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(54) **Title:** HAZARDOUS LOCATION COMPLIANT CIRCUIT PROTECTION DEVICES HAVING ENHANCED SAFETY INTELLIGENCE, SYSTEMS AND METHODS

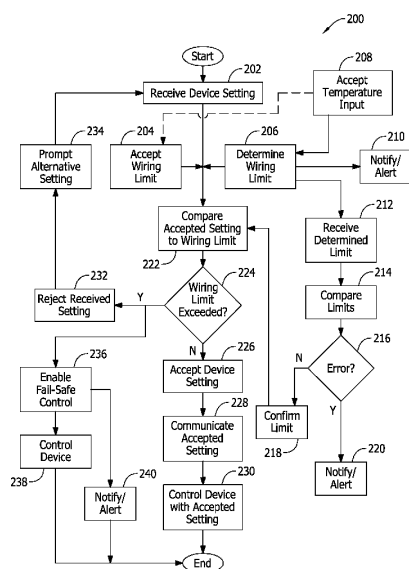


FIG. 5

(57) **Abstract:** Compliant electrical circuit protection devices are described for use in hazardous environments without presenting ignition risks for potentially explosive environmental conditions. Sensing features and systems may evaluate wiring limits and user selected settings for compatibility, detect loose connections and operating parameters to ensure safe operation of the device, and to intelligently diagnose and manage issues of concern for the circuit protection devices as well as the larger electrical power system.

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