

Title (en)

Device for detecting the end of service life for synthetic fibre ropes

Title (de)

Einrichtung zur Erkennung der Ablegereife bei Kunstfaserseilen

Title (fr)

Dispositif de détection de la fin de la durée d'utilisation pour câbles en fibres synthétiques

Publication

**EP 0731209 B1 19990707 (DE)**

Application

**EP 96103183 A 19960301**

Priority

CH 63095 A 19950306

Abstract (en)

[origin: EP0731209A1] The time when a synthetic lift cable (5) has to be replaced is determined by including electrically conducting carbon indicator fibres (19) among the strands of aramid fibres which make up the layers (13,14,16) of the cable. The carbon indicator fibres (19) have a lower extensibility and a lower fatigue strength in bending than the aramid fibres (20).

IPC 1-7

**D07B 1/14**

IPC 8 full level

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CPC (source: EP KR US)

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C-Set (source: EP US)

1. **D07B 2205/205 + D07B 2801/10**
2. **D07B 2205/3007 + D07B 2801/10**

Citation (examination)

- DE 2442393 A1 19750327 - NETH ANTON DR TECHN
- DE 2853661 A1 19800703 - SAAR GMBH DRAHTSEILWERK

Cited by

DE102007042680B4; KR100629661B1; EP0882895A1; CN107815905A; CN102040157A; DE19956736C1; EP1273695A4; EP1314680A4; EP1312574A4; EP1930496A3; DE102017101646A1; EP1029973A1; CN102264623A; CN106769568A; DE202016002171U1; EP1930497A3; KR101495343B1; EP1022376A1; EP2434050A1; EP2042462A1; EP1111125A1; AU769328B2; EP1312573A4; AT516444A1; AT516444B1; CH698843B1; EP0849208A1; US5992574A; EP1010803A3; EP1275608A1; AU2002300075B9; AU2002300075B2; KR100434776B1; EP1886957A1; US7665289B2; US11162214B2; US6631609B2; US6382080B1; US8813918B2; WO2010072549A1; WO2010072690A1; WO2014143503A1; WO2004035913A1; US7326139B2; EP2843128A1; DE202008001786U1; US6608487B2; US10472765B2; US6247359B1; US8360208B2; US6653943B2; US6289742B1; US9075022B2; WO2018115484A1; EP3392404A1; US10421647B2; US10808355B2; WO2017068054A1; US10822742B2; US11008702B2; EP0672781A1

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**EP 96103183 A 19960301**; AR 33564296 A 19960305; AT 96103183 T 19960301; AU 4584896 A 19960304; BR 9600892 A 19960305; CA 2169431 A 19960213; CN 96104226 A 19960304; CZ 64996 A 19960305; DE 59602355 T 19960301; DK 96103183 T 19960301; ES 96103183 T 19960301; HK 98112338 A 19981126; HU P9600548 A 19960305; JP 4751296 A 19960305; KR 19960005794 A 19960306; NO 960880 A 19960305; NZ 28603596 A 19960221; PL 31308896 A 19960305; RU 96104333 A 19960305; TR 9600183 A 19960305; US 85184797 A 19970506; ZA 961733 A 19960304