

1) Family number: 29543494 (US2004131834A)

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Title: ALUMINUM CONDUCTOR COMPOSITE CORE REINFORCED CABLE AND METHOD OF MANUFACTURE

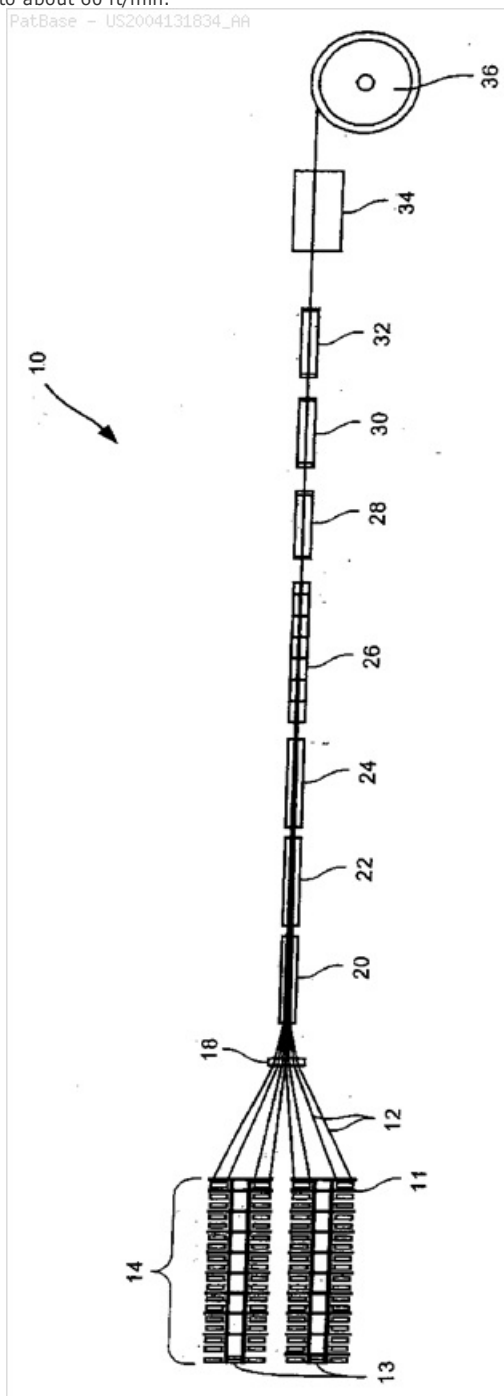
Abstract: This invention relates to an aluminum conductor composite core reinforced cable (ACCC) and method of manufacture. An ACCC cable has a composite core surrounded by at least one layer of aluminum conductor. The composite core comprises a plurality of fibers from at least one fiber type in one or more matrix materials. The composite core can have a maximum operating temperature capability above 100 degrees centigrade or within the range of about -45 degrees centigrade to about 230 degrees centigrade, at least 50 percent fiber to resin volume fraction, a tensile strength in the range of about 160 Ksi to about 370 Ksi, a modulus of elasticity in the range of about 7 Msi to about 37 Msi and a coefficient of thermal expansion in the range of about -0.7×10^{-6} m/m/ degrees centigrade to about 6×10^{-6} m/m/ degrees centigrade. According to the invention, a B-stage forming process may be used to form the composite core at improved speeds over pultrusion processes wherein the speeds ranges from about 9 ft/min to about 60 ft/min.

Classifications:

International (IPC 8-9): B05D B05D1/18 B05D3/02 B29C70/08 B29C70/52 B29D22/00 B32B B32B15/04 B32B15/08 B32B15/20 B32B17/02 B32B27/04 B32B27/12 B32B5/02 B32B5/12 B65H B65H1/00 B65H75/04 C07D471/04 C08J5/04 C08K7/02 C08L101/00 D01F9/14 D02G3/00 D02G3/02 D02G3/36 D03D25/00 D04C1/00 D04H D04H1/00 D04H3/08 D04H3/12 D07B1/02 G02B6/44 H01B1/02 H01B13/00 H01B13/008 H01B13/22 H01B17/14 H01B3/48 H01B5/10 H01B7/18 H01B9/00 H01R4/50 H01R4/58 H01R4/62 H02G15/04 H02G15/06 H02G15/08 H02G15/18 H02G3/00 H02G3/06 H02G7/04 H02G7/05 (Advanced/Invention); B29D22/00 B29K105/08 B32B15/04 B32B27/04 B32B27/12 B32B5/02 H01B13/00 H01B5/10 (Advanced/Non-invention); B05D1/18 B05D3/02 B29C70/04 B29C70/08 B29D22/00 B32B15/04 B32B15/08 B32B17/02 B32B27/04 B32B5/12 B65H1/00 D02G3/00 D02G3/02 D02G3/36 D03D25/00 D04C1/00 D04H1/00 D04H3/08 D07B1/00 G02B6/44 H01B17/14 H01B3/18 H01B5/00 H01B9/00 H02G15/08 H02G3/00 (Core/Invention); H01B5/00 (Core/Non-invention); B05D B32B B65H D04H H01R (Subclass/Invention); B29D B32B (Subclass/Non-invention)

International (IPC 1-7): B05D1/18 B05D3/02 B29D22/00 B29D9/00 B32B15/04 B32B27/04 B32B27/12 B32B5/02 B65H B65H1/00 D02G3/00 D04H1/00 D04H3/08 G02B6/44 H01B5/10 H01B7/18 H01B9/00 H01R H01R4/50 H02G3/00 H02G3/06
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European: B29C70/52 B29C70/52A B32B1/00 B32B15/02 B32B15/04 B32B15/08 B32B15/20 B32B27/04 H01B1/02B H01B5/10G6 H01B7/18B2 H01B9/00P H01R4/50W H01R4/62 H02G15/06 H02G15/10 H02G15/18 H02G7/04 H02G7/05B3 L29L31/34K T01B13/00J T01B5/10G6 T02G7/04
US: 1/1 156/180 174/102R 174/106R 174/113C 174/124.00RP 174/124R 174/130 174/68.1 174/68.100S 174/70R 174/74.00R 174/74.00RP 174/74R 174/88 174/88.00R 174/88.00RP 174/88R 427/372.2 427/379 427/384 427/389.7 427/430.1 427/434.2 427/434.6 428/292.1 428/292.100P 428/297.4 428/298.1 428/299.1 428/299.4 428/299.400P 428/300.4 428/300.7 428/300.700S 428/364 428/364P 428/367 428/367S 428/375 428/375P 428/375S 428/377 428/377S 428/378 438/375 438/375S 442/181 442/181S 442/43 442/43P



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Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: CTC GLOBAL CORP

Assignee(s): (std): COMPOSE TECHNOLOGY CORP ; COMPOSITE TECH CORP ; COMPOSITE TECHNOLOGIES CORP ; CTC CABLE CORP ; COMPSITE TECHNOLOGY CORP ; COMPOSITE TECH ; KORZENIOWSKI GEORGE ; HIEL CLEM ; HIEL CLEMENT ; KORZIENOWSKI GEORGE ; FERGUSON WILLIAM C ; KORZENLOWSKI GEORGE ; PILLING DOUGLAS ; FERGUSON WILLIAM ; BOSZE ERIC ; BRYANT DAVID ; DAVID BRYANT ; CTC GLOBAL CORP

Assignee(s): GEORGE KORZENIOWSKI ; CLEMENT HIEL ; PARTNERS FOR GROWTH II LP ; COMPOSITE TECHNOLOGYCORPORATION ; COMPOSITE TECHNOLOGY CORP

Inventor(s): (std): HEIL CLEM ; CLEMENT HIEL ; WILLIAM FERGUSON ; HIEL CLEMENT ; FERGUSON WILLIAM CLARK ; KORZIENOWSKI GEORGE ; BOSZE ERIC ; FERGUSON WILLIAM ; TATE JAMES ; PILLING DOUG ; HERNANDEZ ORLANDO ; KORZENLOWSKI GEORGE ; BRYANT DAVID HIEL CLEMENT FERG ; BRYANT DAVID ; GEORGE KORZENIOWSKI ; CLEM HIEL ; HIEL CLEM ; KORZENIOWSKI GEORGE ; PILLING DOUGLAS ; FERGUSON WILLIAM C ; DAVID BRYANT ; BRYANT DAVID C

Inventor(s): CLEM HEIL ; BRYANT DAVID HIEL CLEMENT FERGUSON WILLIAM C

Agent(s): DAVIES COLLISON CAVE PTY LTD; DAVIES COLLISON CAVE; JOHNSON ERNEST PETER; D YOUNG AND CO LLP; ILLINGWORTH LAW WILLIAM ILLINGWORTH; ISERN JORGE; SOROKER AGMON; ONDA HIRONORI; ONDA MAKOTO; TOLGA CAYLAK; MICHAEL D MCLINTOSH MCLINTOSH LLC; THE MCINTOSH GROUP; MCINTOSH GROUP; BROWNSTEIN HYATT FARBER SCHRECK LLP; MARCH FISCHMANN AND BREYFOGLE LLP; MARSH FISCHMANN AND BREYFOGLE LLP

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NA NE NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

2) Family number: 51759946 (US2013330599A) © PatBase

Title: FEED-THROUGH

Abstract: A feed-through, for example a battery feed-through for a lithium-ion battery or a lithium ion accumulator, has at least one base body which has at least one opening through which at least one conductor, for example a pin-shaped conductor, embedded in a glass material is guided. The base body contains a low melting material, for example a light metal, such as aluminum, magnesium, AlSiC, an aluminum alloy, a magnesium alloy, titanium, titanium alloy or steel, in particular special steel, stainless steel or tool steel. The glass material consists of the following in mole percent: 35-50 percent P2O5, for example 39-48 percent; 0-14 percent Al2O3, for example 2-12 percent; 2-10 percent B2O3, for example 4-8 percent; 0-30 percent Na2O, for example 0-20 percent; 0-20 percent Li2O, for example 12-20 percent, wherein M is K, Cs or Rb; 0-10 percent PbO, for example 0-9 percent; 0-45 percent Li2O, for example 0-40 percent or 17-40 percent; 0-20 percent BaO, for example 5-20 percent; 0-10 percent Bi2O3, for example 1-5 percent or 2-5 percent.

