To the Honorable Commissioner of Patents and Trademarks: Please	, Ta & Ta	
Unless filed with a new application, mail to: BOX ASSIGNMENT, Comm  1. Name of conveying party(ies): 4.30 44  Salman Akram  Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No  3. Nature of conveyance: ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Other  Execution Date: September 23, 1998		
4. Application number(s) or patent number(s):  If this document is being filed together with a new application, the execution date of the application is: September 23, 1998  A. U.S. Patent Application No.(s)  B. U.S. Patent No.(s)  OS 164113		
5. Name and address of party to whom correspondence concerning this document should be mailed: Name: Joseph A. Walkowski Trask, Britt & Rossa P.O. Box 2550 Salt Lake City, UT 84110-2550  Ai-orney Docket No. 3091US (96-890)	<ol> <li>Total number of U.S. applications and U.S. patents involved:</li></ol>	
DO NOT USE THIS SPACE		

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct.

Joseph A. Walkowski Name of Person Signing

Reg. No. 28,765

September 30, 1998

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

00000155 09164113 0) FC:581

## **ASSIGNMENT**

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

SELL, ASSIGN AND TRANSFER to MICRON TECHNOLOGY, INC. ("ASSIGNEE"), a corporation of the state of Delaware having a place of business at 8000 South Federal Way, Boise, Idaho 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 each undersigned ASSIGNOR concurrently herewith and is entitled SEMICONDUCTOR SUBSTRATE-BASED BGA INTERCONNECTION AND METHODS OF FABRICATING SAME, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent or the legal equivalent thereof which have been or may be filed in the United States and all foreign countries relating to any of such improvements; all original, reexamined 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 made in the United States;

AUTHORIZE the ASSIGNEE to apply for and receive any and all United States and foreign patents relating to such improvements in its own name;

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

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

COVENANT, when requested and at the expense of the ASSIGNEE, to carry out in good faith the intent and purpose of this assignment, to execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications relating to any and all such improvements; to execute all rightful oaths, declarations, assignments, powers of attorney and other papers; to communicate to the ASSIGNEE all facts and provide to the ASSIGNEE all documents and things known and accessible to the undersigned relating to such improvements and the history thereof, and testify as to the same in any interference, litigation or other

Assignment - Page 1 of 2

proceeding relating thereto; and generally to do everything possible which the ASSIGNEE shall consider desirable for vesting title to such improvements in the ASSIGNEE, and to secure, maintain, defend and enforce valid and enforceable patent protection for such improvements;

AGREE and ACKNOWLEDGE that the SALE, ASSIGNMENT AND TRANSFER of rights and property set forth herein is and shall be IRREVOCABLE and BINDING upon the heirs, assigns, representatives and successors of each undersigned ASSIGNOR and EXTEND to the successors, assigns and nominees of the ASSIGNEE.

ASSIGNOR:		
Salvan Akam		Date $\frac{9/23/98}{}$
Salman <b>Akram</b>		
STATE OF IDAHO	) : ss.	
COUNTY OF ADA	. 33. )	

BEFORE ME, the undersigned authority, on this 23 day of Stephon, 1998, personally appeared Salman Akram, personally known or proven by satisfactory documentary evidence to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

Notary or Consular Officer

Assignment - Page 2 of 2

## <u>ASSIGNMENT</u>

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

SELL, ASSIGN AND TRANSFER to MICRON TECHNOLOGY, INC. ("ASSIGNEE"), a corporation of the state of Delaware having a place of business at 8000 South Federal Way, Boise, Idaho 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 each undersigned ASSIGNOR concurrently herewith and is entitled SEMICONDUCTOR SUBSTRATE-BASED BGA INTERCONNECTION AND METHODS OF FABRICATING SAME, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent or the legal equivalent thereof which have been or may be filed in the United States and all foreign countries relating to any of such improvements; all original, reexamined 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 made in the United States;

AUTHORIZE the ASSIGNEE to apply for and receive any and all United States and foreign patents relating to such improvements in its own name;

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

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

COVENANT, when requested and at the expense of the ASSIGNEE, to carry out in good faith the intent and purpose of this assignment, to execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications relating to any and all such improvements; to execute all rightful oaths, declarations, assignments, powers of attorney and other papers; to communicate to the ASSIGNEE all facts and provide to the ASSIGNEE all documents and things known and accessible to the undersigned relating to such improvements and the history thereof, and testify as to the same in any interference, litigation or other

Assignment - Page 1 of 2

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1 Kann	Date $9/23/98$
)	
: ss.	
	) : ss.

BEFORE ME, the undersigned authority, on this 23 day of 50 mm, 1998, personally appeared Salman Akram, personally known or proven by satisfactory documentary evidence to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

MOTARY AUBLIC OF IDAMONTHING

Notary or Consular Officer

Assignment - Page 2 of 2

RECORDATION FORM COVER SHEET  PATENTS ONLY				
To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof Unless filed with a new application, mail to: BOX ASSIGNMENT, Commissioner of Patents and Trademarks, Washington, D.C. 20231.				
1. Name of conveying party(ies):	2. Name and address of receiving party(ies)			
Salman Akram	Name: MICRON TECHNOLOGY, INC.  Address: 8000 South Federal Way Boise, Idaho 83706			
Additional name(s) of conveying party(ies) attached?  Yes  No	Additional name(s) & address(es) attached?   Yes   No			
3. Nature of conveyance:  ☐ Assignment ☐ Merger  ☐ Security Agreement ☐ Change of Name	NOTICE OF EXPRESS MAILING  Express Mail Mailing Label Number: EM339601106US  Date of Deposit with USPS: September 30, 1998			
□ Other	Person making Deposit:			
Execution Date: September 23, 1998				
4. Application number(s) or patent number(s):  If this document is being filed together with a new application, the execution date of the application is: September 23, 1998				
A. U.S. Patent Application No.(s)	B. U.S. Patent No.(s)			
Additional numbers attached? ☐ Yes ☒ No				
<ol> <li>Name and address of party to whom correspondence concerning this document should be mailed:         Name: Joseph A. Walkowski         Trask, Britt &amp; Rossa         P.O. Box 2550         Salt Lake City, UT 84110-2550     </li> <li>Attorney Docket No. 3091US (96-890)</li> </ol>	6. Total number of U.S. applications and U.S. patents involved:			
	7. Total fee (37 C.F.R. § 3.41) \$ 40.00 (\$40.00 times number in box 6) Check no. 10483 is enclosed in this amount.			
	<ol> <li>The Commissioner is hereby authorized to charge any deficiency or credit any overpayment to deposit account number 20-1469.</li> </ol>			
DO NOT USE THIS SPACE				
9. Statement and signature.  To the best of my knowledge and belief, the foregoing information is true and correct.				
Joseph A. Walkowski  Name of Person Signing  Signature  September 30, 1998  Date				
Reg. No. 28,765  Total number of pages including cover sheet, attachments and document: 3				

**RECORDED: 09/30/1998**