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(54) **POWER CONVERTER AND AIR  
CONDITIONER**

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**ABSTRACT**

A power converter includes: a converter including four switching elements in full bridge configuration, the converter converting alternating-current power supplied from an alternating-current power supply into direct-current power; a reactor provided between the alternating-current power supply and the converter; a smoothing capacitor connected between direct-current terminals of the converter; an alternating-current voltage detector detecting an alternating-current voltage output from the alternating-current power supply; an alternating current detector detecting a current flowing through the reactor; and a control circuitry controlling a switching operation of the switching elements. The control circuitry controls the switching elements such that a potential fluctuation due to the switching operation is reduced between a P terminal of the converter and an L terminal of the alternating-current power supply, or between a G terminal of the converter and an N terminal of the alternating-current power supply.

