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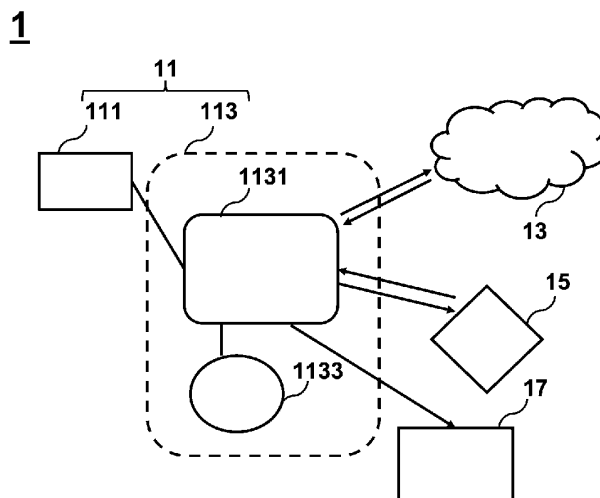


FIG. 1

(57) Abstract: A material monitoring system (1) for casting concrete includes a monitoring device (11) having a body (113) and an integrated sensor (111), and the monitoring device (11) is an internet of things (IoT) device. The body (113) of the monitoring device (11) is installed with a power supply (1133) and a central processing unit (1131). The integrated sensor (111) is used to measure the real-time temperature and real-time electrical resistance of concrete. Further, the integrated sensor (111) is connected to the bottom surface of the body (113), and the integrated sensor (111), the power supply (1133), and the central processing unit (1131) are electrically connected. The integrated sensor (111) is immersed in the concrete while the body (113) is situated on the surface of the concrete when the monitoring device (11) is used.

[Continued on next page]



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