

Abstract

Alkaline metal oxide/metal hydride battery

A novel hydrogen storage alloy as active material for the negative electrode of a Ni/H battery has the composition



with Mm = misch metal, M = Fe and/or Cu and with the parameters

$$0.1 \leq z \leq 0.4; \quad 0.2 \leq y \leq 0.4; \quad 0.3 \leq w \leq 0.5; \\ 0.2 \leq x \leq 0.4 \text{ and } 4.9 \leq v + w + x + y + z \leq 5.1.$$

Partial substitution of Co by M, in conjunction with a special production method, i.e. atomizing the molten alloy, followed by the steps of heat-treatment and pulverization, leads to a high cycle lifetime and loading capacity of the alloy.