11-07-2002

U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office

Form **PTO-1595**(Rev. 03/ 01)
OMB No. 0651-0027 (exp. 5/31/2002) 102274835

To the Honorable Commissioner of Patents and Trademarks: P	lease record the attached original documents or copy thereof
Name of conveying party(ies):	Name and address of receiving party(ies)
Music Semiconductors, Inc. 10-28-02	Name: Micron Technology, Inc.
10 20 302	Internal Address:
	Street Address:
Additional name(s) of conveying party(ies) Additional name(s) of conveying party(ies) Yes X No	8000 S. Federal Way
3. Nature of Conveyance:	
x Assignment Merger	
Security Agreement Change of Name	City: Boise
Other	State: Idaho Zip: 83707-0006
Execution Date: March 6, 2002	Additional name(s) & Yes X No address(es) attached:
4. Application number(s) or patent number(s):	
If this document is being filed together with a new application, the ex	ecution date of the new application is:
A. Patent Application No.(s):	B. Patent No.(s):
09/929,309 60/324,462 60/303,244	6,289,414
09/129,108 60/324,361 60/303,226 09/320,908 60/324,365 60/303,719	
09/320,909 60/303,247 60/288,038	
60/324,459 60/303,222	
Additional numbers attache	ed? x Yes No
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1
Name: Thomas J. D'Amico DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP	7. Total fee (37 CFR 3.41) \$600.00
Internal Address: Atty. Dkt.: M4065.0573/P573-A	Enclosed
Street Address:	Authorized to be charged to deposit account
2101 L Street NW	X Authorized to be charged to credit card
	(Form 2038 enclosed)
	8. Deposit account number:
City: State: Zip: Washington DC 20037-1526	04-1073
DO NOT USE	(Attach duplicate copy of this page if paying by deposit account)
	THIS SPACE
9. Statement and signature.	
To the best of my knowledge and belief, the foregoing info is a true copy of the original document.	ormation (strue and correct and any attached copy
Thomas J. D'Amico Michael Bergman	October 28, 2002
Name of Person Signing	Signature Date
Total number of pages including cover sheet, attack	nments, and documents: 13

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ASSIGNMENT OF PATENTS

This ASSIGNMENT OF PATENTS (this "Assignment of Patents"), dated as of March 7, is entered into by and among (i) MUSIC Semiconductors, Inc., a Chapter 11 debtor in ssion, together with all of its predecessors in interest (collectively referred to as "Music"), usic Corporation, a Philippine corporation, together with all of its predecessors in interest ctively referred to as "MC"), (iii) Music Semiconductors Philippines, Inc., a Philippine ration and a subsidiary of MC, together with all of its predecessors in interest (collectively ed to as "MSPI"), (iv) Musem Electronics NV, a Netherlands corporation, together with all predecessors in interest (collectively referred to as "Musem"), (v) Innovative Technology, a California limited liability company, together with all of its predecessors in interest ctively referred to as "Innovative"), and (vi) Micron Technology, Inc., a Delaware ration ("Purchaser"). Music, together with MC, MSPI, Musem and Innovative shall be ed to collectively as the "Sellers".

This Assignment of Patents is entered into pursuant to the Asset Purchase Agreement as of March 7, 2002, by and among Purchaser and the Sellers (the "Asset Purchase ement"). Any capitalized term used herein but not otherwise defined herein shall have the ing ascribed to such term in the Asset Purchase Agreement.

Pursuant to the Asset Purchase Agreement, each Seller agreed, among other things, to fer to Purchaser all of the Sellers' right, title and interest in and to the Ternary Business, a includes any and all patents, patent applications and provisional applications (including all terparts, divisions, continuations, continuation-in-parts, reexaminations or reissues thereof), all as inventions not yet applied for, owned by each of the Sellers throughout the world and tiated with, or related to, the Ternary Business, together with any and all rights of each rassociated with all such inventions not yet applied for or inventions described or claimed in said applications and patents, whether or not such patents are issued by or such cations are pending with the USPTO or other comparable governmental authority of any ging jurisdiction (including, without limitation, those patents, applications, and inventions set on Exhibit A hereto (the "Assigned Patents")), in exchange for the payment by Purchaser of Jurchase Price pursuant to the terms and subject to the conditions provided in the Asset hase Agreement.

