

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202331022414 A

(19) INDIA

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

(43) Publication Date : 07/04/2023

(54) Title of the invention : A trust evaluation system for selecting leader drones in clustered Flying Ad-hoc Network

(51) International classification :B64C 390200, G05D 011000, G06Q 100600, H04M 090800, H04W 841800  
(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

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(57) Abstract :

FANETs are capable to self-organize and provide flying nodes that are inexpensive, highly multifunctional, and simple to deploy, enabling them to operate together to accomplish challenging jobs more rapidly. The high node mobility and the extremely variable topology provide difficulties for communication design, especially when designing a routing protocol for UAV networks. The multilayer routing system is required to provide flexibility, durability, and payload distribution across UAVs to preserve efficiency. The cluster head (CH) performs the coordination function inside the sub cluster. The CH in each cluster is thought as a temporary Base Station (BS). The Network nodes are organized into a sequence of overlapping clusters. By preserving paths between clusters instead of only between nodes, clustering enables hierarchical routing. It enhances system flexibility, lengthens the lifespan of routes, boosts throughput, lowers routing complexity, and conserves UAV power.

No. of Pages : 20 No. of Claims : 4