will be appreciated, however, by one skilled in the art that the invention may be practiced without such specific details. In other instances, constructional details and other such details have not been shown in detail in order to obscure the invention. Those of ordinary skill in the art, with the included descriptions, will be able to implement appropriate functionally without undue experimentation.

# CONCEPT OF AUTOMATED BRAKE CONTROL SYSTEM

[0010] A microcontroller based instant detection of brake failure in the vehicle is achieved and brought to the notice of the driver. Once the acknowledgement given to stop the vehicle, a mechanism will be employed for controlling/stopping the vehicle in the safe lane.

# CONSTRUCTION OF AUTOMATED BRAKE CONTROL SYSTEM

- [0011] 'Automated Brake Control System' ABCS (2000), consisting of a Hand Brake pedal/hand lever (1001), Brake Drum (1002), Brake Wire (1003), Continuity detector (2001), Microcontroller (2002), Servo motor (2003), GSM (2004), Driver Authentication Switch (2005) and Buzzer (2006).
- [0012] ABCS (2000) is simple in design and operation and can be used in automobiles.

# WORKING OF AUTOMATED BRAKE CONTROL SYSTEM

- [0013] A Continuity detector (2001) terminal which are engaged with the brake wire connected between brake pedal/hand lever (1001) and brake drum(1002) detects the condition/healthiness of brake wire (1003)
- [0014] Once the continuity detector (2001) detects the fault, it sends a signal to the microcontroller (2002). Then the microcontroller activates the buzzer (2006) to inform/alerts the driver about the brake failure and to bring the vehicle in the safe lane.
- [0015] Once the driver confirms the vehicle in safe lane by pressing the Driver acknowledgement switch (2005), microcontroller (2002) deactivate the buzzer (2006) and triggers a servomotor (2003) for applying the brake in brake drum (1002)
- [0016] In addition, once the vehicle stops, an intimation message will be send to the patrol help line and nearest vehicle service centre using GSM module (2004)

#### SPECIAL FEATURES

- [0017] ABCS (2000) is a low cost device.
- [0018] ABCS (2000) is simple in design and operation.
- [0019] ABCS consists of simple modules/blocks, so there is no complexity in operation and the reliability is more.

ENT OFFICE CHENNAL 28/02/2018 14. 05

#### CLAIMS

## L'We Claim:

- 'Automated Brake Control system' ABCS is a low cost, simple in design, can be used in automobiles.
- The method of claim 1 further comprising:
   Instant identification of brake failure can be identified easily.
- 3. The method of claim 2 further comprising:
  As soon as brake failure occurs in the vehicle that will be notified to the driver to avoid major accidents and it allows the driver to keep the vehicle in the safe lane.
- 4. The method of claim 3 further comprising:
  Once the driver brought the vehicle to safer lane, driver will acknowledge the fault and apply the ABCS / backup brake failure protection system to stop the vehicle.
- The method of claim 3 further comprising:
   In addition, by considering the recovery of the vehicle from the brake failure, a message will be sent to nearest service station.

# ABSTRACT AUTOMATED BRAKE CONTROL SYSTEM

Vehicle accidents are quite common in news these days. The recent statistics reveals that approximately 35% to 40% of vehicle accidents are due to brake failure. This brake failure is due to improper maintenance and irregular brake wire and brake oil monitoring. In that situation it is difficult to control/stop the vehicle when it is on the traffic lane during driving.

The proposed Automated Brake Control system (ABCS) aims to detect the fault and instantly apply the secondary brake to make control of the vehicle and stop the vehicle at the above said situation. This system also consists of notification mechanism with the buzzer which notifies/alerts the driver about the failure of the brake. So that the vehicle will be brought to the safe lane and it can be stopped. This ABCS is a low cost, simple in design and operation backup protection system.



E-Mail: chennai-patent@nic.in Website: www.ipindia.nic.in

Telefax: 2250 2066



Telephone: 2250 2081

GOVERNMENT OF INDIA
PATENT OFFICE

2250 2082 2250 2083 2250 2084

INTELLECTUAL PROPERTY BUILDING G.S.T ROAD, GUINDY

G.S.T ROAD, GUINDY CHENNAI - 600 032

NO.POC/CERTIFIED COPY/H1613.3

Dated: |0 / 03/2016

To

Mr. Suresh D. S. Director & Principal, Channabasaveshwara Institute of Technology N. H. 206, Gubbbi – 572 216, Karnataka, India.

