

Title (en)
STEEL COMPOSITION

Title (de)
STAHLZUSAMMENSETZUNG

Title (fr)
COMPOSITION D'ACIER

Publication
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Application
EP 17737334 A 20170616

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Abstract (en)
[origin: WO2017216500A1] The present invention relates to a case-hardenable and/or nitridable steel composition comprising, in percentages by weight of the total composition: carbon: 0.05-0.40, preferably 0.10-0.30; chromium: 2.50-5.00, preferably 3.00-4.50; molybdenum: 4.00-6.00; tungsten: 0.01-1.80, preferably 0.02-1.50; vanadium: 1.00-3.00, preferably 1.50-2.50; nickel: 2.00-4.00; cobalt: 2.00-8.00, preferably 3.00-7.00; iron: balance and also the inevitable impurities, optionally additionally comprising one or more of the following elements: niobium: ≤ 2.00 ; nitrogen: ≤ 0.50 , preferably ≤ 0.20 ; silicon: ≤ 0.70 , preferably 0.05-0.50; manganese: ≤ 0.70 , preferably 0.05-0.50; aluminum: ≤ 0.15 , preferably ≤ 0.10 ; the combined content of niobium + vanadium being within the range 1.00-3.50; and the content of carbon + nitrogen being within the range 0.05-0.50. It also relates to the process for the manufacture thereof, to the steel blank obtained and to a mechanical member comprising same.

IPC 8 full level
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Cited by
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