

Title (en)
Electrical contact for monitoring synthetic fibre ropes

Title (de)
Kontaktierung sicherheitstechnisch überwachbarer Kunstfaserseile

Title (fr)
Contact électrique pour le contrôle des câbles en fibres synthétiques

Publication
EP 1111125 A1 20010627 (DE)

Application
EP 00811226 A 20001221

Priority
• EP 00811226 A 20001221
• EP 99811186 A 19991221

Abstract (en)
A rope is made of synthetic non-conducting strands with interspersed electrically conducting indicator fibers to warn of breaks or faults. All the indicator fibers are connected together at one end and selectively connected in series and parallel at the other. Any breaks are detected electrically by comparison with a reference value for electrical resistance. Independent claims are also included for: (a) a contact element fitted at one end of the rope, e.g. a disk with a cutting edge held by a self-tapping screw or a number of alternative contact devices (b) a plastic rope fitted with safety wires connected in this manner; (c) twinned ropes of opposite twist fitted with safety wires and a joint contact device.

Abstract (de)
Die vorliegende Erfindung betrifft eine Kontaktierung zum Herstellen einer leitenden Verbindung von Indikatorfasern (9) an einem Ende eines aus elektrisch isolierenden Kunstfasern und elektrisch leitenden Indikatorfasern (9) bestehenden, sicherheitstechnisch überwachbaren Kunstfaserseils (6), mit einem Kontaktelement (18), welches mehr als zwei Indikatorfasern (9) elektrisch leitend miteinander verbindet. Befestigungsmittel (20,22) legen das Kontaktelement (18) und die Indikatorfasern (9) in ihrer Lage zueinander fest, wodurch eine kostengünstige und zuverlässige Kontaktierung geschaffen ist. <IMAGE>

IPC 1-7
D07B 1/14; **B66B 7/12**

IPC 8 full level
G01N 27/20 (2006.01); **B66B 5/02** (2006.01); **D07B 1/00** (2006.01); **D07B 9/00** (2006.01); **H01R 13/66** (2006.01); **H01R 13/713** (2006.01)

CPC (source: EP KR US)
B66B 7/1223 (2013.01 - EP KR US); **D07B 1/145** (2013.01 - KR); **D07B 9/00** (2013.01 - KR); **H01R 13/6616** (2013.01 - EP KR US); **H01R 13/6691** (2013.01 - KR); **H01R 13/713** (2013.01 - KR); **D07B 1/145** (2013.01 - EP US); **H01R 13/6691** (2013.01 - EP US); **H01R 13/713** (2013.01 - EP US); **H01R 2201/20** (2013.01 - EP KR US)

Citation (search report)
[DA] EP 0731209 A1 19960911 - INVENTIO AG [CH]

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EP1350886A4; US10472765B2

Designated contracting state (EPC)
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EP 1111125 A1 20010627; **EP 1111125 B1 20040317**; AR 028893 A1 20030528; AT E262070 T1 20040415; AU 7241500 A 20010628; AU 769328 B2 20040122; BR 0006226 A 20010918; BR 0006226 B1 20100406; CA 2329405 A1 20010621; CA 2329405 C 20070410; CN 1139688 C 20040225; CN 1300895 A 20010627; DE 50005676 D1 20040422; DK 1111125 T3 20040621; ES 2216846 T3 20041101; HK 1038599 A1 20020322; ID 28662 A 20010621; IL 140043 A0 20020210; IL 140043 A 20060705; JP 2001234485 A 20010831; KR 100731570 B1 20070622; KR 20010062570 A 20010707; MX PA01000060 A 20020806; MY 126611 A 20061031; NO 20006569 D0 20001221; NO 20006569 L 20010622; NO 319861 B1 20050926; NZ 509111 A 20020531; PT 1111125 E 20040831; SG 87197 A1 20020319; TR 200401348 T4 20040721; US 2001040039 A1 20011115; US 6608487 B2 20030819; ZA 200007777 B 20010716

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