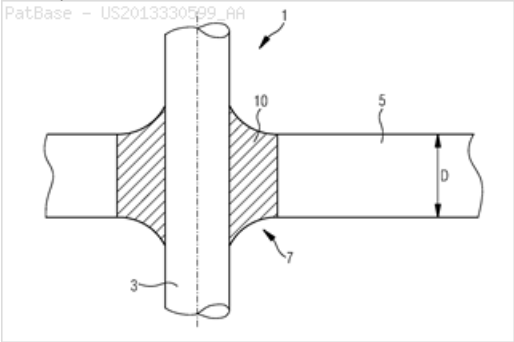
Classifications:

International (IPC 8-9): B23K1/00 B23K1/19 B23K101/36 B23K103/10 B23K15/00 B23K15/04 B23K20/10 B23K26/064 B23K26/20 B23K26/21 B23K26/32 C03C10/00 C03C17/02 C03C27/02 C03C29/00 C03C3/16 C03C3/17 C03C3/19 C03C4/20 C03C8/00 C03C8/02 C03C8/08 C03C8/10 C03C8/24 C22C21/00 C22C21/02 C22C21/04 C22C21/06 H01B17/30 H01G11/74 H01G11/78 H01G11/80 H01G11/82 H01G11/84 H01G2/10 H01G9/10 H01M10/052 H01M10/0525 H01M10/0568 H01M10/0569 H01M10/058 H01M2/02 H01M2/04 H01M2/06 H01M2/08 H01M2/24 H01M2/26 H01M2/30 H01M4/06 H01R13/03 H01R4/02 (Advanced/Invention); B23K101/36 B23K103/00 B23K103/10 H01M10/052 (Advanced/Non-invention)

CPC: H01M2/307 H01M2/0257 H01M2/024 B23K20/10 H01M2/266 B23K2101/38 B23K1/0004 B23K15/04 B23K26/206 B23K2103/54 C03C10/00 H01M2/0486 H01G11/84 H01G11/82 C03C17/02 H01R13/03 B23K2101/36 B23K2103/10 C03C4/20 H01M2/06 Y10T29/49108 Y10T29/49115 B23K1/19 B23K15/0093 B23K26/32 C03C8/00 C03C27/02 C03C2204/00 C03C2207/08 H01M2/24 H01M10/0569 H01M2220/20 H01M2300/0037 C03C3/19 Y02E60/122 Y10T29/4911 C03C8/08 C22C21/00 C22C21/02 C22C21/04 C22C21/06 H01G2/103 H01G9/10 H01G11/74 H01G11/80 H01M10/052 C03C8/24 C03C29/00 H01M2/0262 H01M2/0285 H01M2/065 H01M2/08 H01M2/305 H01M10/0525

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Family:

Publication number	Publication date	Application number	Application date
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Priority:

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Probable Assignee: SCHOTT AG

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Agent(s): SAWODNY MICHAEL WOLFGANG; USUI SHINICHI; OKABE YUZURU; TAKANASHI NORIMICHI; TAYLOR IP PC; SAWODNY MICHAEL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JO JP KE KG KH KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

3) Family number: 33497443 (US2001019494A)

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Title: DC TRANSFORMER/REACTOR

Abstract: The present invention relates to a DC transformer/reactor comprising a magnetic circuit, wherein the magnetic circuit comprises a magnetic core and at least one winding. The winding comprises at least one current-carrying conductor. Each winding comprises also an insulation system, which comprises on the one hand at least two semiconducting layers, wherein each layer constitutes substantially an equipotential surface, and on the other hand between them is arranged a solid insulation.

Classifications:

International (IPC 8-9): B60M3/00 H01B7/00 H01B7/02 H01F27/00 H01F27/28 H01F27/32 H01F27/34 H01F29/14 H01F3/10 H01F3/14 H02H3/02 H02H9/00 H02J3/00 H02J3/18 H02J3/36 H02K1/00 H02K1/02 H02K1/16 H02K11/04 H02K15/00 H02K15/085 H02K15/12 H02K16/00 H02K3/12 H02K3/14 H02K3/28 H02K3/32 H02K3/40 H02K3/48 H02K47/00 H02K47/18 H02K9/00 H02K9/19 H02M3/00 H02M7/04 (Advanced/Invention);

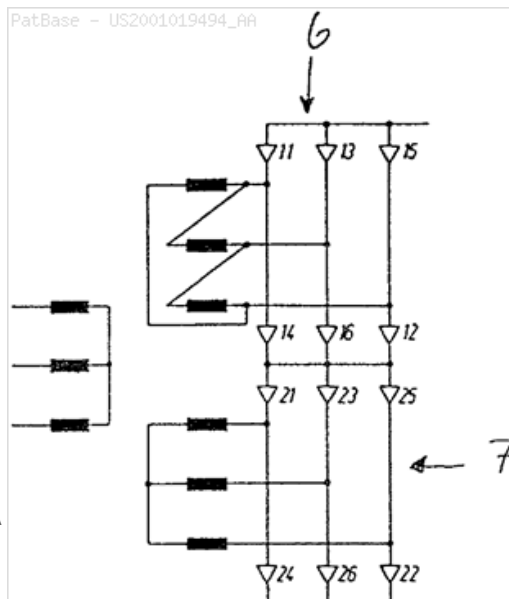
B60M3/00 H01B7/00 H01B7/02 H02K1/16 H02K3/40 H02K9/19 H02M3/00 (Advanced/Non-invention)

International (IPC 1-7): B60M3/00 B65H59/00 F02D21/00 H01R39/00 H02H9/00 H02J16/00 H02J3/00 H02J3/18 H02J3/36 H02K1/00 H02K15/08 H02K15/085 H02K16/00 H02K17/00 H02K19/00 H02K3/00 H02K3/02 H02K3/12 H02K3/30 H02K3/40 H02K47/00 H02K47/18 H02M3/00 H02M5/45

CPC: H01F3/10 H01F3/14 H01F27/288 H01F27/323 H01F27/34 H01F29/14 H01F2027/2833 H01F2027/329 H01F2029/143 H02H3/025 H02K1/165 H02K3/14 H02K3/28 H02K3/40 H02K3/48 H02K9/19 H02K11/048 H02K15/00 H02K15/12 H02K2203/15 Y10S174/13 Y10S174/14 Y10S174/15 Y10S174/17 Y10S174/19 Y10S174/20 Y10S174/22 Y10S174/24 Y10S174/25 Y10S174/26 Y10S174/28 Y10S174/29

European: H01F27/28G H01F27/32C H01F27/34 H01F3/10 H01F3/14 H02K11/04D H02K11/04D1 H02K15/00 H02K15/12 H02K3/14 H02K3/28 H02K3/40 H02K3/48 T01F27/28B2 T01F27/32F T01F29/14A T02K1/16B T02K203/15 T02K3/40 T02K9/19

US: 174/DIG.19 174/DIG.28 290/1.00R 290/1R 310/179 310/179P 310/180 310/180P 310/195 310/196 363/125 363/125P



Family:

Publication number **Publication date** **Application number** **Application date**

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Priority:

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Inventor(s): CARSTENSEN PETER AND ; ANDERS BJORKLUND ; TEMPLIN PETER AND ; GUNNAR DAVIDSSON ; BO HERNNAS ; BENGT RYDHOLM ; LENNART BRANDT ; ARENE EDMAN ; JONNY HYLANDER ; IVAN JONAS ; BENGT ROTHMAN ; UDO FROMM ; ALBERT JAKSTS ; THORSTEN SCHUTTE ; JAN ANDERS NYGREN ; GORAN HOLMSTROM ; HANS OLOF KALLDIN ; THORSTEN SCHUTE ; CHRISTIAN SASSE ; MIKAEL BERGVIST ; HANS BERNHOFF ; MIKAEL BERGVIST ; MATS EKBERG ; JAN ISBERG ; ANDERS SUNESSON ; DAN WINDMAR ; MATS LEIJOJN ; M LEIJON ; B HELNAS ; B KASTENGSEN ; BIR HELNAS ; BIDDER KASTENGSEN ; ANDERS BJOKLUND

