

Title (en)

MULTIPLE LAYER WIRE STRAND FILLED WITH A FILLER DURING PRODUCTION FOR A TIRE REINFORCEMENT

Title (de)

MEHRLAGIGE DRAHTLITZE MIT WÄHREND DES SCHLAGENS EINGEBRACHTEM FÜLLER ALS VERSTÄRKUNG EINES REIFENS

Title (fr)

CABLE A TROIS COUCHES, GOMME IN SITU, POUR ARMATURE DE CARCASSE DE PNEUMATIQUE

Publication

**EP 2366046 B1 20141105 (FR)**

Application

**EP 09749026 A 20091110**

Priority

- EP 2009008007 W 20091110
- FR 0857786 A 20081117

Abstract (en)

[origin: WO2010054790A1] Metal cord (C-1) with three layers (C1, C2, C3), which is rubberized in situ and comprises a core or first layer (10, C1) of diameter d1, around which there are wound together in a helix at a pitch p2, as a second layer (C2), N filaments (11) of diameter d2, N varying from 5 to 7, around which there are wound together in a helix at a pitch p3, as a third layer (C3), P filaments (12) of diameter d3, said cord being characterized in that it has the following features (d1, d2, d3, p2 and p3 being expressed in mm): -  $0.08 \leq d1 + d2 \leq 2d2 + d3$ ; - over any 2 cm length of cord, a rubber compound known as "filling rubber" (13) is present in each of the capillaries (14) situated, on the one hand, between the core (C1) and the N filaments of the second layer (C2), on the other hand between the N filaments of the second layer (C2) and P filaments of the third layer (C3); the level of filling rubber in the cord ranging between 5 and 30 mg per gram of cord.

IPC 8 full level

**D07B 1/06** (2006.01); **D07B 1/16** (2006.01)

CPC (source: EP US)

**D07B 1/0633** (2013.01 - EP US); **D07B 5/12** (2013.01 - EP US); **D07B 1/0613** (2013.01 - EP US); **D07B 7/145** (2013.01 - EP US); **D07B 2201/2006** (2013.01 - EP US); **D07B 2201/2011** (2013.01 - EP US); **D07B 2201/2023** (2013.01 - EP US); **D07B 2201/2028** (2013.01 - EP US); **D07B 2201/2031** (2013.01 - EP US); **D07B 2201/204** (2013.01 - EP US); **D07B 2201/2046** (2013.01 - EP US); **D07B 2201/2059** (2013.01 - EP US); **D07B 2201/2081** (2013.01 - EP US); **D07B 2205/3021** (2013.01 - EP US); **D07B 2205/3053** (2013.01 - EP US); **D07B 2205/3057** (2013.01 - EP US); **D07B 2205/306** (2013.01 - EP US); **D07B 2205/3067** (2013.01 - EP US); **D07B 2205/3071** (2013.01 - EP US); **D07B 2205/3085** (2013.01 - EP US); **D07B 2205/3089** (2013.01 - EP US); **D07B 2207/4072** (2013.01 - EP US); **D07B 2501/2046** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**WO 2010054790 A1 20100520**; BR PI0921715 A2 20160105; BR PI0921715 A8 20180102; CN 102203341 A 20110928; EA 201170693 A1 20111230; EP 2366046 A1 20110921; EP 2366046 B1 20141105; FR 2938557 A1 20100521; FR 2938557 B1 20110218; JP 2012508829 A 20120412; JP 5492219 B2 20140514; KR 101571581 B1 20151124; KR 20110091513 A 20110811; US 2012125512 A1 20120524

DOCDB simple family (application)

**EP 2009008007 W 20091110**; BR PI0921715 A 20091110; CN 200980143866 A 20091110; EA 201170693 A 20091110; EP 09749026 A 20091110; FR 0857786 A 20081117; JP 2011535907 A 20091110; KR 20117011067 A 20091110; US 200913129723 A 20091110