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(54) **POWER SEMICONDUCTOR DEVICE AND
METHOD OF PRODUCING A POWER
SEMICONDUCTOR DEVICE**

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(57) **ABSTRACT**

A power semiconductor device includes a first region in an active region of a semiconductor body and including first trenches each having a first trench electrode electrically connected to a gate terminal and a first trench insulator. A second region includes second trenches each having a second trench electrode electrically connected to the gate terminal and a second trench insulator. At least one of the following applies: a minimal thickness of each second trench insulator amounts to at least 120% of a corresponding minimal thickness of each first trench insulator; an average thickness of the second trench insulators amounts to at least 120% of an average thickness of the first trench insulators; a trench bottom thickness of each second trench insulator amounts to at least 120% of a corresponding trench bottom thickness of each first trench insulator; a minimal breakdown voltage of each second trench insulator amounts to at least 120% of a minimal breakdown voltage of each first trench insulator.

