



भारत सरकार GOVERNMENT OF INDIA पेटेंट कार्यालय THE PATENT OFFICE पेटेंट प्रमाणपत्र PATENT CERTIFICATE (Rule 74 Of The Patents Rules) क्रमांक : 044137646 SL No :



पेटेंट सं. / Patent No. : 387074

आवेदन सं. / Application No. : 202041020407

फाइल करने की तारीख / Date of Filing : 14/05/2020

पेटेंटी / Patentee : 1.VANGIPURAM RADHAKRISHNA 2.ARAVIND CHERUVU

3.GUNUPUDI RAJESH KUMAR 4.GALI SURESH REDDY

et al. et al. et al.

प्रमाणित किया जाता है कि पेटेंटी को उपरोक्त आवेदन में यथाप्रकटित SYSTEM AND METHOD FOR DIAGNOSIS OF DISEASES FROM MEDICAL IMAGES नामक आविष्कार के लिए, पेटेंट अधिनियम, १६७० के उपबंधों के अनुसार आज तारीख 14th day of May 2020 से बीस वर्ष की अविध के लिए पेटेंट अनुदत्त किया गया है।

It is hereby certified that a patent has been granted to the patentee for an invention entitled SYSTEM AND METHOD FOR DIAGNOSIS OF DISEASES FROM MEDICAL IMAGES as disclosed in the above mentioned application for the term of 20 years from the 14th day of May 2020 in accordance with the provisions of the Patents Act, 1970.

## ROPERTY INDIA

अनुदान की तारीख: 21/01/2022 Date of Grant: पेटेंट नियंत्रक Controller of Patent

टिप्पणी - इस पेटेंट के नवीकरण के लिए फीस, यदि इसे बनाए रखा जाना है, 14th day of May 2022 को और उसके पश्चात प्रत्येक वर्ष मे उसी दिन देय होगी।

Note. - The fees for renewal of this patent, if it is to be maintained will fall / has fallen due on 14th day of May 2022 and on the same day

in every year thereafter.



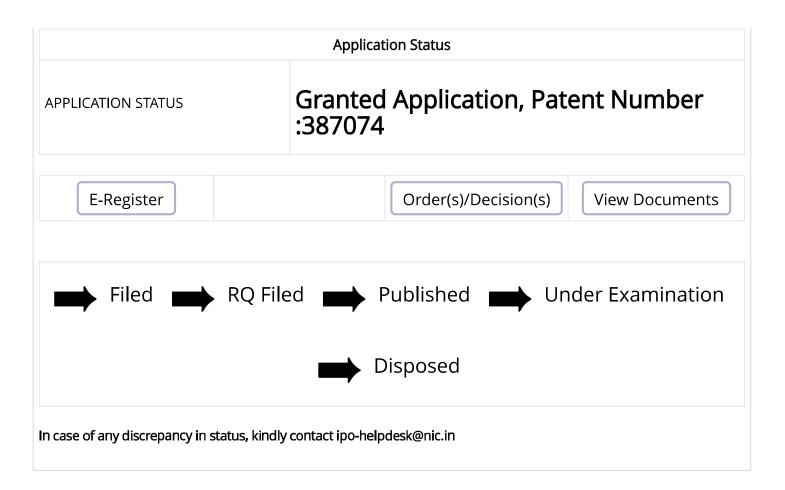
Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India

## (http://ipindia.nic.in/index.htm)



(http://ipindia.nic.in/index.htm)

	Application Details	
APPLICATION NUMBER	202041020407	
APPLICATION TYPE	ORDINARY APPLICATION	
DATE OF FILING	14/05/2020	
APPLICANT NAME	1 . VANGIPURAM RADHAKRISHNA 2 . ARAVIND CHERUVU 3 . GUNUPUDI RAJESH KUMAR 4 . GALI SURESH REDDY 5 . NIMMALA MANGATHAYARU 6 . V. JANAKI 7 . V. SRAVAN KIRAN	
TITLE OF INVENTION	SYSTEM AND METHOD FOR DIAGNOSIS OF DISEASES FROM MEDICAL IMAGES	
FIELD OF INVENTION	COMPUTER SCIENCE	
E-MAIL (As Per Record)	filings@ipexcel.com	
ADDITIONAL-EMAIL (As Per Record)	filings@ipexcel.com	
E-MAIL (UPDATED Online)	filings@ipflair.com	
PRIORITY DATE		
REQUEST FOR EXAMINATION DATE	26/11/2020	
PUBLICATION DATE (U/S 11A)	27/11/2020	
FIRST EXAMINATION REPORT DATE	28/12/2020	
Date Of Certificate Issue	21/01/2022	
POST GRANT JOURNAL DATE	28/01/2022	
REPLY TO FER DATE	10/02/2021	



(19) INDIA

(22) Date of filing of Application :14/05/2020 (43) Publication Date : 27/11/2020

## (54) Title of the invention: SYSTEM AND METHOD FOR DIAGNOSIS OF DISEASES FROM MEDICAL IMAGES

		(71)N of A 12 4
		(71)Name of Applicant:
	:G06K0009620000,	1)VANGIPURAM RADHAKRISHNA Address of Applicant :DEPARTMENT OF INFORMATION
	G06K0009020000,	TECHNOLOGY, VNR VJIET, VIGNANA JYOTHI NAGAR,
(51) International classification	G06F0016280000,	NIZAMPET RD, PRAGATHI NAGAR, HYDERABAD
(31) International Classification	G06T0070280000,	TELANGANA 500090, INDIA Telangana India
	· · · · · · · · · · · · · · · · · · ·	·
(21) D : '/ D / AI	G06F0016583000	2)ARAVIND CHERUVU
(31) Priority Document No	:NA	3)GUNUPUDI RAJESH KUMAR
(32) Priority Date	:NA	4)GALI SURESH REDDY
(33) Name of priority country	:NA	5)NIMMALA MANGATHAYARU
(86) International Application No	:NA	6)V. JANAKI
Filing Date	:NA	7)V. SRAVAN KIRAN
(87) International Publication No	: NA	(72)Name of Inventor:
(61) Patent of Addition to Application	:NA	1)VANGIPURAM RADHAKRISHNA
Number	:NA	2)ARAVIND CHERUVU
Filing Date	INA	3)GUNUPUDI RAJESH KUMAR
(62) Divisional to Application Number	:NA	4)GALI SURESH REDDY
Filing Date	:NA	5)NIMMALA MANGATHAYARU
		6)V. JANAKI
		7)V. SRAVAN KIRAN

## (57) Abstract:

A system for diagnosis of diseases is disclosed. The system receives a medical image and, converts resolution of the medical image into a predefined resolution to obtain a sample image. The system obtains an intensity value matrix upon converting the sample image into gray scale image and obtain a testing data set by converting the intensity value matrix into a test row vector. The system includes a dimensionality reduction module to generate a dimensionality reduced test matrix based on the testing data set and a transformation training matrix obtained from a training data set. The system includes a similarity identification module to identify a similarity value of each row vector of the dimensionality reduced test matrix with a dimensionality reduced training matrix. The system includes a disease classification module to assign a class label of a training row vector to the test row vector based on a maximum similarity value and identify a type of disease present in the medical based on the class label. FIG. 1

No. of Pages: 37 No. of Claims: 9