

Title (en)
MAGNETIC ALLOY MATERIAL AND PROCESS FOR THE PRODUCTION THEREOF

Title (de)
MAGNETISCHES LEGIERUNGSMATERIAL UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)
MATÉRIAU ALLIÉ MAGNÉTIQUE ET SON PROCÉDÉ DE FABRICATION

Publication
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Application
EP 10718525 A 20100419

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Abstract (en)
[origin: WO2010121977A1] The invention relates to the field of materials science and materials physics and concerns a magnetic alloy material, which can be used, for example, as a magnetic cooling material (magnetocaloric material) for cooling purposes or for energy generation purposes, and a process for the production thereof. The aim of the present invention is to provide a magnetic alloy material which has comparable magnetic and/or magnetocaloric properties and improved mechanical properties compared to prior art materials. This aim is achieved by a magnetic alloy material which displays a magnetocaloric effect and has a foam-like structure with an open porosity of from 1% to 50% and/or a closed porosity of at least 1% or in which particles of the magnetic alloy material are embedded in a matrix material having a higher ductility than the magnetic alloy material.

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