

Title (en)
MOTOR CYLINDER SLEEVES BASED ON ALUMINUM ALLOYS AND CALIBRATED SILICON GRAINS AND METHODS FOR OBTAINING THEM

Publication

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Application

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Abstract (en)

[origin: WO8400050A1] The present invention relates to sleeves for internal combustion engines based on aluminum-silicon alloys and silicon grains and to the methods for producing said sleeves. It is characterized in that said grains are carefully calibrated and dispersed in the alloy matrix. The sleeves may also contain at least one intermetal compound such as Ni₃Sn, for example. Those sleeves are obtained by spinning or sintering of a mixture of powders. The invention finds application particularly in the motor vehicle industry and to all fields where sleeve-piston assemblies of good compatibility and based on aluminum alloys are desired.

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Cited by

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