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(54) Title of the invention : SYSTEM TO CONTROL AN UNMANNED AIRCRAFT VEHICLE TO DETECT PLANT DISEASE AND SPRAY FLUID

<p>(51) International classification :B64C0039020000, A01M0007000000, G06Q0050020000, G05D0001000000, A01B0079000000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)Chitkara University Address of Applicant :Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----</p> <p>2)Chitkara Innovation Incubator Foundation Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)LAMBA, Shweta Address of Applicant :Chitkara University Institute of Engineering & Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----</p> <p>2)BALIYAN, Anupam Address of Applicant :Chitkara University Institute of Engineering & Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----</p> <p>3)KUKREJA, Vinay Address of Applicant :Chitkara University Institute of Engineering & Technology, Chitkara University, Chandigarh-Patiala National Highway, Village Jhansla, Rajpura, Punjab - 140401, India. Patiala -----</p> <p>4)UPADHYAY, Rishabh Address of Applicant :SCO 121, Industrial Area Phase 2, Chandigarh - 160002, India. Chandigarh -----</p>
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(57) Abstract :

The present disclosure discloses a system (100) for controlling an unmanned aircraft vehicle (UAV) (102), first sensors and second sensors attached to a various positions in the agricultural field to detect one or more attributes and movements in the agricultural field, and an image acquisition unit (108) attached the UAV (102) acquires images of the agricultural field. The proposed system (100) detects plant diseases in the agricultural field based on the detected attributes and images, and enables the UAV (102) to spray fluid i.e. water, fertilizer, and chemicals in the agricultural field according to the detected plant disease. Additionally, the system (100) is configured to detect animals in the agricultural field and automatically repel animals from the agricultural field, by producing high-frequency sounds from alert units (116).

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