

# **Abstract**

**Yasser Gaber A. Dessouky**

## **Power factor improvement of a boost converter supplying a DC motor**

A study of boost-converter circuit utilized to drive a DC motor as a load while improving the supply power factor is demonstrated through this paper. A computer simulation of the proposed circuit has been assessed using simulink under matlab version (6) to show circuit behavior for different operation modes: speed and voltage control. Experimental investigation has been carried out to analyze the effect of circuit parameter variations on the motor response.