

Title (en)

High ductility, high hot tensile strength tungsten wire and method of manufacture

Title (de)

Hochumformbarer und Hochwarmfester Wolframdraht sowie Verfahren zur dessen Herstellung

Title (fr)

Fil de tungsten à haute ductilité et haute résistance à traction à chaud et son procédé de fabrication

Publication

EP 1555331 A1 20050720 (EN)

Application

EP 05250198 A 20050114

Priority

US 75964504 A 20040116

Abstract (en)

A method for manufacturing a high ductility and high hot tensile strength tungsten wire (9) for incandescent lamp filaments is disclosed. The method comprises the steps of preparing a tungsten alloy, swaging a tungsten rod from the alloy, and drawing the swaged rod to wire size in multiple drawing passes. In the method, the wire (9) is annealed between predetermined draws. It is proposed that an annealing is performed before the final drawing pass, by annealing the wire at a temperature between 1100-1300 DEG C. <??>There is also provided a tungsten wire (9) for incandescent lamp filament, which has high ductility and high hot tensile strength. The tungsten wire (9) of the invention has a cold tensile strength - hot tensile strength ratio not exceeding 3.5. <IMAGE>

IPC 1-7

C22C 27/04; **H01K 1/08**; **B21C 1/00**

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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