Assignment of Patents by the Sellers. Each of the Sellers hereby irrevocably and ally grants, bargains, sells, transfers, conveys, assigns and delivers to Purchaser all right, and interest in and to the Assigned Patents, free and clear of all encumbrances, together with auses of action and other rights to sue for and remedies against past, present and future ngements of any of the foregoing, together with the right to collect damages therefore, and ghts of priority provided thereby, and all rights to seek protection of interests therein under aws of any jurisdiction worldwide and all tangible embodiments thereof, to have and to hold same unto Purchaser, its successors and assigns, for and during the existence of such rights all renewals thereof.

- 2. <u>Further Assurances</u>. Each Seller hereby covenants and agrees that from time to and at the expense of the Sellers, and without further consideration, upon request of aser, each Seller shall and shall cause each of its affiliates to execute and deliver such ments and documents, and take such further actions, as Purchaser reasonably may request fer to sell, convey, transfer and assign to Purchaser, or to record Purchaser's interest in or 5, any of the Assigned Patents.
- 3. Power of Attorney. Each Seller hereby constitutes and appoints Purchaser as its and lawful attorney in fact, with full power of substitution in each Seller's name and stead, ce any and all steps, including proceedings at law, in equity or otherwise, to execute, wheelge and deliver any and all instruments and assurances necessary or expedient in order st or perfect the aforesaid rights and causes of action more effectively in Purchaser or to ct the same or to enforce any claim or right of any kind with respect thereto. Each Seller y declares that the foregoing power is coupled with an interest and as such is irrevocable.
- 4. <u>Successors and Assigns</u>. This Assignment of Patents shall be enforceable against uccessors and assigns of the Sellers and shall inure to the benefit of the successors and as of Purchaser.
- 5. Governing Law. This Assignment of Patents shall be governed by and construed cordance with the laws of the United States, in respect to patent issues and in all other cts, including as to validity, interpretation and effect, by the internal laws of the State of ornia, without giving effect to the conflict of laws rules thereof.

IN WITNESS V REOF, Music, MC, MSPI, Musem, Inc. ive and Purchaser are caused this Assignment of Patents to be signed by their respective officers thereunto ally authorized, all as of the date first written above.

MICRON TECHNOLOGY, INC.
By:
Name lay N. Hawkins
Title: Vice President of Operations
• •
MUSIC SEMICONDUCTORS, INC.
Ву:
Name:
Title:
MUSIC CORPORATION
Pan
By:
Name:
Title:
•
MUSIC SEMICONDUCTORS PHILLIPINES,
·
INC.
By:
Name:
Title:
MUSEM ELECTRONICS NV
THE TAXABLE TO THE TA
Ву:
Name:
Title:

[Signature page to Assignment of Patents continues on next page]

IN WITNESS WHEREOF, Music, MC, MSPI, Musem, Innovative and Purchaser have d this Assignment of Patents to be signed by their respective officers thereunto duly rized, all as of the date first written above.

MICRON TECHNOLOGY, INC.

By:
Name:
Title:
MUSIC SEMICONDUCTORS, INC.
1 h let
BU ()
Name: ENWARD M. MILLER
Title: PRESIDENT 4 COO
<i>I</i> ,
1/1
MUSICEPROGRATION
Ву:
Named Memore Busin
Title PRESIDENT + CEO
· · · · · · · · · · · · · · · · · · ·
MUSIC SEMICONDUCTORS PHILIPPINES,
INC. ////
2017 - "
Ву:
Named MICHAEL BUTTON
Title: Parsions + CRO
.
Alto and and
MUSEM EXPOTRONICS NV
- 356-
By:
Named MICHAEL BUNTON

[Signature page to Assignment of Patents continues on next page]



INNOVATIVE TECHNOLOGY, LLC

By its sole managing member, Music Semiconductors, Inc.

