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(54) **METHOD FOR DETECTING A CHARACTERISTIC OPERATING PARAMETER OF A TRANSISTOR OF AN INVERTER**

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(57) **ABSTRACT**

An inverter. The inverter includes a first and second transistors, which are a high-side transistor and a low-side transistor of the inverter, and control electronics configured to trigger a first switching operation, in which the first transistor is switched on, wherein the second transistor is in a switched-off state, wherein a parasitic capacitance of the first transistor is discharged during the first switching operation, to trigger a second switching operation, in which the first transistor is switched off or switched on again, wherein the second transistor simultaneously remains in the switched-off state, wherein the parasitic capacitance of the first transistor is already discharged in the second switching operation, to record a time difference which describes a difference between a duration of the first switching operation and a duration of the second switching operation, and to determine a characteristic operating parameter of the first transistor based on the time difference.

