

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :12/11/2019

(21) Application No.201941045946 A

(43) Publication Date : 29/11/2019

(54) Title of the invention : METHOD FOR FACE- RECOGNITION ON THE BASIS OF SKETCH USING DEEP CONVOLUTION NEURAL NETWORK

(51) International classification :G06K9/62  
(31) Priority Document No :NA  
(32) Priority Date :NA  
(33) Name of priority country :NA  
(86) International Application No :NA  
Filing Date :NA  
(87) International Publication No : NA  
(61) Patent of Addition to Application Number :NA  
Filing Date :NA  
(62) Divisional to Application Number :NA  
Filing Date :NA

(71)Name of Applicant :

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**2)Dr. Sandeep Saxena**

**3)Mr. Yoddha Beer Singh**

**4)Mr. Pankaj Kumar Keserwani**

**5)Dr. Manoj Kumar**

**6)Dr. B. Santhosh Kumar**

**7)Dr. Nismon Rio R**

**8)Dr. Ramkumar K**

**9)Dr. Mohammad Israr**

(72)Name of Inventor :

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**5)Dr. Manoj Kumar**

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**7)Dr. Nismon Rio R**

**8)Dr. Ramkumar K**

**9)Dr. Mohammad Israr**

(57) Abstract :

The present invention relates to method for face- recognition on the basis of sketch using deep convolution neural network. The objective of the present invention is to overcome the inadequacies of the prior art in techniques for face- recognition on the basis of sketches.

No. of Pages : 17 No. of Claims : 6



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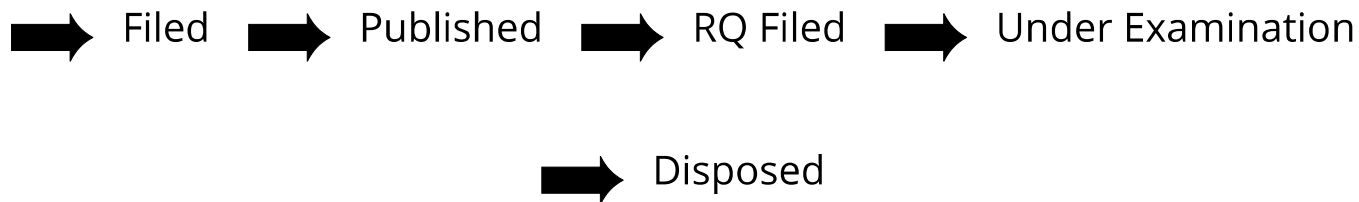


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Application Details	
APPLICATION NUMBER	201941045946
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	12/11/2019
APPLICANT NAME	1 . Dr. Debabrata Samanta 2 . Dr. Sandeep Saxena 3 . Mr. Yoddha Beer Singh 4 . Mr. Pankaj Kumar Keserwani 5 . Dr. Manoj Kumar 6 . Dr. B. Santhosh Kumar 7 . Dr. Nismon Rio R 8 . Dr. Ramkumar K 9 . Dr. Mohammad Israr
TITLE OF INVENTION	METHOD FOR FACE- RECOGNITION ON THE BASIS OF SKETCH USING DEEP CONVOLUTION NEURAL NETWORK
FIELD OF INVENTION	COMPUTER SCIENCE
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E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	29/11/2019

## Application Status

APPLICATION STATUS

**Awaiting Request for Examination**[View Documents](#)

In case of any discrepancy in status, kindly contact [ipo-helpdesk@nic.in](mailto:ipo-helpdesk@nic.in)



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Department of Industrial Policy & Promotion,  
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Government of India

