

EXHIBIT 141



This Certificate issued under the seal of the Copyright Office in accordance with title 17, United States Code, attests that registration has been made for the work identified below. The information on this certificate has been made a part of the Copyright Office records.

REGISTER OF COPYRIGHTS United States of America

REGISTRATION NUMBER TX 3-614-184 EFFECTIVE DATE OF REGISTRATION 8 13 93

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

TITLE OF THIS SERIAL 1993 Annual Book of ASTM Standards: GENERAL METHODS AND INSTRUMENTATION: GENERAL TEST METHODS; NON METAL; LABORATORY APPARATUS; STATISTICAL METHODS; FORENSIC SCIENCE

Volume 14.02 Number 14 Date on Copies JUNE 1993 Frequency of Publication Annual

PREVIOUS OR ALTERNATIVE TITLES

2 a NAME OF AUTHOR American Society for Testing and Materials DATES OF BIRTH AND DEATH

Was this contribution to the work a "work made for hire"? Yes No AUTHOR'S NATIONALITY OR DOMICILE Citizen of United States WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK Anonymously? Pseudonymously?

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed. Collective Work Other: Entire Text

6 NAME OF AUTHOR DATES OF BIRTH AND DEATH

Was this contribution to the work a "work made for hire"? Yes No AUTHOR'S NATIONALITY OR DOMICILE Citizen of Domiciled in WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK Anonymously? Pseudonymously?

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed. Collective Work Other:

NAME OF AUTHOR DATES OF BIRTH AND DEATH

Was this contribution to the work a "work made for hire"? Yes No AUTHOR'S NATIONALITY OR DOMICILE Citizen of Domiciled in WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK Anonymously? Pseudonymously?

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed. Collective Work Other:

3 4 YEAR IN WHICH CREATION OF THIS ISSUE WAS COMPLETED 1993 DATE AND NATION OF FIRST PUBLICATION OF THIS PARTICULAR ISSUE U.S.A.

COPYRIGHT CLAIMANT(S) Name and address must be given even if the claimant is the same as the author given in space 2. American Society for Testing & Materials 1916 Race Street Philadelphia, PA 19103-1187

DO NOT WRITE HERE OFFICE USE ONLY APPLICATION RECEIVED AUG 13 1993 ONE DEPOSIT RECEIVED TWO DEPOSITS RECEIVED AUG 13 1993 REMITTANCE NUMBER AND DATE

TRANSFER If the claimant(s) named here in space 4 are different from the author(s) named in space 2, give a brief statement of how the claimant(s) obtained ownership of the copyright.

EXAMINED BY

Lee/vmv

FORM SE

CHECKED BY

CORRESPONDENCE
Yes

FOR
COPYRIGHT
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ONLY

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

PREVIOUS REGISTRATION Has registration for this issue, or for an earlier version of this particular issue, already been made in the Copyright Office?

Yes No If your answer is "Yes," why is another registration being sought? (Check appropriate box) ▼

- a. This is the first published version of an issue previously registered in unpublished form.
- b. This is the first application submitted by this author as copyright claimant.
- c. This is a changed version of this issue, as shown by space 6 on this application.

If your answer is "Yes," give: Previous Registration Number ▼

~~TX#~~ *3 460 670*

Year of Registration ▼
1992

5

DERIVATIVE WORK OR COMPILATION Complete both space 6a & 6b for a derivative work; complete only 6b for a compilation.

a. **Preexisting Material** Identify any preexisting work or works that this work is based on or incorporates. ▼
1992 Annual Book of ASTM Standards, Section 14, Volume 14.02

6

b. **Material Added to This Work** Give a brief, general statement of the material that has been added to this work and in which copyright is claimed. ▼
Compilation of previous published text plus additional text.

See instructions
before completing
this space

—space deleted—

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REPRODUCTION FOR USE OF BLIND OR PHYSICALLY HANDICAPPED INDIVIDUALS A signature on this form at space 10, and a check in one of the boxes here in space 8, constitutes a non-exclusive grant of permission to the Library of Congress to reproduce and distribute solely for the blind and physically handicapped and under the conditions and limitations prescribed by the regulations of the Copyright Office: (1) copies of the work identified in space 1 of this application in Braille (or similar tactile symbols); or (2) phonorecords embodying a fixation of a reading of that work; or (3) both.

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See instructions

8

DEPOSIT ACCOUNT If the registration fee is to be charged to a Deposit Account established in the Copyright Office, give name and number of Account Name ▼ Account Number ▼

9

CORRESPONDENCE Give name and address to which correspondence about this application should be sent. Name/Address/Apt./City/State/Zip ▼

Robert L. Meltzer, ASTM

1916 Race Street

Philadelphia, PA 19103-1187

Area Code & Telephone Number ▶ *215-299-5431*

Be sure to
fill in your
home phone
number

CERTIFICATION* I, the undersigned, hereby certify that I am the

Check one ▶

- author
- other copyright claimant
- owner of exclusive right(s)
- authorized agent of

**American Society
for Testing and Materials**

Name of author or other copyright claimant, or owner of exclusive right(s) ▶

of the work identified in this application and that the statements made by me in this application are correct to the best of my knowledge.

Typed or printed name and date ▼ If this application gives a date of publication in space 3, do not sign and submit it before that date.

Robert L. Meltzer

date ▶

7-7-93

10

Handwritten signature (X) ▼

Robert L. Meltzer

MAIL
CERTIFI-
CATE TO

Certificate
will be
mailed in
window
envelope

Name ▼	Kathe Hooper, ASTM
Number/Street/Apartment Number ▼	1916 Race Street
City/State/ZIP ▼	Philadelphia, PA 19103-1187

- Complete all necessary spaces
- Sign your application in space 10

1. Application form
2. Nonrefundable \$20 filing fee in check or money order payable to Register of Copyrights
3. Deposit material

Register of Copyrights
Library of Congress
Washington, D.C. 20559

11

* 17 U.S.C. § 504(e) Any person who knowingly makes a false representation of a material fact in the application for copyright registration provided for by section 409, or in any written statement filed in connection with the application, shall be fined not more than \$2,500

EXHIBIT 142

CERTIFICATE OF REGISTRATION

FORM 55 For a Serial UNITED STATES COPYRIGHT OFFICE REGISTRATION NUMBER



This Certificate issued under the seal of the Copyright Office in accordance with title 17, United States Code, attests that registration has been made for the work identified below. The information on this certificate has been made a part of the Copyright Office records.

Marybeth Peters

REGISTER OF COPYRIGHTS United States of America



EFFECTIVE DATE OF REGISTRATION

Month 3 Day 20 Year 98

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

TITLE OF THIS SERIAL

1

1998 Annual Book of ASTM Standards, Iron and Steel Products: Ships and Marine Technology

Table with columns: Volume (01.07), Number (01), Date on Copies (* February 1998), Frequency of Publication (Annual). Includes section for PREVIOUS OR ALTERNATIVE TITLES.

