

Title (en)

METALLIC GLASSES HAVING A STRUCTURED SURFACE AND PROCESS OF MANUFACTURE

Title (de)

OBERFLÄCHENSTRUKTURIERTE METALLISCHE GLÄSER UND VERFAHREN ZUR HERSTELLUNG

Title (fr)

VERRES METALLIQUES AYANT UNE SURFACE STRUCTURÉE ET SON PROCÉDÉ DES FABRICATION

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Application

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Priority

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Abstract (en)

[origin: WO2012072428A1] The invention relates to the field of materials science and provides surface-structured metallic glasses as can be used, for example, as housing materials for mobile telephones, laptops or USB memory sticks. It is an object of the present invention to provide surface-structured metallic glasses whose plasticity under compressive and tensile stress is increased. The object is achieved by surface-structured metallic glasses having one or more depressions having an aspect ratio of at least 1:>1 on at least one surface thereof. The object is also achieved by a process in which a body composed of a metallic glass is produced and at least one depression is subsequently introduced into at least one of the surfaces of the cooled body by means of a tool using uniaxial pressure.

IPC 8 full level

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Y. ZHANG ET AL: "Making metallic glasses plastic by control of residual stress", NATURE MATERIALS, vol. 5, no. 11, 15 October 2006 (2006-10-15), GB, pages 857 - 860, XP055319719, ISSN: 1476-1122, DOI: 10.1038/nmat1758

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