U.S. Department of Commerce FORM PTO-1619A Patent and Trademark Office Expires 06/30/99 08-08-2001 OMB 0651-0027 V-1-01 101804016 PATENTS ONLY TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies **Submission Type** Conveyance Type **Assignment** New **Security Agreement** Resubmission (Non-Recordation) License **Document ID#** Change of Name To Cancel Recordation of **Correction of PTO Error** Other Merger **Erroneous Assignment** Reel # Frame # U.S. Government **Corrective Document** For Use ONLY by U.S. Government Agencies [X]Reel # 10885 Frame # 0978 **Departmental File** Secret File **Execution Date** Conveying Party(ies) Mark if additional names of conveying parties attached Month Day Name (line 1) ORBOT INSTRUMENTS, LIMITED 05122000 Name (line 2) Second Party **Execution Date** Month Day Year Name (line 1) Name (line 2) Mark if additional names of receiving parties attached Receiving Party If document to be recorded Name (line 1) APPLIED MATERIALS, INC. is an assignment and the receiving party is not domiciled in the United Name (line 2) States, an appointment of a domestic Address (line 1) P.O. Box 450A representative is attached. (Designation must be a Address (line 2) separate document from Assignment.) Address (line 3) 95052 **Domestic Representative Name and Address** Enter for the first Receiving Party only. Name Address (line 1) Address (line 2) Address (line 3) Address (line 4) FOR OFFICE USE ONLY 8/07/2001 TDIAZ1 00000180 09150296 01 FC+581 I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231 on 27 hel, 2001.

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FORM PTO-1619E
Expires 06/30/99
OMB 0651-0027

## Page 2

U.S. Department of Commerce Patent and Trademark Office PATENT

Correspondent Name and Address Area Code and Telephone Number (408) 235-6536
Name APPLIED MATERIALS, INC.
Address (line 1) Attn: Patent Group
Address (line 2) 2881 Scott Blvd., M/S 2061
Address (line 3)
Address (line 4) Santa Clara, CA 95050
Pages Enter total number of pages of the attached conveyance document including any attachments. # 4
Application Number(s) or Patent Number(s) [] Mark if additional numbers attached
Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).
Patent Application Number(s)  Patent Number(s)
09150296
If this document is being filed together with a <u>new Patent Application</u> , enter the date the patent application was <u>Month Day Year</u> signed by the first named executing inventor.
Patent Cooperation Treaty (PCT)
Enter PCT application number PCT
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Number of Properties Enter the total number of properties involved. # 1
Fee Amount Fee Amount for Properties Listed (37 CFR 3.41): \$ 40.00
Method of Payment: Enclosed [X] Deposit Account []  Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the account.)
Deposit Account Number: # 03-3117
Authorization to charge additional fees: Yes [X] No []
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 document. Charges to deposit account are authorized, as indicated herein.
Jane I. Song (Reg. No. 48,073) Jane Vorg 7/26/01
Name of Person Signing Signature Date



WHEREAS, ORBOT INSTRUMENTS, LIMITED, having offices in Yavne, Israel, (hereinafter referred to as "Assignor") owns rights and interest in U.S. Patent Serial Number 09/150,296, filed on 9 SEP 1998, entitled METHOD AND APPARATUS FOR INSPECTION OF PATTERNED SEMICONDUCTOR WAFERS (hereinafter referred to as "Patent Application"); and

WHEREAS, APPLIED MATERIALS, INCORPORATED, having offices in California, United States of America (hereinafter referred to as "Assignee"), desires to acquire Assignor's entire rights and interests in and to the Patent Application, and in and to the inventions disclosed in said Patent Application, and to the Future Patents (as hereinafter defined) as successor to the business of Assignor. which business is ongoing and existing.

NOW THEREFORE, for and in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor does hereby sell. assign and transfer unto said Assignee, its successors, assigns and legal representatives, Assignor's full rights and interests in and to said Patent Application, and to all future patents which may be granted therefor throughout the world, and all division, reissues, substitutions, continuations, continuations-in-part and extensions thereof (collectively, "Future Patents"), together with all claims, causes of action and damages for past infringement, if any, of said Patent Application and Future Patents; and Assignor hereby authorizes and requests the United States Patent and Trademark Office and other patent offices throughout the world to issue all Future Patents resulting therefrom insofar as Assignor's interest is concerned, to the said Assignee of Assignor's entire right, title and interest.

Assignor also hereby sells and assignees to Assignee, its successors, assigns and legal representatives Assignor's full rights and interests to inventions disclosed in said Patent Application and Future Patents throughout the world, including the right to file applications and obtain patents, utility models, industrial models and designs for said inventions in Assignee's own name throughout the world including all rights of priority, all rights to publish cautionary notices reserving ownership of said inventions and all rights to register said inventions in appropriate registries; and Assignor further agrees to execute any and all powers of attorney, applications, assignments, declarations, affidavits, and any other papers in connection therewith reasonably necessary to perfect such right, title and interest in Assignee, its successors, assigns and legal representatives.

Assignor hereby further agrees that Assignor will communicate to said Assignee, or to its successors, assigns and legal representatives, any facts known to Assignor respecting any improvements, and, at the expense of said Assignee, will testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, make all lawful oaths, and general do everything possible to vest title in said Assignee and to aid said Assignee, its successors, assigns and legal representatives in obtaining and enforcing proper protection for said Patent Application and Future Patents in such countries as Assignee may elect.

IN WITNESS WHEREOF, Assignor has caused this instrument to be executed effective May 12, 2000.

ORBOT INSTRUMENTS, LIMITED

Name and Title: Joseph J. Sweeney, President

PATENT

REEL: 012040 FRAME: 0751

## **AUTHORIZATION TO EXECUTE DOCUMENTS**



WHEREAS, Applied Materials, Inc. ("Applied") purchased shares of Orbot Instruments Ltd. ("Orbot") on Jan. 9, 1997;

WHEREAS, Applied purchased shares of Opal, Inc., a parent company of Opal Technologies Ltd. ("Opal"), on Jan. 9, 1997;

WHEREAS, Orbot merged into Opal on Oct. 21, 1998; and

WHEREAS, Opal changed its name to Applied Materials Israel Ltd. ("Applied-Israel") on Oct. 27, 1998.

Pauline Wan, who is corporate counsel at Applied, is hereby authorized to execute all documents on behalf of Applied-Israel, for executing assignments of patents and patent applications and for prosecution of patent applications and in transacting business concerning patents and patent applications before the U.S. Patent and Trademark Office, including the U.S. Receiving Office under the Patent Cooperation Treaty, and before all foreign (non-U.S.) patent offices, for securing U.S. and foreign patent rights.

IN WITNESS WHEREOF, Applied-Israel has caused this instrument to be executed on June 14, 2001.

APPLIED MATERIALS ISRAEL LTD.

Bv:

Name: Alexander Meyer Title: Vice President

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RECORDED: 08/01/2001

PATENT REEL: 012040 FRAME: 0752