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Table with 6 columns: APPLICATION NUMBER, FILING or 371(c) DATE, GRP ART UNIT, FIL FEE REC'D, ATTY,DOCKET,NO, TOT CLAIMS, IND CLAIMS. Row 1: 61/243,444, 09/17/2009, 110, 493331/0033

CONFIRMATION NO. 3304

26610
STROOCK & STROOCK & LAVAN LLP
180 MAIDEN LANE
NEW YORK, NY 10038

FILING RECEIPT



Date Mailed: 09/30/2009

Receipt is acknowledged of this provisional patent application. It will not be examined for patentability and will become abandoned not later than twelve months after its filing date. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections

Applicant(s)

Bruce Bier, Warren, NJ;

Power of Attorney:

Charles Cantine--43531

If Required, Foreign Filing License Granted: 09/24/2009

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US 61/243,444

Projected Publication Date: None, application is not eligible for pre-grant publication

Non-Publication Request: No

Early Publication Request: No

** SMALL ENTITY **

Title

ARC SUPPRESSING SLEEVE

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process simplifies the filing of patent applications on the same invention in member countries, but does not result in a grant of "an international

patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

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Title 35, United States Code, Section 184

Title 37, Code of Federal Regulations, 5.11 & 5.15

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET – Page 1 of 2

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

Express Mail Label No. _____ **FILED ELECTRONICALLY (VIA EFS)** _____

INVENTOR(S)		
Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)
Bruce	Bier	Warren, New Jersey
Additional inventors are being named on the _____ separately numbered sheets attached hereto		
TITLE OF THE INVENTION (500 characters max):		
ARC SUPPRESSING SLEEVE		
CORRESPONDENCE ADDRESS		
Direct all correspondence to: <input checked="" type="checkbox"/> The address corresponding to Customer Number: <div style="border: 1px solid black; display: inline-block; padding: 5px; margin-left: 20px;">26610</div>		
OR <input type="checkbox"/> Firm or Individual Name		
Address		
City	State	Zip
Country	Telephone	Email
ENCLOSED APPLICATION PARTS (check all that apply)		
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76 <input type="checkbox"/> CD(s), Number of CDs _____		
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets <u> 2 </u> <input type="checkbox"/> Other (specify) _____		
<input checked="" type="checkbox"/> Specification (e.g. description of the invention) Number of Pages <u> 5 </u>		
Fees Due: Filing Fee of \$220 (\$110 for small entity). If the specification and drawings exceed 100 sheets of paper, an application size fee is also due, which is \$270 (\$135 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).		
METHOD OF PAYMENT OF THE FILING FEE AND APPLICATION SIZE FEE FOR THIS PROVISIONAL APPLICATION FOR PATENT		
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.		<div style="border: 1px solid black; padding: 5px; display: inline-block;">\$110.00</div> TOTAL FEE AMOUNT (\$)
<input type="checkbox"/> A check or money order is enclosed to cover the filing fee and application size fee (if applicable).		
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached		
<input checked="" type="checkbox"/> The Director is hereby authorized to charge the filing fee and application size fee (if applicable) or credit any overpayment to Deposit Account Number: <u> 19-4709 </u> .		

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PROVISIONAL APPLICATION COVER SHEET
Page 2 of 2

PTO/SB/16 (10-08)

Approved for use through 06/30/2010. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.



No.

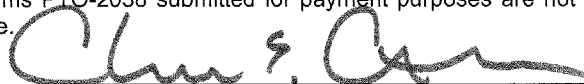


Yes, the name of the U.S. Government agency and the Government contract number are: _____

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SIGNATURE



Date **September 17, 2009**

TYPED or PRINTED NAME **Charles E. Cantine**

REGISTRATION NO. **43,531**
(if appropriate)

TELEPHONE **212-806-5400**

Docket Number: **493331/0033**

ARC SUPPRESSING SLEEVE

TECHNICAL FIELD OF THE INVENTION

[001] The present invention relates to a sleeve for use with compression connectors for cables. More specifically, the present invention relates to an arc suppressing sleeve for use with compression connectors for connecting secondary cables.

BACKGROUND OF THE INVENTION

[002] Secondary cables (e.g., 125 volts) are often connected live by utility crews. Typically, one end of the cable is spliced to the end of another cable using a copper compression connector. These connectors are a copper tube that is compressed on either end of the cable.