Sub:

Supply of Certified Copy in respect of Application No. 201641006047.

Sri,

With reference to your letter dated 22/02/2016 on the above subject and to forward herewith Certified Copy for the above mentioned Patent Applications as desired by you.

Yours faithfully

(DR.S.P.SUBRAMANIYAN)
DEPUTY CONTROLLER OF PATENT & DESIGNS

Encl: One Certified Copy





ORGANIZZNIG CONTINUTEE

Dr. PRATAPSINH KAKASAHER DESAI

President STE

Dr. SURESH D S

Chairman

tiTE-Kantataka Section 180

Director CIT-Group of Institutions Gubbi, Tumakuru

National Executive Council Members

Section Managing Concedition

FOR PURITIES DETAILS CONTACT

Dr. SANGAMESH B Marriber - SAC, ISTE - Karnataka Section ophgas Bas

Mr. SHASHANK M GOVIDA American + SMC, HTE - Karnutaka Section

Karnataka - Section

Presents

DEBUG YOUR LOCK DOWN

**HACK 2020** 

(STATE LEVEL CODING CONTEST)



2° 2004, 20020

Registrations Start

TO RESISTER.

hit.ly/istelsack2020

(Registration Free)

Strell do.

istekarsec@gmail.com

FACULTY COURDOLATOR.

Mr. CHETAN BALAM Placement Officer, CIT-OLDER

STERRAT COORDINATORS

MIN. SHELDERNE HER. 4094945345

MY STRIBANCON

HOLDERANGS

Attractive Prizes for winners

Certificate will be leaved to all participants

Fidure Research Annual semant





2\*\* May 2020

5" may 2020.

97 Hay 2020

Drift to control of the Control of t



## Channabasaveshwara Institute of Technology

(affizione to VTU, Seignum & Appeared by ASCE, New Owbi) (MAC Assendated & 180 9001/2015 Certified Institution) NN 204 (B.M. Rond), Gubbs, Tumbur - 872 215. Karnataka.





#### Dr Suresh D S

Director, CIT Group of Institutions

#### Dr.Shantala C P

Vice-Principal A Director, Dept. of Training and Placement

#### Mr. Chetan Balaji

Training and Placement Officer 9886090916

#### Student Coordinator

Mr. Seijath H S Dept. of CSE 5092955545



# Department of Training and Placement

# Presents

# <THINK TWICE: CODE ONCE>

A Coding Challenge for students of Fer-final year from Ch.JS.EC.ES Branches



Registration: Last Date: 03/04/2020 before 6:00 PM

Event Date: 4th April till 7th April (Daily two hours 6:00 PM to 8:00 PM)

Registration form

# bit.ly/codeonce

Day 1: 4th April: 6:00 PM -8:00 PM: WARM UP

Day 2: 5th April: 6:00 PM -8:00 PM: NOOB

Day 3: 6th April: 6:00 PM -8:00 PM: NORM

Day 4: 7th April: 6:00 PM -8:00 PM: PRO



# CERTIFICATE OF GRANT

THE PERSON NAMED IN

Patent number: 2021101573

The Commissioner of Patents has granted the above patent on 12 May 2021, and certifies that the below particulars have been registered in the Register of Patents.

Name and address of patentee(s):

Dr. Rajashekar Patil, Professor of Mechanical Engineering, Flat No. D 701, Kolte Patil Raega Apartments, Bidharahalii Hobit, Kannur, Bangalore 562149 India

Mr. Kalbesh Sund Kamble, Assistant Professor of Mechanical Engineering, SSPM's COE, Kankavli, Sindhudurg Maharashtra 418602 India

Dr N Jagadeesh, Assistant Professor of Automobile Engineering, P E S College of Engineering Mandya Kamataka 571401 India

Or. Sharath V.G. Assistant Professor of Mechanical Engineering, 419, Gyan Ascent, AMS Layout, Vidyarahyapura, Near Nativity Church, Bengaluru-560097 India

Devaraj E. Assistant Professor of Mechanical Engineering, No 2413,LIG B Sector, behind showoff showroom. Velahanka new town-560064 India

