(19) INDIA

(22) Date of filing of Application :03/10/2023 (43) Publication Date : 20/10/2023

(54) Title of the invention: SYSTEM AND METHOD FOR AGRICULTURAL MONITORING USING AN UNMANNED AERIAL VEHICLE

(71)Name of Applicant: :B64C0039020000, G06T0007000000, 1)Chitkara University (51) International A01M0007000000, A01B0079000000, Address of Applicant : Chitkara University, Chandigarh-Patiala classification H04N0007180000 National Highway, Village Jhansla, Rajpura, Punjab - 140401, (86) International India. Patiala -----:NA Application No 2) Chitkara Innovation Incubator Foundation :NA Filing Date Name of Applicant: NA (87) International Address of Applicant: NA : NA Publication No (72)Name of Inventor: (61) Patent of Addition:NA 1)MASIH, Jolly to Application Number :NA Address of Applicant :BML Munjal University, 67th Milestone, Filing Date NH 48, Kapriwas, Gurgaon - 122413, Haryana, India. Gurgaon ---(62) Divisional to :NA **Application Number** 2)MITTAL, Amit :NA Filing Date Address of Applicant :224, Sector 8, Ambala City, Distt: Ambala -134003, Haryana, India. Ambala -----

(57) Abstract:

The present disclosure discloses a system (100) to monitor an agricultural field, the system may include an image acquisition unit (104) attached to an unmanned aerial vehicle (UAV) (102) to acquire an image of an area of interest in the agricultural field, while the UAV flight in the agricultural field. In addition, a processing unit (106) is configured to analyse the received image and determine, level and type of one or more plant diseases on at least one of the plants in the agricultural field, further store the determined level and type of the one or more plant diseases and location information on a server (108), and the server is accessible by one or more entities. Further, the UAV (102) uses less energy to operate because it is small and has a shape that does not threaten living organisms such as butterflies, and honeybees in an agricultural environment.

No. of Pages: 30 No. of Claims: 10