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(54) **AN ELECTRICAL APPLIANCE**

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ABSTRACT

An electrical appliance comprising: a plurality of electrical loads, each electrical load being powered from a common power source; a controller including a processor coupled to a memory, wherein the memory has stored therein a sequence of numbers and a plurality of numerical ranges, each numerical range being associated with a respective electrical load from the plurality of electrical loads; and a plurality of switches, each electrical switch being electrically coupled to the power source, the controller, and a respective electrical load of the plurality of electrical loads; wherein the appliance is configured to iteratively: select, by the controller, a plurality of numbers from the sequence of numbers; generate, by the controller, a switching signal for any electrical load of the plurality of electrical loads which is associated with a respective numerical range which includes a number from the plurality of numbers; and activate, for each switching signal, a respective switch of the plurality of switches to electrically connect the respective electrical load to the power source over a period of time.

