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(54) Title: METHOD FOR ACTIVELY DETECTING FAULT IN ENERGY STORAGE SYSTEM, AND ENERGY STORAGE SYSTEM

(54) 发明名称: 储能系统的故障主动检测方法及储能系统

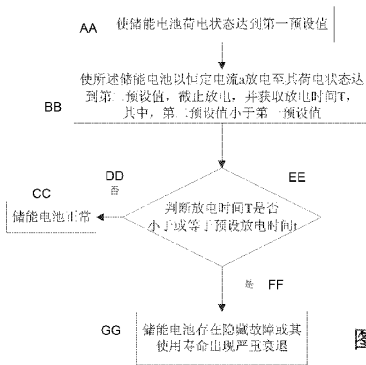


图 1

- AA Cause a state of charge of an energy storage battery to reach a first preset value
BB Cause the energy storage battery to perform discharging at a constant current a until the state of charge thereof reaches a second preset value, stop discharging, and acquire a discharge time T, wherein the second preset value is less than the first preset value
CC The energy storage battery is normal
DD No
EE Determine whether the discharge time T is less than or equal to a preset discharge time t
FF Yes
GG There is a hidden fault in the energy storage battery or there is a serious decline in the service life of the energy storage battery

(57) Abstract: A method for actively detecting a fault in an energy storage system, and an energy storage system. The method for actively detecting a fault in an energy storage system comprises: a step of causing a state of charge of an energy storage battery to reach a first preset value; a discharge time acquisition step of causing the energy storage battery to perform discharging at a constant current a until the state of charge thereof reaches a second preset value, stopping discharging, and acquiring a discharge time T, wherein the second preset value is less than the first preset value; and determining whether the discharge time T is less than or equal to a preset discharge time t, and if so, determining that there is a hidden fault in the energy storage battery or there is a serious decline in the service life of the energy storage battery, and if not, determining that the energy storage battery is normal. By means of the method for actively detecting a fault in an energy storage system, whether there is a hidden fault in an energy storage battery or whether there is a serious decline in the service life of an energy storage battery can be determined.

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本国际公布：
— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 一种储能系统的故障主动检测方法及储能系统, 储能系统的故障主动检测方法包括: 使储能电池荷电状态达到第一预设值的步骤; 使储能电池以恒定电流*a*放电至其荷电状态达到第二预设值, 截止放电, 并获取放电时间*T*的放电时间获取步骤, 其中, 第二预设值小于第一预设值; 判断放电时间*T*是否小于或等于预设放电时间*t*, 如果是, 则判定储能电池存在隐藏故障或其使用寿命出现严重衰退, 如果否, 则判定储能电池正常。本储能系统的故障主动检测方法能够判断储能电池是否存在隐藏故障或其使用寿命是否出现严重衰退。