Agent(s): GOWLING LAFLEUR HENDERSON LLP ; GOWLING WLG CANADA LLP ; REINHOLD COHN AND PARTNERS ; DYKEMA GOSSETT PLLC

Designated states: AL AM AT AU AZ BA BB BE BG BR BY CA CH CN CU CZ DE DK EE ES FI FR GB GE GH GR HU IE IL IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MC MD MG MK MN MW MX NL NO NZ PL PT RO RU SD SE SG SI SK SZ TJ TM TR TT UA UG US UZ VN YU

4) Family number: 55761974 (US2014041925A)

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Title: SURFACE MODIFIED OVERHEAD CONDUCTOR

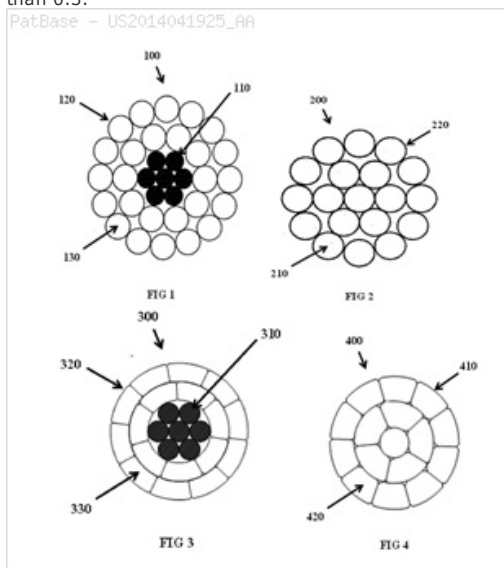
Abstract: The present invention relates to a surface modified overhead conductor with a coating that allows the conductor to operate at lower temperatures. The coating is an inorganic, non-white coating having durable heat and wet aging characteristics. The coating preferably contains a heat radiating agent with desirable properties, and an appropriate binder/suspension agent. In a preferred embodiment, the coating has Lss value of less than 80, a heat emissivity of greater than or equal to 0.5, and/or a solar absorptivity coefficient of greater than 0.3.

Classifications:

International (IPC 8-9): B05D5/12 C09D1/00 C09D1/02 C09D183/04 C09D7/12 C09D7/61 C23C26/00 C25D11/02 C25D11/06 C25D11/08 C25D7/06 C25D9/06 H01B H01B1/02 H01B1/08 H01B13/00 H01B13/16 H01B13/30 H01B3/00 H01B3/02 H01B3/10 H01B3/12 H01B3/46 H01B5/00 H01B5/02 H01B5/08 H01B5/10 H01B7/02 H01B7/29 H01B7/42 H01B9/00 H02G7/00 (Advanced/Invention); H01B7/42 (Advanced/Non-invention); H01B5/00 H01B5/10 (Core/Invention); H01B (Subclass/Invention)

CPC: H01B1/023 H01B1/026 H01B1/08 H01B13/0026 H01B13/0033 H01B3/025 H01B7/292 H01B3/008 H01B3/02 H01B3/10 H01B3/46 H01B7/29 H01B13/30 H01B9/006 H01B9/008 H01B5/002 H01B7/421 C25D7/0607 C25D11/02 C25D11/022 C25D11/024 C25D11/026 C25D11/06 C25D11/08 H01B3/105

US: 1/1 174/40R 205/108 205/159 205/162 205/250 205/320 205/323 205/333 205/95 427/117 427/120



Family:

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IN00817CN2015 A	20160701	IN2015CN00817	20150210
IN02831KN2015 A	20160212	IN2015KN02831	20150827
IN327032 B	20191213	IN2015CN00817	20150210
JP2015532763 T2	20151112	JP20150526528T	20130419
JP2016515281 T2	20160526	JP20150559003T	20140221
JP6386459 B2	20180905	JP20150526528T	20130419
KR101929416 B1	20181214	KR20157005533	20130419
KR20150041797 A	20150417	KR20157005533	20130419
KR20150125981 A	20151110	KR20157026584	20140221
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WO14133898 A1	20140904	WO2014US17736	20140221

Priority:

US20120681926P 20120810	US20120702120P 20120917	US20130769492P 20130226
US20130800608P 20130315	US20130863902 20130416	CA20132880495 20130419
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US20150701220 20150430		

Probable Assignee: GENERAL CABLE TECHNOLOGIES CORP

Assignee(s): (std): GEN CABLETECHNOLOGIES CORP ; GENERLA CABLE TECHNOLOGIES CORP ; PHELPS DODGE IND INC ; GENERAL CABLE TECH CORP ; GEN CABLE TECHNOLOGIES CORP

Assignee(s): GENERAL CABLE TECHNOLOGIES CORP ; GENERAL CABLETECHNOLOGIES CORP ; JPMORGAN CHASE BANK NA ; GENERAL CABLE IND INC ; TEMPLE WILLIAM S ; SIRIPURAPU SRINIVAS ; RANGANATHAN SATISH KUMAR ; MHETAR VIJAY ; RANGANATHAN SATHISH KUMAR ; ANDERSEN RYAN ; BAKER GORDON ; DAVIS CODY R ; DOSS DENNIS L ; FREESTONE JAMES

Inventor(s): (std): DOSS DENNIS L ; ANDERSEN RYAN ; MHETAR VIJAY ; TEMPLE WILLIAM S ; RANGANATHAN SATISH KUMAR ; FREESTONE JAMES ; BAKER GORDON ; SIRIPURAPU SRINIVAS ; DAVIS CODY R ; RANGANATHAN SATHISH KUMAR ; RANGANATHAN SATHISH K ; GORDON BAKER ; CODY R DAVIS ; JAMES FREESTONE ; SRINIVAS SIRIPURAPU ; SATHISH KUMAR RANGANATHAN ; RYAN ANDERSEN ; WILLIAM S TEMPLE ; DENNIS L DOSS ; VIJAY MHETAR ; TEMPLE WILLIAMS S ; SATHISH K RANGANATHAN ; SATISH K RANGANATHAN ; KUMAR RANGANATHAN SATHISH

Agent(s): PIZZEYS PATENT AND TRADE MARK ATTORNEYS; PIZZEYS PATENT AND TRADE MARK ATTORNEYS PTY LTD; SMART AND BIGGAR; PARLEE MCLAWS LLP; ESTUDIO CAREY LTDA; BARTON MATTHEW THOMAS; ABU GAZALEH INTELLECTUAL PROPERTY LLC; ROBIN BRIDGE AND JOHN LIU; ULMER AND BERNE LLP; GREENBAUM MICHAEL C

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

5) Family number: 28239516 (US2001009198A)

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Title: ELECTRICAL CABLE WITH SELF-REPAIRING PROTECTION

Abstract: A cable, in particular a cable for electric power transmission or distribution, having an inner layer comprising a self-repairing material with a predetermined cohesiveness and a controlled flowability, so as to re-establish, upon creation of a discontinuity in at least one of the cable coating layers, the continuity in the coating. The discontinuity in the coating can be caused by mechanical abuses of various types, for example accidental impact with cutting tools. Infiltration of moisture and generation of leakage currents, leading to a rapid corrosion of the conductor, are in this way avoided.

Classifications:

International (IPC 8-9): H01B13/00 H01B3/28 H01B3/30 H01B3/44 H01B3/46 H01B7/17 H01B7/28 H01B9/02

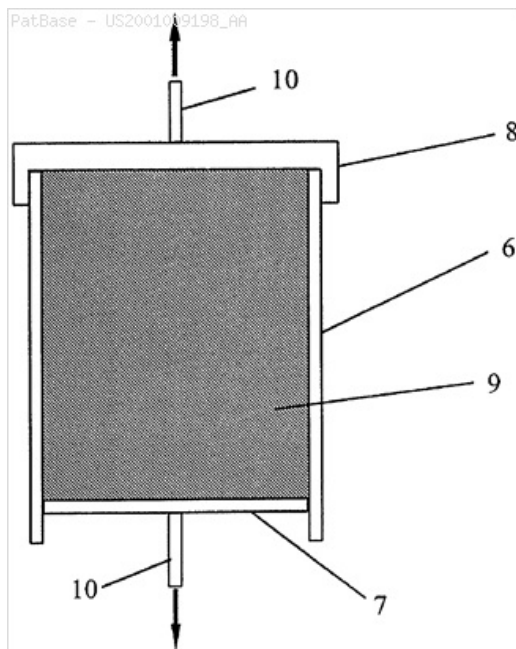
H01H3/00 (Advanced/Invention);
H01B13/00 H01B3/18 H01B3/30 H01B3/44 H01B3/46 H01B7/17
H01B9/00 H01H3/00 (Core/Invention)

International (IPC 1-7): H01B3/28 H01B3/30 H01B3/44 H01B3/46 H01B7/00 H01B7/17 H01B7/28 H01B7/34 H01B9/02 H01H3/00

