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(57) Abstract :

The present disclosure relates to a geospatial sensing device (100). The device (100) has housing (102) where an image acquisition unit (104) is attached to the housing (102) to provide textural and spectral information of an area. A set of sensors (106) are attached to the housing (102) to detect one or more geospatial parameters of an area. Additionally a near-infrared (NIR) sensor is (108) attached to the housing to detect one or more objects, while a positioning unit (110) is configured to detect location information of an area. A processing unit (112) is operatively coupled to the image acquisition unit (104), set of sensors (106), the NIR sensor (108), and the positioning unit (110), where the processing unit (112) generates a map based on the temporally, spatially aligned information and produces a plurality of visual features in the map representation using one or more algorithms.

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