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100737823 rademarks: Please record the attached original documents or copy thereof. To the Honorable Commissioner of Patents and Tra 1. Name of conveying party(ies): 2. Name and Address of receiving party(ies) Micron Electronics, Inc. Micron Custom Manufacturing Services 16399 Franklin Road Nampa, Idaho 8368年 🔾 Additional name(s) of conveying party(ies) attached? 3. Nature of conveyance: JUN \_ Merger X Assignment \_\_\_ Change of Name \_\_\_ Security Agreement \_\_\_ Other \_\_\_\_\_ Additional name(s) & address(es) attached? \_\_\_ Yes Execution Date: February 24, 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: A. Patent Application No.(s) B. Patent No.(s) 09/021,791 09/010,206 09/008,944 09/018,076 09/009,626 09/018,083 09/010,028 Additional numbers attached? 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: 7 concerning document should be mailed: Hayley M. Smith, Legal Assistant 7. Total fee (37 CFR 3.41)..... \$ 280.00 Kirkland & Ellis Citicorp Center X Enclosed 153 East 53rd Street New York, New York 10022 X Any deficiency is authorized to be charged to Deposit Account No. 11-1098 (212) 446-4727 8. \_\_ Charge to Deposit Account No. 11-1098 (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 popylis a true copy of the original document.

Debra B. Arenare, Esq.

Name of Person Signing

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PATENT 80 10

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### **ASSIGNMENT**

Micron Electronics, Inc., a corporation having an office at 900 East Karcher Road, Nampa, Idaho 83687, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, hereby sells, assigns, and transfers its entire right, title and interest in and to the Patents, including without limitation, damages and payments for past or future infringements thereof, and the right to bring suit and recover against any third party for acts of infringement occurring before the date of this Assignment, and including all divisions, continuations, continuations-in-part, reissues, reexaminations, extensions or equivalents thereof in all pending applications therefor, all foreign counterparts thereof and all pending applications therefor, and any period of market exclusivity relating thereto, in and to the following patents and patent applications to Micron Custom Manufacturing Services, a corporation having a place of business at 16399 Franklin Road, Nampa Idaho 83687:

### **PATENTS**

- 1. U.S. Patent No. 4,885,841 for "Vibrational Method of Aligning the Leads of Surface Mount Electronic Components with the Mounting Pads of Printed Circuit Boards During the Mollen Solder Mounting Process," issued December 12, 1989.
- 2. U.S. Patent No. 5,247,844 for "Semiconductor Pick-and-Place Machine Calibration Apparatus," issued September 28, 1993.
- 3. U.S. Patent No. 5,237,622 for "Semiconductor Pick-and-Place Machine Automatic Calibration Apparatus," issued August 17, 1993.
- 4. U.S. Patent No. 5,433,013 for "Fixture For Alignment of Vacuum Nozzles On Semiconductor Manufacturing Equipment," issued July 18, 1995.
- 5. U.S. Patent No. 5,385,291 for "Method Employing an Elevating of Atmospheric Pressure During The Heating and/or Cooling Phases of Ball Grid Array (BGA) Soldering of An IC Device to A PCB," issued January 31, 1995.
- 6. U.S. Patent No. 5,539,992 for "Fixture For Alignment of Vacuum Nozzles on Semiconductor Manufacturing Equipment," issued July 30, 1996.
- 7. U.S. Patent No. 5,537,204 for "Automatic Optical Pick-and-Place Calibration and Capability Analysis System For Assembly of Components onto Printed Circuit Boards," issued July 16, 1996.
- 8. U.S. Patent No. 5,540,376 for "Angled Pallets For Wave Soldering," issued July 30, 1996.
- 9. U.S. Patent No. 5,617,990 for "Shield and Method for Selective Wave Soldering," issued April 8, 1997.
- 10. U.S. Patent No. 5,667,077 for "Module Handling Apparatus And Method With Rapid Switchover Capability," issued September 16, 1997.
- U.S. Patent No. 5,704,535 for "Shield and Method for Selective Wave Soldering," issued January 6, 1998.

