

Title (en)
HYPEREUTECTIC ALUMINUM/SILICON ALLOY POWDER AND PRODUCTION THEREOF

Title (de)
ÜBEREUTEKTISCHES ALUMINIUM-SILIKON-PULVER UND DESSEN HERSTELLUNG

Title (fr)
POUDRE A BASE D'UN ALLIAGE ALUMINIUM/SILICIUM HYPEREUTECTIQUE ET PRODUCTION DE CETTE POUDRE

Publication
EP 0592665 B1 19960612 (EN)

Application
EP 91918937 A 19911031

Priority

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- JP 29509990 A 19901031

Abstract (en)
[origin: EP0592665A1] A hypereutectic aluminum/silicon alloy powder wherein a primary crystal of silicon has a grain diameter of as minute as 10 μ m or less is produced by the atomization process which comprises preparing a melt of a hypereutectic aluminium/silicon alloy containing phosphorus and spraying the melt by means of air or an inactive gas to effect rapid cooling for solidification. The obtained alloy powder contains 12 to 50 wt% of silicon and 0.0005 to 0.1 wt% of phosphorus. This powder can provide a solidified powder with improved mechanical properties in a high yield without any limitation to the grain size. <IMAGE>

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IPC 8 full level
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Cited by
US6136106A; US6030577A; US6086819A; GB2317900A; GB2317900B; WO9709459A1; WO9703775A1; EP0747494B1; WO9709458A1; WO9709457A1

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