By: _____ Name: __ Title: ___

[ASSIGNMENT OF PATENTS]

EXHIBIT A

Patent, Application, or Invention Title	Description/Comments	PB NTR #
PATENTS ISSUED	Patent No.	
Partially-Ordered CAMs Used In Ternary Hierarchical	6,289,414	
Address Searching/Sorting		
PATENT APPLICATIONS		
Partially-Ordered CAMs Used In Temary Hierarchical	09/929,309	<u> </u>
Address Searching/Sorting	1) ·
A Simplified Switching Hub for Data Communication	09/129,108	
Networks		
Crossbar Switch and Control for Data Networks	09/320,908	
Switching		}
Routing Arbiter for Data Network Switching	09/320,909	
Reduced Signal Swing in Bit Lines in a CAM	60/324,459	
A Tertiary CAM Cell	60/324,462	
Source Coupled Match Detector	60/324,361	
Reduced Signal Swing in Match Detection Circuit	60/324,365	
Writing to and Reading from a RAM or a CAM using	60/303,247	
Current Drivers and Current Sensing Logic		1
A Novel Priority Encoder	60/303,222	
A Novel Multi-Match Detection Circuit	60/303,244	
Distributed Content Addressable Memory	60/303,226	
High Speed Ring/Bus	60/303,719	
Current Switching Sensor Detector	60/288,038	
Inventions		
A novel two-step method to perform multi-width		
lookup in CAM		
A conditional write instruction for CAM		
A technique to allow wide data lookup in CAM		
A multi-purpose CAM cascade circuit		
A simple power management technique for CAM		
A dynamic CAM cell implemented in standard logic		
Timestamp counters for learning and aging CAM		
entries		

Patent, Application, or Invention Title	Description/Comments	PB NTR#
Inventions (continued)		
Simultaneous refresh of multiple dynamic CAM words		
A read-modify-write technique to emulate masked write in dynamic CAM		
A CAM with a parallel instruction set		
CAM status bits that can be written for all matching words		
A dynamic CAM with a variable refresh rate		-
Variable number of priority queues		
A wrap register for a priority queue		1
A "both" instruction for a priority queue		
A CAM datapath to simplify data ordering		
Replication of input data for narrow width CAM		
lookup		
Conditional instruction execution on a CAM processor interface		
A unique identifier manager circuit		

ACKNOWLEDGMENT - MUSIC SEMICONDUTORS, INC.

OF CALIFORNIA)
) SS:
TY OF SAN FRANCISCO)

a Notary Public in and for said County, in the State aforesaid, DO BY CERTIFY that Church Musches Williams, appeared before me this day in person, knowledged that he executed and delivered the Instrument of Assignment of Patents above as his free and ary act and in his representative capacity for Music Semiconductors, Inc., a Chapter 11 Debtor in Possession, uses and purposes herein set forth.

IN WITNESS WHEREOF, I have hereunto my hand and notarial seal this between of March 2002.

R. FECHTNER
Commission # 1266763
Notary Public - California
San Francisco County
My Comm. Expires Jun 9, 2004

Notary Public

My Commission Expires: 6 7 2004

ACKNOWLEDGMENT- MUSIC CORPORATION

E OF CALIFORNIA

San Francisco County My Comm. Expires Jun 9, 2004

ACKNOWLEDGMENT - MUSIC SEMICONDUCTORS PHILIPPINES, INC.

TE OF CALIFORNIA

NTY OF SAN FRANCISCO

SS:

EBY CERTIFY that ________ a Notary Public in and for said County, in the State aforesaid, DO acknowledged that he executed and delivered the Instrument of Assignment of Patents above as his free and oration, for the uses and purposes herein set forth.