R Vara Prasad Kaviti, Assistant Professor of Mechanical Engineering, CMRU Main campus, Off Hennur, Bagalur Main Road, Chagalatti, Near Kempegowda international airport, Bangalore 562149, India

Mr. T CH Anil Kumar, Assistant Professor of VFSTR (Deemed To Be University), Vadlamudi, Andhra Pradesh, India

Dr. Shaik Dilkush, Assistant Professor of Rajiv Gandhi university of knowledge Technologies- (RGUICT), Nuzvid campus, Nuzvid, Andhra Pradesh India

Dr J Viswanatha Rao, professor, Electrical and Electronics engineering, VNR Vignana Jyothi Institute of Engineering and Technology, Hyderabad, Telangana India

Dr Girish D P Professor, Department of Mechanical Engineering, Government engineering college, janapada loka Ramanagara, Kamataka 562159, India

Dr. Manjunath Gowda M.R. Associate Professor, Department of Mechanical Engineering, H.M.S Institute of Technology, NH-4, Kesaramadu post, Kythsandra, Turnkur, Kamataka 572104, India

Kiran Gowd M.R. Assistant Professor, Department of Mechanical Engineering, Channabasaveshwara Institute of Technology, NH-206, Gubbi, Tumkur, Karnataka 572216, India

#### Title of invention:

DEVELOPMENT OF MEGAWATT WIND TURBINE FOR OPTIMAL MANAGEMENT OF SMART AGRICULTURAL FARMS

#### Name of inventor(s):

Rajashekar Patil, Kalpesh Sunil Kamble, N Jagadeesh, Bharath V G, Devaraj E, R Vara Prasad Kaviti. T CH Anil Kumar, Shaik Dilkush, J Viswanatha Rao, Girish D P, Manjunath Gowda M.R, Kiran Gowd M.R.

#### Term of Patent:

Eight years from 27 March 2021

116

Doted this 12th day of May 2021

Commissioner of Patents



# CERTIFICATE OF GRANT

NOTE. This triviousbon Patent cannot be enforced unless and until it has been examined by the Commissioner of Patents and a Certificate of Examination has been issued. See sections 120(1A) and 129A of the Patents Act 1990, set out on the reverse of this document.

Patent number: 2021101573



Dated this 12th day of May 2021

Commissioner of Patients

MICRIDACT MIC



g-ites E-mail ; chennal parerriginic in birings/Website www.pindia.nic.in



g-лпч-Теlephone : 044-2250 5200

044-2250 5285

RMID : 044-2250 5286

भारत सरकार वाणिज्य एवं उदयोग मन्त्रालय सद्योग संवर्धन और आंतरिक व्याणर विभाग

एकस्व कार्यालय

मीडिक संबंदा गवन, जी एस.टी. रोड, गिडी, चेन्नई-600032 GOVERNMENT OF INDIA

MINISTRY OF COMMERCE & INDUSTRY DEPARTMENT FOR PROMOTION OF INDUSTRY AND INTERNAL TRADE

PATENT OFFICE

INTELLECTUAL PROPERTY BUILDING GIST HOAD GUINDY, CHENNAL 600 032

THE ! No. POCKERTIFIED COPY! H & 3!

दिनाक/ Date: 09 /06/2021

To

Mr. R. Sekar, Research Scholar, Channabasaveshwara Institute Of Technology, NH - 206, BH Road, Gubbi - 572 216, Tumkur (District). Karnataka, India.

> Supply of Certified Copies in respect of Patent Application No. Sub :

202141019814.

Sir,

With reference to your letters dated 30/04/2021 on the above subject and to forward herewith Certified Copies for the above mentioned Patent Applications.

Yours faithfully

(MS. SRIRUPA MUKHERJEE) ASSISTANT CONTROLLER OF PATENTS AND DESIGNS

Encl: One Certified Copy.

