# ABSTRACT

## POWER ADJUSTABLE AND TRANSFORMERLESS AC TO DC POWER CIRCUIT

A power adjustable and transformerless AC to DC power circuit including an AC to DC power circuit is revealed. The AC to DC power circuit consists of a first reactance component, a second reactance component and an AC power connected to form a loop. The second reactance component is connected to a full bridge rectifier for full-wave rectification of lower voltage AC to output an unstable low voltage DC. A filter capacitor is connected across to the full bridge rectifier to filter the unstable low voltage DC and output a stable low voltage direct current. Thus the manufacturing cost is dramatically reduced, the power is saved, and no heat is generated. Moreover, the reactance of the whole circuit is reduced so as to get high power factor. No high frequency radiation is created so that there is no radiation damage and no interference to electronic equipment.

Fig. 1