NAME OF AUTHOR

2

a American Society for Testing and Materials

DATES OF BIRTH AND DEATH Year Born Year Died

Form section for author a: Was this contribution to the work a 'work made for hire'? AUTHOR'S NATIONALITY OR DOMICILE (Citizen of/Domiciled in United States). WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK (Anonymous? Pseudonym?).

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed.

Collective Work Other: Entire Text

NAME OF AUTHOR

b

DATES OF BIRTH AND DEATH Year Born Year Died

Form section for author b: Was this contribution to the work a 'work made for hire'? AUTHOR'S NATIONALITY OR DOMICILE. WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK.

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed.

Collective Work Other:

NAME OF AUTHOR

c

DATES OF BIRTH AND DEATH Year Born Year Died

Form section for author c: Was this contribution to the work a 'work made for hire'? AUTHOR'S NATIONALITY OR DOMICILE. WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK.

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed.

Collective Work Other:

YEAR IN WHICH CREATION OF THIS ISSUE WAS COMPLETED

3

a 1998 Year

DATE AND NATION OF FIRST PUBLICATION OF THIS PARTICULAR ISSUE

Complete this information ONLY if this work has been published. Month February Day 27 Year 1998 Nation

COPYRIGHT CLAIMANT(S) Name and address must be given even if the claimant is the same as the author given in space 2.

4

American Society for Testing and Materials 100 Barr Harbor Drive West Conshohocken, PA 19428-2950

TRANSFER If the claimant(s) named here in space 4 are different from the author(s) named in space 2, give a brief statement of how the claimant(s) obtained ownership of the copyright.

Vertical stamp: DO NOT WRITE HERE OFFICE USE ONLY. APPLICATION RECEIVED MAR 20, 1998. ONE DEPOSIT RECEIVED. TWO DEPOSITS RECEIVED MAR 20, 1998. REMITTANCE NUMBER AND DATE.

See instructions before completing this space.

*Date on copy is January 1998.

EXAMINED BY

[Handwritten signature]

FORM SE

CHECKED BY

[Handwritten signature: AWD]

CORRESPONDENCE
Yes

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PREVIOUS REGISTRATION Has registration for this issue, or for an earlier version of this particular issue, already been made in the Copyright Office?

Yes No If your answer is "Yes," why is another registration being sought? (Check appropriate box) ▾

a. This is the first published version of an issue previously registered in unpublished form.

b. This is the first application submitted by this author as copyright claimant.

c. This is a changed version of this issue, as shown by space 6 on this application.

If your answer is "Yes," give: Previous Registration Number ▾ Year of Registration

5

DERIVATIVE WORK OR COMPILATION Complete both space 6a & 6b for a derivative work; complete only 6b for a compilation.

a. **Preexisting Material** Identify any preexisting work or works that this work is based on or incorporates. ▾

1997 Annual Book of ASTM Standards, Section 01, Volume 01.07.

b. **Material Added to This Work** Give a brief, general statement of the material that has been added to this work and in which copyright is claimed. ▾

Completion of previous published text plus additional text.

See instructions
before completing
this space.

6

—space deleted—

7

REPRODUCTION FOR USE OF BLIND OR PHYSICALLY HANDICAPPED INDIVIDUALS A signature on this form at space 10, and a check in one of the boxes here in space 8, constitutes a non-exclusive grant of permission to the Library of Congress to reproduce and distribute solely for the blind and physically handicapped and under the conditions and limitations prescribed by the regulations of the Copyright Office: (1) copies of the work identified in space 1 of this application in Braille (or similar tactile symbols); or (2) phonorecords embodying a fixation of a reading of that work; or (3) both.

a. Copies and Phonorecords

b. Copies Only

c. Phonorecords Only

See instructions.

8

DEPOSIT ACCOUNT If the registration fee is to be charged to a Deposit Account established in the Copyright Office, give name and number of Account.

Name ▾

Account Number ▾

American Society for Testing and Materials

DA078328

9

CORRESPONDENCE Give name and address to which correspondence about this application should be sent.

Name/Address/Apt/Qty/State/ZIP

Kathe Hooper, American Society for Testing and Materials

100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

Area Code & Telephone Number ▶ (610) 832-9834

Be sure to
give your
daytime phone
number.

CERTIFICATION I, the undersigned, hereby certify that I am the

Check only one ▶

author

other copyright claimant

owner of exclusive right(s)

authorized agent of American Society for Testing & Materials

Name of author or other copyright claimant, or owner of exclusive right(s)

of the work identified in this application and that the statements made by me in this application are correct to the best of my knowledge.

Typed or printed name and date ▾ If this application gives a date of publication in space 3, do not sign and submit it before that date.

Robert L. Meltzer

date ▶ 3-5-98

10

Handwritten signature (X) ▾

[Handwritten signature: Robert L. Meltzer]

MAIL
CERTIFICATE
TO

Name ▾

Kathe Hooper, ASTM

Number/Street/Apartment Number ▾

100 Barr Harbor Drive

City/State/ZIP

West Conshohocke, PA 19428-2959

Certificate
will be
mailed in
window
envelope

• Complete all necessary spaces
• Sign your application in space 10

1. Application form
2. Nonrefundable \$20 filing fee in check or money order payable to Register of Copyrights
3. Deposit material

Register of Copyrights
Library of Congress
Washington, D.C. 20559

The Copyright Office has the authority to adjust fees at 6-year intervals based on changes in the Consumer Price Index. The next adjustment is due in 1999. Please contact the Copyright Office after July 1998 to determine the actual fee schedule.

11

EXHIBIT 143



This Certificate issued under the seal of the Copyright Office in accordance with title 17, United States Code, attests that registration has been made for the work identified below. The information on this certificate has been made a part of the Copyright Office records.

