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(54) **Title:** BATTERY SYSTEM AND EQUALIZATION MANAGEMENT METHOD THEREFOR

(54) 发明名称: 一种电池系统及其均衡管理方法

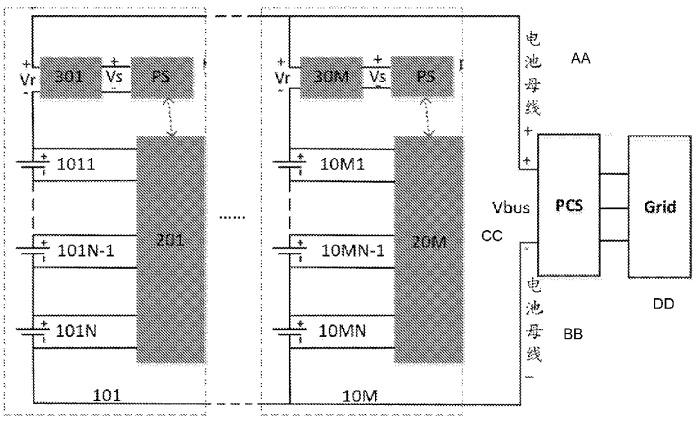

图1

AA Battery bus
BB Grid

(57) **Abstract:** A battery system, comprising several battery clusters connected in parallel. Each battery cluster is connected to a power conversion system by means of a battery bus; and any one battery cluster comprises several battery packs connected in series, and further comprises: pack equalizers, which correspond to the battery packs on a one-to-one basis, wherein a first end of each pack equalizer is connected to two ends of a corresponding battery pack, and a second end thereof is connected to a power source; and a cluster equalizer, a first end of the cluster equalizer being connected in series to the battery packs, and a second end thereof being connected to the power source. According to the battery system, the pack equalizer is used between the battery packs to adjust the equalization of the battery packs in each cluster; in addition, each battery cluster is connected to the cluster equalizer to realize equalization adjustment of the battery cluster. Thus, the battery system has the advantages of low cost, small size, light weight and low loss. The present invention

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NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), 欧亚 (AM, AZ, BY, KG, KZ, RU, TJ, TM), 欧洲 (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG)。

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- 关于发明人身份(细则4.17(i))
- 关于申请人有权申请并被授予专利(细则4.17(ii))
- 发明人资格(细则4.17(iv))

本国际公布:
- 包括国际检索报告(条约第21条(3))。

further relates to an equalization management method for the battery system.

(57) 摘要: 一种电池系统，包括若干个并联的电池簇，各个电池簇通过电池母线连接至储能变流器，且任一电池簇包括若干个串联的电池包；还包括包均衡器，其与电池包一一对应，且其第一端连接至对应电池包的两端，第二端与功率源连接；以及簇均衡器，其第一端与电池包串联，第二端连接至功率源。该电池系统一方面在电池包间采用了包均衡器调节每簇内电池包的均衡，另一方面，在各个电池簇上连接有簇均衡器，实现了电池簇的均衡调节，具有成本低、体积小、重量轻、损耗小的优点。还涉及一种该电池系统的均衡管理方法。