

Title (en)  
Conductor roll

Title (de)  
Wärmeleitende Rolle

Title (fr)  
Rouleau conducteur

Publication  
**EP 0658635 B1 19990324 (EN)**

Application  
**EP 94117700 A 19941109**

Priority  
US 15052093 A 19931110

Abstract (en)  
[origin: EP0658635A1] A conductor roll for use in the annealing of wire, such as copper wire, comprising a conductive substrate, such as copper, coated with a wear resistant layer of tungsten or tungsten based alloy in which the surface of the wear resistant layer has a roughness of at least 2 microns Ra. <IMAGE>

IPC 1-7  
**C23C 30/00**; **C21D 9/56**

IPC 8 full level  
**C21D 1/40** (2006.01); **C21D 9/56** (2006.01); **C21D 9/62** (2006.01); **C23C 30/00** (2006.01)

CPC (source: EP)  
**C21D 9/563** (2013.01); **C21D 9/62** (2013.01); **C23C 30/00** (2013.01)

Cited by  
ITUA20162154A1; WO2017168385A1

Designated contracting state (EPC)  
CH DE ES FR GB IT LI

DOCDB simple family (publication)  
**EP 0658635 A1 19950621**; **EP 0658635 B1 19990324**; CA 2135510 A1 19950511; CA 2135510 C 19990921; DE 69417367 D1 19990429; DE 69417367 T2 19990826; ES 2129098 T3 19990601; JP 3065219 B2 20000717; JP H07197133 A 19950801; SG 49600 A1 19980615

DOCDB simple family (application)  
**EP 94117700 A 19941109**; CA 2135510 A 19941109; DE 69417367 T 19941109; ES 94117700 T 19941109; JP 29910594 A 19941109; SG 1996000642 A 19941109