[003] Utility crews often encounter problems using such compression connectors. For example, it can be difficult to get all the cable strands into the connector. In addition, when the strands make contact with the outer edge of the connector during installation, the strands will sometimes arc to the connector, creating a potentially dangerous condition for the utility crew.

[004] In light of the shortcomings of the conventional methods and applications known in the art, it is desirable to provide a device that helps ensure a proper and safe installation of copper compression connectors for use with cables, and in particular, secondary cables.

SUMMARY OF THE INVENTION

[005] The present invention relates to a novel arc suppressing sleeve for use with compression connectors for connecting cables. In particular, the present invention is directed towards a sleeve formed of an arc suppressing material. The sleeve is installable on the end of a conventional compression connector, for example, a copper compression connector. The sleeve is designed and constructed to aid in facilitating the introduction of the strands of the cable into the connector. The sleeve is also designed and constructed to suppress and/or prevent any arcing between the cable and the connector when the connector is applied to the cable.

[006] Other objects, features, and characteristics of the present invention, as well as the methods of operation and functions of the related elements of the structure, and the combination of parts and economies of manufacture, will become more apparent upon consideration of the following detailed description with reference to the accompanying drawings, all of which form a part of this specification.

BRIEF DESCRIPTION OF THE DRAWINGS

[007] A further understanding of the present invention can be obtained by reference to a preferred embodiment set forth in the illustrations of the accompanying drawings. Although the illustrated embodiment is merely exemplary of systems for carrying out the present invention, both the organization and method of operation of the invention, in general, together with further objectives and advantages thereof, may be more easily understood by reference to the drawings and the following description. The drawings are not intended to limit the scope of this invention, which is set forth with particularity in the claims as appended or as subsequently amended, but merely to clarify and exemplify the invention.

DESCRIPTION OF A PREFERRED EMBODIMENT

[008] Reference is made to the attached drawings, wherein embodiments of arc suppressing sleeves according to the present invention are shown and described. As shown in the attached drawings, the sleeve 10 has a first opening 12 that is designed and constructed to receive a compression connector (not shown), such as a copper compression connector. Opening 12 is of an appropriate size such that the sleeve 10 can be installed on one end of the connector. Preferably, sleeve 10 is designed and constructed such that opening 12 is of a size and configuration that sleeve 10 can be easily slid onto an end of the compression connector. In a preferred embodiment, opening 12 may be about 1.060 inches, or may be about 0.688 inches, as

shown in the attached drawings, in order to engage conventional compression connectors, for example, the conventional compression connectors used by Con Edison.

[009] Sleeve 10 also includes an opening 14 for accepting the cable. The inside diameter of opening 14 is smaller than opening 12, and is also preferably smaller than the inside diameter of the compression connector. In a preferred embodiment, opening 14 includes a curved, chamfered, and/or angled entrance 16 which further aids in ensuring that the strands of the cable are positioned inside the sleeve and thus inside the compression connector during installation. In a preferred embodiment, if opening 12 is about 1.060 inches, opening 14 can be about 0.815 inches, and if opening 12 is about 0.688 inches, then opening 14 can be about 0.520 inches.

[0010] Sleeve 10 is formed of an arc suppressing material. In a preferred embodiment, the sleeve is formed of Delrin, an arc suppressing plastic material.

[0011] In use, the user would position sleeve 10 on one end of the compression connector by positioning one end of the connector within opening 12 of sleeve 10. The user would then introduce the cable within opening 14 of sleeve 10. The angle or curved portion 16 of opening 14 aids in ensuring that all of the strands of the cable are forced into the compression connector when the cable is introduced into and through sleeve 10 and into the compression connector. The design and construction of the sleeve also reduces and/or prevents any potential arcing between the cable and the connector as the cable is introduced into the compression connector. Once the cable is within the connector, the connector can be crimped on to the cable end. A second sleeve can be positioned at the other end of the compression connector, and the procedure repeated on a second cable.

[0012] The examples provided are merely exemplary, and should not be construed to limit the scope of the invention in any way. Thus, while there have been shown and described and

pointed out novel features of the present invention as applied to preferred embodiments thereof, it will be understood that various omissions and substitutions and changes in the form and details of the disclosed invention may be made by those skilled in the art without departing from the spirit of the invention. For example, the material, size, and design of the sleeve can be varied without deviating from the scope of the invention. It is the intention, therefore, to be limited only as indicated by the scope of the claims appended hereto.

