(19) INDIA

(51) International

(86) International

Filing Date (87) International

Application Number

Filing Date (62) Divisional to

Application Number

Filing Date

(61) Patent of Addition to

Application No

Publication No

classification

(22) Date of filing of Application :21/09/2023

:B64C0039020000, G06Q0030020000,

G05D0001100000, G06T0017050000,

B64D0047080000

:NA

:NA

: NA

:NA

:NA

:NA

:NA

(43) Publication Date: 06/10/2023

(54) Title of the invention : OPTIMISATION OF MULTI WAVELENGTH DRONE IMAGES FOR BETTER VISUALISATION USING GEO REFERENCE MODEL

(71)Name of Applicant:

1)G. Ravi

Address of Applicant :Assistant Professor, ECE Department, St peters engineering college, Hyderabad-500100, India. ------

2)Parth Shrivastava

3)Dr. S. Murugaveni

4)Dr. Markkandan S

5)Dr. M. Ramkumar Prabhu

6)Sai Sundara Sriramam Yadavalli

7)Dr. Thummala Ranga Babu

8)P. Sivaprasad

Name of Applicant : NA Address of Applicant : NA

(72)Name of Inventor:

1)G. Ravi

Address of Applicant :Assistant Professor, ECE Department, St peters engineering college, Hyderabad-500100, India. ------

2)Parth Shrivastava

3)Dr. S. Murugaveni

Address of Applicant :Department of Electronics and Communication Engineering, SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, India. ----

4)Dr. Markkandan S

Address of Applicant :Assistant Professor (Senior), School of Electronics Engineering (SENSE), Vellore Institute of Technology, Chennai, Tamil Nadu, India

5)Dr. M. Ramkumar Prabhu

6)Sai Sundara Sriramam Yadavalli

Address of Applicant :Assistant Professor, Department of ECE S.R.K.R. Engineering College, Bhimavaram, A.P, India.

7)Dr. Thummala Ranga Babu

Address of Applicant :Professor & HOD, ECE Department, RVR & JC College of engineering, Chowdavaram ------

8)P. Sivaprasad

Address of Applicant :Assistant professor, ECE Department, RVR & JC College of engineering, A.P ------

(57) Abstract:

OPTIMISATION OF MULTI WAVELENGTH DRONE IMAGES FOR BETTER VISUALISATION USING GEO REFERENCE MODEL Abstract: The present invention discloses a novel system and method for optimizing multi-wavelength drone images through the seamless integration of multi-spectral and thermal data with a Geo-reference model. Unmanned aerial vehicles (UAVs) equipped with advanced sensors capture data from target areas, which is subsequently processed and integrated into a precise spatial framework. The integrated data is then subjected to visualization enhancement techniques, facilitating improved interpretation and decision-making in applications such as agriculture, environmental monitoring, infrastructure assessment, and land surveying. The innovation addresses longstanding challenges in remote sensing by providing a comprehensive solution that enhances the accuracy, efficiency, and utility of multi-wavelength drone imaging. The system's versatility and adaptability to diverse sectors underscore its potential for revolutionizing data acquisition and analysis in dynamic environments.

No. of Pages: 10 No. of Claims: 9