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(54) Title: A REMOTE SENSING DEVICE

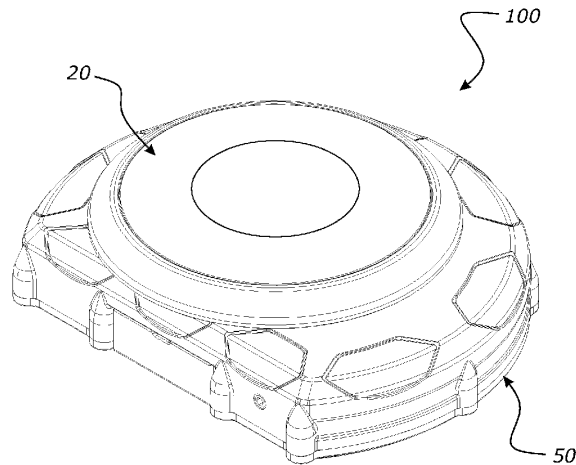


FIG. 1

(57) Abstract: A remote sensing system and device is provided for monitoring a condition within an infrastructure network. In particular, the system and device are configured to monitor components of civil water infrastructure such as sewers, rainwater infrastructure, freshwater infrastructure, manholes, catch pits, sewers, or outlets etc. The device includes an antenna unit having an elongate hollow shaft depending therefrom, and a monitoring unit for housing electrical components including a sensor for detecting a parameter. The monitoring unit is removably mounted to the antenna unit via the shaft, and connected to a component of the infrastructure being monitored, for example manhole cover or lid. The antenna unit and monitoring unit are separate and individually water-tight structures, and the elongate hollow connection shaft makes an essentially rigid connection, while finding a passageway between antenna unit and monitoring unit.

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