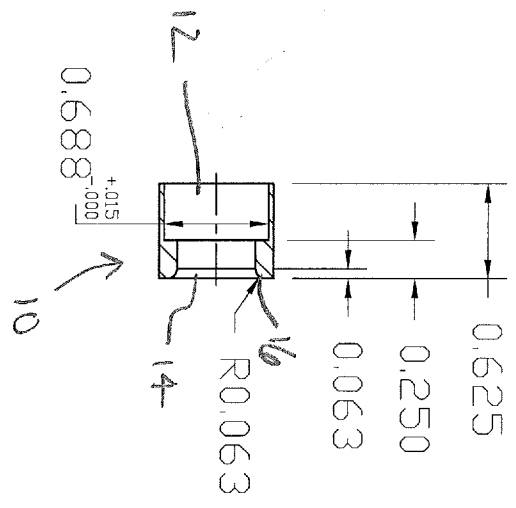
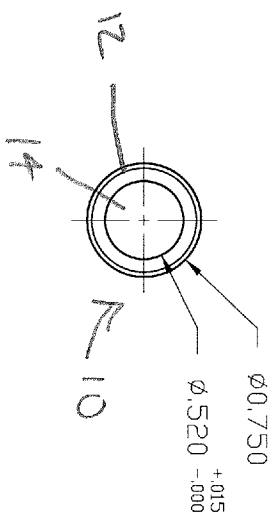
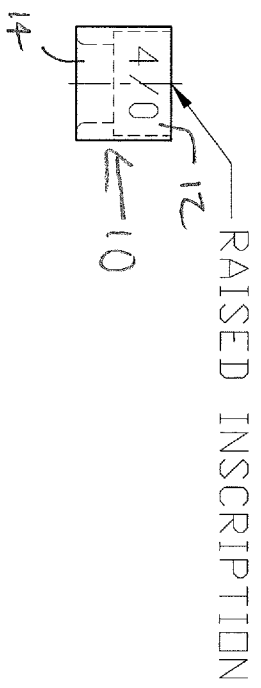
[0013] It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described and all statements of the scope of the invention which, as a matter of language, might be said to fall therebetween.

CLAIMS

I claim:

1. An arc suppressing sleeve for use with a compression connector and a cable, the compression connector having an inner diameter and an outer diameter, the sleeve comprising:
 - a first opening designed and constructed to accept an outer diameter of a compression connector;
 - a second opening having an inner diameter less than the inner diameter of the compression connector;wherein the sleeve is formed of an arc suppressing material.

REVISIONS					
REV	DRAFTS	REV. DATE	DESCRIPTION	APP'D.	DT.



- NOTES:**
1. MATERIAL: WHITE DELRIN
 2. TOLERANCE: UNLESS OTHERWISE SPECIFIED
FRACTION: $\pm 1/32$
DECIMAL: ± 0.015
ANGULAR: $\pm 5'$

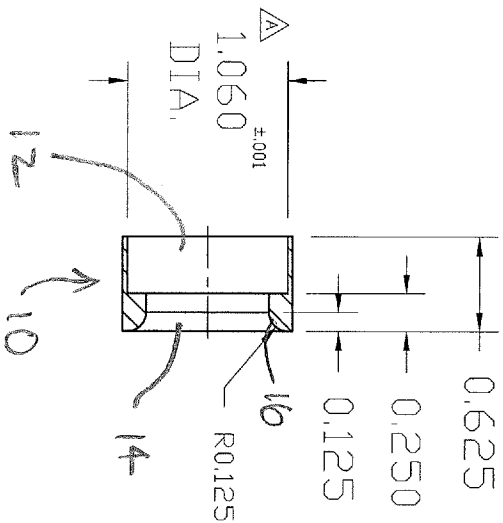
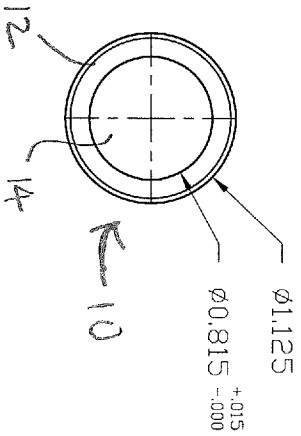
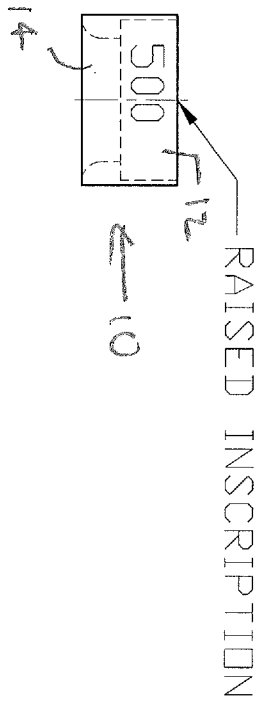
RICHARDS MANUFACTURING COMPANY
 517 LYONS AVENUE
 IRVINGTON, NJ 07111

