(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 168 374 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
08.01.2003 Bulletin 2003/02

(43) Date of publication A2:
02.01.2002 Bulletin 2002/01

(21) Application number: **01115164.4**

(22) Date of filing: **22.06.2001**

(51) Int Cl.[7]: **H01B 7/18**, H01B 9/00

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **22.06.2000 US 599847**

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(54) Composite reinforced electrical transmission conductor

(57) A composite reinforced electrical transmission conductor cable primarily designed for transmission of electrical signals, such as data signals, telephone signals of any frequency and electrical power of essentially any voltage. A fiber optic cable may also be carried by the core in a preferred embodiment. A splicing arrangement for securing the ends of the cable together is also provided. The cable is comprised of a reinforced plastic composite component which serves as a load bearing component and an electrically conductive component which serves for transmission of the electrical signals carried by the cable. In a preferred embodiment, the cable is comprised of a reinforced plastic composite outer load carrying sheath along with an inner highly electrically conductive core. In this way, the sheath provides the necessary strength and the inner core provides for transmission of the electrical signals. In still further embodiments, strips of reinforcd plastic composite can be embedded in an electrically coductive cylindrically shaped cable material.

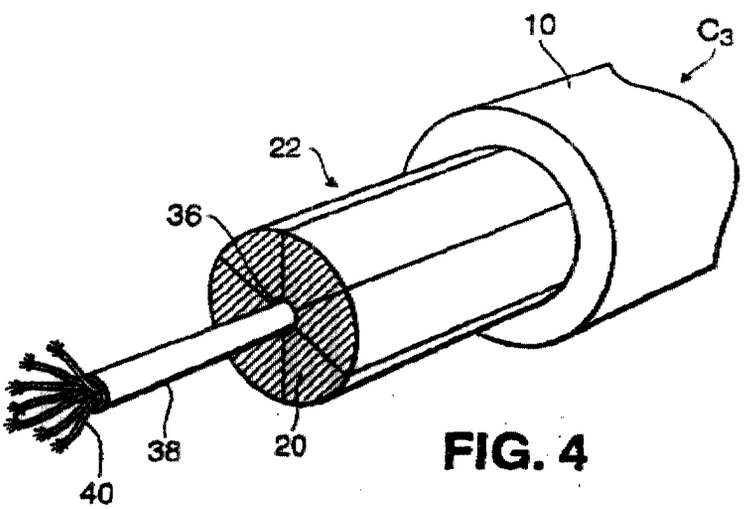

FIG. 4

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EUROPEAN SEARCH REPORT

Application Number
EP 01 11 5164

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	EP 0 814 355 A (LUCENT TECHNOLOGIES INC) 29 December 1997 (1997-12-29)	1	H01B7/18 H01B9/00
A	* column 3, line 45 - column 6, line 20; figures 1,2 *	2-13	
X	EP 0 550 784 A (FURUKAWA ELECTRIC CO LTD) 14 July 1993 (1993-07-14)	1	
A	* page 3, line 21 - page 5, line 49; figures 1-5 *	2-13	
A	EP 0 141 931 A (AEG TELEFUNKEN KABELWERKE) 22 May 1985 (1985-05-22) * page 4, paragraph 1 - page 5, paragraph 1; claims 1-13; figures 1,2 *	1-13	
A	US 3 973 385 A (ROE NORMAN P) 10 August 1976 (1976-08-10) * column 2, line 6 - column 6, line 25; figures 1-7 *	1-13	

TECHNICAL FIELDS SEARCHED (Int.Cl.7)

H01B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	15 November 2002	Demolder, J

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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EPO FORM 1503 03.82 (P04C01)

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15-11-2002

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0814355 A	29-12-1997	US 5822484 A	13-10-1998
		EP 0814355 A1	29-12-1997
		JP 10123383 A	15-05-1998
EP 0550784 A	14-07-1993	CA 2058412 A1	01-07-1993
		US 5198621 A	30-03-1993
		EP 0550784 A1	14-07-1993
EP 0141931 A	22-05-1985	DE 3330096 A1	21-03-1985
		AT 44187 T	15-07-1989
		DE 3348154 C2	24-03-1988
		DE 3478773 D1	27-07-1989
		EP 0141931 A2	22-05-1985
		FI 843268 A ,B,	21-02-1985
		FI 872512 A ,B,	04-06-1987
US 3973385 A	10-08-1976	US 4059951 A	29-11-1977
		US 4085183 A	18-04-1978

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82