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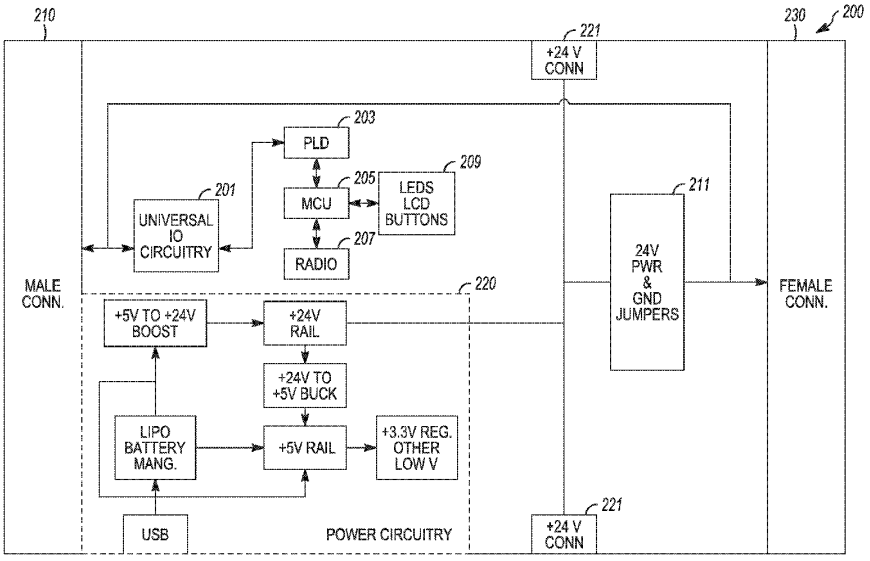


FIG. 2

(57) Abstract: Various embodiments include methods and apparatuses to test production tools and related electrical components therefor including individual printed-circuit boards (PCBs). In one example, a test-plug hardware-platform includes at least one input/output (I/O) connector, and a configurable control system to provide command and operational signals through the I/O connector and collect data through the I/O connector from at least one PCB under test. A wireless-mesh network within the test-plug hardware-platform can interface wirelessly with at least the PCB under test. The at least one PCB operating within a production tool or other piece of equipment. Other methods and systems are disclosed.

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