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Document Name	Created Date/Uploaded Date
201941045946-COMplete SPECIFICATION [12-11-2019(online)].pdf	12/11/2019
201941045946-DECLARATION OF INVENTORSHIP (FORM 5) [12-11-2019(online)].pdf	12/11/2019
201941045946-DRAWINGS [12-11-2019(online)].pdf	12/11/2019
201941045946-FORM 1 [12-11-2019(online)].pdf	12/11/2019
201941045946-FORM-9 [12-11-2019(online)].pdf	12/11/2019
201941045946-REQUEST FOR EARLY PUBLICATION(FORM-9) [12-11-2019(online)].pdf	12/11/2019
201941045946-STATEMENT OF UNDERTAKING (FORM 3) [12-11-2019(online)].pdf	12/11/2019

**FORM 1**  
**THE PATENTS ACT, 1970**  
**(39 of 1970)**  
**&**  
**THE PATENTS RULES, 2003**  
**APPLICATION FOR GRANT OF PATENT**  
**[See sections 7,54 & 135 and rule 20(1)]**

**(FOR OFFICE USE ONLY)**

Application No.: .....  
 Filing Date: .....  
 Amount of Fee Paid: .....  
 CBR No.: .....  
 Signature: .....

**1. APPLICANT(S):**

Sr.No.	Name	Nationality	Address	Country	State
1	Dr. Debabrata Samanta	India	Assistant Professor, Department of Computer Science, CHRIST (Deemed to be University), Bengaluru, Karnataka	India	Karnataka
2	Dr. Sandeep Saxena	India	Department of IT, Galgotias College of Engineering and Technology, Plot No.1, Knowledge Park-II, Greater Noida (U.P), INDIA	India	Uttar Pradesh
3	Mr. Yoddha Beer Singh	India	Department of CSE, Galgotias College of Engineering and Technology, Plot No.1, Knowledge Park-II, Greater Noida (U.P), INDIA	India	Uttar Pradesh
4	Mr. Pankaj Kumar Keserwani	India	National Institute of Technology Sikkim, Ravangla, South Sikkim-737 139, India	India	Sikkim
5	Dr. Manoj Kumar	India	Assistant professor, Department of Computer Science (ASET), Amity University, Sector 125, Noida (UP), B 302, Ace platinum, sector zeta 1, Greater Noida, 201306	India	Uttar Pradesh
6	Dr. B. Santhosh Kumar	India	Sr. Assistant Professor, Department of CSE, GMR Institute of Technology, Rajam- 532127, Andhara Pradesh	India	Andhra Pradesh

7	Dr. Nismon Rio R	India	Assistant Professor , Department of Computer Science, CHRIST (Deemed to be University) Bengaluru – 560029, Karnataka, India	India	Karnataka
8	Dr. Ramkumar K	India	Lecturer, Department of Information and Communications Technology, Villa College QI Campus, RahDhebai Hingun, Male' - 20373, Rep of Maldives	Maldives	Not Selected
9	Dr. Mohammad Israr	India	Professor, Department of Mechanical Engineering, Sur University College Sur, Sultanate of Oman,	Oman	Not Selected

## 2. INVENTOR(S):

Sr.No.	Name	Nationality	Address	Country	State
1	Dr. Debabrata Samanta	India	Assistant Professor, Department of Computer Science, CHRIST (Deemed to be University), Bengaluru, Karnataka	India	Karnataka
2	Dr. Sandeep Saxena	India	Department of IT, Galgotias College of Engineering and Technology, Plot No.1, Knowledge Park-II, Greater Noida (U.P), INDIA	India	Uttar Pradesh
3	Mr. Yoddha Beer Singh	India	Department of CSE, Galgotias College of Engineering and Technology, Plot No.1, Knowledge Park-II, Greater Noida (U.P), INDIA	India	Uttar Pradesh
4	Mr. Pankaj Kumar Keserwani	India	National Institute of Technology Sikkim, Ravangla, South Sikkim-737 139, India	India	Sikkim
5	Dr. Manoj Kumar	India	Assistant professor, Department of Computer Science	India	Uttar Pradesh

