CERTIFICATE OF GRANT
INNOVATION PATENT

Patent number: 2021102839

The Commissioner of Patents has granted the above patent on 30 June 2021, and certifies that the below particulars have been registered in the Register of Patents.

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Title of invention:

Conceptual framework of Artificial Intelligence in Human Resource Management

Name of inventor(s):

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Term of Patent:

Eight years from 26 May 2021

NOTE: This Innovation 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.

Priority details:

Number	Date	Filed with
202111020974	9 May 2021	IN

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Commissioner of Patents

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Dated this 30th day of June 2021

Commissioner of Patents

Extracts from the Patents Act, 1990

Sect 120(1A)   Infringement proceedings in respect of an innovation patent cannot be started unless the patent has been certified.

Sec 128   **Application for relief from unjustified threats**

(1)   Where a person, by means of circulars, advertisements or otherwise, threatens a person with infringement proceedings or other similar proceedings a person aggrieved may apply to a prescribed court, or to another court having jurisdiction to hear and determine the application, for:

(a)   a declaration that the threats are unjustifiable; and

(b)   an injunction against the continuance of the threats; and

(c)   the recovery of any damages sustained by the applicant as a result of the threats.

(2)   Subsection (1) applies whether or not the person who made the threats is entitled to, or interested in, the patent or a patent application.

Sec 129A   **Threats related to an innovation patent application or innovation patent and courts power to grant relief.**

Certain threats of infringement proceedings are always unjustifiable.

(1)   If:

(a)   a person:

(i) has applied for an innovation patent, but the application has not been determined; or

(ii) has an innovation patent that has not been certified; and

(b)   the person, by means of circulars, advertisements or otherwise, threatens a person with infringement proceedings or other similar proceedings in respect of the patent applied for, or the patent, as the case may be;

then, for the purposes of an application for relief under section 128 by the person threatened, the threats are unjustifiable.

Courts power to grant relief in respect of threats made by the applicant for an innovation patent or the patentee of an uncertified innovation patent

(2)   If an application under section 128 for relief relates to threats made in respect of an innovation patent that has not been certified or an application for an innovation patent, the court may grant the application the relief applied for.

Courts power to grant relief in respect of threats made by the patentee of certified innovation patent

(3)   If an application under section 128 for relief relates to threats made in respect of a certified innovation patent, the court may grant the applicant the relief applied for unless the respondent satisfies the court that the acts about which the threats were made infringed, or would infringe, a claim that is not shown by the applicant to be invalid.

Schedule 1   **Dictionary**

certified, in respect of an innovation patent other than in section 19, means a certificate of examination issued by the Commissioner under paragraph 101E(e) in respect of the patent

(54) Title of the invention : SMART MASK SHAPED MOUTHSET CAPABLE OF ENHANCING AND SYNTHESIZING SPEECH EVEN FROM LIP MOVEMENTS

(51) International classification	:A61B0005048800, H04B0001382700, H04B0001387700, A45F0005000000, B60R0011000000
(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
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Filing Date	:NA

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(57) Abstract :

Abstract: - In today's time, it is very hard to find a person who does not own a mobile phone. Mobile phones are one of the most important innovation which is useful for humans in current digital era. Most of them becoming slave to mobile phone due to its functionality. It is the smallest gadget in invention, which is becoming a basic need of life equivalent to the fundamental needs. Saying about mobile phone the basic purpose of its design is different but now we started using in a different and multifunctional approaches. The first and foremost role that mobile phones play in our lives is that they provide us an easy and fast way of communication. They are not just useful for communication but comes handy in other day to day tasks. If you are carrying the latest smartphone, you don't need to have any extra requirements such as camera, calculator, torch, music player, watch or radio. Your smartphone can do all these tasks easily. And if you are getting bored, you can play games on your phone or chat with your friends. Moreover, with millions of apps available for almost anything you can think of, mobile phones are certainly the most useful tool for us today. In such mobile phone to enhance the features of it, this novel design of accessory have been designed. It consist of multiple data acquisition modules such as Mic, Camera setup and Electromyography setup which are controlled and computed using artificial intelligence based functional arrangements. It plays its vital role to help the dumb person to generate speech from their muscle activity and coveys clear speech of communication even at noisy environment. To make commercial this novel design invention has been given a relevant name to introduce which is referred as Mouthset.

