

Title (en)

WROUGHT MAGNESIUM ALLOY HAVING EXCELLENT FORMABILITY AND METHOD OF PRODUCING SAME

Title (de)

SCHMIEDEPRODUKT AUS MAGNESIUMLEGIERUNG MIT AUSGEZEICHNETER FORMBARKEIT UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

ALLIAGE DE MAGNESIUM CORROYÉ POSSESSANT UNE EXCELLENTE CAPACITÉ DE FAÇONNAGE ET PROCÉDÉ DE PRODUCTION DE CET ALLIAGE

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Application

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Abstract (en)

[origin: US2008304997A1] Disclosed is a wrought magnesium alloy having excellent strength and extrusion or rolling formability, and a method of producing the same. The wrought magnesium alloy comprises 0.1-1.5 at % group IIIa, 1.0-4.0 at % group IIb, 0.35 at % or less of one selected from the group consisting of groups IIa, IVa, VIIa, IVb, and a mixture thereof, 1.0 at % or less of group IIb, and a balance of Mg and unavoidable impurities and thus has a second phase composite microstructure. The wrought magnesium alloy of the present invention has high strength, toughness, and formability in addition to the electromagnetic wave shield ability of magnesium. Accordingly, the wrought magnesium alloy is a material useful to portable electronic goods, such as notebook personal computers, mobile phones, digital cameras, camcorders, CD players, PDA, or MP3 players, automotive parts, such as engine room hoods, oil pans, or inner panel of door, or structural parts for airplane.

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