Marybeth Peters
REGISTER OF COPYRIGHTS
United States of America

TX 4-029-465
* 7060402741 5 *

EFFECTIVE DATE OF REGISTRATION
MAR 16 1995
Month Day Year

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

TITLE OF THIS SERIAL
1995 Annual Book of ASTM Standards: *Iron & Steel Products*

Shipbuilding
Volume Number Date on Copies Frequency of Publications
01 07 January 1995 Annual

PREVIOUS OR ALTERNATIVE TITLES

NAME OF AUTHOR
American Society for Testing and Materials

Was this contribution to the work a "work made for hire"? Yes No
AUTHOR'S NATIONALITY OR DOMICILE
Name of Country OR Citizen of Domiciled in **United States**
WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
Anonymous? Yes No Pseudonymous? Yes No

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed.
 Collective Work Other: **Entire Text**

NAME OF AUTHOR
DATES OF BIRTH AND DEATH
Year Born Year Died

Was this contribution to the work a "work made for hire"? Yes No
AUTHOR'S NATIONALITY OR DOMICILE
Name of Country OR Citizen of Domiciled in
WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
Anonymous? Yes No Pseudonymous? Yes No

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NAME OF AUTHOR
DATES OF BIRTH AND DEATH
Year Born Year Died

Was this contribution to the work a "work made for hire"? Yes No
AUTHOR'S NATIONALITY OR DOMICILE
Name of Country OR Citizen of Domiciled in
WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
Anonymous? Yes No Pseudonymous? Yes No

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed.
 Collective Work Other:

YEAR IN WHICH CREATION OF THIS ISSUE WAS COMPLETED **1995**
DATE AND NATION OF FIRST PUBLICATION OF THIS PARTICULAR ISSUE
Month **January** Day **26** Year **1995**
U.S.A. Nation

COPYRIGHT CLAIMANT(S) Name and address must be given even if the claimant is the same as the author given in space 2.
American Society for Testing & Materials
1916 Race Street
Philadelphia, PA 19103-1187

APPLICATION RECEIVED
MAR 16 1995
ONE DEPOSIT RECEIVED
TWO DEPOSITS RECEIVED
MAR 16 1995
REGISTRATION NUMBER AND DATE

TRANSFER If the claimant(s) named here in space 4 are different from the author(s) named in space 2, give a brief statement of how the claimant(s) obtained ownership of the copyright.

07526197
071526197

NOTE
Under the law the "author" of a "work made for hire" is generally the employer not the employee (see instructions). For any part of this work that was "made for hire" check "Yes" in the space provided give the employer (or other person for whom the work was prepared) as "Author" of this part and leave the space for dates of birth and death blank.

3
4
See instructions before completing this space

EXAMINED BY

db

FORM SE

CHECKED BY

CORRESPONDENCE
Yes

FOR
COPYRIGHT
OFFICE
USE
ONLY

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

PREVIOUS REGISTRATION Has registration for this issue, or for an earlier version of this particular issue, already been made in the Copyright Office?

Yes No If your answer is "Yes," why is another registration being sought? (Check appropriate box) ▼

- a. This is the first published version of an issue previously registered in unpublished form
- b. This is the first application submitted by this author as copyright claimant
- c. This is a changed version of this issue, as shown by space 6 on this application

If your answer is "Yes," give Previous Registration Number ▼

TX# 3-841-004

Year of Re-registration ▼

1994

5

DERIVATIVE WORK OR COMPILATION Complete both space 6a & 6b for a derivative work, complete only 6b for a compilation.

a. **Preexisting Material** Identify any preexisting work or works that this work is based on or incorporates. ▼

1994 Annual Book of ASTM Standards, Section 01, Volume 07.

6

b. **Material Added to This Work** Give a brief, general statement of the material that has been added to this work and in which copyright is claimed. ▼

Compilation of previous published text plus additional text.

See instructions before completing this space

—space deleted—

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REPRODUCTION FOR USE OF BLIND OR PHYSICALLY HANDICAPPED INDIVIDUALS A signature on this form at space 10, and a check in one of the boxes here in space 8, constitutes a non-exclusive grant of permission to the Library of Congress to reproduce and distribute solely for the blind and physically handicapped and under the conditions and limitations prescribed by the regulations of the Copyright Office: (1) copies of the work identified in space 1 of this application in Braille (or similar tactile symbols); or (2) phonorecords embodying a fixation of a reading of that work; or (3) both.

Copies and Phonorecords

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Phonorecords Only

See instructions

8

DEPOSIT ACCOUNT If the registration fee is to be charged to a Deposit Account established in the Copyright Office, give name and number of Account. Name ▼ Account Number ▼

CORRESPONDENCE Give name and address to which correspondence about this application should be sent. Name Address Apt City State Zip ▼

Robert L. Meltzer, ASTM

1916 Race Street

Philadelphia, PA 19103-1187

Area Code & Telephone Number ▶ **215-299-5431**

Be sure to give your daytime phone number

9

CERTIFICATION* I, the undersigned, hereby certify that I am the

Check one ▶

- author
- other copyright claimant
- owner of exclusive right(s)

authorized agent of **American Society for Testing and Materials**

Name of author or other copyright claimant or owner of exclusive right(s) ▶

of the work identified in this application and that the statements made by me in this application are correct to the best of my knowledge.

Typed or printed name and date ▼ If this application gives a date of publication in space 3, do not sign and submit it before that date.

Robert L. Meltzer

date ▶

March 8, 1995

10

Handwritten signature (X) ▼

Robert L. Meltzer

MAIL CERTIFICATE TO

Certificate will be mailed in window envelope

Name ▼	Kathe Hooper, ASTM
Number Street Apartment Number ▼	1916 Race Street
City State ZIP ▼	Philadelphia, PA 19103-1187

- Complete all necessary spaces
- Sign your application in space 10

1. Application form
2. Nonrefundable \$20 filing fee in check or money order payable to Registrar of Copyrights
3. Deposit material

Registrar of Copyrights
Library of Congress
Washington, D.C. 20559

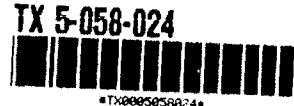
11

* 17 U.S.C. § 506(e): Any person who knowingly makes a false representation of a material fact in the application for copyright registration provided for by section 409, or in any written statement filed in connection with the application, shall be fined not more than \$2,500.

EXHIBIT 144

FORM SE
For a Serial
UNITED STATES COPYRIGHT OFFICE
REGISTRATION NUMBER

111463041



EFFECTIVE DATE OF REGISTRATION

DEC 27 1999

Month Day Year

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

1

TITLE OF THIS SERIAL ▼

1999 Annual Book of ASTM Standards: End Use Products

Volume ▼	Number	Date on Copies ▼	Frequency of Publication ▼
15.07	15	November 1999	Annual

PREVIOUS OR ALTERNATIVE TITLES ▼

2

NAME OF AUTHOR ▼

a American Society for Testing and Materials

DATES OF BIRTH AND DEATH

Year Born Year Died ▼

Was this contribution to the work a "work made for hire"?

Yes
 No

AUTHOR'S NATIONALITY OR DOMICILE

Name of Country

OR { Citizen of ►
Domiciled in ► United States

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK

Anonymous? Yes No
Pseudonymous? Yes No

If the answer to either of these questions is "Yes," see detailed instructions.

