

Title (en)

METHOD AND APPARATUS FOR PRODUCING METAL MATRIX COMPOSITES USING ELECTROMAGNETIC BODY FORCES.

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HERSTELLUNG VON MMC MITTELS ELEKTROMAGNETISCHER MASSENKRÄFTE.

Title (fr)

METHODE ET APPAREIL DE PRODUCTION DE COMPOSITES A MATRICE METALLIQUE UTILISANT DES FORCES ELECTROMAGNETIQUES MASSIQUES.

Publication

EP 0587560 A4 19941012

Application

EP 91915508 A 19910606

Priority

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Abstract (en)

[origin: WO9221458A1] A method for producing metal matrix composites, in a continuous or batch mode, including the steps of placing a substantially liquid metal in the vicinity of a reinforcement material and the source of a transient magnetic field sufficient to produce an electromagnetic body force within the metal, and activating the magnetic field, propelling the substantially liquid metal into the reinforcement material. Also described are apparatus for producing these metal matrix composites, including an infiltration zone having adjoining liquid metal (16) and reinforcement material (18) subzones and an electromagnetic field source (22) capable of being activated and deactivated adjacent to the liquid metal subzone of the infiltration zone that produces a transient magnetic field and associated eddy currents within the metal, the electromagnetic field source oriented so as to propel the metal into the reinforcement material subzone of the infiltration zone.

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Citation (search report)

- No further relevant documents disclosed
- See references of WO 9221458A1

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