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

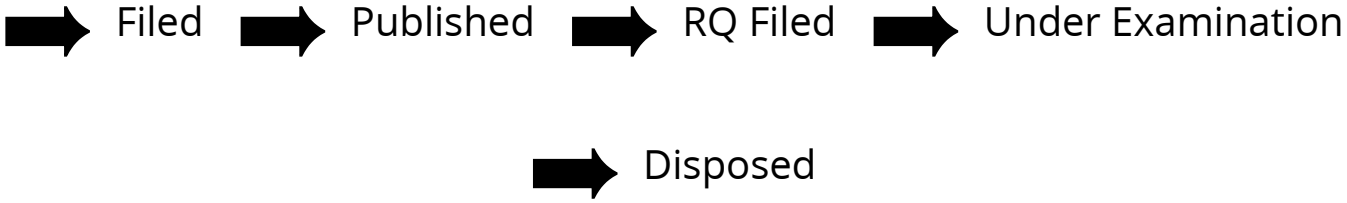
(http://ipindia.nic.in/index.htm)

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

Application Details	
APPLICATION NUMBER	202141054101
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	24/11/2021
APPLICANT NAME	VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
TITLE OF INVENTION	AN ARTIFICIAL INTELLIGENCE (AI) AND INTERNET OF THINGS (IOT) BASED INTEGRATED APPROACH FOR COVID-19 PREVENTION
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	ravirlyfan@gmail.com
ADDITIONAL-EMAIL (As Per Record)	
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	24/12/2021

Application Status	
APPLICATION STATUS	Awaiting Request for Examination

View Documents



In case of any discrepancy in status, kindly contact ipo-helpdesk@nic.in

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/11/2021

(21) Application No.202141054101 A
(43) Publication Date : 24/12/2021

(54) Title of the invention : AN ARTIFICIAL INTELLIGENCE (AI) AND INTERNET OF THINGS (IOT) BASED INTEGRATED APPROACH FOR COVID-19 PREVENTION

(51) International classification :G06K0009000000, H04L0029080000, G06F0008710000, C22C0038380000, G01N0027300000
(86) International Application No :NA
Filing Date :NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number :NA
Filing Date :NA
(62) Divisional to Application Number :NA
Filing Date :NA

(71)**Name of Applicant :**
1)VALLURUPALLI NAGESWARA RAO VIGNANA JYOTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY
Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad- 500090, Telangana State, India ---------- ----------
Name of Applicant : NA
Address of Applicant : NA
(72)**Name of Inventor :**
1)Shiva Madhav
Address of Applicant :Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology (VNRVJIET),Hyderabad ---------- ----------
2)P Jyothi
Address of Applicant :Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology (VNRVJIET),Hyderabad ---------- ----------
3)K Lakshmi Samhita
Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad- 500090, Telangana State, India ---------- ----------
4).B. Rohit
Address of Applicant :Vignana Jyothi Nagar, Pragathi Nagar, Nizampet (S.O), Hyderabad- 500090, Telangana State, India ---------- ----------
5)A Priya Valentina
Address of Applicant :Vallurupalli Nageswara Rao Vignana Jyothi Institute of Engineering and Technology (VNRVJIET),Hyderabad ---------- ----------

(57) Abstract :
A low-cost AI-based screening system that can be installed at various locations. The objective is to automate the task of face mask detection, check for social distancing and body temperature scanning. The dataset consisted of 2314 images combining those without a mask and those with an artificial mask attached to them. These functionalities are carried out by combining AI and IoT technologies. IoT devices are employed with deep learning and computer vision algorithms to achieve a real-time covid screening solution. The objective is to provide a cost-effective solution for automating face mask detection, checking social distancing and temperature sensing by leveraging IoT. Components like Raspberry Pi, IR Temperature Module, Servo Motors, Pi camera, Solenoid Lock, Motion Detector, and Relay are used to achieve the task. The system and method for identification of pople with risk / threat of Covid 19, wherein these components are easily available at a low cost.

No. of Pages : 17 No. of Claims : 4