

## عنوان مقاله:

A New Soft-Switched Three-Phase Four-Wire Shunt Active Power Filter

## محل انتشار:

بیست و دومین کنفرانس بین المللی برق (سال: 1386)

تعداد صفحات اصل مقاله: 9

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## خلاصه مقاله:

This paper presents a new soft switched topology for losses reduction in a three-phase four-wire shunt active power filter (SAPF). The soft-switching technique not only offers a reduction in switching loss and thermal requirement, but also allows the possibility of high frequency and snubberless operation. Improved circuit performance and efficiency as well as reduction of EMI emission can be achieved. The resonant dc link inverter with low voltage stress is used for power converter of a three-phase four-wire shunt active power filter. It is assumed that the active power filter is connected to a load that can be unbalanced and may also draw harmonic currents. The p-q theory is used for controlling the SAPF. The proposed topology and operation principle of the control method is discussed in details, finally the feasibility of such a scheme is demonstrated through simulation studies by use of PSIM software.

## کلمات کلیدی:

APF , Soft Switching, Unbalance, Harmonic , PSIM

## لینک ثابت مقاله در پایگاه سیویلیکا:

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