

Title (en)
HARD PARAMAGNETIC STAINLESS STEEL AND METHOD FOR MANUFACTURING SAME

Title (de)
HARTER PARAMAGNETISCHER EDELSTAHL UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)
ACIER INOXYDABLE DUR PARAMAGNETIQUE ET SON PROCEDE DE FABRICATION

Publication
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Application
EP 21773723 A 20210906

Priority
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Abstract (en)
[origin: WO2022096178A1] The present invention relates to a paramagnetic stainless steel with a chemical composition comprising by weight: - $20 \leq \text{Cr} \leq 40\%$, - $3 \leq \text{Ni} \leq 20\%$, - $0 \leq \text{Mn} \leq 15\%$, - $0 \leq \text{Al} \leq 5\%$, - $3 < \text{Mo} \leq 15\%$, - $0 \leq \text{W} \leq 5\%$, - $0 \leq \text{Cu} \leq 2\%$, - $0 \leq \text{Si} \leq 5\%$, - $0 \leq \text{Ti} \leq 1\%$, - $0 \leq \text{Nb} \leq 1\%$, - $0 \leq \text{C} \leq 0.1\%$, - $0 \leq \text{N} \leq 0.5\%$, - $0 \leq \text{S} \leq 0.5\%$, - $0 \leq \text{P} \leq 0.1\%$, the remainder being iron and possible impurities each having a content less than or equal to 0.5%, said steel having a hardness between 575 and 900 HV10. The invention also relates to a part, in particular a watch component made of this steel and to the method for manufacturing the part.

IPC 8 full level
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