Thay time





भारत सरकार GOVERNMENT OF INDIA वाणिज्य एवं उद्योग मंत्रालय MINISTRY OF COMMERCE & INDUSTRY पेटेंट कार्यालय THE PATENT OFFICE

# जिस किसी से संबन्धित हो TO WHOMSOEVER IT MAY CONCERN

(पोहरलाक्षरी जो पेटेंट अधिनियम, 1970 की धारा 73(3) के तहत महानियंत्रक एकस्व, ट्यापार विहन की ओर से प्रमाणपत्र हस्ताक्षर व जारी करने के लिए प्राधिकृत अधिकारी हूँ प्रमाणित करता(ती) हूँ कि निम्नतिखित पेटेंट आवेदन के संबंध में फाइल दस्तावेज(जी) नेपि इसके साथ संजयत हैं

undersigned, heing an officer duly authorized to sign and issue the certificate on Controller General of Patents, Designs and Trademarks in accordance with the Section 73(3) of the Patents Act, 1970, hereby certify that annexed hereto is (the document(s) as filed in connection with the following Patent Application:

देवन सहयांक) Application Number: 202141019814 इस करने की तारीखक) Date of Filing: 30/04/2021

शोधित दस्तावेज(जो) का नाम:

e of the document(s) requested: Complete Specification

हैंट अधिनियम, 1970 की धारा 147(1) के अधीन मुझमे निहित शक्तियों के तहत जारी is certificate is issued under the powers vested in me U/S 147(1) of The Patents

is 06th day of May 2021

नियंत्रकः पेटेंट व डिजाइनKoptroller of Patents and Designs (प्राप्तिकन हस्तासरी/Authorised Signatory)

FORM 1		700285228274 (5)	FICE USE ONL	.Y)
THE PATENTS ACT 1970 (39 of 1970) & The Patents Rules, 2003 APPLICATION FOR GRANT OF PATENT (See section 7, 54 & 135 and rule 20(1))		Application No: 202141019814  Filing Date: 30/04/2021  Amount of Fee Paid: 1750/~  CBR No: 15906		
I. APPLICANT(S)				30-4-21
Name	Nationality		Addres SEKAR	
1. SEKAR R	INDIAN	Research Scholar Channabasaveshwara Institute of Technology NH-206, BH Road, Gubbi – 572 216 Tumkur (District)- Karnataka Mob: +91-9740778007 Email: sekar.rp@gmail.com		
2. INVENTOR(S)				
Name	Nationality		Addres	
			SEKAR	
1. SEKAR R	INDIAN	Research Scholar Channabasaveshwara Institute of Technology NH-206, BH Road, Gubbi – 572 216 Tumkur (District)- Karnataka		
		Dr. SURESH D S		
2. Dr. SURESH D S	INDIAN	Professor, Department of ECE Channabasaveshwara Institute of Technology NH-206, BH Road, Gubbi – 572 216 Tumkur (District)- Karnataka		
3. Dr. NAGANAGOUDA H	INDIAN	Dr. NAGANAGOUDA H Former Director, National Training Centre for Solar Technology Karnataka Power Corporation Limited (KPCL) Bangalore - Karnataka		
Di 111100 000	LTIPLE RE	NEWABLE	ENERGY	ER CONVERTER SOURCES WITH
4. ADDRESS FOR CORRESPONDENCE OF APPLICANT/AUTHORIZED PATENT AGENT IN INDIA		SEKAR R Research Scholar		
5. PRIORITY PARTICULAR	S OF THE APP	LICATION(S	FILED IN CON	VENTION COUNTRY
Country	Application Number	Filing Date	Name of the Applicant	Title of the Invention
6:PARTICULARS FOR FILE	NG PATENTIC	COOPERATIO	N TREATY (PC	T) NATIONAL PHASE

