

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311066561 A

(19) INDIA

(22) Date of filing of Application :04/10/2023

(43) Publication Date : 20/10/2023

(54) Title of the invention : A SYSTEM AND METHOD FOR DEPLOYING A MODULAR AERIAL VEHICLE WITH EXPANDABLE DEPLOYABLE COMPONENTS

(51) International classification :H04W007400000, G06F0009445000, B64C0039020000, A61B0005000000, G06F0012020000

(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)Chitkara University**

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

**2)Bluest Mettle Solutions Private Limited**

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

**1)MISHRA, Rahul**

Address of Applicant :ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune -----

**2)SINGH, Dhiraj**

Address of Applicant :ODC-4, Panchshil Tech Park, inside Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune - 411057, Maharashtra, India. Pune -----

**3)MANTRI, Archana**

Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

(57) Abstract :

Embodiments of the present disclosure relates to a system (100) and method (300) for deploying a modular aerial vehicle with expandable deployable components. The system (102) comprises a processor (202) coupled to a memory (204). The memory (204) stores processor-executable instructions. The processor (202) is configured to attach a plurality of expandable deployable components to one or more expansion slots of a base platform. Next, the processor (202) is configured to establish one or more communication channels and one or more electrical connections between the base platform and the plurality of expandable deployable components. Thereafter, the processor (202) is configured to configure the plurality of expandable deployable components to customize a functionality of the modular aerial vehicle. In the end, the processor (202) is configured to detach outdated expandable deployable components to attach upgraded expandable deployable components to the one or more expansion slots based on the configuration.

No. of Pages : 25 No. of Claims : 10