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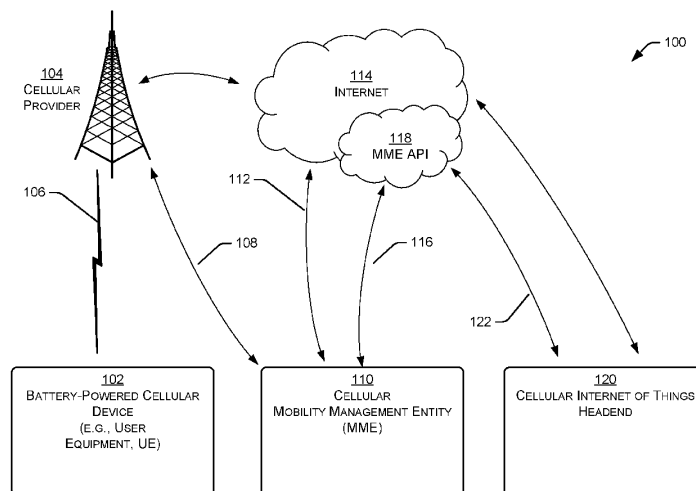


FIG. 1

(57) Abstract: Techniques for operating cellular internet of things (IoT) devices under a public cellular carrier are disclosed. During an active connection, the cellular IoT device's radio-controlling application can collect radio metrics by tapping into the diagnostics interface of IoT device's cellular modem to collect data regarding accumulative signal strength, block/bit error rate, and/or round-trip latency for the session, etc. During the active connection, battery and environmental information as well as application-based information can be collected and sent to a remote computing device. In an example, the cellular IoT device can be given revised or refined values for use in timers, which may be used by the device to more efficiently use idle and/or power-save modes to reduce battery power consumption. Moreover, the use of the timers may be extended to devices distinct from the cellular modem, thereby increasing the utility of the timers and the functionality of the IoT device.

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