ternational application number	International filing date as allotted by receiving
PARTICULARS FOR FILING DIVISI	ONAL APPLICATION
riginal (first) application number	Date of filing of original (first) application
(Har) opposition	
PARTICULARS FOR FILING PATEN	NT OF ADDITION
Main application / Patent Number	Date of filing of main application
D. DECLARATIONS:	
n m . L L . the Incontacte)	e true & first inventor(s) for this invention and vour assignee or legal representative.
(b) Signature(s) of the inventor(s):	Junearon H
(c) Name(s) : SEKAR (ii) Declaration by the applicant(s) in the	R R Dr. SURESH D S Dr. NAGANAGOUDA H
(b) Signature(s) (c) Name(s) of the signatury (iii) Declaration by the applicant(s):	
to a line the berefy declare(5) [	hat: -
m t how see in massession of	the above-mentioned historical
☐ The provisional/eemplete spe	ecification relating to the invention is fried with ans
m man incomting an discharged on	the specification uses the biological material from
I dis and the necessary DCIII	ussion from the competent additions stant oc
-submitted by me/us before th	se grant or patent to media.
.   There is no lawful ground of	objection to the grant of the Patent to me/us.
() - I am We are the assigned of	e applications, particulars of which are given in Para-
-5 was the first application in	convention country/countries in respect of my/our
TOTAL CONTROL OF THE PARTY OF T	
invention.	the above-mentioned application(s) filed in
□ I/We claim the priority from	the above-mentioned application(s) filed in
	the above-mentioned application(s) filed in and state that no application for protection in respect- ade in a convention country before that date by me'us-
<ul> <li>I/We claim the priority from eonvention country/countries of the invention had been me</li> </ul>	the above-mentioned application(s) filed in a and state that no application for protection in respect ade in a convention country before that date by me/us-
- I/We claim the priority from -convention country/countries -of the invention had been me -or by any person from which - My/our application in India i	the above-mentioned application(s) filed in sand state that no application for protection in respect side in a convention country before that date by me/us-is LAVe derive the title is based on international application under Patent spentioned in Para-6.
	the above-mentioned application(s) filed in send state that no application for protection in respect ade in a convention country before that date by me/us-is based on international application under Patent send in Para-6.
<ul> <li>I/We claim the priority from convention country/countries of the invention had been the or by any person from which My/our application in India i Cooperation Treaty (PCT) as The application is divided or given in Para 7, and pray the</li> </ul>	the above-mentioned application(s) filed in and state that no application for protection in respect ade in a convention country before that date by me/us-1/V/o derive the title, is based on international application under Patent contioned in Para-6.  In of my/our application, particulars of which are at this application may be treated as deemed to have
- I/We claim the priority from convention country/countries of the invention had been the or by any person from which My/our application in India i Cooperation Treaty (PCT) as The application is divided or given in Para 7, and pray the	the above-mentioned application(s) filed in a and state that no application for protection in respect ade in a convention country before that date by me/us-1/V/o derive the title is based on international application under Patent s mentioned in Para-6. In of my/our application, particulars of which are at this application may be treated as deemed to have a sec. 16 of the Act.
<ul> <li>I/We claim the priority from convention country/countries of the invention had been the or by any person from which My/our application in India i Cooperation Treaty (PCT) as</li> <li>The application is divided or given in Para 7, and pray the filed on under the convention of the control o</li></ul>	the above-mentioned application(s) filed in a and state that no application for protection in respect ade in a convention country before that date by me/us-is based on international application under Patent in the international application under Patent at of my/our application, particulars of which are at this application may be treated as deemed to have er see 16 of the Act.

(a) Provisional specification / Complete specification	ication	
(b) Complete specification (in conformation w	ith the international application) / as amended	
before the International Preliminary Examinate	ion Authority (IPEA), as applicable (2 copies), No. of	
pages , No. of claims	- C- C- C- CATANA	
(e) Drawings (in conformation with the interne	tional application)/as amended before the	
International Preliminary Examination Author	ity (IPEA), as applicable (2 copies), No. of	
sheets		
(d) Priority documents	Control Contro	
(e) Translation of priority document/Specifical	ion/International Search Report—	
(f) Statement and undertaking on Form 3		
(g) Power-of-Authority-		
(h) Declaration of inventorship on Form 5		
(i) Sequence listing in electronic form		
(j) Request for Certified Copy		
	07 ht 10001	
I.D.B.I. Bonds. Thombur. But be been been been been been been been	nowledge, information and belief the facts and	
Dated this 27th day of April, 20	21	
	Signature: - Q. S.	
To,		
The Controller of Patents		
The Patent Office, at Chennai		
		-
mentioned.  *Tick (√)/cross (x) whichever is applicable/no		

OFFICE CHENNAI 03/05/2021

משלאובתה ווכו מרמונים וב ומוכים ובוו מחבות ליווו

no/code, state and country.

\*For fee: See First Schedule.

\*Strike out the column(s) which is/are not applicable.

\*Complete address of the inventor and applicant should be given stating the postal index