

Title (en)

METALLIC GLASSES HAVING A COMBINATION OF HIGH PERMEABILITY, LOW COERCIVITY, LOW AC CORE LOSS, LOW EXCITING POWER AND HIGH THERMAL STABILITY

Publication

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Application

EP 82104504 A 19820524

Priority

- US 29516581 A 19810821
- US 31951481 A 19811109

Abstract (en)

[origin: EP0072893A1] Metallic glasses having high permeability, low magnetostriction, low coercivity low ac core loss, low exciting power and high thermal stability are disclosed. The metallic glasses consist essentially of about 66 to 82 atom percent iron, from 1 to about 8 atom percent of said iron being, optionally replaced with nickel and or cobalt, about 1 to 6 atom percent of at least one element selected from the group consisting of chromium, molybdenum, tungsten, vanadium, niobium, tantalum, titanium, zirconium and hafnium, about 17 to 28 atom percent of boron, 0.5 to 6 atom percent of said boron being, optionally, replaced with silicon and up to 2 atom percent of boron being, optionally, replaced with carbon, plus incidental impurities. Such metallic glasses are especially suited for use in tape heads, relay cores, transformers and the like.

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C22C 38/00

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Citation (examination)

- EP 0020937 A1 19810107 - ALLIED CORP [US]
- EP 0049770 A2 19820421 - ALLIED CORP [US]

Cited by

US5619174A; EP1848837A4; US5160379A; US4588452A; US5628840A; US6093261A; US5474624A; EP0175222A1; US11198927B1; US8704134B2; US6187112B1; US7935198B2; WO2012010940A3; WO2012010940A2; US9228625B2; WO2012010941A1; US9315884B2; WO9632518A1

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