11-07-2000 ORDATION FORM COVER (Rev. 6-93) CMB No. 0651-001 (esp. 4/94) PATENTS ONLY To the Honorable Commissioner of Patents and Trademarks: Please record the attached original document or copy the 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): THARAKAN, Nancy Name: Teradyne, Inc. Internal Address: Street Address: 321 Harrison Avenue Additional name(s) of conveying party(ies) City: Boston attached? Yes No State: MA 02118 Zip: 3. Nature of conveyance: Additional name(s) & address(es) attached? ☐ Merger Assignment Assignment ☐ Change of Name Security Agreement ☐ Yes ☑ No Other Execution Date: September 29, 2000 4. Application number(s) or registration number(s): If this document is being filed together with a new September 29, 2000 application, the execution date of the application is: B. Patent No.(s) A. Patent Application No.(s): ☐ Yes ☑ No Additional numbers attached? 6. Total number of applications and patents involved: 1 5. Name and address of the party to whom correspondence concerning document should be mailed: 7. Total Fee (37 C.F.R.3.41)-----\$25.00 ☐ Enclosed Bruce D. Rubenstein Authorized to be charged to deposit account if Legal Department check insufficient or inadvertently Omitted Teradyne, Inc. 321 Harrison Avenue 8. Deposit account number: 20-0515 City: Boston State: MA Zip: 02118 (Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

STATEMENT AND SIGNATURE

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original attached copy of the original document.

Total number of pages including cover sheet, attachments and documents: 3

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PATENT REEL: 011202 FRAME: 0931

| Docket No. | TER00-02 |
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ASSIGNMENT

WHEREAS, I, Nancy T. Tharakan have invented a certain improvement in METHODS AND APPARATUS FOR GENERATING A TEST SIGNAL FOR XDSL DEVICES described in an application for Letters Patent of the United States, the specification of which:

| [X] | States Patent Office; | | | | |
|-------|-------------------------------------|----------|--|--|--|
| [] | was filed onas Application No | ; | | | |
| [] | was patented under U.S. Patent Noon | . | | | |

WHEREAS, Teradyne, Inc. (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the Commonwealth of Massachusetts and having a usual place of business at 321 Harrison Avenue, Boston, Massachusetts 02118 desires to acquire an interest therein in accordance with agreements duly entered into with me;

NOW. THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns and legal representatives, the entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to said invention as described in said application, together with the entire right, title and interest in and to said application and such Letters Patent as may issue thereon; said invention, application and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made; I hereby convey all rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. I hereby acknowledge that this assignment, being of the entire right, title and interest in and to said invention, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all such Letters Patent to ASSIGNEE for its own name as assignee of the entire right, title and interest therein:

AND, I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said

PATENT REEL: 011202 FRAME: 0932 ASSIGNEE, its successors, assigns and legal representatives, but at its or their expense and charges, including the execution of applications for patents in foreign countries, and the execution of substitution, reissue, divisional or continuation applications and preliminary or other statements and the giving of testimony in any interference or other proceeding in which said invention or any application or patent directed thereto may be involved;

AND, I do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal the date set forth below.

Inventor: $\frac{q}{129}$ Nancy T. Tharakan

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|-------|------|-------|------------|-----|---|--|
| Count | v of | Suf | 18/ | 16. | | |

RECORDED: 09/29/2000

Then personally appeared before me the above-named Nancy T. Tharakan and acknowledged that he/she executed the foregoing instrument as his/her free act and deed this ______ day of $\leq e + \frac{1}{2}$, $e + \frac{1}{2}$.

(SEAL)

Notary Public

(MAZYZ MACLACIA)

My Commission expires 2/10/03