

Title (en)

STEEL, CARBURIZED STEEL COMPONENT, AND CARBURIZED STEEL COMPONENT PRODUCTION METHOD

Title (de)

STAHL, KOMPONENTE AUS EINSATZGEHÄRTETEM STAHL UND HERSTELLUNGSVERFAHREN FÜR KOMPONENTE AUS EINSATZGEHÄRTETEM STAHL

Title (fr)

ACIER, CONSTITUANT D'ACIER CÉMENTÉ, ET PROCÉDÉ DE PRODUCTION DE CONSTITUANT D'ACIER CÉMENTÉ

Publication

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Application

**EP 16868681 A 20161125**

Priority

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- JP 2016084997 W 20161125

Abstract (en)

A steel according to an aspect of the present invention has a chemical composition within a predetermined range, in which a hardenability index  $C_{eq}$  ranges from greater than 7.5 to smaller than 44.0, an AlN precipitation index  $I_{AlN}$  ranges from greater than 0.00030 to smaller than 0.00110, a metallographic structure includes ferrite ranging from 85 to 100 area%, an average distance between sulfides, which are observed in a cross section parallel to a rolling direction of the steel and have an equivalent circle diameter ranging from 1  $\mu\text{m}$  or greater to smaller than 2  $\mu\text{m}$ , is shorter than 30.0  $\mu\text{m}$ , and a presence density of the sulfides, which are observed in the cross section parallel to the rolling direction of the steel and have an equivalent circle diameter ranging from 1  $\mu\text{m}$  or greater to smaller than 2  $\mu\text{m}$ , is 300 pieces/mm<sup>2</sup> or more.

IPC 8 full level

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CPC (source: EP KR US)

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