

Title (en)

ROLLED STEEL MATERIAL FOR HIGH-STRENGTH SPRING AND WIRE FOR HIGH-STRENGTH SPRING USING SAME

Title (de)

GEWALZTES STAHLMATERIAL FÜR HOCHFESTE FEDER UND DRAHT FÜR HOCHFESTE FEDER DAMIT

Title (fr)

MATIÉRIAU D'ACIER LAMINÉ POUR RESSORT À HAUTE RÉSISTANCE ET CÂBLE POUR RESSORT À HAUTE RÉSISTANCE L'UTILISANT

Publication

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Application

EP 14875039 A 20141210

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Abstract (en)

An object of the present invention is to provide a rolled material for high strength spring, which has excellent wire drawability even when suppressing the addition amount of an alloying element, and which can exhibit corrosion fatigue properties after quenching and tempering. The present invention provides a rolled material for high strength spring, including C, Si, Mn, P, S, Al, Cu and Ni, wherein an amount of nondiffusible hydrogen is 0.40 ppm by mass or less, and an area ratio of ferrite expressed as a percentage satisfies an inequality expression (1) below, and a total area ratio of bainite and martensite is 2% or less: Ferrite area ratio $< 0.77 \frac{\text{C}}{\text{C} + 0.77} \frac{\text{C}}{\text{C} + 0.08} \times 100$ where [name of element] in the above inequality expression (1) means a content expressed in % by mass of each element.

IPC 8 full level

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