(12) PATENT APPLICATION PUBLICATION

(21) Application No.202311023991 A

(19) INDIA

(22) Date of filing of Application :30/03/2023 (43) Publication Date : 19/05/2023

## (54) Title of the invention : AIRCRAFT BOOKING MANAGEMENT SYSTEM USING BLOCKCHAIN AND METHOD THEREOF

(71)Name of Applicant: 1)Chitkara University Address of Applicant : Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, (51) International :B64D 110000, G06Q 100200, G06Q India. Patiala ----classification 501200, H04L 090600, H04L 093200 2) Bluest Mettle Solutions Private Limited (86) International Name of Applicant: NA  $\cdot PCT//$ Application No Address of Applicant: NA :01/01/1900 Filing Date (72)Name of Inventor: (87) International 1)MISHRA, Rahul : NA Publication No Address of Applicant :ODC-4, Panchshil Tech Park, inside (61) Patent of Addition to Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune -:NA 411057, Maharashtra, India. Pune -----Application Number :NA Filing Date 2)PANDEY, Sakshi (62) Divisional to Address of Applicant :ODC-4, Panchshil Tech Park, inside :NA Application Number Courtyard by Marriott premises, Hinjewadi Phase - 1, Pune -:NA Filing Date 411057, Maharashtra, India. Pune -----3)SHARMA, Bhanu Address of Applicant : Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----

## (57) Abstract:

The present disclosure relates to a system (100) for managing aircraft bookings using blockchain technology and artificial intelligence. The system includes a decentralized database (112) that connects to a blockchain network and an AI engine (102) with various modules. The system (100) verifies identity of passengers using biometric data, and generates tickets based on predetermined conditions and executes specified actions. The system stores data related to each aircraft, including manifests, trajectories, and luggage onboarding, on the digital ledger. The administrative module utilizes the digital ledger to streamline administrative procedures related to cargo handling, fuel management, and maintenance, while the revenue calculation module calculates revenue distribution based on a predetermined set of criteria. The system also includes a data storage module to store data related to loyalty programs, lodging, ground transportation, and non-airline-related services.

No. of Pages: 24 No. of Claims: 10