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed. ▼

Collective Work Other: Entire Text

NOTE

Under the law, the "author" of a "work made for hire" is generally the employer, not the employee (see instructions). For any part of this work that was "made for hire" check "Yes" in the space provided, give the employer (or other person for whom the work was prepared) as "Author" of that part, and save the space for dates of birth and death blank.

NAME OF AUTHOR ▼

DATES OF BIRTH AND DEATH

Year Born ▼ Year Died

Was this contribution to the work a "work made for hire"?

Yes
 No

AUTHOR'S NATIONALITY OR DOMICILE

Name of Country

OR { Citizen of ►
Domiciled in ►

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK

Anonymous? Yes No
Pseudonymous? Yes No

If the answer to either of these questions is "Yes," see detailed instructions.

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Collective Work Other:

NAME OF AUTHOR ▼

DATES OF BIRTH AND DEATH

Year Born ▼ Year Died ▼

Was this contribution to the work a "work made for hire"?

Yes
 No

AUTHOR'S NATIONALITY OR DOMICILE

Name of Country

OR { Citizen of ►
Domiciled in ►

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK

Anonymous? Yes No
Pseudonymous? Yes No

If the answer to either of these questions is "Yes," see detailed instructions.

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Collective Work Other:

3

YEAR IN WHICH CREATION OF THIS ISSUE WAS COMPLETED This information must be given in all cases.

1999 Year

DATE AND NATION OF FIRST PUBLICATION OF THIS PARTICULAR ISSUE

Complete this information ONLY if this work has been published.

Month ► Nov Day ► 19 Year ► 1999

United States Nation

4

COPYRIGHT CLAIMANT(S) Name and address must be given even if the claimant is the same as the author given in space 2. ▼

American Society for Testing and Materials
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

APPLICATION RECEIVED
DEC 27 1999

ONE DEPOSIT RECEIVED

TWO DEPOSITS RECEIVED
DEC 27 1999

REMITTANCE NUMBER AND DATE

TRANSFER If the claimant(s) named here in space 4 are different from the author(s) named in space 2, give a brief statement of how the claimant(s) obtained ownership of the copyright.

MORE ON BACK ► • Complete all applicable spaces (numbers 5-11) on the reverse side of this page.
• See detailed instructions. • Sign the form at line 10.

DO NOT WRITE HERE
Page 1 of 2 pages

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FORM SE

CHECKED BY

CORRESPONDENCE
Yes

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DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

PREVIOUS REGISTRATION Has registration for this issue, or for an earlier version of this particular issue, already been made in the Copyright Office?

Yes No If your answer is "Yes," why is another registration being sought? (Check appropriate box) ▼

a. This is the first published version of an issue previously registered in unpublished form.

b. This is the first application submitted by this author as copyright claimant.

c. This is a changed version of this issue, as shown by space 6 on this application.

If your answer is "Yes," give: Previous Registration Number ▼ Year of Registration

5

DERIVATIVE WORK OR COMPILATION Complete both space 6a & 6b for a derivative work; complete only 6b for a compilation.

a. **Preexisting Material** Identify any preexisting work or works that this work is based on or incorporates. ▼

1998 Annual Book of ASTM Standards, Section 15, Volume 15.07

b. **Material Added to This Work** Give a brief, general statement of the material that has been added to this work and in which copyright is claimed. ▼

Compilation of previous published text plus additional text.

See instructions
before completing
this space.

6

---space deleted---

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a. Copies and Phonorecords

b. Copies Only

c. Phonorecords Only

See instructions.

8

DEPOSIT ACCOUNT If the registration fee is to be charged to a Deposit Account established in the Copyright Office, give name and number of Account.

Name ▼

Account Number ▼

American Society for Testing and Materials

DA078328

9

CORRESPONDENCE Give name and address to which correspondence about this application should be sent.

Name/Address/Apt/City/State/ZIP

Kathe Hooper, American Society for Testing and Materials

100 Barr Harbor Drive

West Conshohocken, PA 19428-2959

Area Code & Telephone Number ▶ (610) 832-9634

Be sure to
give your
daytime phone
number

CERTIFICATION* I, the undersigned, hereby certify that I am the

Check only one ▶

author

other copyright claimant

owner of exclusive right(s)

authorized agent of American Society for Testing & Materials

Name of author or other copyright claimant, or owner of exclusive right(s) ▲

of the work identified in this application and that the statements made by me in this application are correct to the best of my knowledge.

Typed or printed name and date ▼ If this application gives a date of publication in space 3, do not sign and submit it before that date.

Robert L. Meltzer

date ▶ 12-20-99

10

Handwritten signature (X) ▼
Robert L. Meltzer

MAIL
CERTIFICATE
TO

Name ▼	Kathe Hooper, ASTM
Number/Street/Apartment Number ▼	100 Barr Harbor Drive
City/State/ZIP	West Conshohocken, PA 19428-2959

Certificate
will be
mailed in
window
envelope

- Complete all necessary spaces
- Sign your application in space 10

1. Application form
2. Nonrefundable \$20 filing fee in check or money order payable to Register of Copyrights
3. Deposit material

Register of Copyrights
Library of Congress
Washington, D.C. 20550

The Copyright Office has the authority to adjust fees at 5-year intervals, based on changes in the Consumer Price Index. The next adjustment is due in 1999. Please contact the Copyright Office after July 1995 to determine the actual fee schedule.

11

EXHIBIT 145

Additional Certificate of Registration of a Claim to Copyright

This is to certify that the statements set forth
in the attached have been made a part of the
records of the Copyright Office with claim
of copyright registered under number

In testimony whereof, the seal of this office
is affixed hereto on



TX 3-114-937

October 2, 2019

A handwritten signature in blue ink, reading "Kay A. Leahy". The signature is fluid and cursive, with a long horizontal stroke at the end.

United States Register of Copyrights and Director

FORM SE
UNITED STATES COPYRIGHT OFFICE
REGISTRATION NUMBER

TX 3 114 937

EFFECTIVE DATE OF REGISTRATION

JUL 25 1991

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

TITLE OF THIS SERIAL

1991 Annual Book of ASTM Standards: *PLASTICS (III): D3100-1AEST*

Volume	Number	Date on Copies	Frequency of Publication
08	0803	MAY 1991	ANNUAL
PREVIOUS OR ALTERNATIVE TITLES			

04119259
652611h0

A

NAME OF AUTHOR	DATES OF BIRTH AND DEATH
American Society for Testing and Materials	Year Born Year Died

Was this contribution to the work a "work made for hire"?	AUTHOR'S NATIONALITY OR DOMICILE	WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Citizen of <u>United States</u> Domiciled in <u>United States</u>	Anonymous? <input type="checkbox"/> Yes <input type="checkbox"/> No Pseudonymous? <input type="checkbox"/> Yes <input type="checkbox"/> No
NATURE OF AUTHORSHIP	Briefly describe nature of the material created by this author in which copyright is claimed.	
<input type="checkbox"/> Collective Work <input type="checkbox"/> Other	Entire Text	

NOTE

Under the law the "author" of a work made for hire is generally the employer or the other party (see instructions) For any part of the work that was "made for hire" check "Yes" in the space provided (even the work was prepared as "author" of that part) and leave the space for dates of birth and death blank.

