

Title (en)

IRON GROUP TRANSITION METAL-REFRACTORY METAL-BORON GLASSY ALLOYS

Publication

**EP 0002923 B1 19811111 (EN)**

Application

**EP 78300851 A 19781218**

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- US 86667178 A 19780103
- US 86667578 A 19780103
- US 88121378 A 19780227

Abstract (en)

[origin: EP0002923A1] The invention deals with glassy alloys consisting essentially of about 5 to 12 atom per cent boron, one of the members selected from the group of 20 to 60 atom per cent molybdenum and about 13 to 40 atom per cent tungsten and the balance essentially one of the group consisting of cobalt, iron and nickel. The invention also relates to glassy alloys containing all three iron, cobalt and nickel plus molybdenum and/or tungsten, together with low boron content. The latter glassy alloys of the invention consist essentially of about 5 to 12 atom per cent boron, about 5 to 15 atom per cent molybdenum and/or tungsten and the balance essentially iron, cobalt and nickel plus incidental impurities. The glassy alloys evidence hardness values of at least about 1000 Kg/ mm<2>, ultimate tensile strengths of at least about 330 Kpsi and crystallization temperatures of at least about 445 DEG C.

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

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Cited by

EP1552027A4; EP0068545A3; EP3321382A1; DE2364131A1; EP3942085A4; US11555228B2; WO2020190229A1; US7785428B2; US8097095B2

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