

Title (en)

STEEL WIRE FOR FLEXIBLE CARD CLOTHING

Title (de)

STAHLDRAHT FÜR FLEXIBLE KARDENGARNITUREN

Title (fr)

FIL EN ACIER POUR GARNITURE DE CARDES FLEXIBLE

Publication

EP 3655556 B1 20210901 (EN)

Application

EP 18737585 A 20180704

Priority

- CN 2017093841 W 20170721
- EP 2018068030 W 20180704

Abstract (en)

[origin: WO2019015957A1] The steel wire has an equivalent diameter between 0.2 and 0.7 mm. The steel wire has a composition comprising between 0.7% and 1.1 % by weight carbon; between 0.5% and 1.2% by weight manganese; between 0.05% and 0.5% by weight silicon. The steel wire further comprises less than 0.4% by weight chromium; less than 0.05% by weight phosphorus; less than 0.05% by weight sulphur; less than 0.2% by weight copper; and less than 0.2% by weight nickel. The steel wire comprises at least one alloying element, selected from the group of vanadium, titanium, niobium, molybdenum, tungsten and boron. When the at least one alloying element is selected from the group of vanadium, titanium, niobium, molybdenum and tungsten, the content of the at least one alloying element is between 0.02% and 0.2% by weight. When the at least one alloying element is boron, the content of boron is at least 0.001 % by weight. The steel wire composition further comprises unavoidable impurities and the remainder being iron. The steel wire has a tempered martensitic microstructure. The microstructure of the steel wire comprises between 1 and 10 % by volume of undissolved carbides.

IPC 8 full level

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