

Title (en)

A1-based composite material having adhesion resistance property and process for producing the same

Title (de)

Verbundwerkstoff auf Aluminiumbasis mit Klebrigbeständigkeit und das Herstellungsverfahren

Title (fr)

Matériau composite à base d'aluminium, ayant une propriété de résistance à l'adhésion, et procédé pour sa production

Publication

EP 0747494 A1 19961211 (EN)

Application

EP 96108948 A 19960604

Priority

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Abstract (en)

An Al alloy piston comprises a piston body and a reinforced portion forming a piston groove. The reinforced portion is composed of Al-based composite material. Namely, Al molten metal (AC8A) forming the piston body was impregnated to the powder compact which is non-sintered compact so as to be solidified so that the reinforced portion was formed. The powder compact is made by compressing atomized powder having the primary crystal Si particles whose mean particle diameter is 10 μ m (microns). To the powder compact Fe-Cr powder particles may be added. Accordingly, the present invention provide Al-based composite material whose adhesion resistance property is improved and the process for producing the same. <IMAGE>

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Citation (search report)

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- [A] US 3895941 A 19750722 - BOLLING GUSTAF FREDERIC, et al
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- [XA] DATABASE WPI Section Ch Week 8707, Derwent World Patents Index; Class M26, AN 87-045608, XP002011236
- [Y] DATABASE WPI Section Ch Week 9201, Derwent World Patents Index; Class M22, AN 92-003616, XP002011237
- [Y] DATABASE WPI Section Ch Week 8531, Derwent World Patents Index; Class M22, AN 85-188088, XP002011238

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