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## (54) ELECTRICAL ARC-FLASH PROTECTION BASED ON PERSONNEL PROXIMITY **SENSING**

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(57)ABSTRACT

A system includes a plurality of sensors, a processor, and a notification system. The plurality of sensors detects personnel within a proximity from an electrical equipment. The processor obtains data from the electrical equipment and the detection from the plurality of sensors; calculates safety parameters based on the data and the detection; and controls one or more Overcurrent Protective Devices (OCPDs), dynamically and without human intervention, by changing a plurality of relay settings based on the safety parameters. The notification system obtains information comprising the control and safety parameters from the processor and notifies the information to related personnel.

