

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202331022410 A

(19) INDIA

(22) Date of filing of Application :27/03/2023

(43) Publication Date : 07/04/2023

(54) Title of the invention : A self controlled UAV based forest fire detection system

(51) International classification :A62C 030200, B64C 390200, G08B 170000, G08B 251000, H04W 720400
(86) International Application No :PCT//
Filing Date :01/01/1900
(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)Brainware University, Kolkata

Address of Applicant :398, Ramkrishnapur Rd, Near Jagadighata Market, Barasat, Kolkata, West Bengal 700125 -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Mr. Animesh Upadhyaya

Address of Applicant :Student, Brainware University, 398, Ramkrishnapur Rd, near Jagadighata Market, Barasat, Kolkata, West Bengal 700125 -----

2)Mr. Koushik Mukhopadhyay

Address of Applicant :Assistant Professor, Brainware University, 398, Ramkrishnapur Rd, near Jagadighata Market, Barasat, Kolkata, West Bengal 700125 -----

3)Mr. Sitikantha Chattopadhyay

Address of Applicant :Assistant Professor, Brainware University, 398, Ramkrishnapur Rd, near Jagadighata Market, Barasat, Kolkata, West Bengal 700125 -----

4)Mr. Subhra Prokash Dutta

Address of Applicant :Assistant Professor, Brainware University, 398, Ramkrishnapur Rd, near Jagadighata Market, Barasat, Kolkata, West Bengal 700125 -----

5)Mr. Shiplu Das

Address of Applicant :Assistant Professor, Brainware University, 398, Ramkrishnapur Rd, near Jagadighata Market, Barasat, Kolkata, West Bengal 700125 -----

6)Dr. Debdutta Pal

Address of Applicant :Professor, Brainware University, 398, Ramkrishnapur Rd, near Jagadighata Market, Barasat, Kolkata, West Bengal 700125 -----

7)Dr. Shivnath Ghosh

Address of Applicant :Associate Professor, Brainware University, 398, Ramkrishnapur Rd, near Jagadighata Market, Barasat, Kolkata, West Bengal 700125 -----

(57) Abstract :

[027] The present invention discloses a kind of forest fire protection emergency alarm device, including camera module, microprocessor module, alarm module, communication module. The UAV itself a master control module, from a particular zone the UAV is following on his predefined latitudes and longitudes of forest range. Including intelligent monitoring device and monitoring aperture being uniformly distributed in inside forest. Through the camera module the, the microprocessor analyzing the fire across forest area. When UAV controller analyze the fire then it triggered the alarm through LoRa module. LoRa gateway wirelessly connected to the cloud server, cloud sever station act in real-time. real-time monitoring to forest environment, and certain pre-processing can be carried out to fire hazard, incipient fault data is sent to monitor supervision platform in time.

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