B

NAME OF AUTHOR	DATES OF BIRTH AND DEATH
	Year Born Year Died

Was this contribution to the work a "work made for hire"?	AUTHOR'S NATIONALITY OR DOMICILE	WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
<input type="checkbox"/> Yes <input type="checkbox"/> No	Citizen of Domiciled in	Anonymous? <input type="checkbox"/> Yes <input type="checkbox"/> No Pseudonymous? <input type="checkbox"/> Yes <input type="checkbox"/> No
NATURE OF AUTHORSHIP	Briefly describe nature of the material created by this author in which copyright is claimed.	
<input type="checkbox"/> Collective Work <input type="checkbox"/> Other		

C

NAME OF AUTHOR	DATES OF BIRTH AND DEATH
	Year Born Year Died

Was this contribution to the work a "work made for hire"?	AUTHOR'S NATIONALITY OR DOMICILE	WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
<input type="checkbox"/> Yes <input type="checkbox"/> No	Citizen of Domiciled in	Anonymous? <input type="checkbox"/> Yes <input type="checkbox"/> No Pseudonymous? <input type="checkbox"/> Yes <input type="checkbox"/> No
NATURE OF AUTHORSHIP	Briefly describe nature of the material created by this author in which copyright is claimed.	
<input type="checkbox"/> Collective Work <input type="checkbox"/> Other		

3

YEAR IN WHICH CREATION OF THIS WORK WAS COMPLETED	DATE AND NATION OF FIRST PUBLICATION OF THIS PARTICULAR EDITION
1991	U.S.A.

4

4

AMERICAN SOCIETY FOR TESTING & MATERIALS
1916 Race Street
Philadelphia, PA 19103-1187

APPLICATION RECEIVED
JUL 25 1991

ONE DEPOSIT RECEIVED

TWO DEPOSITS RECEIVED
JUL 25 1991

RIGHTS INCE. PENDING AND DUE

IX 3 114 937

EXAMINED BY [Signature] FORM SE

CHECKED BY _____

CORRESPONDENCE
Yes

FOR
COPYRIGHT
OFFICE
USE
ONLY

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

PREVIOUS REGISTRATION Has registration for this issue, or for an earlier version of this particular issue, already been made in the Copyright Office?

Yes No If your answer is "Yes," why is another registration being sought? (Check appropriate box) **5**

- a. This is the first published version of an issue previously registered in unpublished form.
- b. This is the first application submitted by this author as copyright claimant.
- c. This is a changed version of this issue, as shown by space 9 on this application.

If your answer is "Yes," give: Previous Registration Number Year of Registration

TX# 2 159 454 1990

DERIVATIVE WORK OR COMPILATION Complete both space 6a & 6b for a derivative work, complete only 6b for a compilation.

a. Preexisting Material Identify any preexisting work or works that this work is based on or incorporates **1990 Annual Book of ASTM Standards, Section 07, Volume 48.13.** **6**

b. Material Added to This Work Give a brief, general statement of the material that has been added to this work and in which copyright is claimed
Compilation of previous published text plus additional text.

See instructions before completing this space

—space deleted— **7**

REPRODUCTION FOR USE OF BLIND OR PHYSICALLY HANDICAPPED INDIVIDUALS A signature on this form at space 10, and a check in one of the boxes here in space 8, constitutes a non-exclusive grant of permission to the Library of Congress to reproduce and distribute safety for the blind and physically handicapped and under the conditions and limitations prescribed by the regulations of the Copyright Office: (1) copies of the work identified in space 1 of this application in Braille (or similar tactile symbols), or (2) phonorecords embodying a fixation of a reading of that work; or (3) both.

- a Copies and Phonorecords
- b Copies Only
- c Phonorecords Only

See instructions

DEPOSIT ACCOUNT If the registration fee is to be charged to a Deposit Account established in the Copyright Office, give name and number of Account. Name Account Number

CORRESPONDENCE Give name and address to which correspondence about this application should be sent. Name/Address/Room/Zip

Robert L. Meltzer, ASTM
1916 Race Street
Philadelphia, PA 19103-1107
Area Code & Telephone Number **215-299-5431**

Be sure to give your daytime phone number

CERTIFICATION I, the undersigned, hereby certify that I am the author other copyright claimant owner of exclusive rights authorized agent of **American Society for Testing and Materials** of the work identified in this application and that the statements made by me in this application are correct to the best of my knowledge. Name of author or other copyright claimant, or owner of exclusive right

Typed or printed name and date If this application gives a date of publication in space 3, do not sign and submit it before that date.
Robert L. Meltzer **6-14-91**

10

[Signature]

NAME CERTIFICATE TO

Certificate will be mailed to address on envelope

Name <input type="checkbox"/>	Kathe Hooper, ASTM
Number/Street/Room/Number <input type="checkbox"/>	1916 Race Street
City/State/Zip <input type="checkbox"/>	Philadelphia, PA 19103-1107

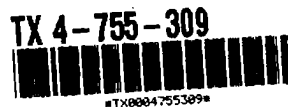
1. Application
2. Declaration (filling in to check or mailing with)
3. Deposit notice

Library of Congress
Library of Copyright
Washington, D.C. 20540

11

EXHIBIT 146

FORM SE
For a Serial
UNITED STATES COPYRIGHT OFFICE
RE



This Certificate issued under the seal of the Copyright Office in accordance with title 17, United States Code, attests that registration has been made for the work identified below. The information on this certificate has been made a part of the Copyright Office records.

Marybeth Peters
REGISTER OF COPYRIGHTS
United States of America

EFFECTIVE DATE OF REGISTRATION
6 23 98
Month Day Year

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

1 TITLE OF THIS SERIAL ▼

1998 Annual Book of ASTM Standards, General Test Methods, Monometal, Chromatography, Durability of Nonmetallic Materials, Forensic Sciences, Laboratory Apparatus, Statistical Methods

Volume ▼	Number	Date on Copies ▼	Frequency of Publication ▼
14.02	14	July	Annual

PREVIOUS OR ALTERNATIVE TITLES ▼

2 NAME OF AUTHOR

a American Society for Testing and Materials

DATES OF BIRTH AND DEATH
Year Born ▼ Year Died ▼

Was this contribution to the work a "work made for hire"?
 Yes No

AUTHOR'S NATIONALITY OR DOMICILE
Name of Country
OR { Citizen of ► United States
Domiciled in ►

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
Anonymous? Yes No
Pseudonymous? Yes No

If the answer to either of these questions is "Yes," see detailed instructions.

