

Title (en)

PARTS WITH A BAINITIC STRUCTURE HAVING HIGH STRENGTH PROPERTIES AND MANUFACTURING PROCESS

Title (de)

TEILE MIT BAINITISCHER STRUKTUR MIT HOHEN FESTIGKEITSEIGENSCHAFTEN UND HERSTELLUNGSVERFAHREN

Title (fr)

PIECES A STRUCTURE BAINITIQUE A HAUTES PROPRIETES DE RESISTANCE ET PROCEDE DE FABRICATION

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Application

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Abstract (en)

[origin: WO2016151345A1] The subject of the invention is a part, the composition of which comprises, the contents being expressed as percentages by weight, $0.10 \leq C \leq 0.30$, $1.6 \leq Mn \leq 2.1$, $0.5 \leq Cr \leq 1.7$, $0.5 \leq Si \leq 1.0$, $0.065 \leq Nb \leq 0.15$, $0.0010 \leq B \leq 0.0050$, $0.0010 \leq N \leq 0.0130$, $0 \leq Al \leq 0.060$, $0 \leq Mo \leq 1.00$, $0 \leq Ni \leq 1.0$, $0.01 \leq Ti \leq 0.07$, $0 \leq V \leq 0.3$, $0 \leq P \leq 0.050$, $0.01 \leq S \leq 0.1$, $0 \leq Cu \leq 0.5$, $0 \leq Sn \leq 0.1$, the remainder of the composition consisting of iron and inevitable impurities resulting from the smelting, the microstructure consisting, in surface proportions, of 100% to 70% of bainite, of less than 30% of residual austenite and of less than 5% of ferrite, and process for the manufacture thereof.

IPC 8 full level

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