

Title (en)  
METHOD OF PRODUCING STEEL WIRE

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES STAHLDRATES

Title (fr)  
PROCÉDÉ DE FABRICATION DE FIL D'ACIER

Publication  
**EP 2404681 A4 20151202 (EN)**

Application  
**EP 10748749 A 20100302**

Priority  
• JP 2010053352 W 20100302  
• JP 2009047890 A 20090302

Abstract (en)  
[origin: EP2404681A1] Provided is a production method in which a steel having a good tensile strength can be produced with a small processing energy. The method is a method of producing a steel wire, the method including: a pre-drawing process in which a high-carbon steel wire containing 0.90 to 1.20% by mass of carbon is subjected to a drawing to obtain an intermediate wire; a heat treatment process in which the intermediate wire is subjected to a patenting heat treatment to obtain a heat treated wire; and a final drawing process in which the heat treated wire is subjected to a drawing to obtain a steel wire, wherein the amount  $\mu_f$  of drawing in the final drawing process which satisfies the relation represented by the following formula:  $\mu_f = 2 \ln D_0 / D_f$  (wherein  $D_f$  represents the final diameter of the steel wire obtained in the final drawing process,  $D_0$  represents the diameter of the heat treated wire before the final drawing process and  $\ln$  represents natural logarithm) is 2.50 to 3.10.

IPC 8 full level  
**B21C 1/00** (2006.01); **D07B 1/06** (2006.01)

CPC (source: EP US)  
**B21C 1/003** (2013.01 - EP US); **D07B 1/066** (2013.01 - EP US); **D07B 2205/3035** (2013.01 - EP US); **D07B 2205/3057** (2013.01 - EP US); **D07B 2501/2046** (2013.01 - EP US)

Citation (search report)  
• No further relevant documents disclosed  
• See references of WO 2010101154A1

Designated contracting state (EPC)  
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DOCDB simple family (publication)  
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