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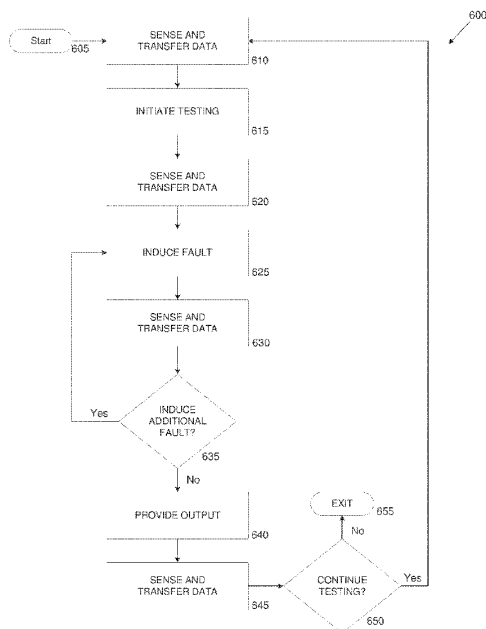


FIG. 4

(57) Abstract: An apparatus configured to test an electrical system including one or more power supplies, a load, and one or more protective-isolation devices disposed between the power supplies and the load. The apparatus has a first measurement assembly configured to sense a first voltage or current at an input side of the one or more power supplies, a second measurement assembly configured to sense a second voltage or current at an output side of the supplies, and a third voltage or current between the one or more protective-isolation devices and the load, and a power controller electrically disposed between the second or third measurement assembly and a fault assembly. The fault assembly and the power controller are configured to selectively induce a fault, which is selected from a plurality of fault-types, either to the output side of the electrical system or between the one or more protective-isolation devices and the load.

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