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed.

Collective Work Other: Entire Text

NAME OF AUTHOR ▼

DATES OF BIRTH AND DEATH
Year Born Year Died ▼

Was this contribution to the work a "work made for hire"?
 Yes No

AUTHOR'S NATIONALITY OR DOMICILE
Name of Country
OR { Citizen of ►
Domiciled in ►

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
Anonymous? Yes No
Pseudonymous? Yes No

If the answer to either of these questions is "Yes," see detailed instructions.

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed. ▼

Collective Work Other:

NAME OF AUTHOR ▼

DATES OF BIRTH AND DEATH
Year Born ▼ Year Died ▼

Was this contribution to the work a "work made for hire"?
 Yes No

AUTHOR'S NATIONALITY OR DOMICILE
Name of Country
OR { Citizen of ►
Domiciled in ►

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
Anonymous? Yes No
Pseudonymous? Yes No

If the answer to either of these questions is "Yes," see detailed instructions.

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed. ▼

Collective Work Other:

3 a YEAR IN WHICH CREATION OF THIS ISSUE WAS COMPLETED
1998 Year

b DATE AND NATION OF FIRST PUBLICATION OF THIS PARTICULAR ISSUE
Complete this information ONLY if this work has been published.
Month ► June Day ► 22 Year ► 1998
United States Nation

4 COPYRIGHT CLAIMANT(S) Name and address must be given even if the claimant is the same as the author given in space 2. ▼

American Society for Testing and Materials
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

TRANSFER If the claimant(s) named here in space 4 are different from the author(s) named in space 2, give a brief statement of how the claimant(s) obtained ownership of the copyright.

APPLICATION RECEIVED
JUN 23 1998
ONE DEPOSIT RECEIVED
TWO DEPOSITS RECEIVED
JUN 23 1998
REMITTANCE NUMBER AND DATE

MORE ON BACK ► Complete all applicable spaces (numbers 5-11) on the reverse side of this page.
See detailed instructions. Sign the form at line 10.

DO NOT WRITE HERE
Page 1 of 2 pages

EXAMINED BY

CHECKED BY

CORRESPONDENCE Yes

FORM SE

FOR COPYRIGHT OFFICE USE ONLY

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

PREVIOUS REGISTRATION Has registration for this issue, or for an earlier version of this particular issue, already been made in the Copyright Office?

Yes No If your answer is "Yes," why is another registration being sought? (Check appropriate box) ▼

- a. This is the first published version of an issue previously registered in unpublished form.
- b. This is the first application submitted by this author as copyright claimant.
- c. This is a changed version of this issue, as shown by space 6 on this application.

If your answer is "Yes," give: Previous Registration Number ▼ Year of Registration

5

DERIVATIVE WORK OR COMPILATION Complete both space 6a & 6b for a derivative work; complete only 6b for a compilation.

a. Preexisting Material Identify any preexisting work or works that this work is based on or incorporates. ▼
1997 Annual Book of ASTM Standards, Section 14, Volume 14.02.

b. Material Added to This Work Give a brief, general statement of the material that has been added to this work and in which copyright is claimed. ▼
Compilation of previous published text plus additional text.

See instructions before completing this space.

6

---space deleted---

REPRODUCTION FOR USE OF BLIND OR PHYSICALLY HANDICAPPED INDIVIDUALS A signature on this form at space 10, and a check in one of the boxes here in space 8, constitutes a non-exclusive grant of permission to the Library of Congress to reproduce and distribute solely for the blind and physically handicapped and under the conditions and limitations prescribed by the regulations of the Copyright Office: (1) copies of the work identified in space 1 of this application in Braille (or similar tactile symbols); or (2) phonorecords embodying a fixation of a reading of that work; or (3) both.

- a. Copies and Phonorecords
- b. Copies Only
- c. Phonorecords Only

See instructions.

7

8

DEPOSIT ACCOUNT If the registration fee is to be charged to a Deposit Account established in the Copyright Office, give name and number of Account.
Name ▼ Account Number ▼

American Society for Testing and Materials

DA078328

9

CORRESPONDENCE Give name and address to which correspondence about this application should be sent.

Name/Address/Apt/City/State/ZIP

Kathe Hooper, American Society for Testing and Materials
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

Area Code & Telephone Number ▶ (610) 832-9634

Be sure to give your daytime phone number.

CERTIFICATION* I, the undersigned, hereby certify that I am the

- Check only one ▶
- author
 - other copyright claimant
 - owner of exclusive right(s)
 - authorized agent of American Society for Testing & Materials
Name of author or other copyright claimant, or owner of exclusive right(s) ▲

of the work identified in this application and that the statements made by me in this application are correct to the best of my knowledge.

Typed or printed name and date ▼ If this application gives a date of publication in space 3, do not sign and submit it before that date.

Robert L. Metzger

date ▶ 6-22-98

10

Handwritten signature (X) Robert L. Metzger

MAIL CERTIFICATE TO

Name ▼ Kathe Hooper, ASTM
Number/Street/Apartment Number ▼ 100 Barr Harbor Drive
City/State/ZIP West Conshohocken, PA 19428-2959

Certificate will be mailed in window envelope

- Complete all necessary spaces
- Sign your application in space 10

1. Application form
 2. Nonrefundable \$20 filing fee in check or money order payable to Register of Copyrights
 3. Deposit material
- Register of Copyrights
Library of Congress
Washington, D.C. 20550

The Copyright Office has the authority to adjust fees at 8-year intervals, based on changes in the Consumer Price Index. The next adjustment is due in 1994. Please contact the Copyright Office after July 1993 to determine the actual fee schedule.

11

*17 U.S.C. § 506(e): Any person who knowingly makes a false representation of a material fact in the application for copyright registration provided for by section 409, or in any written statement filed in connection with the application, shall be fined not more than \$2,500.

EXHIBIT 147

CERTIFICATE OF REGISTRATION

Case 1:13-cv-01215-TSC Document 198-13 Filed 10/07/19 Page 21 of 26



OFFICIAL SEAL

This Certificate issued under the seal of the Copyright Office in accordance with title 17, United States Code, attests that registration has been made for the work identified below. The information on this certificate has been made a part of the Copyright Office records.