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## PATENT APPLICATIONS

- 1. U.S. Patent Application No. 08/800,069 for "Air Bladder Fixture Tooling for Supporting Circuit Board Assembly Processing," filed February 12, 1997.
- 2. U.S. Patent Application No. 08/602,346 for "Improved Actuator Stem and Actuator Design," filed February 16, 1996.
- 3. U.S. Patent Application No. 08/410,388 for "Spring Roll Pins For Printed Circuit Board Routing," filed July 29, 1993.
- 4. U.S. Patent Application No. 08/686,781 for "Wave Solder Method For Attaching Components to A Printed Circuit Board," filed July 25, 1996.
- 5. U.S. Patent Application No. 08/553,763 for "Thermal Box For A Semiconductor Test System," filed October 23, 1995.
- 6. U.S. Patent Application No. 08/891,954 for "Module Handling Apparatus and Method With Rapid Switchover Capabilities," filed July 14, 1997.
- 7. U.S. Patent Application No. 08/712,371 for "Universal Testing Device," filed September 11, 1996.
- 8. U.S. Patent Application No. 08/695,613 for "Fixture For Testing and Prepping Light-Emitting Diodes," filed August 12, 1996.
- 9. U.S. Patent Application No. 08/706,448 for "Method And Apparatus For Depositing Solder and Adhesive Materials Onto A Printed Circuit Board," filed September 3, 1996.
- 10. U.S. Patent Application No. 08/775,664 for "Salvage Method and Apparatus For Recovering Microelectronic Components From Printed Circuit Boards," filed December 31, 1996.
- 11. U.S. Patent Application No. 08/761,701 for "Universal Fixture For Holding Printed Circuit Boards During Processing," filed December 6, 1996
- 12. U.S. Patent Application No. 08/772,155 for "Method and Apparatus For Preserving Solder Paste in the Manufacturing of Printed Circuit Board Assemblies," filed December 20, 1996.
- 13. U.S. Patent Application No. 08/773,624 for "Method And Apparatus For Coupling Together Printed Circuit Boards," filed December 20, 1996.
- 14. U.S. Patent Application No. 08/855,092 for "Electronic Component Connecting Tool and Method," filed May 13, 1997.
- 15. U.S. Patent Application No. 08/885,315 for "Apparatus for Using A Damage IC," June 30, 1997.
- 16. U.S. Patent Application No. 08/885,670 for "Method of Using A Damaged IC," filed June 30, 1997.
- 17. U.S. Patent Application No. 08/918,613 for "Apparatus For Bending Component Leads," filed August 22, 1997.
- 18. U.S. Patent Application No. 08/916,691 for "Method For Bending Component Leads," filed August 22, 1997.

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- 19. U.S. Patent Application No. 08/833,914 for "Universal Fixture For Supporting And Holding Populated Sides of Printed Circuit Board Assemblies During Processing," filed April 10, 1997.
- 20. U.S. Patent Application No. 08/895,765 for "Apparatus For Calibrating Surface Mounting Processes In Printed Circuit Board Assembly Manufacturing," filed July 17, 1997.
- 21. U.S. Patent Application No. 08/895,766 for "Method For Calibrating Surface Mounting Processes in Printed Circuit Board Assembly Manufacturing," filed July 17, 1997.
- 22. U.S. Patent Application No. 08/882,479 for "Apparatus For Holding Printed Circuit Board Assemblies in Manufacturing," filed June 25, 1997
- 23. U.S. Patent Application No. 08/882,480 for "Method For Holding Printed Circuit Board Assemblies in Manufacturing," filed June 25, 1997.
- 24. U.S. Patent Application No. 08/852,335 for "Alignment Fixture For Solder-Wave Machine," filed May 2, 1997.
- 25. U.S. Patent Application No. 08/897,093 for "Solder Paste Brick," filed July 18, 1997.
- 26. U.S. Patent Application No. 08/896,412 for "Method of Attaching a Device To A Circuit Board," filed July 18, 1997.
- 27. U.S. Patent Application No. 08/925,188 for "Apparatus For Supporting Printed Circuit Board Assemblies," filed September 8, 1997.
- 28. U.S. Patent Application No. 08/926,139 for "Method For Supporting Printed Circuit Board Assemblies," filed September 8, 1997.
- 29. U.S. Patent Application No. 08/919,626 for "Improved Carrier Socket For Receiving A Damaged IC," filed August 28, 1997.
- 30. U.S. Patent Application No. 08/919,536 for "Improved Carrier Socket For Receiving A Damaged IC," filed August 28, 1997.
- 31. U.S. Patent Application No. 08/924,278 for "High Speed Interface For Testing Semiconductor Components," filed September 8, 1997.
- 32. U.S. Patent Application No. 09/021,791 for "Air Bladder Fixture Tooling For Supporting Circuit Board Assembly Processing," filed February 11, 1998.
- 33. U.S. Patent Application No. 09/018,076 for "Real-Time Manufacturing Process Control Monitoring Method," filed February 3, 1998.
- 34. U.S. Patent Application No. 09/018,083 for "Real-Time Manufacturing Process Control Monitoring Apparatus," filed February 3, 1998.
- 35. U.S. Patent Application No. 09/010,206 for "Glass Parts Pick-Up Jig," filed January 20, 1998.
- 36. U.S. Patent Application No. 09/009,626 for "Method For Calibrating A Pick and Place Machine Using A Glass Parts Pick-Up Jig," filed January 20, 1998.
- 37. U.S. Patent Application No. 09/010,028 for "Z Origin Calibration Jig," filed January 20, 1998.

