

Title (en)

METHOD OF MANUFACTURING A METALLIC ARTICLE FROM AN AMORPHOUS ALLOY

Publication

EP 0200079 B1 19900314 (DE)

Application

EP 86105131 A 19860414

Priority

DE 3515167 A 19850426

Abstract (en)

[origin: US4710236A] An amorphous metal body is produced from an intermediate product formed by compacting at least two usually crystalline components of the alloy in powder form. The alloying components in the intermediate product extend in at least one dimension at most 1 um. The intermediate product is converted into the amorphous metallic body by means of a diffusion reaction at a predetermined elevated temperature. In order to produce bodies of larger size on a large technical scale, a mixture powder comprising particles is produced from the alloying components in powder form by a milling process which is terminated at a predetermined time in such a manner that the particles produced by milling have at least a predominantly layer-like structure of the alloying components. This mixture powder is then compacted into the intermediate product with the desired shape and dimensions. The intermediate product is optionally deformed.

IPC 1-7

B22F 9/04; **C22C 1/00**

IPC 8 full level

C22C 33/02 (2006.01); **B22F 1/142** (2022.01); **B22F 3/00** (2006.01); **B22F 9/04** (2006.01); **C22C 1/00** (2006.01); **C22C 1/04** (2006.01); **C22C 19/00** (2006.01); **C22C 38/12** (2006.01); **C22C 45/00** (2006.01); **C22C 45/02** (2006.01); **C22C 45/04** (2006.01); **H01F 1/08** (2006.01)

CPC (source: EP US)

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Citation (examination)

"Frankfurter Zeitung, Blick durch die Wirtschaft" no. 23, 1.2. 1984, page 5; Appl. Phys. lett, 48 (2), 13 Jan. 1986, p. 124 to 126.

Cited by

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