

Title (en)
ALUMINIUM CASTING ALLOY

Title (de)
ALUMINIUMGUSSLEGIERUNG

Title (fr)
ALLIAGE D'ALUMINIUM DE COULÉE

Publication
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Application
EP 19922609 A 20191217

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Abstract (en)
The invention relates to the field of metallurgy and can be used to produce shaped castings by means of gravity die casting, pressure die casting and pressurised crystallisation, which shaped castings can be used in automobile construction, for housings of electronic device and also as heavy-duty components which are capable of operating at elevated temperatures. An aluminium based casting alloy comprises (in wt%): 0.01-1.1 iron, 0.5-2.5 manganese, 1.2-2.2 nickel, 0.02-0.20 chromium, 0.02-0.15 titanium, 0.02-0.35 zirconium, and the remainder being aluminium, wherein iron and nickel are preferably in the form of aluminides of eutectic origin in the amount of no less than 4 wt%. The invention is directed to the creation of a new, high-tech aluminium alloy that is capable of hardening without water quenching.

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