

Title (en)

FERRITIC STAINLESS STEEL EXCELLENT IN CORROSION RESISTANCE AND IMPACT RESISTANCE

Title (de)

FERRITISCHER ROSTFREIER STAHL MIT HERVORRAGENDER KORROSIONSBESTÄNDIGKEIT UND SCHLAGZÄHIGKEIT

Title (fr)

ACIER INOXYDABLE FERRITIQUE PRÉSENTANT UNE EXCELLENTE RÉSISTANCE À LA CORROSION ET AUX CHOCS

Publication

**EP 3666918 B1 20220223 (EN)**

Application

**EP 19191488 A 20190813**

Priority

KR 20180159642 A 20181212

Abstract (en)

[origin: EP3666918A1] Provided is a ferritic stainless steel having improved impact resistance and corrosion resistance at high temperatures by suppressing formation of a sigma phase in the steel. The ferritic stainless steel composition may include an amount of about 0.015% or less (excluding 0%) of carbon (C), an amount of about 0.17% or less (excluding 0%) of silicon (Si), an amount of about 1.35% or less (excluding 0%) of manganese (Mn), an amount of about 17 to 20% of chromium (Cr), an amount of about 0.1 to 0.5% of titanium (Ti), an amount of about 3 to 5% of aluminum (Al), and iron (Fe) constituting the remaining balance of the steel composition. In particular, the steel composition satisfies [Equation 1] below.  $20Si + Mn/A1 < 0.7$  where Si, Mn, and Al denote the content (%) of each component.

IPC 8 full level

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CPC (source: CN EP KR US)

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