

Title (en)

Method of producing metal base composite material under promotion of matrix metal infiltration by fine pieces of third material.

Title (de)

Verfahren zur Herstellung von Verbundmetall unter Beschleunigung der Infiltration des Matrix-Metalls durch feine Teilchen eines dritten Materials.

Title (fr)

Procédé de fabrication de métal composite promouvant l'infiltration d'une matrice métallique par des fines particules d'un troisième matériau.

Publication

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Application

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Priority

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Abstract (en)

[origin: EP0340957A2] In producing a metal base composite material by first producing a porous preform (10) from a reinforcing material such as short fibers, whisker, particles or mixtures thereof, and secondly infiltrating a molten matrix metal into the interstices of the porous preform, fine pieces of a third material having good affinity to the molten matrix metal are mixed in the porous preform in the process of producing the preform, and at least a part of the preform is contacted with a molten mass of the matrix metal so that the molten matrix metal infiltrates into the interstices of the porous preform with no substantial pressure being applied thereto.

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Cited by

US5553658A; US5163499A; EP1036849A3; EP0375588A1; FR2675063A1; EP0368787A1; US5000249A; EP1193319A1; US6148899A; US5487420A; US5638886A; US5287911A; US5000245A; EP1059133A1; CN1107795C; EP1405577A3; US5004036A; US5000247A; CN104928541A; DE10115477A1; US5284200A; US5119864A; US5007474A; US5329984A; US5280819A; US5529108A; US5585190A; US5000248A; US5267601A; US5269989A; US5238045A; EP0373093A1; US5000246A; US5526867A; US5240062A; US5851686A; US5010945A; CN107686953A; EP0575685A1; US5172747A; US5197528A; US5005631A; AT393652B; CN104388763A; US5501263A; US5236032A; US5007476A; US5541004A; US5016703A; US5311919A; US5303763A; US5316069A; US5020583A; US5150747A; US5377741A; US5531260A; US5004034A; US5361824A; US5298283A; US5350004A; US5500244A; EP0408257A3; US5004035A; US5505248A; US5518061A; US5301738A; US5848349A; US5165463A; EP1282166A3; CN109913774A; WO9925885A1; US7329384B2; US6360809B1; EP1405577A2; US6383656B1; US5983973A; GB2356636A; GB2356636B; US5322109A; US5435374A; US5544121A; US5007475A; US5620804A; US5020584A; US5040588A; US5618635A; CN112779480A; US6611056B2; US6630734B2; US6646344B1; US7160627B2; US6835349B2; US6318442B1; EP0368790B1; EP0370940B1; EP0369930B1; EP0368784B1; KR100545802B1; EP0373093B1; WO0008219A1; WO9426445A1; WO9118122A3; EP0368781B1; EP0369928B1

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