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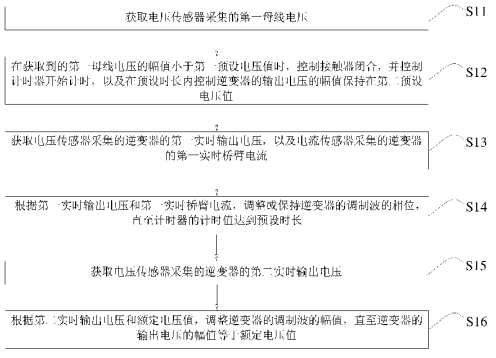
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(81) 指定国(除另有指明，要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG,

(54) **Title:** CONTROL METHOD AND SYSTEM FOR PARALLEL POWER SUPPLY SYSTEM, AND DEVICE, MEDIUM AND PRODUCT

(54) 发明名称: 一种并联供电系统的控制方法、系统、设备、介质及产品



S11 Acquire a first bus voltage collected by a voltage sensor
S12 When the amplitude of the acquired first bus voltage is less than a first preset voltage value, control a contactor to close, control a timer to start timing, and control within a preset duration the amplitude of an output voltage of an inverter to be maintained at a second preset voltage value
S13 Acquire a first real-time output voltage of the inverter that is collected by the voltage sensor and a first real-time bridge arm current of the inverter that is collected by a current sensor
S14 On the basis of the first real-time output voltage and the first real-time bridge arm current, adjust or maintain the phase of a modulation wave of the inverter until a timing value of the timer reaches the preset duration
S15 Acquire a second real-time output voltage of the inverter that is collected by the voltage sensor
S16 On the basis of the second real-time output voltage and a rated voltage value, adjust the amplitude of the modulation wave of the inverter until the amplitude of the output voltage of the inverter equals the rated voltage value

图 1

(57) **Abstract:** A control method and system for a parallel power supply system, and a device, a medium and a product. Each controller controls within a preset duration the amplitude of an output voltage of an inverter to be maintained at a second preset voltage value, and then adjusts or maintains the phase of a modulation wave of the inverter on the basis of a first real-time output voltage and a first real-time bridge arm current until a timing value of a timer reaches the preset duration, such that the phases of output voltages of inverters are the same when the preset duration is reached; and then, on the basis of a second real-time output voltage and a rated voltage value, each controller synchronously adjusts the amplitude of the output voltage of each inverter to the rated voltage value, such that the inverters in a parallel power supply system can be synchronously started without the need for the network communication among the controllers. Therefore, the complexity of the control system for a parallel power supply system can be effectively reduced, and the dependence of the control system for a parallel power supply system on a network can be effectively reduced.

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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: 一种并联供电系统的控制方法、系统、设备、介质及产品，各个控制器在预设时长内控制逆变器的输出电压的幅值保持在第二预设电压值，再根据第一实时输出电压和第一实时桥臂电流，调整或保持逆变器的调制波的相位，直至计时器的计时值达到预设时长，使得在达到预设时长时各个逆变器的输出电压的相位相同，再根据第二实时输出电压和额定电压值，同步调整各个逆变器的输出电压的幅值至额定电压值，使得各个控制器之间不需要网络通信，即可实现并联供电系统中的各个逆变器同步启动，能够有效地降低并联供电系统的控制系统的复杂性，能够有效地降低并联供电系统的控制系统对网络的依赖。