CPC: Y02A30/14 H01B3/441 H01B7/28

European: H01B3/44B H01B7/28

US: 174/110.00RP 174/110R 174/120.00R 174/120.00RP 174/120R

**Family:**

Publication number	Publication date	Application number	Application date
AR018570 AA	20011128	AR1999P100890	19990303
AT254795 E	20031215	AT19990103092T	19990217
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AU764922 B2	20030904	AU19990018590	19990304
BRPI9900857 A	20000118	BR1999PI00857	19990303
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CA2263377 AA	19990904	CA19992263377	19990225
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DE69912868 T2	20040729	DE19996012868T	19990217
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EP0940819 B1	20031119	EP19990103092	19990217
ES2212400 T3	20040716	ES19990103092T	19990217
JP2000100259 A2	20000407	JP19990057161	19990304
NZ334457 A	19990528	NZ19990334457	19990303
US2001009198 AA	20010726	US19990261505	19990303
US2002104678 AA	20020808	US20010971766	20011009
US2002108774 AA	20020815	US20020058004	20020129
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Priority:

EP19980103767 19980304	US19980076752P 19980304	EP19990103092 19990217
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AU19990018590 19990304	US20010971766 20011009	US20020058004 20020129
AU20030204994 20030630		

Probable Assignee: PRYSMIAN CAVI E SISTEMI ENERGIA SRL**Assignee(s):** (std): PIRELLI ; PIRELLI AND C SPA ; PIRELLI CAVI E SISTEMI SPA ; PIRELLI CAVIE SISTEMI S P A ; PRYSMIAN CAVI E SISTEMI ENERGIA S R L ; PRYSMIAN CAVI SISTEMI ENERGIA ; PIRELLI CAVI E SISTEMI S P A ; PRYSMIAN CAVI SISTEMI ENERGIA SRL**Assignee(s):** PRYSMIAN (LUX) II SARL ; PRYSMIAN LUX II SARL ; PIRELLI S P A MAILAND MILANO ; POZZATI GIOVANNI ; PIRELLI SPA ; PIRELLI CAVIE SISTEMI SPA ; PRYSMIAN II SARL ; PRYSMIAN CAVI E SISTEMI ENERGIA SRL ; PIRELLI S P A ; POZZATI GIOVANNI ; PIRELLI CAVI AND SYST SPA ; PIRELLI AND C S P A ; PIRELLI AND C S P A MAILAND MILANO ; BALCONI LUCA ; BAREGGI ALBERTO ; BELLI SERGIO ; BOSISIO CLAUDIO ; CAIMI LUIGI ; GSCP ATHENA (LUX) II SARL ; GSCP ATHENA II SARL ;**Inventor(s):** (std): PIRELLI CAVI SPA ; POZZATI GIOVANNI ; PIRELLI CAVI S P A ; POZZATI GIOVANNI ; BALCONI LUCA ; BAREGGI ALBERTO ; BOSISIO CLAUDIO ; CAIMI LUIGI ; BELLI SERGIO**Inventor(s):** ALBERTO BAREGGI ; LUIGI CAIMI ; LUCA BALCONI ; CLAUDIO BOSISIO ; SERGIO BELLI ; GIOVANNI POZZATI**Agent(s):** DAVIES COLLISON CAVE; DAVIES COLLISON CAVE PTY LTD; KIRBY EADES GALE BAKER; ONO SHINJIRO; SHAMOTO ICHIO; KOBAYASHI YASUSHI; NAKATA HISASHI; TOMITA HIROYUKI; CHIBA AKIO**Designated states:** AT BE CH DE DK ES FI FR GB IE IT LI NL PT SE**6) Family number:** 62005013 (US2016099090A)

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Title: ENERGY EFFICIENT CONDUCTORS WITH REDUCED THERMAL KNEE POINTS AND THE METHOD OF MANUFACTURE THEREOF

Abstract: The present invention relates to electrical conductors for electrical transmission and distribution with pre-stress conditioning of the strength member so that the conductive materials of aluminum, aluminum alloys, copper, copper alloys, or copper micro-alloys are mostly tension free or under compressive stress in the conductor, while the strength member is under tensile stress prior to conductor stringing, resulting in a lower thermal knee point in the conductor.

Classifications:

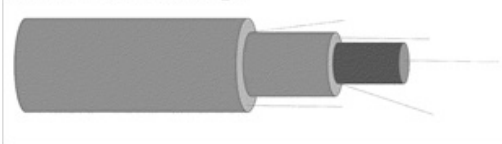
International (IPC 8-9): H01B H01B1/02 H01B1/24 H01B11/22 H01B13/00 H01B13/02 H01B13/24 H01B13/26 H01B3/44 H01B5/00 H01B5/10 H01B7/00 H01B7/18 H01B7/22 H01B7/28 H01B7/282 H01B7/29 H01B9/00 H01B9/02 H01B9/04 H01R4/18 H01R43/00 H02G1/02 (Advanced/Invention); H01B13/02 (Advanced/Non-invention)

CPC: H01B1/24 H01B3/441 H01B7/2806 H01B7/2825 H01B7/292

H01B13/245 H02G1/02 H01B1/023 H01B1/026 H01B5/105 H01B13/0285 Y10T29/49123 H01B5/102 H01B13/0016 H01R4/183

US: 1/1 174/102A 174/102R 174/128.1 29/825

PatBase - US2016099090_AA



Family:

Publication number	Publication date	Application number	Application date
AU2015323325 AA	20170406	AU20150323325	20150924
CA2961452 AA	20170315	CA20152961452	20150924
CN105702352 A	20160622	CN201510447245	20150727
CN105702352 B	20180629	CN201510447245	20150727
CN105788738 A	20160720	CN201510588201	20150916
CN105788738 B	20190416	CN201510588201	20150916
CN205959672 U	20170215	CN201520715686U	20150916
EP3213327 A1	20170906	EP20150845013	20150924
EP3213327 A4	20180808	EP20150845013	20150924
ID201801102 A	20180202	ID2017P0001810	20150924
IN201747009028 A	20170428	IN201747009028	20170316
KR102057043 B1	20191218	KR20177009583	20150924
KR20170052650 A	20170512	KR20177009583	20150924
US2016099090 AA	20160407	US20150863396	20150923
US2017178764 AA	20170622	US20170449602	20170303
US2019295739 AA	20190926	US20190423116	20190527
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US10304586 BB	20190528	US20170449602	20170303
WO16046790 A1	20160331	WO20151B57369	20150924
ZA201702853 A	20180725	ZA20170002853	20170424

Priority:

US20140051490P 20140917 US20140056330P 20140926 US20140056332P 20140926
US20150148915P 20150417 US20150863396 20150923 WO20151B57369 20150924
US20170449602 20170303 US20190423116 20190527

Probable Assignee: TS CONDUCTOR SOLUTION CORP

Assignee(s): (std): HUANG JIANPING ; JIANPING HUANG ; TS CONDUCTOR SOLUTION CORP

Inventor(s): (std): HUANG JIANPING ; JIANPING HUANG

Agent(s): EISENBERG MICHAEL D; LAMINAR IP PTY LTD; OPROIU MARGARETA; KUSNO HADI KUNCORO SSI; MICHAEL D

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

7) Family number: 33112094 (US2006151194A)

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Title: ENHANCED ELECTRICAL CABLES

Abstract: Wellbore electrical cables according to the invention include at least one insulated conductor, at least one layer of armor wires surrounding the insulated conductor, and a polymeric material disposed in the interstitial spaces formed between armor wires and interstitial spaces formed between the armor wire layer and insulated conductor which may further include wear resistance particles or even short fibers, and the polymeric material may further form a polymeric jacket around an outer, layer of armor wires. The insulated conductor is formed from a plurality of metallic conductors encased in an insulated jacket. The invention also discloses a method of preparing a cable by extruding first layer of polymeric material upon at least one insulated conductor; serving a first layer of armor wires upon the polymeric material; softening the polymeric material to partially embed armor wires; extruding a second layer of polymeric material over the armor wires; serving a second layer outer armor wires thereupon; softening the polymeric material to partially embed the second armor wire layer; and optionally extruding a third layer of polymeric material over the outer armor wires embedded in the second layer of polymeric material. Further disclosed are methods of using the cables of the invention in seismic and wellbore operations, including logging operations.