Marybeth Peters

REGISTER OF COPYRIGHTS
United States of America

FORM SE

For a Serial
UNITED STATES COPYRIGHT OFFICE

RE:

TX 5-410-705



TX0005410705

EFFECTIVE DATE OF REGISTRATION

8 27 01
Month Day Year

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

1

TITLE OF THIS SERIAL ▼
2001 ANNUAL BOOK OF ASTM STANDARDS: LABORATORY APPARATUS;
DEGRADATION OF MATERIALS; SI; OXYGEN FIRE SAFETY

Volume ▼ Number ▼ Date on Copies ▼ Frequency of Publication ▼
14.04 14 JULY 2001 ANNUAL

PREVIOUS OR ALTERNATIVE TITLES ▼

2

a

NAME OF AUTHOR ▼
American Society for Testing and Materials

DATES OF BIRTH AND DEATH
Year Born ▼ Year Died ▼

Was this contribution to the work a "work made for hire"?
 Yes
 No

AUTHOR'S NATIONALITY OR DOMICILE
Name of Country
OR { Citizen of ▼
Domiciled in ▼ United States

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
Anonymous? Yes No
Pseudonymous? Yes No
If the answer to either of these questions is "Yes," see detailed instructions.

NATURE OF AUTHORSHIP Briefly describe nature of material created by this author in which copyright is claimed. ▼
 Collective Work Other: Entire Test

NOTE

Under the law, the "author" of a "work made for hire" is generally the employer, not the employee (see instructions). For any part of this work that was "made for hire" check "Yes" in the space provided, give the employer (or other person for whom the work was prepared) as "Author" of that part, and leave the space for dates of birth and death blank.

b

NAME OF AUTHOR ▼

DATES OF BIRTH AND DEATH
Year Born ▼ Year Died ▼

Was this contribution to the work a "work made for hire"?
 Yes
 No

AUTHOR'S NATIONALITY OR DOMICILE
Name of Country
OR { Citizen of ▼
Domiciled in ▼

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
Anonymous? Yes No
Pseudonymous? Yes No
If the answer to either of these questions is "Yes," see detailed instructions.

NATURE OF AUTHORSHIP Briefly describe nature of material created by this author in which copyright is claimed. ▼
 Collective Work Other:

c

NAME OF AUTHOR ▼

DATES OF BIRTH AND DEATH
Year Born ▼ Year Died ▼

Was this contribution to the work a "work made for hire"?
 Yes
 No

AUTHOR'S NATIONALITY OR DOMICILE
Name of Country
OR { Citizen of ▼
Domiciled in ▼

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
Anonymous? Yes No
Pseudonymous? Yes No
If the answer to either of these questions is "Yes," see detailed instructions.

NATURE OF AUTHORSHIP Briefly describe nature of material created by this author in which copyright is claimed. ▼
 Collective Work Other:

3

a

YEAR IN WHICH CREATION OF THIS ISSUE WAS COMPLETED
2001
Year

This information must be given in all cases.

b

DATE AND NATION OF FIRST PUBLICATION OF THIS PARTICULAR ISSUE
Month ▶ July Day ▶ 16 Year ▶ 2001
United States
Nation

4

See instructions before completing this space.

COPYRIGHT CLAIMANT(S) Name and address must be given even if the claimant is the same as the author given in space 2. ▼
American Society for Testing and Materials
100 Barr Barbor Drive
West Conshohocken, PA 19428-2959

TRANSFER If the claimant(s) named here in space 4 is (are) different from the author(s) named in space 2, give a brief statement of how the claimant(s) obtained ownership of the copyright. ▼

APPLICATION RECEIVED
AUG 27 2001
ONE DEPOSIT RECEIVED
TWO DEPOSITS RECEIVED
AUG 27 2001
FUNDS RECEIVED

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MORE ON BACK ▶ • Complete all applicable spaces (numbers 5-9) on the reverse side of this page.
• See detailed instructions. • Sign the form at line 8.

DO NOT WRITE HERE
Page 1 of 2 pages

EXAMINED BY _____
CHECKED BY MS
 CORRESPONDENCE
Yes

FORM SE

FOR
COPYRIGHT
OFFICE
USE
ONLY

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

PREVIOUS REGISTRATION Has registration for this work, or for an earlier version of this work, already been made in the Copyright Office?

- Yes No If your answer is "Yes," why is another registration being sought? (Check appropriate box.) ▼
 - a. This is the first published edition of a work previously registered in unpublished form.
 - b. This is the first application submitted by this author as copyright claimant.
 - c. This is a changed version of the work, as shown by space 6 on this application.
- If your answer is "Yes," give: Previous Registration Number ▼ Year of Registration ▼

5

DERIVATIVE WORK OR COMPILATION Complete both space 6a and 6b for a derivative work; complete only 6b for a compilation.
Preexisting Material Identify any preexisting work or works that this work is based on or incorporates. ▼

2000 Annual Book of ASTM Standards, Section 14 Volume 14.04

Material Added to This Work Give a brief, general statement of the material that has been added to this work and in which copyright is claimed. ▼

Compilation of previous published text plus additional text.

a 6

See instructions before completing this space.

DEPOSIT ACCOUNT If the registration fee is to be charged to a Deposit Account established in the Copyright Office, give name and number of Account.
Name ▼ Account Number ▼

American Society for Testing and Materials DA078328

a 7

CORRESPONDENCE Give name and address to which correspondence about this application should be sent. Name/Address/Apt./City/State/ZIP ▼

Kathe Hooper, American Society for Testing and Materials
100 Barr Harbor Drive
West Conshohocken, PA 19428-2959

Area code and daytime telephone number ▶ 610-832-9634 Fax number ▶ 610-832-9635

Email ▶ khooper@astm.org

b

CERTIFICATION* I, the undersigned, hereby certify that I am the
Check only one ▶ author
 other copyright claimant
 owner of exclusive right(s)
 authorized agent of American Society for Testing and Materials
Name of author or other copyright claimant, or owner of exclusive right(s) ▲

of the work identified in this application and that the statements made by me in this application are correct to the best of my knowledge.

Typed or printed name and date ▼ If this application gives a date of publication in space 3, do not sign and submit it before that date.
Robert L. Meltzer Date ▶ 8/24/01

Handwritten signature (X) ▼
X Robert L. Meltzer

8

Certificate will be mailed in window envelope to this address:

Name ▼	Kathe Hooper, ASTM
Number/Street/Apt ▼	100 Barr Harbor Drive
City/State/ZIP ▼	West Conshohocken, PA 19428-2959

YOU MUST

- Complete all necessary spaces
- Sign your application in space 8

SEND ALL ELEMENTS IN THE SAME PACKAGE

1. Application form
2. Nonrefundable filing fee in check or money order payable to Register of Copyrights
3. Deposit material

MAIL TO
Library of Congress
Copyright Office
101 Independence Avenue, S.E.
Washington, D.C. 20559-6000

As of July 1, 1999, the filing fee for Form SE is \$30.

