(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(51) International

(86) International

Filing Date (87) International

(61) Patent of Addition

to Application Number

Filing Date

Application Number

Filing Date

(62) Divisional to

Application No

Publication No

classification

(22) Date of filing of Application :30/12/2021

:G06N0003040000, G16H0050200000,

G06K0009620000, G06T0007000000,

G06N0003080000

:NA

:NA

: NA

:NA

:NA

:NA

:NA

(21) Application No.202111061704 A

(43) Publication Date: 07/01/2022

(54) Title of the invention : A SYSTEM FOR DISEASE DETECTION IN PLANTS USING DEEP CONVOLUTIONAL NEURAL NETWORK AND METHOD THEREOF

(71)Name of Applicant:

1)Dr. Nabeel Ahmad

Address of Applicant :Associate Professor & Head, School of Biotechnology, IFTM University Moradabad U.P. India 244102 ------

2)Dr Arvind Kumar Shukla

3)Dr. Preeti Bala

4)Mr. Rajan Prasad

5)Dr. Abhishek Kumar Mishra

6)Dr. Rakesh Kumar Yadav

7)Mr. Adnan Ahmad

8)Om Prakash Singh

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor:

1)Dr. Nabeel Ahmad

Address of Applicant : Associate Professor & Head, School of

Biotechnology, IFTM University Moradabad U.P. India 244102 -----

2)Dr Arvind Kumar Shukla

3)Dr. Preeti Bala

Address of Applicant :Assistant Professor, Department of Computer Application, SRMIST, Delhi-Meerut Road, Modinagar, U.P. 201204 ----

4)Mr. Rajan Prasad

Address of Applicant :Associate Professor, Department of Computer Science & Engineering, Babu Banarasi Das University, Lucknow-206028, U.P. India -------

5)Dr. Abhishek Kumar Mishra

Address of Applicant :Associate Professor, Department of Computer Science & Engineering, SCS & A, IFTM University, Moradabad UP, India 244102 ------

6)Dr. Rakesh Kumar Yadav

Address of Applicant :Assistant Professor, Department of Computer Science & Engineering, SCS & A, IFTM University, Moradabad UP, India 244102 ------

7)Mr. Adnan Ahmad

Address of Applicant :Assistant Professor, Department Of Bioengineering, Integral University, Lucknow U.P. India 226022 -----

8)Om Prakash Singh

Address of Applicant :Department of Computer Science & Engineering, Dr. K.N. Modi Institute of Engineering and Technology, Modinagr, Ghaziabad, 201204, U.P. India -------

(57) Abstract:

The present invention discloses a system for disease detection in plant leaves using deep convolutional neural network and method thereof. The present invention is comprised of, but not limited to, a processing unit communicatively coupled with a memory unit for collecting dataset containing various image set of plant leaves. Further, the dataset collected, can contain a plurality of images of plant leaves distributed proportionally among various classes—cedar rust, multiple diseases, and healthy leaves.

No. of Pages: 19 No. of Claims: 4