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U.S. Patent Application No. 09/008,944 for "Method For 38. Calibrating The Z-Origin Position," filed MMXXXXXXXXX January 20, 1998 U.S. Patent Application No. 02/1/202111 for "Method For Preserving 39. Solder Paste In The Manufacturing of Printed Circuit Board Assemblies." filed November 24, 1997 for "Universal Fixture 40. U.S. Patent Application No. For Holding Printed Circuit Boards During Processing," filed December 13, 1997. U.S. Patent Application No. 41. Fixture For Holding Printed Circuit Boards During Processing," filed December 13, 1997. 42. U.S. Patent Application No. Fixture For Holding Printed Circuit Boards During Processing," filed December 13, 1997. 43. U.S. Patent Application No. Fixture For Holding Printed Circuit Boards During Processing," filed December 13, 1997. Reviewed Executed on this 24th day of through 1998 at Nampa, Idaho. Micron Electronics, Inc.

T. Erik Oaas

Executive Vice President,

Finance and Chief Financial Officer

REEL: 9225 FRAME: 0983

State of Idaho	}
	} ss.
County of Canyon	}
This	day of <u>February</u> , 1998, before me personally came the <u>K Oa a S</u> , who executed the foregoing instrument in my knowledged to me that he executed the same of his own free will for therein
the harboses see forth	
	Sienda Ctilysemons
	Sienda Chitzsemans Notary Public for Idaho
	My commission expires $1/-16-2002$
[Seal]	

## KIRKLAND & ELLIS

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212 446-4800

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June 8, 1998

# **VIA EXPRESS MAIL NO. EM602179453US**

Commissioner of Patents and Trademarks BOX ASSIGNMENT Washington, D.C. 20231

Re:

Patent Assignment between Micron Electronics, Inc.

and Micron Custom Manufacturing Services

Our ref. 35948-20

Dear Sir/Madam:

Enclosed for recordation is a patent assignment document transferring ownership of the patent applications listed on the attached Recordation Cover Sheet from Micron Electronics, Inc. to Micron Custom Manufacturing Services.

We have also enclosed a check in the amount of \$280.00 as payment of the required fee. Any additional fees should be charged to and/or any overpayments should be credited to Deposit Account 11-1098.

Kindly date stamp the enclosed self-addressed stamped postcard to confirm receipt of this package.

Please direct any communications in connection with this matter to the undersigned.

Very truly yours,

Havley M. Smith

Legal Assistant to Debra B. Arenare

Enclosures

cc: Debra B. Arenare, Esq. (w/out encl) Angelo M. Ninivaggi, Esq. (w/encl)

K:\HSMITH\CORNERST\MCMS\ASSIGNL3.PTO

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RECORDED: 06/08/1998