

Title (en)

COLD-ROLLED STEEL SHEET, MANUFACTURING METHOD THEREFOR, AND CAR PART

Title (de)

KALTGEWALZTES STAHLBLECH, HERSTELLUNGSVERFAHREN DAFÜR UND AUTOTEIL

Title (fr)

TÔLE D'ACIER LAMINÉE À FROID, PROCÉDÉ DE FABRICATION S'Y RAPPORTANT ET PIÈCE DE VOITURE

Publication

**EP 3115482 A1 20170111 (EN)**

Application

**EP 15759246 A 20150219**

Priority

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- JP 2015000777 W 20150219

Abstract (en)

There are provided a cold-rolled steel sheet having excellent chemical convertibility and high corrosion resistance after coating and a method for producing the cold-rolled steel sheet, and an automotive component. The method includes performing first pickling with an acid liquid 1) or an acid liquid 2) below on a steel sheet subjected to continuous annealing after cold-rolling and performing second pickling with an acid liquid made of a non-oxidizing acid on the steel sheet: the acid liquid 1) containing nitric acid and hydrochloric acid, in which the nitric acid has a concentration of more than 50 g/L to 200 g/L or less, a ratio R1 (hydrochloric acid/nitric acid) of a concentration of the hydrochloric acid to the concentration of the nitric acid is 0.01 to 0.25, and a concentration of iron ions is 3 to 50 g/L, and the acid liquid 2) containing nitric acid and hydrofluoric acid, in which the nitric acid has a concentration of more than 50 g/L to 200 g/L or less, a ratio R2 (hydrofluoric acid/nitric acid) of a concentration of the hydrofluoric acid to the concentration of the nitric acid is 0.01 to 0.25, and a concentration of iron ions is 3 to 50 g/L.

IPC 8 full level

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CPC (source: EP)

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