Classifications:

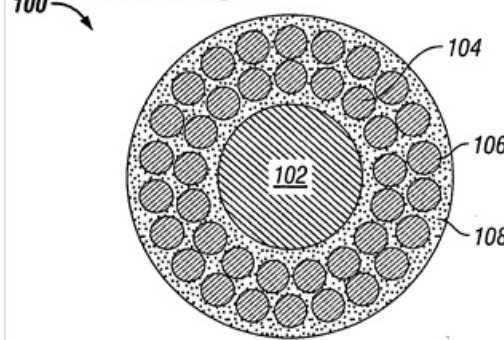
International (IPC 8-9): B02C19/06 B65B1/20 B65B3/22 D07B1/14 E21B17/00 E21B17/20 E21B19/00 E21B19/08 E21B19/22 E21B23/00 E21B23/14 E21B43/00 E21B43/16 E21B43/25 E21B43/26 E21B43/267 E21B47/00 E21B47/12 F16L11/00 H01B11/00 H01B13/14 H01B7/00 H01B7/04 H01B7/14 H01B7/17 H01B7/18 H01B7/285 H02G1/10 H02G15/013 H02G15/08 H02G3/04 (Advanced/Invention); E21B23/00 E21B23/14 E21B47/12 (Advanced/Non-invention); B02C19/06 B65B1/00 B65B3/00 E21B19/00 E21B43/16 E21B43/25 E21B47/00 H01B7/00 H01B7/04 H01B7/17 H01B7/18 (Core/Invention); E21B47/12 (Core/Non-invention)

International (IPC 1-7): E21B23/14 E21B47/12 F16L11/00 H01B7/04

CPC: E21B47/12 E21B17/028 E21B17/00 E21B2023/008 B65B37/00 E21B47/00 E21B47/0001 E21B43/26 E21B17/2006 D07B1/147 E21B17/206 H02G1/10 E21B47/121 E21B19/22 H01B7/046 H01B7/1895 H01B13/141

European: B65B37/00 E21B17/00 E21B17/02E E21B17/20D

PatBase - US2006151194_AA



E21B47/12 H01B13/14B H01B7/04E H01B7/18U H02G1/10 P21B23/00T

US: 1/1 141/11 141/67 141/69 141/70 166/250.01 166/278 166/280.2 166/305.1 166/308.1 166/308.100S 166/335 166/336 166/339 166/352 166/385 166/385S 166/66 166/66S 166/67 166/67S 166/77.1 174/102.00R 174/102R 174/106.00R 174/106.00RP 174/106R 174/107 174/113R 174/68.1 174/74R 174/75R 174/79 174/84R 241/39 241/5 340/853.1 340/853.100S

Family:

Publication number	Publication date	Application number	Application date
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AU2006205539 AA	20060720	AU20060205539	20060112
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CA2594393 C	20140225	CA20062594393	20060112
CA2609886 AA	20080520	CA20072609886	20071106
CA2609886 C	20130702	CA20072609886	20071106
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FR2908921 A1	20080523	FR20070059108	20071116
FR2908921 B1	20130322	FR20070059108	20071116
GB200901273 A0	20090311	GB20090001273	20090127
GB2456908 A1	20090805	GB20090001273	20090127
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IN267289 B	20150717	IN2007CN03079	20070711
MX2007008396 A1	20070906	MX20070008396	20060112
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NO20090471 L	20090803	NO20090000471	20090130
NO338335 B1	20160808	NO20070003677	20070717
NO341410 B1	20171030	NO20090000471	20090130
RU2009103151 A	20100810	RU20090103151	20090130
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WO06075306 A1	20060720	WO20061B50119	20060112

Priority:

US20050033698	20050112	US20050146596	20050607	EP20060701794	20060112
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Probable Assignee: SCHLUMBERGER TECHNOLOGY CORP

Assignee(s): (std): ARDIC HIFZI ; BILLINGHAM MATTHEW ; EL KHOLY ISMAIL ; FULIN WAYNE ; GILLAN PETER ; HERNANDEZ SOLIS VLADIMIR ; KIM BYONG ; SAIT NOOR ; SCHLUMBERGER CA LTD ; KIM BYONG JUN ; SAIT NOOR F ; SBORDONE ANDREA ; LOZANO GENDREAU JOSE RAMON ; PRAD RES AND DEV LTD ; JACOB GREGOIRE ; PESSIN JEAN LOUIS ; PRAD RES AND DEVELOPMENT LTD ; VARKEY JOSEPH ; SRIDHAR GARUD ; SCHLUMBERGER SERVICES PETROL ; SCHLUMBERGER HOLDINGS ; SCHLUMBERGER TECHNOLOGY BV ; SCHLUMBERGER TECHNOLOGY CORP ; SCHLUMBERGER TECHNOLOGY CORP ; SMITS JAN W

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Inventor(s): (std): VARKEY JOSEPH P ; GARUD SKRIDHAR ; KIM BYONG J ; BYONG KIM JUN ; WAYNE FULIN ; GARUD SRIDHAR ; JOSEPH VARKEY ; NOOR SAIT ; HIFZI ARDIC ; JAN W SMITS ; PETER GILLAN ; JOSE RAMON LOZANO GENDREAU ; VLADIMIR HERNANDEZ SOLIS ; GILLAN PETER ; SMITS JAN W ; ARDIC HIFZI ; HERNANDEZ SOLIS VLADIMIR ; LOZANO GENDREAU JOSE RAMON ; JOSPEH VARKEY ; VARKEY JOSPEH ; LOZANO ZHENDRO KHOSE RAMON ; SMITS JAN V ; VARKI DZHOZEF ; ARDIK KHIFZI ; GILLAN PITER ; EHRNANDES SOLIS VLADIMIR ; PESSIN JEAN LOUIS ; EL KHOLY ISMAIL ; JACOB GREGOIRE ; SBORDONE ANDREA ; SAIT NOOR F ; BILLINGHAM MATTHEW ; VARKEY JOSEPH ; KIM BYONG ; SRIDHAR GARUD ; SAIT NOOR ; FULIN WAYNE ; KIM BYONG JUN

Inventor(s): BYONG JUN KIM ; FULIN WAYNE SUGAR LAND ; VARKEY JOSEPH MISSOURI CITY ; KIM BYONG JUN SUGAR LAND ; SRIDHAR GARUD STAFFORD

Agent(s): GRIFFITH HACK ; SMART AND BIGGAR ; SMART AND BIGGAR LLP ; HASELTINE LAKE LLP ; BREVALEX ; SCHLUMBERGER CONVEYANCE AND DELIVERY, ATTN: ROBIN NAVA ; SCHLUMBERGER CONVEYANCE AND DELIVERY ATTN ROBIN NAVA ; SCHLUMBERGER TECHNOLOGY CORP ; SCHLUMBERGER IPC, ATTN: TIM CURINGTON ; SCHLUMBERGER IPC ATTN TIM CURINGTON ; SCHLUMBERGER IPC, ATTN: DAVID CATE ; SCHLUMBERGER IPC ATTN DAVID CATE ; SCHLUMBERGER IPC, ATTN: DAVID CATE ; SCHLUMBERGER TECHNOLOGY DAVID CATE CORP ; BILL ; TIM ; DAVID ; CATE DAVID ; FLYNN MICHAEL ; CASTANO JAIME ; JAIME ; MICHAEL ; NAVA ROBIN ; ROBIN ; JODY LYNN ; MICHAEL L ; JODY ; CHARLOTTE ; JOHN ; TREVOR ; CATHY

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX NZ NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

8) Family number: 42243767 (US2002016122A)

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Title: ELASTIC LAMINATE WEB

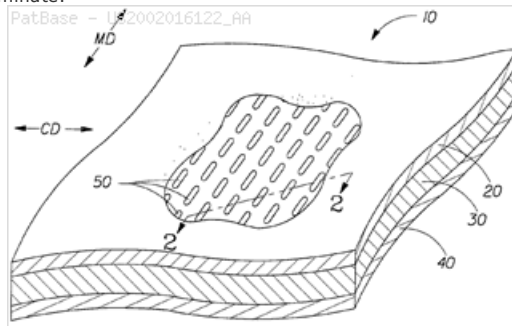
Abstract: An elastic laminate web is disclosed. The elastic laminate web can be non-apertured or apertured, and comprises a first web, and a second web joined to the first web in a face to face relationship at a plurality of discrete bond sites having an aspect ratio of at least 2. The first and second webs form an interior region therebetween. An elastic material is disposed between the first and second webs. The elastic material is apertured in regions coincident the bond sites, such that the first and second webs are joined through the apertures. The laminate so produced can be stretched in a predetermined direction, such as by incremental stretching, to produce an apertured elastic laminate.

