

Title (en)
FOIL-LIKE METAL STRIP

Publication
EP 0326785 B1 19920408 (DE)

Application
EP 88810837 A 19881207

Priority
CH 34188 A 19880201

Abstract (en)
[origin: EP0326785A1] Foil-like metal strip comprises hard particles embedded in a metal matrix of gp. VIIIA element(s) gp. IVA, VA or VIA element(s) and at least one of B, C, Si and P, the hard particles being prim. pptes near surface of the strip and the strip having a thickness of max. 1 mm. and being produced from a melt using a cooling rate of at least 100 K/s. The novelty is that at least 50% of the hard particles have a skeleton-like crystal form with a length 1 width ratio of at least 5. In prodn. of the strip by melt spinning directly from a separately produced and remelted alloy, the novelty is that, in the separate alloy prodn. step, the parameters (e.g. melting atmos., chemical compsn., superheat, casting temp. and/or solidifcn. rate) are chosen so that the hard particles already ppte. from the melt during solidifcn. During strip mfr., a max. value for an empirically determined, energy input to the remelted alloy is maintained, the max. value being a function of the melting temp. and the time to solidifcn. of the melt such that re-dissolution of the hard particles is at least partially avoided.

IPC 1-7
B22D 11/06; **C22C 1/00**; **C22C 1/10**

IPC 8 full level
B22D 11/06 (2006.01); **B24D 11/00** (2006.01); **C22C 1/10** (2006.01); **C22C 19/00** (2006.01); **C22C 19/05** (2006.01); **C22C 32/00** (2006.01); **C22C 45/00** (2006.01); **C22C 45/04** (2006.01)

CPC (source: EP US)
B22D 11/06 (2013.01 - EP US); **B24D 11/00** (2013.01 - EP US); **C22C 1/1036** (2013.01 - EP US); **Y10T 428/12431** (2015.01 - EP US); **Y10T 428/12486** (2015.01 - EP US)

Cited by
EP0618039A1; EP0608468A1

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EP 0326785 A1 19890809; **EP 0326785 B1 19920408**; CH 676471 A5 19910131; DE 3869943 D1 19920514; ES 2031629 T3 19921216; JP 2695894 B2 19980114; JP H01222032 A 19890905; US 5061573 A 19911029

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