

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202041026335 A

(19) INDIA

(22) Date of filing of Application :22/06/2020

(43) Publication Date : 03/07/2020

(54) Title of the invention : CLASSIFICATION OF BLOOD CELL USING MULTI AND HYPER SPECTRAL IMAGES USING CONVOLUTIONAL NEURAL NETWORKS

(51) International classification

:A61B
3/00

(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

(62) Divisional to Application Number

:NA

Filing Date

:NA

(71)Name of Applicant :

1)Dr.K.Balasubadra

Address of Applicant :Professor, Dept of IT, R.M.D
Engineering College, R.S.M Nagar, Kavaraipettai, Tiruvallur Dist,
Tamilnadu, India-601206. Tamil Nadu India

2)Dr.R.Sasikumar

3)Dr.V.Prasanna Srinivasan

4)Mr.K.Balachander

5)Mr.K.Saravanan

6)Mr.K.Mohana Sundaram

7)Mr. Umamageswaran J

8)Ms.Badi Alekhya

(72)Name of Inventor :

1)Dr.K.Balasubadra

2)Dr.R.Sasikumar

3)Dr.V.Prasanna Srinivasan

4)Mr.K.Balachander

5)Mr.K.Saravanan

6)Mr.K.Mohana Sundaram

7)Mr. Umamageswaran J

8)Ms.Badi Alekhya

(57) Abstract :

In the field of biomedical, RBCs, WBCs, and platelets are the blood cell classification where they must be analyzed to predict the diseases in patients and make them undergo appropriate treatment. By using sensors, multi spectral images are obtained. But for detailed analysis, the image pixel captured is broken into N number of pixels called hyperspectral images, based on different required classification. To receive the desired result with the detailed feature, convolution neural networks are adopted in the process. For computer vision, it extracts the desired feature images by applying max polling in CNN. Then, it was fine-tuned by activation function to get the desired result.

No. of Pages : 11 No. of Claims : 4