

(54) Title of the invention : Multi-functional Cost-effective Smart Pole for Early Flood Detection and Rescue Operations

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(57) Abstract :
ABSTRACT: Title: Multi-functional Cost-effective Smart Pole for Early Flood Detection and Rescue Operations The present disclosure proposes a multi-functional smart flood pole integrated with plurality of sensors and communication network for early detection of floods and boat capsizes and alerts to the emergency response authorities. The smart flood pole comprises a solar panel 102, a controller 104, a battery unit 106, and a remote surveillance unit 108, a pollution monitoring sensor 110, a weather sensing unit 112, a communication module 114, a remote storage 116 and a processing module 118. The system integrates plurality of components into the pole structure, making the multi-functional smart flood pole self-sustained and cost-effective. The multi-functional smart flood pole is utilized to provide early flood warning to evacuate vulnerable groups such as children, pregnant women, and other people from the flood prone areas by early detection of floods.

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