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(54) Title: AUTOMATED EXTERNAL DEFIBRILLATOR

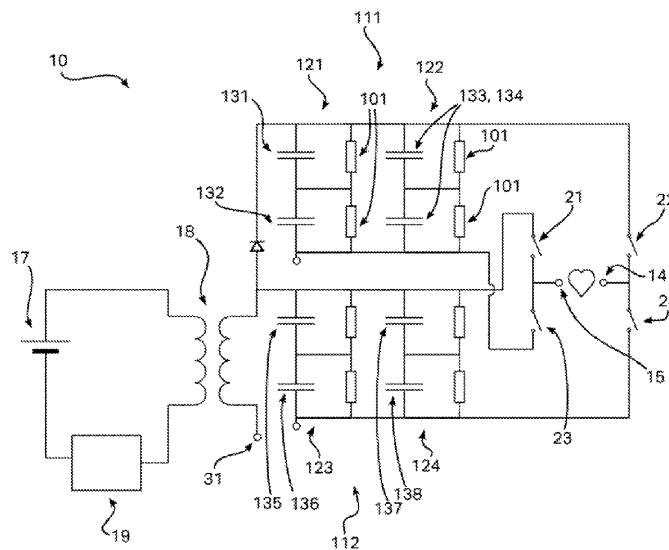


FIGURE 5

(57) **Abstract:** Described is an automated external defibrillator (AED). The AED comprises two pads for placement on a patient, each pad comprising an energy storage system. The energy storage system comprises at least two energy storage blocks, a switching circuit and a shock generation circuit connected to the two pads, and a controller connected to the switching circuit and the shock generation circuit. The controller is configured to perform an electrical switching operation to provide a defibrillation shock in two phases, such that the voltage and a peak current in each of the two phases is substantially the same. Each energy storage block comprises at least one or more capacitors. In some aspects at least one of the energy storage blocks including two or more capacitors connected in series, and at least two energy storage blocks are connected in parallel so that the capacitor system includes capacitors connected both in series and in parallel with each other.

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