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(54) **Title: IOT SENSORS FOR MONITORING CURING OF CONCRETE AND MONITORING HEALTH OF RESULTING CONCRETE STRUCTURE**

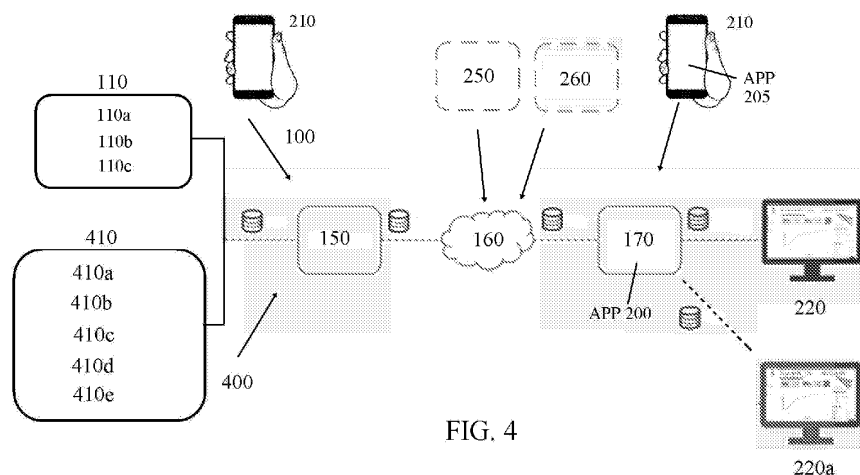


FIG. 4

(57) **Abstract:** The invention describes IoT sensors (110) and a system (100) for monitoring in-situ curing of concrete. The IoT sensors include temperature and moisture sensors (110a, 110b). These sensors are embedded in a curing concrete and real-time curing temperature and moisture data from the sensors are sent to a data centre (160) and control station (170). With a software application (200), the curing parameters are interpreted to determine the strength that has developed in the concrete. The results of computation are displayed on a user dashboard (220), in a graphical form, together with information on the mix of the concrete. A mobile device (210) is provided to facilitate registering and inputting locations of the IoT sensors. A gateway device (150) is provided to aggregate data from a plurality of IoT sensors. Additional sensors (410a, 410a-410e) are embedded in the curing concrete to monitor (400) the health or integrity of the concrete structure.

[Continued on next page]

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