

Title (en)

METHOD OF PREPARING IMPROVED HYPER-EUTECTIC ALLOYS AND COMPOSITES BASED THEREON

Title (de)

VERFAHREN ZUR HERSTELLUNG VON VERBESSERTE HYPEREUTEKTISCHE LEGIERUNGEN UND AUF DIESEN BASIERTE VERBUNDWERKSTOFFE

Title (fr)

PROCEDE DE PREPARATION D'ALLIAGES AMELIORES HYPER-EUTECTIQUES ET COMPOSITES BASES SUR CES ALLIAGES

Publication

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Application

EP 91920402 A 19911127

Priority

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Abstract (en)

[origin: WO9209711A1] A method is described for preparing a refined or reinforced eutectic or hyper-eutectic metal alloy, comprising: melting the eutectic or hyper-eutectic metal alloy, adding particles of non-metallic refractory material to the molten metal matrix, mixing together the molten metal alloy and the particles of refractory material, and casting the resulting mixture under conditions causing precipitation of at least one intermetallic phase from the molten metal matrix during solidification thereof such that the intermetallics formed during solidification wet and engulf said refractory particles. The added particles may be very small and serve only to refine the precipitating intermetallics in the alloy or they may be larger and serve as reinforcing particles in a composite with the alloy. The products obtained are also novel.

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IPC 8 full level

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CPC (source: EP)

C22C 1/1036 (2013.01); **C22C 32/00** (2013.01)

Citation (examination)

- Int. Mtrls Rev., 1986, 31(3), pp.115-139
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Cited by

US8540797B2; WO2010013080A1

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