

Title (en)  
THREE-LAYER METAL CORD FOR TYRE CARCASS REINFORCEMENT

Title (de)  
DREISCHICHTIGER METALLCORD ZUR REIFENKARKASSENVERSTÄRKUNG

Title (fr)  
CABLE METALLIQUE A TROIS COUCHES POUR ARMATURE DE CARCASSE DE PNEUMATIQUE

Publication  
**EP 1699973 B1 20070919 (FR)**

Application  
**EP 04804256 A 20041223**

Priority  
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• FR 0315371 A 20031224

Abstract (en)  
[origin: FR2864556A1] The reinforcing cord is made from carbon steel strands forming a central core and one or two layers of twisted outer strands, with a rubber sleeve encasing the core where the cord comprises a core and one layer, or the inner layer where the cord consists of a core and two layers. The rubber sleeve can be of natural rubber with a reinforcing charge of carbon black or synthetic rubber, with a secant modulus on extension of under 20 MPa; its mean thickness is between 0.010 and 0.040 mm.

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

CPC (source: EP KR US)  
**D07B 1/02** (2013.01 - KR); **D07B 1/0633** (2013.01 - EP KR US); **D07B 1/162** (2013.01 - KR); **D07B 1/0646** (2013.01 - EP US); **D07B 1/0653** (2013.01 - EP US); **D07B 2201/1036** (2013.01 - KR); **D07B 2201/2023** (2013.01 - EP KR US); **D07B 2201/2025** (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 2201/2041** (2013.01 - KR); **D07B 2201/2043** (2013.01 - KR); **D07B 2201/2044** (2013.01 - KR); **D07B 2201/2045** (2013.01 - KR); **D07B 2201/2046** (2013.01 - EP US); **D07B 2201/206** (2013.01 - EP US); **D07B 2201/2061** (2013.01 - EP US); **D07B 2201/2062** (2013.01 - EP US); **D07B 2201/2065** (2013.01 - EP US); **D07B 2201/2071** (2013.01 - EP US); **D07B 2201/2081** (2013.01 - EP US); **D07B 2201/2097** (2013.01 - EP US); **D07B 2205/10** (2013.01 - KR); **D07B 2205/201** (2013.01 - KR); **D07B 2205/2078** (2013.01 - EP US); **D07B 2205/2082** (2013.01 - EP US); **D07B 2205/3021** (2013.01 - KR); **D07B 2401/208** (2013.01 - EP US); **D07B 2501/2046** (2013.01 - EP US); **D07B 2501/2076** (2013.01 - EP US)

C-Set (source: EP US)  
1. **D07B 2201/206 + D07B 2801/12**  
2. **D07B 2201/2061 + D07B 2801/12**  
3. **D07B 2201/2062 + D07B 2801/12**  
4. **D07B 2201/2065 + D07B 2801/12**  
5. **D07B 2205/2078 + D07B 2801/16**  
6. **D07B 2205/2082 + D07B 2801/16**

Cited by  
CN106661830A; CN106661829A; WO2015189313A2; WO2015189310A1; WO2015189314A1; WO2017037225A1

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**FR 2864556 A1 20050701; FR 2864556 B1 20060224**; AT E373738 T1 20071015; BR PI0418080 A 20070417; BR PI0418080 B1 20150804; CA 2548969 A1 20050804; CA 2548969 C 20130604; CN 1898435 A 20070117; CN 1898435 B 20100616; DE 602004009102 D1 20071031; DE 602004009102 T2 20080619; EP 1699973 A1 20060913; EP 1699973 B1 20070919; ES 2294566 T3 20080401; JP 2007517142 A 20070628; JP 2011122291 A 20110623; JP 4707675 B2 20110622; JP 5485189 B2 20140507; KR 101152692 B1 20120615; KR 20060131792 A 20061220; RU 2006126712 A 20080127; RU 2358052 C2 20090610; US 2006237110 A1 20061026; US 2010288412 A1 20101118; US 2012279629 A1 20121108; US 2012298281 A1 20121129; US 8245490 B2 20120821; US 8650850 B2 20140218; WO 2005071157 A1 20050804

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