Classifications:

International (ipc 8-9): A47L1/15 A47L13/16 A47L13/17 A61F A61F13/00 A61F13/15 A61F13/472 A61F13/49 A61F13/511 A61F13/512 A61F13/514 A61F13/53 A61F13/535 A61F13/539 A61F13/56 A61F5/44 A61F5/48 A61K8/00 A61K8/02 A61K8/73 A61Q1/00 A61Q1/02 A61Q15/00 A61Q17/04 A61Q19/00 A61Q19/02 A61Q19/10 A61Q5/12 A61Q90/00 B26F1/08 B26F1/20 B26F1/24 B29C31/00 B29C55/02 B29C55/18 B29C59/00 B29C59/04 B29C65/00 B29C65/02 B29C65/18 B29C65/74 B29C69/00 B29D31/00 B29D99/00 B29L31/48 B32B B32B15/04 B32B25/10 B32B27/02 B32B27/06 B32B3/02 B32B3/06 B32B3/10 B32B3/24 B32B3/26 B32B37/00 B32B37/12 B32B37/14 B32B37/16 B32B37/30 B32B38/00 B32B38/04 B32B5/02 B32B5/04 B32B5/22 B32B5/24 B32B5/26 B32B7/02 B32B7/04 B65D33/36 B65D75/30 B65D75/58 C11D17/04 D04H1/54 D04H1/559 D04H13/00 D21H27/30 D21H27/32 H01B1/00 H01B7/08 (Advanced/Invention); A61F13/539 A61F5/44 A61K8/00 A61K8/02 A61Q1/00 A61Q19/00 A61Q19/10 B29C59/04 B29L31/48 B32B37/12 B32B38/00 B32B5/02 D04H1/54 (Advanced/Non-invention); A47L13/16 A61F13/15 A61F5/44 A61K8/00 A61K8/02 A61K8/72 A61Q1/00 A61Q1/02 A61Q15/00 A61Q17/04 A61Q19/00 A61Q19/02 A61Q19/10 A61Q5/12 A61Q90/00 B26F1/00 B29C55/18 B32B3/24 B32B38/04 B32B5/22 B32B7/04 C11D17/04 D04H13/00 (Core/Invention); B32B (Subclass/Invention); A61F (Subclass/Non-invention)

International (ipc 1-7): A22C13/00 A47L13/16 A47L13/17 A61F13/00 A61F13/15 A61F13/472 A61F13/49 A61F13/511 A61F13/514 A61F13/53 A61F13/539 A61F13/539 A61F5/44 A61F5/48 A61K7/00 A61K7/02 A61K7/32 A61K7/42 A61K7/50 B26F1/08 B29C31/00 B29D22/00 B29D23/00 B29D31/00 B31C1/00 B31D1/00 B32B1/08 B32B15/14 B32B23/02 B32B25/10 B32B27/02 B32B27/06 B32B27/12 B32B27/14 B32B3/00 B32B3/02 B32B3/06 B32B3/10 B32B3/24 B32B3/26 B32B31/00 B32B31/20 B32B5/00 B32B5/02 B32B5/04 B32B5/06 B32B5/18 B32B5/22 B32B5/24 B32B5/26 B32B7/02 B32B7/04 B32B9/00 B65D33/36 B65D75/30 B65D75/58 B65H81/00 D04H1/00 D04H1/54 D04H13/00 D04H3/00 D04H5/00 D21H27/30 D21H27/32 H01B1/00 H01B1/20 H01B1/22 H01B7/00 H01B7/02 H02G1/00 B29C69/00 Y10T428/24479 Y10T428/24942 Y10T428/24942 Y10T428/24942 Y10T428/24996 Y10T428/1324 Y10T428/1362 Y10T428/239 Y10T428/2457 B29C66/729 Y10T442/61 Y10T442/654 Y10T442/655 Y10T442/657 Y10T442/659 Y10T442/601 Y10T442/602 Y10T442/679 Y10T442/3472 Y10T442/637 Y10T442/2525 B29C66/7392 B29C66/7394 B29C66/7394 Y10T428/249921 Y10T428/249924 Y10T428/249939 B29C66/73143 D04H1/425 D04H1/559 A61F13/51113 A61F13/51394 A61F13/51104 A61F13/5123 A61F13/00 A61F13/51121 A61F13/5116 A61F13/513 B32B5/08 B32B27/12 B32B27/32 B32B2262/0253 B32B2262/062 B32B2262/065 B32B2262/067 B32B2262/12 B32B2262/14 B32B2264/00 B32B2307/31 B32B2307/718 B32B2307/726 B32B2307/732 B32B2437/00 B32B2479/00 B32B2535/00 B29C66/72321 B29C66/72328 B29C66/72343 B32B15/14 B32B15/046 B32B15/08 B32B27/322 B32B2457/00 B32B2305/026 B32B5/18 B32B5/245 B32B29/002 B32B29/02 B32B2311/00 B29C66/1312 A61F13/511 B32B7/05 B29C48/0018 B29C48/0021 B29C48/08 B29C48/12 B29C48/21 B29C65/06 B29C66/232 B29C66/234 B65D75/58 Y10T428/24777 Y10T428/24802 Y10T428/249994 Y10T428/249995 Y10T442/60 Y10T442/651 Y10T442/673 B32B5/022 B32B7/12 A61F13/15707 A61F13/15756 A61F13/512 A61F13/5146 A61F13/536 B29C65/08 B29C66/1122 B29C66/436 B29C66/4722 B29C66/71 B29C66/723 B29C66/727 B29C66/7294 B29C66/73921 B29C66/81433 B29C66/83411 B32B37/0076 B32B2305/18 Y10T428/24331 Y10T428/24562 Y10T428/24851 Y10T442/647 Y10T442/656 Y10T442/668 Y10T442/671 Y10T442/674 Y10T442/69 Y10T442/693 A61F13/53 A61F13/537 A61F13/539 A61F13/8405 A61F2013/53782 B32B3/266 B32B5/26 B32B7/04 B29C66/344 A47L13/15 A47L13/17 A61F13/15593 A61F13/15699 A61F13/15731 A61F13/4902 A61F13/51464 A61F13/51476 A61F13/51478 A61F2013/51165 A61F2013/51182 A61F2013/51322 A61K8/0208 A61Q19/00 A61Q19/10 B26F1/20 B26F1/24 B29C55/023 B29C55/18 B29C59/007 B29C59/04 B29C65/02 B29C65/18 B29C65/7437 B29C66/21 B29C66/45 B29C66/83413 B29C66/83511 B29C2793/0045 B29C2105/0854 B29K2995/0068 B29L2009/00 B29L2031/4878 B29L2031/737 B29L2031/7374 B32B5/04 B32B15/04 B32B27/06 B32B37/12 B32B37/144 B32B38/0004 B32B38/0012 B32B38/04 B32B2037/0092 B32B2038/0028 B32B2038/047 B32B2305/20 B32B2307/202 B32B2307/204 B32B2307/51 B32B2555/02 B65D75/30 C11D17/04 H01B7/0838 Y10T428/23 Y10T428/237 Y10T428/24041 Y10T428/24273 Y10T428/24298 Y10T428/24314 Y10T428/24322 Y10T428/24612 Y10T428/2481 Y10T428/24826

European: A47L1/15 A47L13/17 A61F13/15M2B A61F13/15M5 A61F13/15M6 A61F13/15M6C A61F13/15M7 A61F13/49D2H A61F13/511A A61F13/511D A61F13/512 A61F13/512B A61F13/513 A61F13/514B1A A61F13/514B2 A61F13/514C1 A61F13/514C2 A61F13/53 A61F13/536 A61F13/537 A61F13/539 A61F13/84B A61K8/02C A61Q19/00 A61Q19/10 B26F1/20 B26F1/24 B29C55/02B B29C55/18 B29C59/00G B29C65/02 B29C65/18 B29C65/7437 B29C66/21 B29C66/4722 B29C66/83411 B29C66/83413 B29C69/00 B32B15/04 B32B27/06 B32B3/26B B32B37/00D B32B37/14B B32B38/00A



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Inventor(s): RONALD JOSEPH ZINK MICHAEL BERNARD DUGAS ; D R DYE ; CURRO JOHN JOSEPH BENSON DOUGLAS HERRIN STRUBE ; JOHN BRAIN STRUBE ; RONALD JOSEPH ZINK ; DR DYE ; JJ CURRO ; DR OYE ; DH BENSON ; CURRO JOHN JOSEPH BENSON DOUGLAS HERRIN STRUBE JOHN BRIAN ; CURRO JOHN JOSEPH ALWATTARI ALI ABDELAZIZ ; JOHN JOSEPH CURRO ; JOHN BRIAN STRUBE ; DEBORAH RUTH DYE ; D R OYE ; J J CURRO ; D H BENSON ; DUGAS MICHAEL ; ZINK RONALD ; BENSON DOUGLAS HERRIN WEST HARRISON ; CURRO JOHN JOSEPH CINCINNATI ; KAMINISKI ANNEKA MARGARET CINCINNATI ; MANSFIELD MICHELLE ANN CINCINNATI ; STRUBE JOHN BRIAN OKEANA ; JOHN J CURRO ; DOUGLAS H BENSON ; JOHN B STRUBE ; CHARLES DETWILER ROBERSON ; EDWARD KENNETH STAHL ; JESSICA ZINGELMANN ; ALFRED FRANK BALDWIN ; SAEED FERESHTEHKHOU ; DANIEL CHARLES PECK ; DEBORAH ADAMO KOEHLER ; MICHELE ANN MANSFIELD ; ANNEKE MARGARET KAMINISKI ; ALI ABDELAZIZ ALWATTARI ; SAMUEL MARK GILLETTE ; WALTER GOMER JONES ; ANTHONY STEPHEN SPENCER ; STRUBE JOHN BRIAN HAMILTON ; SPENCER ANTHONY STEPHEN WOODSTOCK ; ZINK RONALD JII ; CURRO JOHN JOSEPH ALWATTARI ALI ABDELAZIZ BENSON DOUGLAS HERRIN KAMINISKI ANNEKE MARGARET MANSFIELDMICHELE ANN STRUBE JOHN BRIAN ;