9

EXHIBIT 148

Additional Certificate of Registration of a Claim to Copyright

This is to certify that the statements set forth
in the attached have been made a part of the
records of the Copyright Office with claim
of copyright registered under number

In testimony whereof, the seal of this office
is affixed hereto on



TX 2-567-321

October 1, 2019

A handwritten signature in blue ink, reading "Kay A. Leahy".

United States Register of Copyrights and Director

FORM SE
UNITED STATES COPYRIGHT OFFICE

REGISTRATION NUMBER

TX 2 567 321

EFFECTIVE DATE OF REGISTRATION

6 2 89
Month Day Year

DO NOT WRITE ABOVE THIS LINE. IF YOU NEED MORE SPACE, USE A SEPARATE CONTINUATION SHEET.

TITLE OF THIS SERIAL

1 1989 Annual Book of ASTM Standards, Petroleum Products and Lubricants (II): D 1949 - D 3601

Volume 05.02 Number 05 Date on Copies March 1989 Frequency of Publication Annual

PREVIOUS OR ALTERNATIVE TITLES

2 a NAME OF AUTHOR American Society for Testing and Materials

DATES OF BIRTH AND DEATH Year Born Year Died

Was this contribution to the work a "work made for hire"?
 Yes
 No

AUTHOR'S NATIONALITY OR DOMICILE
Name of Country
OR { Citizen of
Domiciled in United States

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
Anonymous? Yes No
Pseudonymous? Yes No

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed.
 Collective Work Other: Entire Text

b NAME OF AUTHOR

DATES OF BIRTH AND DEATH Year Born Year Died

Was this contribution to the work a "work made for hire"?
 Yes
 No

AUTHOR'S NATIONALITY OR DOMICILE
Name of Country
OR { Citizen of
Domiciled in

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
Anonymous? Yes No
Pseudonymous? Yes No

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed.
 Collective Work Other:

NAME OF AUTHOR

DATES OF BIRTH AND DEATH Year Born Year Died

Was this contribution to the work a "work made for hire"?
 Yes
 No

AUTHOR'S NATIONALITY OR DOMICILE
Name of Country
OR { Citizen of
Domiciled in

WAS THIS AUTHOR'S CONTRIBUTION TO THE WORK
Anonymous? Yes No
Pseudonymous? Yes No

NATURE OF AUTHORSHIP Briefly describe nature of the material created by this author in which copyright is claimed.
 Collective Work Other:

3 4 YEAR IN WHICH CREATION OF THIS ISSUE WAS COMPLETED 1989

DATE AND NATION OF FIRST PUBLICATION OF THIS PARTICULAR ISSUE
Complete this information ONLY if this work has been published. Month April Day 27 Year 1989 U.S.A. Nation

COPYRIGHT CLAIMANT(S) Name and address must be given even if the claimant is the same as the author given in space 2.

American Society for Testing and Materials
1916 Race Street
Philadelphia, PA 19103

TRANSFER If the claimant(s) named here in space 4 are different from the author(s) named in space 2, give a brief statement of how the claimant(s) obtained ownership of the copyright

DO NOT WRITE HERE OFFICE USE ONLY
APPLICATION RECEIVED
ONE DEPOSIT RECEIVED
TWO DEPOSITS RECEIVED
REMITTANCE NUMBER AND DATE

MORE ON BACK Complete all applicable spaces (numbers 5-11) on the reverse side of this page. See detailed instructions. Sign the form at line 10.

DO NOT WRITE HERE Page 1 of 2 pages

NOTE Under this line



TX 2 567 321

CHECKED BY [Signature]

CORRESPONDENCE Yes

DEPOSIT ACCOUNT FUNDS USED

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PREVIOUS REGISTRATION Has registration for this issue, or for an earlier version of this particular issue, already been made in the Copyright Office?

- Yes No If your answer is "Yes," why is another registration being sought? (Check appropriate box) ▼
- a. This is the first published version of an issue previously registered in unpublished form.
- b. This is the first application submitted by this author as copyright claimant.
- c. This is a changed version of this issue, as shown by space 6 on this application.

5

If your answer is "Yes," give: Previous Registration Number ▼ TX 2-348-343 Year of Registration ▼ 1988

DERIVATIVE WORK OR COMPILATION Complete both space 6a & 6b for a derivative work, complete only 6b for a compilation

a. Preexisting Material Identify any preexisting work or works that this work is based on or incorporates. ▼
1988 Annual Book of ASTM Standards Section 05 Volume 05.02

6

b. Material Added to This Work Give a brief, general statement of the material that has been added to this work and in which copyright is claimed ▼
Compilation of previous published text plus additional text.

See instructions before completing this space

MANUFACTURERS AND LOCATIONS If this is a published work consisting preponderantly of nondramatic literary material in English, the law may require that the copies be manufactured in the United States or Canada for full protection. If so, the names of the manufacturers who performed certain processes, and the places where these processes were performed must be given. See instructions for details.

Names of Manufacturers ▼ Waverly Press, Inc. Places of Manufacture ▼ Easton, MD

7

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- a. Copies and Phonorecords b. Copies Only c. Phonorecords Only

See instructions

DEPOSIT ACCOUNT If the registration fee is to be charged to a Deposit Account established in the Copyright Office, give name and number of Account Name ▼ Account Number ▼

CORRESPONDENCE Give name and address to which correspondence about this application should be sent. Name Address Apt City State Zip ▼

R. L. Meltzer, ASTM
1916 Race Street
Philadelphia, PA 19103

Area Code & Telephone Number ▼ 215-299-5431

Be sure to give your daytime phone number

CERTIFICATION* I, the undersigned, hereby certify that I am the

Check one ▶ author
 other copyright claimant
 owner of exclusive right(s) American Society for Testing and Materials
 authorized agent of Testing and Materials

of the work identified in this application and that the statements made by me in this application are correct to the best of my knowledge.
Name of author or other copyright claimant, or owner of exclusive right(s) ▲

10

Typed or printed name and date ▼ If this is a published work, this date must be the same as or later than the date of publication given in space 3.

Robert L. Meltzer date ▶ 5/22/89

Handwritten signature (X) ▼ [Signature]

MAIL CERTIFICATE TO

Name ▼ Kathe Scholl, ASTM

Number Street Apartment Number ▼ 1916 Race Street

City State ZIP ▼ Philadelphia, PA 19103

Certificate will be mailed in window envelope

- Have you:
- Completed all necessary spaces?
 - Signed your application in space 10?
 - Enclosed check or money order for \$10 payable to Register of Copyrights?
 - Enclosed your deposit material with the application and fee?
- MAIL TO: Register of Copyrights, Library of Congress, Washington D.C. 20559

11

* 17 U.S.C. § 506(e) Any person who knowingly makes a false representation of a material fact in the application for copyright registration provided for by section 409 or in any written statement filed in connection with the application, shall be fined not more than \$2,500.