IN WITNESS WHEREOF, I have hereunto my hand and notarial seal this of day of March 2002

R. FECHTNER
Commission # 1266763
Notary Public - California \$
San Francisco County
My Comm. Expires Jun 9, 2004

Notary Public

My Commission Expires: __

ACKNOWLEDGMENT - INNOVATIVE TECHNOLOGY, LLC

NTY OF SAN FRANCISCO)
acknowledged that he executed and de	a Notary Public in and for said County, in the State aforesaid, DO with Milling of Assignment of Patents above as his free and pacity for Innovative Technology, LLC, a California limited liability et forth.
IN WITNESS WHEREOF, I have	hereunto my hand and notarial seal this 6 Hday of March 2002.
R. FECHTNER Commission.# 1266763 Notary Public - Californic San Francisco County My Comm. Expires Jun 9, 20	My Commission Expires:

TE OF CALIFORNIA

ACKNOWLEDGMENT - MUSEM ELECTRONICS NV

E OF CALIFORNIA)) SS:			
TTY OF SAN FRANCISCO)			
BY CERTIFY that	d delivered the Instr	ument of Assigna	ppeared before a ment of Patents	above as his free an
IN WITNESS WHEREOF, I b	ave hereunto my han	d and notarial sea	u this the day	of March 2002.
OF TIMES		otary Public	featil	nez
R. FECHTNER Commission # 12667 Notice Public - Collide	63 E mio E ctv V	My Comm	nission Expires:	6-9-2004

ASSIGNMENT OF PATENTS

This ASSIGNMENT OF PATENTS (this "Assignment of Patents"), dated as of March 7, 2002, is entered into by and among (i) MUSIC Semiconductors, Inc., a Chapter 11 debtor in possession, together with all of its predecessors in interest (collectively referred to as "Music"), (ii) Music Corporation, a Philippine corporation, together with all of its predecessors in interest (collectively referred to as "MC"), (iii) Music Semiconductors Philippines, Inc., a Philippine corporation and a subsidiary of MC, together with all of its predecessors in interest (collectively referred to as "MSPI"), (iv) Musem Electronics NV, a Netherlands corporation, together with all of its predecessors in interest (collectively referred to as "Musem"), (v) Innovative Technology, LLC, a California limited liability company, together with all of its predecessors in interest (collectively referred to as "Innovative"), and (vi) Micron Technology, Inc., a Delaware corporation ("Purchaser"). Music, together with MC, MSPI, Musem and Innovative shall be referred to collectively as the "Sellers".

- A. This Assignment of Patents is entered into pursuant to the Asset Purchase Agreement dated as of March 7, 2002, by and among Purchaser and the Sellers (the "Asset Purchase Agreement"). Any capitalized term used herein but not otherwise defined herein shall have the meaning ascribed to such term in the Asset Purchase Agreement.
- B. Pursuant to the Asset Purchase Agreement, each Seller agreed, among other things, to transfer to Purchaser all of the Sellers' right, title and interest in and to the Ternary Business, which includes any and all patents, patent applications and provisional applications (including all counterparts, divisions, continuations, continuation-in-parts, reexaminations or reissues thereof), as well as inventions not yet applied for, owned by each of the Sellers throughout the world and associated with, or related to, the Ternary Business, together with any and all rights of each Seller associated with all such inventions not yet applied for or inventions described or claimed within said applications and patents, whether or not such patents are issued by or such applications are pending with the USPTO or other comparable governmental authority of any foreign jurisdiction (including, without limitation, those patents, applications, and inventions set forth on Exhibit A hereto (the "Assigned Patents")), in exchange for the payment by Purchaser of the Purchase Price pursuant to the terms and subject to the conditions provided in the Asset Purchase Agreement.
- Assignment of Patents by the Sellers. Each of the Sellers hereby irrevocably and formally grants, bargains, sells, transfers, conveys, assigns and delivers to Purchaser all right, title and interest in and to the Assigned Patents, free and clear of all encumbrances, together with all causes of action and other rights to sue for and remedies against past, present and future infringements of any of the foregoing, together with the right to collect damages therefore, and all rights of priority provided thereby, and all rights to seek protection of interests therein under the laws of any jurisdiction worldwide and all tangible embodiments thereof, to have and to hold the same unto Purchaser, its successors and assigns, for and during the existence of such rights and all renewals thereof.

