

## Title (en)

LOW-YIELD-RATIO TYPE HIGH-STRENGTH STEEL, AND MANUFACTURING METHOD THEREFOR

## Title (de)

HOCHFESTER STAHL MIT NIEDRIGEM STRECKGRENZENVERHÄLTNIS UND HERSTELLUNGSVERFAHREN DAFÜR

## Title (fr)

ACIER À HAUTE RÉSISTANCE DE TYPE À FAIBLE RAPPORT D'ÉLASTICITÉ ET SON PROCÉDÉ DE FABRICATION

## Publication

**EP 3395997 A4 20181107 (EN)**

## Application

**EP 16879212 A 20161202**

## Priority

- KR 20150186522 A 20151224
- KR 2016014135 W 20161202

## Abstract (en)

[origin: EP3395997A1] One aspect of the present invention relates to a low-yield-ratio type high-strength steel comprising 0.02-0.11 wt% of carbon (C), 0.1-0.5 wt% of silicon (Si), 1.5-2.5 wt% of manganese (Mn), 0.01-0.06 wt% of aluminum (Al), 0.1-0.6 wt% of nickel (Ni), 0.01-0.03 wt% of titanium (Ti), 0.005-0.08 wt% of niobium (Nb), 0.1-0.5 wt% of chromium (Cr), 0.01 wt% or less of phosphorus (P) (excluding 0 wt%), 0.01 wt% or less of sulfur (S) (excluding 0 wt%), 5-30 weight ppm of boron (B), 20-70 weight ppm of nitrogen (N), 50 weight ppm or less of calcium (Ca) (excluding 0 weight ppm), 5-50 weight ppm or less of tin (Sn) (excluding 0 weight ppm), and the remainder being iron (Fe) and other inevitable impurities.

## IPC 8 full level

**C22C 38/58** (2006.01); **C21D 8/02** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/54** (2006.01)

## CPC (source: EP US)

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## Citation (search report)

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- See references of WO 2017111345A1

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EP4056725A4

## Designated contracting state (EPC)

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## Designated extension state (EPC)

BA ME

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## DOCDB simple family (application)

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