			(ASET), Amity University, Sector 125, Noida (UP), B 302, Ace platinum, sector zeta 1, Greater Noida, 201306		
6	Dr. B. Santhosh Kumar	India	Sr. Assistant Professor, Department of CSE, GMR Institute of Technology, Rajam-532127, Andhara Pradesh	India	Andhra Pradesh
7	Dr. Nismon Rio R	India	Assistant Professor , Department of Computer Science, CHRIST (Deemed to be University) Bengaluru – 560029, Karnataka, India	India	Karnataka
8	Dr. Ramkumar K	India	Lecturer, Department of Information and Communications Technology, Villa College QI Campus, RahDhebai Hingun, Male' - 20373, Rep of Maldives	Maldives	Not Selected
9	Dr. Mohammad Israr	India	Professor, Department of Mechanical Engineering, Sur University College Sur, Sultanate of Oman,	Oman	Not Selected

**3. TITLE OF THE INVENTION: METHOD FOR FACE- RECOGNITION ON THE BASIS OF SKETCH USING DEEP CONVOLUTION NEURAL NETWORK**

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

Dr. Debabrata Samanta Assistant Professor, Department of Computer Science, CHRIST (Deemed to be University), Bengaluru, Karnataka

Telephone No.:

Fax No.:

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E-

mail: debabrata.samanta369@gmail.com

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

Sr.No.	Country	Application Number	Filing Date	Name of the Applicant	Tilte of the Invention
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**6. PARTICULARS FOR FILING PATENT COOPERATION TREATY (PCT) NATIONAL PHASE APPLICATION:**

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

**7. PARTICULARS FOR FILING DIVISIONAL APPLICATION**

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

**8. PARTICULARS FOR FILING PATENT OF ADDITION:**

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

**9. DECLARATIONS:****(i) Declaration by the inventor(s)**

I/We ,Dr. Debabrata Samanta,Dr. Sandeep Saxena,Mr. Yoddha Beer Singh,Mr. Pankaj Kumar Keserwani,Dr. Manoj Kumar,Dr. B. Santhosh Kumar,Dr. Nismon Rio R,Dr. Ramkumar K,Dr. Mohammad Israr, is/are the true & first inventor(s) for this invention and declare that the applicant(s) herein is/are my/our assignee or legal representative.

(a) Date: -----

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

(c) Name(s): Dr. Debabrata Samanta,Dr. Sandeep Saxena,Mr. Yoddha Beer Singh,Mr. Pankaj Kumar Keserwani,Dr. Manoj Kumar,Dr. B. Santhosh Kumar,Dr. Nismon Rio R,Dr. Ramkumar K,Dr. Mohammad Israr

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

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

(a) Date: -----

(b) Signature(s) : .....

(c) Name(s) of the singnatory: Dr. Debabrata Samanta,Dr. Sandeep Saxena,Mr. Yoddha Beer Singh,Mr. Pankaj Kumar Keserwani,Dr. Manoj Kumar,Dr. B. Santhosh Kumar,Dr. Nismon Rio R,Dr. Ramkumar K,Dr. Mohammad Israr

**(iii) Declaration by the applicant(s)**

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



## 10. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION:

<b>Sr.</b>	<b>Document Description</b>	<b>FileName</b>
1	REQUEST FOR EARLY PUBLICATION(FORM-9)	form 9..pdf
2	COMPLETE SPECIFICATION	FORM_2.pdf
3	DRAWINGS	Drawings.pdf
4	STATEMENT OF UNDERTAKING (FORM 3)	Form 3.pdf
5	DECLARATION OF INVENTORSHIP (FORM 5)	Form 5.pdf

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

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

Signature: .....