No. of Pages : 13 No. of Claims : 1

(54) Title of the invention : DATA TRAFFIC FREE SECURED MULTICAST INTERFACING IN SMART IOT DEVICES FAVOURED USING WIDEBAND LI-FI TECHNOLOGY

(51) International classification	:H04L0029080000, H04B0010116000, H04W0004700000, H04W0072120000, H04L0009000000	(71)Name of Applicant : 1)Dr. M.R. ARUN Address of Applicant :262-1 A, ANNA STREET EXT, VIVEKANANDA NAGAR, AVADI, CHENNAI, TAMIL NADU, INDIA - 600 054. Tamil Nadu India 2)F. SHABINA FRED RISHMA 3)A. ARSHATH KUMAR
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(87) International Publication No	: NA	5)Dr. B. MUTHU KUMAR
(61) Patent of Addition to Application Number	:NA	6)Dr. HARDEEP SINGH SAINI 7)Dr. G. HELEN RUTH JOICE
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(57) Abstract :

In this emerging digital era the use of internet of things were found to be increasing consistently in every sector day by day. Because of this the data traffic is also found to be gradually exceeding beyond the specified limitation. If such situation persists for long time. expanding of IOT devices in new application becomes difficult to implement. To overcome that minor novel changes were carried out in the networking system of IOT devices using multicast technology through optical Li-Fi communication. This novel innovation in IOT device interface provides considerable reduction of data traffic and favours IOT system modules in upcoming various applications.

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(54) Title of the invention : AI BASED METHOD OF EXAMINING THE STATE OF LUNGS WITH SUSPECTED COVID-19 PATIENTS

(51) International classification	:G06K0009620000, G06N0003040000, G06T0007000000, G06N0003080000, A61B0005000000	(71)**Name of Applicant :** 　**1)Dr. Kamal Upreti** 　　Address of Applicant :Associate Professor, Department of Information Technology, Inderprastha Engineering College, Ghaziabad. Uttar Pradesh India 　**2)Dr. Ranjana Dinkar Raut** 　**3)Dr. Mohd Tajuddin** 　**4)Dr. Mauparna Nandan** 　**5)Dr. G. Yamuna** 　**6)Karamjeet Kaur** (72)**Name of Inventor :** 　**1)Dr. Kamal Upreti** 　**2)Dr. Ranjana Dinkar Raut** 　**3)Dr. Mohd Tajuddin** 　**4)Dr. Mauparna Nandan** 　**5)Dr. G. Yamuna** 　**6)Karamjeet Kaur**
(31) Priority Document No	:NA	
(32) Priority Date	:NA	
(33) Name of priority country	:NA	
(86) International Application No	:NA	
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(87) International Publication No	: NA	
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Filing Date	:NA	

(57) Abstract :

Aspects of the present disclosure relate to an artificial intelligence-based method (100) for examining state of lungs of a COVID-19 suspected patient. The said method comprises of: collecting (102), a plurality of image of computer tomography (CT) of normal lungs, lung™s infected with tumor and lungs infected with COVID-19, classification (104) of the plurality of images into three subsets after collection (102), forming (106) a sample set after the classification (104) of the plurality of images, training (108) of a plurality of convolution neural network such as ImageNet, LeNet, VGGNet 16 and AlexNet with a transfer learning method, inputting (110) the sample set into the trained (108) convolution neural network for obtaining four classifiers, integrating (112) the four classifiers with an ensemble learning method for obtaining an ensemble classifier model for assessing the state of lungs of the COVID-19 suspected patient.

No. of Pages : 16 No. of Claims : 4