

(54) Title of the invention : CNN-LSTM BASED COVID-19 DIAGNOSIS FROM CHEST CT SCANS

<p>(51) International classification :G06N0003040000, C12Q0001700000, G06N0003080000, G06T0007000000, G16H0030400000</p> <p>(86) International Application No :PCT// Filing Date :01/01/1900</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)Dr. Hari Krishna Address of Applicant :Associate Professor, Department of ECE, B V Raju Institute of Technology, Narsapur ----- 2)Dr. K. Santhosh Kumar 3)Dr. V. Tamizhazhagan 4)Mrs. A. Swathi 5)Mr. D. Saravanan 6)Dr. D. Stalin David 7)Mrs. S. Usharani 8)Mr. Shashi Kant Gupta 9)Dr.Raja Chakraborty 10)Mr. Ruhul Amin Name of Applicant : NA Address of Applicant : NA (72)Name of Inventor : 1)Dr. Hari Krishna Address of Applicant :Associate Professor, Department of ECE, B V Raju Institute of Technology, Narsapur ----- 2)Dr. K. Santhosh Kumar Address of Applicant :Assistant Professor, Department of Information Technology, Annamalai University, Chidambaram. ----- 3)Dr. V. Tamizhazhagan Address of Applicant :Assistant Professor, Department of Information Technology, Annamalai University, Chidambaram. ----- 4)Mrs. A. Swathi Address of Applicant :Research Scholar, Department of CSE, SRM Institute of Science and Technology, Chennai ----- 5)Mr. D. Saravanan Address of Applicant :Associate Professor, Department of CSE, IFET College of Engineering, Villupuram, 605108. ----- 6)Dr. D. Stalin David Address of Applicant :Assistant Professor, Department of CSE, IFET College of Engineering, Villupuram, 605108. ----- 7)Mrs. S. Usharani Address of Applicant :Associate Professor, Department of CSE, IFET College of Engineering, Villupuram, 605108. ----- 8)Mr. Shashi Kant Gupta Address of Applicant :Researcher, Department of CSE, Integral University, Lucknow, UP, India ----- 9)Dr.Raja Chakraborty Address of Applicant :Associate Professor, Department of Pharmaceutical Technology, School of Medical Science, ADAMAS University, Barrackpore-Barasat Rd, 24 Parganas North, Jagannathpur, Kolkata-700126 ----- 10)Mr. Ruhul Amin Address of Applicant :Assistant Professor, Faculty of Pharmaceutical Science, Assam down town University, Panikheti, Guwahati-781026 -----</p>
--	---

(57) Abstract :
The use of CNN-based architectures in disease diagnostic aided systems results from advancements in deep learning and the availability of medical imaging data in the field. However, CT scans may be used as a complement to reverse transcription-polymerase chain reaction (RT-PCR)-based studies because of their high sensitivity rates. COVID-19 pneumonia and non-COVID-19 pneumonia are studied here utilizing deep learning approaches that may be easily deployed in any hospital.

No. of Pages : 18 No. of Claims : 5