



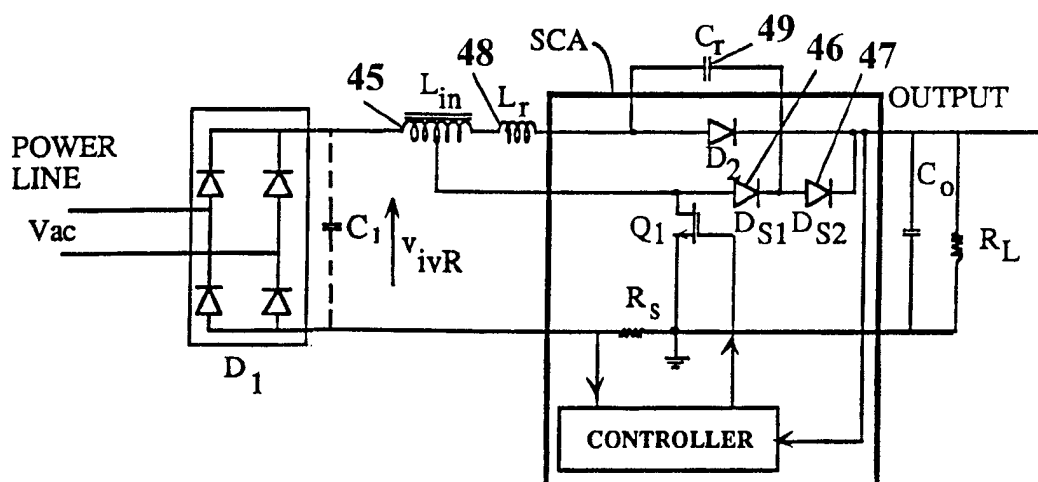
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(54) Title: MODULAR APPARATUS FOR REGULATING THE HARMONICS OF CURRENT DRAWN FROM POWER LINES



(57) Abstract

Modular apparatus for regulating the harmonics of current drawn from power lines by electric equipment, comprising a first rectifier circuit module, consisting of an array of rectifying diodes; a second Switch and Controller Assembly (SCA) module, which comprises a power switch and controller and their interconnections; an input inductor for filtering the current drawn from the rectifier module; and an output capacitor, for filtering the output voltage ripple at the load. The inlet of the rectifier is connected to the power line and an outlet of the rectifier module is connected to the SCA. The inlet of said SCA is connected to the rectifier, via an inductor and the outlet of said SCA is connected to the output capacitor. The inlet of the inductor is connected to the rectifier, the outlet of the inductor is connected to the inlet of said SCA, and the capacitor is connected in parallel with the load.