

Title (en)

A method of manufacturing objects based on aluminium.

Title (de)

Verfahren zur Herstellung von Formkörpern auf Aluminiumbasis.

Title (fr)

Procédé de préparation d'articles à base d'aluminium.

Publication

EP 0588439 A1 19940323 (EN)

Application

EP 93202681 A 19930916

Priority

NL 9201606 A 19920917

Abstract (en)

The invention relates to a method of manufacturing objects containing aluminium, by starting from aluminium and other metals in powder form, and 0.5-50 vol.% additives, mixing said starting materials, densifying them, binding the particles together and carrying out a moulding process, whereby one starts with metals in their elementary condition in which besides aluminium up to 6.0 wt.% copper, up to 3.5 wt.% magnesium, up to 1.0 wt.% silicon, up to 5.5 wt.% zinc, up to 10.0 wt.% tin, and/or up to 6.0 wt.% nickel as element in powder form has been added and a ceramic hardener in particulate form in an amount of 5-20 vol.% pre-treated by annealing-drying in order to decrease the amount of hydrogen, followed by cold isotatic compression of the mixture into billets, which are subsequently degassed and sintered, whereby said degassing and said sintering take place in one heat treatment and whereby finally the sintered product is subjected to a heat treating process and cooled.

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Citation (search report)

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