



AC to DC Converter System with Ripple Feedback Circuit

This patent covers a ripple feedback circuit for use with a current-sourced rectifier system with a resonant load balancing filter. The ripple feedback circuit eliminates the oscillation of the rectifiers and improves the line-current waveform by sensing the low frequency AC components of the output current and by combining such AC components with the control voltage at the input to the multiplier of the pulse width modulator of the rectifier system. A sample of the rectified line voltage is multiplied by the control voltage less ripple feedback to form the input to the pulse-width modulator which produces the gating waveform for the converter of the rectifier system.