Form PTO-1595 RECO 08-02	-2004 U.S. PEPARTMENT OF COMMERCE U.S. Patent and Trademark Office
OMB No. 0651-0027 (exp. 6/30/2005)	U.S. Patent and Trademark Office
Tab settings ⇔⇔ → 103904	
Tab settings → → → 102803 To the Honorable Commissioner of Patents and 1102803	ed original documents or copy thereof.
1. Name of conveying party(ies): 7.22.04	2. Name and address of receiving party(ies)
'	Name: Micron Technology, Inc.
Additional name of conveying party(ies) attached? ☐ Yes ☒ No	Internal Address: Mail Stop 1-525
Additional flame of conveying party(ics) attached:	
3. Nature of conveyance:	Street Address: 8000 S Federal Way
☐ Security Agreement ☐ Change of Name	City: Boise State: ID Zip: 83716
Other	Additional Name(s) & address(es) attached? ☐ Yes ☒ No
Execution Date: July 22, 2004	
A. Patent Application No.(s) Additional numbers atta	B. Patent No.(s) ached? ☐ Yes ⊠ No
Name and address of party to whom correspondence concerning this document should be mailed:	6. Total number of applications and patents involved: 1
Name: David J. Paul	7. Total fee (37 CFR 3.41) \$ 40
Internal Address: Micron Technology, Inc.	☐ Enclosed
Mail Stop 1-525	Authorized to be charged to deposit account
	Deposit account number:
Street Address: 8000 S Federal Way	13-3092, Order No. 2004-0071.00/US
City: Boise State: ID Zip: 83716	(Attach duplicate copy of this page if paying by deposit argount)
DO NOT USE	THIS SPACE
9. Statement and signature.	86
To the best of my knowledge and belief, the foregeing inform is a true copy of the original document. David J. Paul	07/22/2004/ \$ \$
Name of Person Signing	Signature Date
Total number of pages including of Mail documents to be recorded with	
Commissioner of Patents & T Washington,	rademarks, Box Assignments
***asimgton,	D.C. 20231

PATENT

REEL: 015616 FRAME: 0330

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: James L. Dale	§	
	§	Group Art Unit:
Serial No.:	§	
	§	Examiner:
Filed: July 22, 2004	§	
	§	Atty. Docket: 2004-0071.00/US
For: METHODS OF FORMING A CONTACT	§	
OPENING IN A SEMICONDUCTOR ASSEMBLY	§	
USING A DISPOSABLE HARD MASK	§	
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	§	
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ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, the undersigned, do hereby:

SELL, ASSIGN AND TRANSFER to MICRON TECHNOLOGY, INC., (the "Assignee"), a corporation of Delaware having a place of business at 8000 S. Federal Way, Boise, ID 83706, the entire right, title and interest for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for United States Letters Patent, which has been executed by the undersigned concurrently herewith and is entitled: such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent which have been or shall be filed in the United States and all foreign countries on any of such improvements; all original and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application in the United States;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to the Assignee;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT that, when requested and at the expense of the Assignee, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all such improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to the Assignee all facts known to the undersigned relating to such improvements and the history thereof; and generally do everything possible which the Assignee shall consider desirable for securing, maintaining and enforcing proper

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TO BE BINDING on the heirs, assigns, representatives and successors of the undersigned and extend to the successors, assigns and nominees of the Assignee.		
(Signature) Date: 7/22/04		
STATE OF IDAHO)		
) ss. County of Ada)		
BEFORE ME, this day of 20 personally appeared the above-named individual(s), to me known to be the person(s) who is (are) described in and who executed the foregoing assignment instrument and acknowledged to me that he/she (they) executed the same of his/her (their) own free will for the purpose therein expressed.		
SEAL		
Notary or Consular Officer My Commission Expires:		

patent protection for such improvements and for vesting title to such improvements in the

Assignee;

RECORDED: 07/22/2004

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