A bidirectional dc-dc converter with multiple outputs are concatenated with a high frequency current source parallel resonant push pull inverter is presented in this paper. The two outputs are added together and it is taken as the input source for the inverter. The current source parallel resonant push pull inverter implemented here with high frequency applications like induction heating, Fluorescent lighting, Digital signal processing sonar. This paper proposes a simple photovoltaic power system consists of a bidirectional converter and a current fed inverter for regulating the load variations. Solar power is used as the input source for the system. Simulation of the proposed system is carried out in PSIM software and experimentally verified the results.