

PATENT ASSIGNMENT

Electronic Version v1.1

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Govindarajan T. Srinivasan</td><td>09/29/2008</td></tr><tr><td>Michael W. Hamblin</td><td>10/06/2008</td></tr><tr><td>Joseph F. Wrinn</td><td>09/30/2008</td></tr><tr><td>Peter A. Reichert</td><td>09/29/2008</td></tr></tbody></table>		Name	Execution Date	Govindarajan T. Srinivasan	09/29/2008	Michael W. Hamblin	10/06/2008	Joseph F. Wrinn	09/30/2008	Peter A. Reichert	09/29/2008
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Joseph F. Wrinn	09/30/2008										
Peter A. Reichert	09/29/2008										
RECEIVING PARTY DATA											
Name:	TERADYNE, INC.										
Street Address:	600 Riverpark Drive (MS NR 700-2-3)										
City:	North Reading										
State/Country:	MASSACHUSETTS										
Postal Code:	01864										
PROPERTY NUMBERS Total: 1											
<table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>12190035</td></tr></tbody></table>		Property Type	Number	Application Number:	12190035						
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CORRESPONDENCE DATA											
Fax Number: (617)342-4001 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
Phone: 617-342-4000											
Email: mtoomey@foley.com											
Correspondent Name: Joseph M. Maraia											
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Address Line 2: 111 Huntington Avenue, 26th Floor											
Address Line 4: Boston, MASSACHUSETTS 02199-7610											
ATTORNEY DOCKET NUMBER:	077311-0168										
NAME OF SUBMITTER:	Joseph M. Maraia										
Total Attachments: 6											

OP \$40.00 12190035

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PATENT  
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**ASSIGNMENT - WORLDWIDE**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor (hereinafter referred to singly and collectively as "ASSIGNOR") has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto

Teradyne, Inc.  
600 Riverpark Drive (MS NR 700-2-3)  
North Reading, Massachusetts 01864

(hereinafter referred to as "ASSIGNEE") its successors and assigns, the full and exclusive right, title and interest for the United States, its territories and possessions, and all foreign countries in and to this invention relating to

**X-RAY INSPECTION OF SOLDER REFLOW IN HIGH-DENSITY PRINTED CIRCUIT BOARD APPLICATIONS**

as set forth in this United States Patent Application

*check one*      ☐ executed concurrently herewith,  
                    ☐ executed on \_\_\_\_\_,  
                    ☒ Serial No. 12/190,035    Filed 8/12/2008

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application and all other applications for Letters Patent of the United States and countries foreign thereto for above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States and countries foreign thereto, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the International Convention and any other international agreement to which the United States adheres; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY AUTHORIZES ASSIGNEE to file patent applications in any or all countries on the above-identified invention or inventions in the name of the undersigned or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable under the International Convention or otherwise.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representative or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, and declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the law firm of **Foley & Lardner LLP** the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of **Foley & Lardner LLP** do not personally represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

Executed this 29<sup>th</sup> day of September, 2008

[Signature]  
GOVINDARAJAN T. SRINIVASAN

State of MA)

County of Middlesex)

On this 29<sup>th</sup> day of September, 2008, before me, Michele T. Brown-Tosi (a notary public in and for said county), personally appeared GOVINDARAJAN T. SRINIVASAN, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature [Signature]

My Commission Expires:  MICHELE T. BROWN-TOSI  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
December 5, 2014

(Seal)

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
MICHAEL W. HAMBLIN

State of \_\_\_\_\_)

County of \_\_\_\_\_)

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, \_\_\_\_\_ (a notary public in and for said county), personally appeared MICHAEL W. HAMBLIN, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

(Seal)

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
GOVINDARAJAN T. SRINIVASAN

State of \_\_\_\_\_)

County of \_\_\_\_\_)

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, \_\_\_\_\_ (a notary public in and for said county), personally appeared GOVINDARAJAN T. SRINIVASAN, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

(Seal)

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
MICHAEL W. HAMBLIN

State of MA \_\_\_\_\_)

County of Middlesex \_\_\_\_\_)

On this 14 day of October, 2008, before me, Michele T. Brown-Tosi (a notary public in and for said county), personally appeared MICHAEL W. HAMBLIN, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Michele T. Brown-Tosi

My Commission Expires: \_\_\_\_\_

(Seal)



MICHELE T. BROWN-TOSI  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
December 5, 2014

Executed this 30th day of September, 2008.

Joseph F. Wrinn  
JOSEPH F. WRINN

State of MA)

County of Middlesex)

On this 30th day of September, 2008, before me, Michele T. Brown-Tosi (a notary public in and for said county), personally appeared JOSEPH F. WRINN, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Michele T. Brown-Tosi

My Commission Expires: December 5, 2014  
 MICHELE T. BROWN-TOSI  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
December 5, 2014

(Seal)

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
PETER A. REICHERT

State of \_\_\_\_\_)

County of \_\_\_\_\_)

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me, \_\_\_\_\_ (a notary public in and for said county), personally appeared PETER A. REICHERT, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

(Seal)

Executed this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
JOSEPH F. WRINN

State of \_\_\_\_\_)

County of \_\_\_\_\_)

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, before me, \_\_\_\_\_ (a notary public in and for said county), personally appeared JOSEPH F. WRINN, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature \_\_\_\_\_

My Commission Expires: \_\_\_\_\_

(Seal)

Executed this 29<sup>th</sup> day of September 2008

\_\_\_\_\_  
PETER A. REICHERT

State of MA \_\_\_\_\_)

County of Middlesex \_\_\_\_\_)

On this 29<sup>th</sup> day of September 2008, before me, Michele T. Brown-Tosi (a notary public in and for said county), personally appeared PETER A. REICHERT, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Michele T. Brown-Tosi

My Commission Expires:



**MICHELE T. BROWN-TOSI**  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
December 5, 2014

(Seal)