BALDWIN JR ALFRED FRANC

Agent(s): PHILLIPS ORMONDE FITZPATRICK; MBM INTELLECTUAL PROPERTY LAW LLP; GOWLING LAFLEUR HENDERSON LLP; MBM AND CO; DIMOCK STRATTON LLP; HEIDE UTE; KREMER VERONIQUE MARIE JOSEPHINE; LLOYD WISE AND CO 4005 TOWER TWO LIPPO CENTRE 89 QUEENSWAY CENTRAL; LLOYD WISE AND CO; SOGA MICHITERU; SOGA MICHIHARU; NAGAI HIROSHI; TANI YOSHIKAZU; ABE KAZUO; THE PROCTER AND GAMBLE COMPANY, INTELLECTUAL PROPERTY DIVISION; PROCTER AND GAMBLE CO INTELLECTUAL PROPERTY DIVISION; STONE ANGELA MARIE; BULLOCK RODDY M; ANGELA MARIE; RODDY M; DAVID K; PETER D; DAVID M; JAY A; LEONARD W

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ OM PH PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW

9) Family number: 52424853 (US2014076597A)

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Title: SUBTERRANEAN CABLE

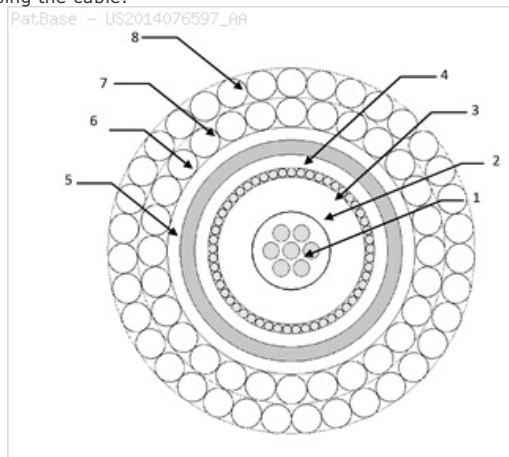
Abstract: The present invention relates to a cable comprising a first conductor and a first insulator layer, wherein the first conductor and the first insulator extend along a longitudinal axis of the cable, wherein the first insulator layer is axially external to the conductor, and wherein the first insulator layer comprises a first fluoropolymer, as well as a method of manufacturing said cable, and a method for transmitting electricity using the cable.

Classifications:

International (IPC 8-9): H01B13/016 H01B3/44 H01B5/10 H01B7/18 H01B7/22 H01B7/28 H01B7/29 H01B9/02 H02G9/02 (Advanced/Invention)

CPC: H01B7/046 H01B7/29 H01B13/016 H02G9/02 H01B3/445 H01B7/28 H01B7/226 Y10T29/49123 Y02A30/14

US: 174/102A 174/102R 174/37 29/828



Family:

Publication number	Publication date	Application number	Application date
DE602013029700 D1	20171228	DE201360029700T	20130918
DE602013029701 D1	20171228	DE201360029701T	20130918
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GB201223227 A0	20130206	GB20120023227	20121220
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GB2508695 A1	20140611	GB20130016627	20130918
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GB2509804 A1	20140716	GB20130016626	20130918
GB2509804 B2	20150729	GB20130016626	20130918
US2014076597 AA	20140320	US20130030263	20130918
US2014076606 AA	20140320	US20130030349	20130918

Priority:

GB20120016685 20120918 GB20120023227 20121220 EP20130184916 20130918
EP20130184918 20130918

Probable Assignee: BPP CABLES LTD

Assignee(s): (std): BPP CABLES LTD

Inventor(s): (std): PATEL DARREN LINDSAY

Inventor(s): PATEL DARREN LINDSAY BILLERICAY ; PATEL DARREN LINDSAY ESSEX ; DARREN LINDSAY PATEL

Agent(s): SEEMANN AND PARTNER PATENTANWALTE MBB; ONO SHUSUKE; TURNER CRAIG ROBERT

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

10) Family number: 36070651 (US2009004373A)

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Title: METHODS AND COMPOSITIONS FOR TEMPORARY BARRIER COATINGS

Abstract: Methods of temporarily protecting an exterior surface of a structure, an interior hard surface, and an automobile part, including the step of applying to the surface a solution including a water-soluble polymer, and allowing the solution to dry, thereby forming a water-soluble polymer coating on the surface, is disclosed. The protective coating can thereafter be removed by washing the surface with water, such as with a power sprayer, taking with it any secondary substance which has coated it or otherwise has been bound to it.

Classifications:

International (IPC 8-9): B23P17/00 B32B27/04 B32B3/00 B32B5/16 B41J2/01 B41J2/015 B41J2/21 B41M5/00 B82B1/00 B82B3/00 B82Y15/00 B82Y20/00 B82Y30/00 B82Y40/00 C01B13/14 C07F3/08 C07F9/00 C07F9/38 C07K1/00 C08F16/06 C08K3/34 C08L29/04 C09D11/00 C09D11/02 C09D11/03 C09D11/10 C09D11/326 C09D11/38 C09D11/52 C09D5/20 C09D7/12 C09D7/40 C09K11/02 C09K11/06 C09K11/08 C09K11/56 C09K11/70 C09K11/88 C30B11/00 C30B29/40 C30B29/48 C30B29/60 C30B33/00 C30B7/14 F21K2/00 F21S2/00 F21V8/00 F21V9/08 F28F7/00 G01N33/543 G01N33/58 G02B5/02 G02B5/20 G02B6/00 G02B6/02 G02B6/10 G02B6/12 G02B6/26 G02F1/361 G09F13/22 H01B1/00 H01B1/02 H01B1/06 H01B1/12 H01B13/14 H01J5/16 H01L27/15 H01L29/06 H01L31/00 H01L31/042 H01L33/00 H01L33/06 H01L33/50 H01L51/50 H05B33/12 H05B33/14 H05B33/24 (Advanced/Invention);

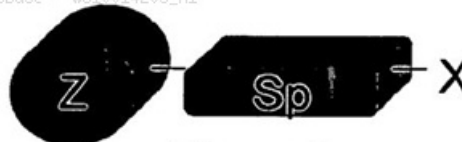
B82B3/00 B82Y20/00 B82Y30/00 B82Y40/00 C07F3/06 C07K1/00 C08K3/22 C08K7/18 C08K9/00 C09D11/00 F21Y101/00 F21Y101/02 F21Y103/00 F21Y105/00 G02B6/10 G02B6/12 H01L29/06 (Advanced/Non-invention); B32B27/04 B32B3/00 B32B5/16 B82B1/00 B82B3/00 C01B13/14 C07K1/00 C08F16/00 C08K3/00 C08L29/00 C09D11/00 C09D11/10 C09D5/20 F21K2/00 F28F7/00 G02B6/10 G02B6/12 G02B6/26 G02F1/35 H01J5/02 H01L27/15 H01L29/02 H01L31/00 H01L31/042 H01L33/00 (Core/Invention)

CPC: G01N33/54373 G02B6/004 H01S3/169 C08K3/34 C09D5/008 C09D129/04 A61K49/0067 B82Y15/00 G01N33/54353 G01N33/588 G02B6/0229 B01J13/02 B82Y40/00 C09K11/565 C09K11/881 H01L31/055 H01L31/0296 H01L31/0304 H01L31/035281 Y02E10/52 H01L31/0543 H01L31/0547 H01L51/5012 C09K11/025 Y10T428/24612 Y10T428/25 G02B6/10 Y10S977/786 Y10S977/95 B82Y30/00 C30B29/605 C30B33/00 G01N33/54346 G01N33/587 B82B3/0095 C07K1/00 Y10S977/824 Y10S977/896 C30B7/14 C30B29/40 C30B29/48 Y10T428/24893 C30B29/60 G02B6/0023 G02B6/0033 G02B6/0041 C09D11/00 C09D11/037 B82Y20/00 G02B6/0011 G02B6/0065 G09F13/22 Y10S977/774 G02B6/0026 G02B6/0043 C08K3/22 C08K7/18 C08K9/00 C09D7/68 C09D7/70 C09D11/326 C09D11/38 C09D11/52 C09K11/02 C09K11/883 Y10T29/49401 B41J2/2107 H01L33/06 H01L2933/0091 C09K11/08 G02B6/12 H01L29/06 G02B6/0035 G02B6/005 H01L33/505 H01L33/507 H01L33/60

European: A61K49/00P12 A61K49/00P12B2 B01J13/02 B82Y15/00 B82Y20/00 B82Y30/00 B82Y40/00 C09D11/326 C09D11/38 C09D11/52 C09D129/04 C09D5/00F C09D7/12N2 C09D7/12S C09K11/02 C09K11/02B C09K11/08 C09K11/56B2 C09K11/88B C09K11/88B2 C30B29/48 C30B29/60D C30B33/00 C30B7/14 G01N33/543D6 G01N33/543F G01N33/543K2 G01N33/58H4 G01N33/58J G02B6/00L604 G02B6/00L608 G09F13/22 H01L31/0352C2 H01L31/052B H01L31/055 H01L51/50E M08K3/22 M08K3/34 M08K7/18 M08K9/00 S02B6/00L6I8 S02B6/00L6O4P T01L31/0296 T01L31/0304 T01L33/50C T01L33/50D T01L33/60 T01S3/16N Y02E10/52