4/0 MCM DELRIN SLEEVE

DESIGN	DATE	SCALE	DWG. NO.	REV	PART NUMBER
KL	11/04/2008	NONE	RE-570-1255-1	570-1255-1	570-1255-1

RICHARDS MANUFACTURING COMPANY
 C:\2000\eldwg\ELECTRICAL PRODUCT\

REVISIONS					
REV	DRAFTS	REV. DATE	DESCRIPTION	APP'D.	DT.
△A	AES	01/07/2009	1.060 ±.001 DIA. WAS 1.063 DIA. +.015/-0.000		



- NOTES:
1. MATERIAL: WHITE DELRIN
 2. TOLERANCE: UNLESS OTHERWISE SPECIFIED
FRACTION: $\pm 1/32'$
DECIMAL: $\pm .015$
ANGLE: $\pm 5'$

RICHARDS MANUFACTURING COMPANY
CLAIMS PROPRIETARY RIGHTS IN THE
MATERIALS DISCLOSED HEREIN, OTHERS
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WITHOUT WRITTEN PERMISSION.

R RICHARDS MANUFACTURING COMPANY
517 LYONS AVENUE
IRVINGTON, NJ 07111

500 MCM DELRIN SLEEVE

DSGND	DATE	SCALE	DWG NO.	REV	PART NUMBER
KL	11/04/2008	NONE	RE-570-1263-1	A	570-1263-1
DRTD C:\2000\etdwy\ELECTRICAL PRODUCT\					

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	ARC SUPPRESSING SLEEVE
First Named Inventor/Applicant Name:	Bruce Bier
Filer:	Charles E Cantine/Lucille Assevero
Attorney Docket Number:	493331/0033

Filed as Small Entity

Provisional Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Provisional Application filing fee	2005	1	110	110

Pages:

Claims:

Miscellaneous-Filing:

Petition:

Patent-Appeals-and-Interference:

Post-Allowance-and-Post-Issuance:

Extension-of-Time:

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				110

Electronic Acknowledgement Receipt

EFS ID:	6095864
Application Number:	61243444
International Application Number:	
Confirmation Number:	3304
Title of Invention:	ARC SUPPRESSING SLEEVE
First Named Inventor/Applicant Name:	Bruce Bier
Customer Number:	26610
Filer:	Charles E Cantine/Lucille Assevero
Filer Authorized By:	Charles E Cantine
Attorney Docket Number:	493331/0033
Receipt Date:	17-SEP-2009
Filing Date:	
Time Stamp:	18:17:18
Application Type:	Provisional

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$110
RAM confirmation Number	4312
Deposit Account	194709
Authorized User	

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Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal of New Application	ProvisionalAppPatentCoverSheet.pdf	173751 728a854e3c7b323d1dd0f67e8a645f8c9e925ea	no	2

Warnings:

Information:

2		Specification.pdf	269045 32a1e50b7504bc01c4c581e36ce9d38df623b2a5	yes	5
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Multipart Description/PDF files in .zip description

Document Description	Start	End
Specification	1	4
Claims	5	5

Warnings:

Information:

3	Drawings-only black and white line drawings	Drawings.pdf	93018 f326f19760b387290c3d81846769fd615334dd10	no	2
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Warnings:

Information:

4	Fee Worksheet (PTO-875)	fee-info.pdf	29225 607382470dc8ffa50007fa8a460cac1b5ad83433	no	2
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Warnings:

Information:

Total Files Size (in bytes):			565039		
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

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New International Application Filed with the USPTO as a Receiving Office

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