Name: Balram Singh Yadav

To The Controller of Patents

The Patent office at CHENNAI

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# FORM 5

THE PATENT ACT 1970

(39 OF 1970) &

(As Amended)

## DECLARATION AS TO INVENTORSHIP

[See sections 10(6) and Rule 13(6)]

### 1. NAME OF APPLICANT(S)

Sr.No.	Name	Nationality	Address
1	Dr. Debabrata Samanta	India	Assistant Professor, Department of Computer Science, CHRIST (Deemed to be University), Bengaluru, Karnataka
2	Dr. Sandeep Saxena	India	Department of IT, Galgotias College of Engineering and Technology, Plot No.1, Knowledge Park-II, Greater Noida (U.P), INDIA
3	Mr. Yodha Beer Singh	India	Department of CSE, Galgotias College of Engineering and Technology, Plot No.1, Knowledge Park-II, Greater Noida (U.P), INDIA
4	Mr. Pankaj Kumar Keserwani	India	National Institute of Technology Sikkim, Ravangla, South Sikkim-737 139, India
5	Dr. Manoj Kumar	India	Assistant professor, Department of Computer Science (ASET), Amity University, Sector 125, Noida (UP), B 302, Ace platinum, sector zeta 1, Greater Noida, 201306
6	Dr. B. Santhosh Kumar	India	Sr. Assistant Professor, Department of CSE, GMR Institute of Technology, Rajam- 532127, Andhra Pradesh
7	Dr. Nismon Rio R	India	Assistant Professor , Department of Computer Science, CHRIST (Deemed to be University) Bengaluru - 560029, Karnataka, India
8	Dr. Ramkumar K	India	Lecturer, Department of Information and Communications Technology, Villa College QI Campus, RahDhebai Hingun, Male' - 20373, Rep of Maldives
9	Dr. Mohammad Israr	India	Professor, Department of Mechanical Engineering, Sur University College Sur, Sultanate of Oman.

Hereby declare that the true and first inventor(s) of the invention disclosed in the complete specification filed in pursuance of my/our application numbered \_\_\_\_\_ dated .....is

## 2. INVENTOR(S)

Sr.No.	Name	Nationality	Address
1	Dr. Debabrata Samanta	India	Assistant Professor, Department of Computer Science, CHRIST (Deemed to be University), Bengaluru, Karnataka
2	Dr. Sandeep Saxena	India	Department of IT, Galgotias College of Engineering and Technology, Plot No.1, Knowledge Park-II, Greater Noida (U.P), INDIA
3	Mr. Yodha Beer Singh	India	Department of CSE, Galgotias College of Engineering and Technology, Plot No.1, Knowledge Park-II, Greater Noida (U.P), INDIA
4	Mr. Pankaj Kumar Keserwani	India	National Institute of Technology Sikkim, Ravangla, South Sikkim-737 139, India
5	Dr. Manoj Kumar	India	Assistant professor, Department of Computer Science (ASET), Amity University, Sector 125, Noida (UP), B 302, Ace platinum, sector zeta 1, Greater Noida, 201306
6	Dr. B. Santhosh Kumar	India	Sr. Assistant Professor, Department of CSE, CMR Institute of Technology, Rajam-532127, Andhra Pradesh
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8	Dr. Ramkumar K	India	Lecturer, Department of Information and Communications Technology, Villa College QI Campus, RahDhebai Hingun, Male' - 20373, Rep of Maldives
9	Dr. Mohammad Israr	India	Professor, Department of Mechanical Engineering, Sur University College Sur, Sultanate of Oman.

Dated this 12<sup>th</sup> day of Nov., 2019

## ~~3. ECLARATION TO BE GIVEN WHEN THE APPLICATION IN INDIA IS FILED BY THE APPLICANT (S) IN THE CONVENTION COUNTRY:-~~

~~We the applicant(s) in the convention country hereby declare that our right to apply for a patent in India is by way of assignment from the true and first inventor(s).~~

~~Dated this .....day of .....2019~~

~~Signature:-~~

~~\_\_\_\_\_ Name of Signatory:-~~

**4. ~~STATEMENT (to be signed by the additional inventor(s) not mentioned in the application form)~~**

~~I/we assent to invention referred to in the above declaration, being included in the complete specification filed in pursuance of the stated application.~~

~~Dated this .....day of .....2019~~

~~Signature of the additional inventor (s)~~

~~Name :~~

To,

The Controller of Patents

The Patent Office,

**Chennai**