US: 1/1 106/31.13 106/31.92 106/31.920S 136/259 165/185 250/462.1 252/301.36 252/301.4P 252/301.4S 252/301.6P 252/301.6S 252/500 252/500S 252/512 252/519.2 252/519.200P 252/519.21 252/519.3 252/582 257/103 257/80 257/80P 257/89 257/89S 257/98 257/98P 257/E33.001 257/E33.001S 257/E33.061 257/E33.061S 257/E33.067 257/E33.067S 257/E33.076 257/E33.076S 29/890.1 29/890.100S 313/498 347/100 347/100P 347/20 347/20S 362/330 362/611 385/129 385/130 385/131 385/141 385/31 427/154 427/154P 428/172 428/172P 428/206 428/323 428/323S 524/445 524/445S 524/557 524/557S 526/319 526/319S 562/8 562/8P 977/774 977/774S 977/786 977/949 977/950

PatBase - W010014205_A1

**Figure 8****Family:**

Publication number	Publication date	Application number	Application date
DE602007037988 D1	20140918	DE200760037988T	20070306
DE602008032734 D1	20140724	DE200860032734T	20080912
EP2041478 A2	20090401	EP20070752303	20070306
EP2041478 A4	20110420	EP20070752303	20070306
EP2041478 B1	20140806	EP20070752303	20070306
EP2207789 A1	20100721	EP20080831106	20080912
EP2207789 A4	20110216	EP20080831106	20080912
EP2207789 B1	20140611	EP20080831106	20080912
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JP2014089966 A2	20140515	JP20130252719	20131206
JP2016167451 A2	20160915	JP20160041098	20160303
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US2015152324 AA	20150604	US20140500290	20140929
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US8876272 BB	20141104	US20090655074	20091222
US9212056 BB	20151215	US20110015651	20110128
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Priority:

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Probable Assignee: SAMSUNG ELECTRONICS CO LTD

Assignee(s): (std): COMERFORD MARK ; COE SULLIVAN SETH ; COX MARSHALL ; KAZLAS PETER T ; CASTLE DOME SOLUTIONS LLC ; DIFILIPPO VINCENT ; ANC MARIA J ; BREEN CRAIG ; BULOVIC VLADIMIR ; MOELLER GREGORY V ; QD VISION INC ; MODI ROHIT ; STECKEL JONATHAN S ; LINTON JOHN R ; RITTER JOHN E ; SAMSUNG ELECTRONICS CO LTD

Assignee(s): SAMSUNG ELECTRONICS CO ; QD VISION INC LEXINGTON ; CAPRICORN LIBRA INVESTMENT GROUP LP ; GOWAN MILLING CO LLC

Inventor(s): (std): MOELLER GREGORY V ; COMERFORD MARK ; COE SULLIVAN SETH ; BULOVIC VLADIMIR ; BREEN CRAIG ; MODI ROHIT ; STECKEL JONATHAN S ; COX MARSHALL ; LINTON JOHN R ; ANC MARIA J ; KAZLAS PETER T ; RITTER JOHN E ; RATH CHRISTIAN ; VERRALL ANDREW P ; DIFILIPPO VINCENT ; ROHIT MODI ; JOHN R LINTON ; MARK COMERFORD ; CRAIG BREEN ; JONATHAN S STECKEL ; SETH COE SULLIVAN ; KAZLAS PETER

Inventor(s): COX MARSHALL NORTH HAVEN ; BREEN CRAIG SOMERVILLE ; COMERFORD MARK BOSTON ; COE SULLIVAN SETH BELMONT ; BULOVIC VLADIMIR LEXINGTON ; MOELLER GREGORY V ASHLAND

Agent(s): GRUENECKER PATENT U RECHTSANWAELTE PARTG MBB ; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER ANWALTSSOZIETAET ; GRUENECKER KINKELDEY STOCKMAIR AND SCHWANHAEUSSER ; OSAKI KATSUMASA ; TSUBOKURA MICHIAKI ; KAWAGUTI AND PARTNERS ; QUARLES AND BRADY LLP ; QD VISION INC ; CANTOR COLBURN LLP ; FINNEGAN MARTHA ANN

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

11) Family number: 58801381 (US2016233007A)

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Title: LIGHTWEIGHT AND FLEXIBLE IMPACT RESISTANT POWER CABLE AND PROCESS FOR PRODUCING IT

Abstract: The present disclosure relates to an impact resistant, multipolar power cable (10) comprising, a plurality of cores (1), each core (1) comprising at least one conductive element (3) and an electrical insulating layer (5) in a position radially external to the at least one conductive element (3). The cores (1) are stranded together so as to form an assembled element providing a plurality of interstitial zones (2). An expanded polymeric filler (6) fills the interstitial zones (2) between the plurality of cores (1). An expanded impact resistant layer (7) is in a position radially external to the expanded polymeric filler (6) and comprises a polymer that differs from the expanded polymeric filler (6).

Classifications:**International (IPC 8-9):** H01B13/14 H01B13/24 H01B17/18

H01B3/44 H01B7/02 H01B7/18 H01B7/295

H01B9/00 (Advanced/Invention);

H01B7/295 (Advanced/Non-invention)

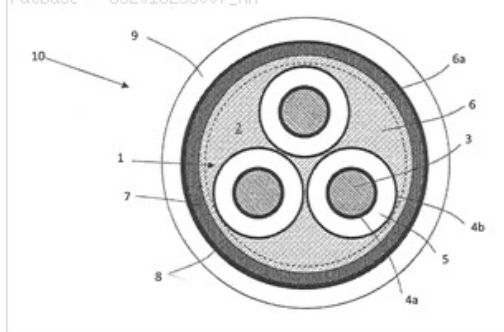
CPC: H01B7/1825 H01B3/441 H01B3/443 H01B3/445 H01B7/189

H01B7/295 H01B13/141 H01B13/142 H01B13/24 H01B7/0225

H01B7/18 H01B9/006

US: 1/1 174/116

PatBase - US2016233007_AA

**Family:**

Publication number	Publication date	Application number	Application date
AU2013400927 A1	20150326	AU20130400927	20130923
AU2013400927 AA	20150326	AU20130400927	20130923
AU2013400927 BB	20181025	AU20130400927	20130923
BR112016006186 A2	20170801	BR20161106186	20130923
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CN105849826 B	20171212	CN201380080337	20130923
DE602013029200 D1	20171221	DE201360029200T	20130923
DK3050064 T3	20180205	DK20130798726T	20130923
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EP3050064 B1	20171108	EP20130798726	20130923
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GC7733 A	20180507	GC2014P027949	20140918
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RU2016115550 A	20171030	RU20160115550	20130923
RU2638172 C2	20171212	RU20160115550	20130923
US2016233007 AA	20160811	US20130023937	20130923
US9947438 BB	20180417	US20130023937	20130923
WO15040448 A1	20150326	WO20131B02426	20130923

Priority:

EP20130798726 20130923 WO20131B02426 20130923

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Title: TIGHT BUFFERED FIBER OPTIC GROUNDWIRE CABLE

Abstract: A fiber optic groundwire or static cable for use between spaced-apart support towers of an electrical power transmission network, for ground fault protection from lightning strikes and other electrical faults, with an integral fiber optic telecommunications bundle. A bundle of optical fibers tightly enclosed by a pliable thermally insulating strain jacket is firmly affixed into a helically-wound channel within an electrically conductive core. At least one layer of stranded electrical conductors serving as strength members completely surrounds the core. The tight jacketing of the optical fibers by a pliable strain jacket, combined with the firm mounting of the strain jacket within the helical channel of the core, reduces the axial tensional forces on the optical fibers that occur during and after installation of the cable. Also, the cable provides improved fault current carrying capability by utilizing a strain jacket made from a high temperature and thermally insulating silicone-based or ethylene propylene-based material. Because the fiber optic bundles are tight buffered in the strain jacket and the strain jacket is tightly affixed in the channels of the core rather than in loose in the strain jacket, the cable accommodates more optical fibers per unit area of channel than prior art "loose tube" construction, which allow the fibers to move relative to one another and relative to the cable core.

Classifications:**International (IPC 8-9):** G02B6/44 H01B11/00

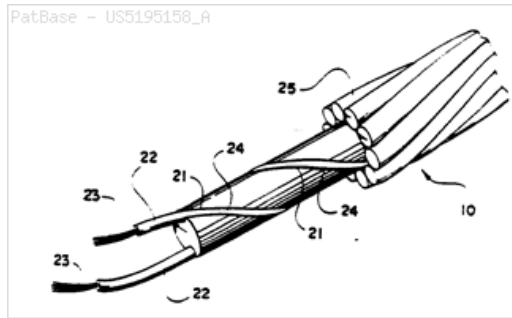
H01B5/10 (Advanced/Invention);

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