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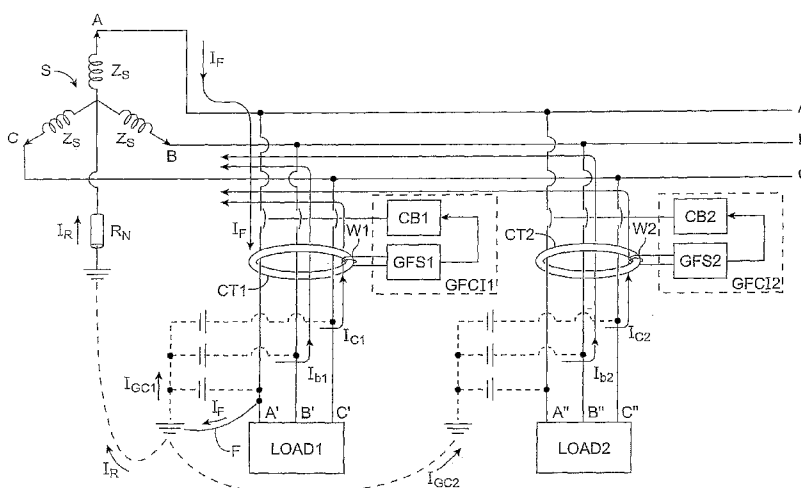
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(54) Title: A GROUND-FAULT CIRCUIT-INTERRUPTER SYSTEM FOR THREE-PHASE ELECTRICAL POWER SYSTEMS



(57) Abstract: A ground-fault circuit-interrupter method and system for three-phase electrical power systems including a plurality of GFCI units and a processor forming a ground-fault circuit interrupting system for use in a three-phase power distribution network including a three-phase source of electrical power, a three- or four- wire main circuit, and a plurality of three- or four- wire feeder circuits connected across the main circuit. A GFCI unit is provided in the main circuit and in each of the feeder circuits. The processor is programmed to continuously monitor the main GFCI unit and each feeder GFCI unit to determine when and where a fault has occurred and, in response thereto, to interrupt the faulted circuit and to inhibit tripping of the non-faulted circuits. The novel GFCI system is applicable for solidly-grounded, resistance-grounded, or ungrounded as well as other three-phase systems.

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