

新型双极性 MH/Ni 电池的研制

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摘要: 报道了新型双极性 MH/Ni 电池的研制。分析了双极性电池结构, 进一步研究了电池的密封原理。通过改进电池结构, 调整正负极容量配比, 优选密封工艺等措施, 解决了双极性 MH/Ni 电池设计中的基本问题。测试结果表明: 改进后的双极性 MH/Ni 电池电化学性能好, 具有高倍率充放电的能力。

关键词: 双极性 MH/Ni 电池; 高倍率充放电; 混合动力车

中图分类号: TM912.2 文献标识码: A 文章编号: 1001-1579(2004)01-0016-03

Research on novel Ni/MH batteries in bipolar design

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Abstract: Research on novel bipolar Ni/MH hydride battery was reported. The structure of bipolar battery was analyzed and the sealing principle of the batteries was studied. The basic problems of bipolar design were solved by improving the structure of the batteries, modifying the ratio of the capacity of the positive electrode to negative electrode and optimizing the technique of sealing. The testing result showed that electrochemical performance of improved batteries was good and it could charge or discharge at high rate.

Key words: bipolar nickel/metal hydride batteries; charge or discharge at high rate; hybrid electric vehicle