

Title (en)

HIGH-STRENGTH FERRITIC STAINLESS STEEL FOR CLAMP, AND MANUFACTURING METHOD THEREFOR

Title (de)

HOCHFESTER FERRITISCHER ROSTFREIER STAHL FÜR KLEMMEN UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

ACIER INOXYDABLE FERRITIQUE À HAUTE RÉSISTANCE POUR COLLIER DE SERRAGE ET SON PROCÉDÉ DE FABRICATION

Publication

**EP 4060058 A4 20240124 (EN)**

Application

**EP 20902604 A 20201111**

Priority

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Abstract (en)

[origin: EP4060058A1] Disclosed are high-strength ferritic stainless steel STS430, which has a yield strength of 350 MPa or greater and can be applied to a clamp of a vehicle or a common hose, and a manufacturing method thereof. The high-strength ferritic stainless steel for a clamp, according to one embodiment of the present invention, comprises, by weight, 0.04-0.1% of C, 0.2-0.6% of Si, 0.01-1.5% of Mn, 14.0-18.0% of Cr, 0.005-0.2% of Al, 0.005-0.2% of V, 0.02-0.1% of N, and the remainder as Fe and inevitable impurities, satisfies Expressions (1) and (2), and has at least  $2.5 \times 10^{6-2}$  precipitates having a mean diameter of 0.5  $\mu\text{m}$  or less per  $\text{mm}^2$ . (1)  $0.35\% \leq \text{Si} + \text{Al} + \text{V} \leq 0.6\%$  (2)  $0.09\% \leq \text{C} + \text{N} \leq 0.12\%$

IPC 8 full level

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Citation (search report)

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