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(51) International classification:H04B0007185000, G08G0005000000, H04W0088060000, H04W0004800000, A61P0027020000(86) International Application No Filing Date:NA(87) International Publication No (61) Patent of Addition Filing Date:NA(61) Patent of Addition Filing Date:NA(61) Polication Number Filing Date:NA(62) Divisional to Filing Date:NA(63) Divisional to Filing Date:NA	<ul> <li>(71)Name of Applicant :</li> <li>1)Chitkara University <ul> <li>Address of Applicant :Chitkara University, Chandigarh-Patiala</li> <li>National Highway, Village Jhansla, Rajpura, Punjab - 140401,</li> <li>India. Patiala</li></ul></li></ul>
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## (57) Abstract :

The present invention introduces an Open Wireless Architecture (OWA) system that seamlessly integrates airborne and terrestrial communication networks. The OWA system comprises one or more airborne networks, one or more terrestrial networks, and a diverse set of open standards and protocols enabling efficient communication between them. By adhering to open standards, the OWA system promotes interoperability, fostering flexibility and scalability. Real-time data exchange capabilities enhance decision-making and operational efficiency, while multifaceted communication supports voice, video, and data exchange, including critical information like flight plans and weather updates. The OWA system's future compatibility ensures integration with emerging wireless technologies, such as 5G and UAVs systems. Additionally, the system includes a Quality of Service (QoS) management engine, prioritizing data traffic and optimizing communication range and quality. The OWA system represents a significant advancement in wireless communication, unlocking new possibilities for enhanced connectivity and collaboration between airborne and terrestrial entities in various domains.

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