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(54) Title of the invention : UNMANNED AERIAL VEHICLE (UAV) BASED IMAGING SYSTEM

(51) International classification	:B64C0039020000, G06K0009000000, G06T0007000000, H04N0007180000, G06F0016510000	(71) <b>Name of Applicant :</b> <b>1)Chitkara Innovation Incubator Foundation</b> Address of Applicant :SCO: 160-161, Sector - 9c, Madhya Marg, Chandigarh- 160009, India. Chandigarh India
(31) Priority Document No	:NA	(72) <b>Name of Inventor :</b>
(32) Priority Date	:NA	<b>1)SOOD, Vishakha</b>
(33) Name of priority country	:NA	<b>2)GUSAIN, Hemendra Singh</b>
(86) International Application No	:NA	<b>3)GUPTA, Sheifali</b>
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(57) Abstract :

The present disclosure discloses an Unmanned Aerial Vehicle (UAV) based imaging system 100 for monitoring and forecasting about hazards and disasters, such as landslide, flood, drought, and the like. The UAV based imaging system 100 can include imaging units 102, such as a tracking camera 102-1 and a main camera 102-2 that can be operatively coupled to UAV 110, a processing unit 104, a positioning unit 106, a driving unit 108, an altimeter 112, and a magnetometer 114. The UAV based imaging system 100 can obtain one or more images through the tracking camera 102-1, and can detect a region of interest (ROI) from the obtained images. Further, the UAV 110 moves towards the detected ROI to capture and analyze HD images of the ROI through the main camera 102-2 to monitor and forecast about hazards and disasters.

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