Patent Dept.

Q 006

INNOVATIVE TECHNOLOGY, LLC

By its sole managing member, Music Semiconductors, Inc.

Name:

(ASSIGNMENT OF PATENTS)

A

Patent, Application, or Invention Title	Description/Comments	PB NTR #
PATENTS ISSUED	Palent No.	
Partially-Ordered CAMs Used In Ternary Hierarchical Address Searching/Sorting	6,289,414	
PATENT APPLICATIONS		
Partially-Ordered CAMs Used in Ternary Hierarchical Address Searching/Sorting	09/929,309	
A Simplified Switching Hub for Data Communication Networks	09/129,108	
Crossbar Switch and Control for Data Networks Switching	09/320,908	
Routing Arbiter for Data Network Switching	09/320,909	
Reduced Signal Swing in Bit Lines in a CAM	80/324,459	
A Tertiary CAM Cell	60/324,462	
Source Coupled Match Detector	60/324,361	
Reduced Signal Swing in Match Detection Circuit	60/324,365	
Writing to and Reading from a RAM or a CAM using	60/303,247	
Current Drivers and Current Sensing Logic	·	}
A Novel Priority Encoder	60/303,222	
A Novel Multi-Match Detection Circuit	60/303,244	
Distributed Content Addressable Memory	60/303,226	
High Speed Ring/Bus	60/303,719	
Current Switching Sensor Detector	60/288,038	
Inventions		+
A novel two-step method to perform multi-width lookup in CAM		
A conditional write instruction for CAM		
A technique to allow wide data lookup in CAM		
A multi-purpose CAM cascade circuit		
A simple power management technique for CAM		
A dynamic CAM cell implemented in standard logic		
Timestamp counters for learning and aging CAM entries		

PATENT

REEL: 013484 FRAME: 0317

Patent, Application, or Invention Title	Description/Comments	PB NTR#
Inventions (continued)		
Simultaneous refresh of multiple dynamic CAM words		
A read-modify-write technique to emulate masked write in dynamic CAM		
A CAM with a parallel instruction set		
CAM status bits that can be written for all matching words		
A dynamic CAM with a variable refresh rate		
Variable number of priority queues		
A wrap register for a priority queue		
A "both" instruction for a priority quaue		
A CAM datapath to simplify data ordering		
Replication of input data for narrow width CAM lookup		
Conditional instruction execution on a CAM processor interface		
A unique identifier manager circuit		

ACKNOWLEDGMENT - MUSIC SEMICONDUTORS, INC.

COUNTY OF SAN FRANCISCO)) SS:)	. '
I, Roxi Fechther HEREBY CERTIFY that Edward M	, a Notary Public in and for inches had been allered to the land of Assistance of Assi	said County, in the State aforesaid, DO suppeared before me this day in person,

IN WITNESS WHEREOF, I have hereunto my hand and noterial seal this 6 th day of March 2002.

voluntary act and in his representative capacity for Music Semiconductors, Inc., a Chapter 11 Debtor in Possession,

R. FECHTNER
Commission # 1266763
Notary Public - California
Son Francisco County
My Corrent Baptes Jun 9, 2004

for the uses and purposes herein set forth.

My Commission Expires: 6 9 -2004

ACKNOWLEDGMENT-MUSIC CORPORATION

) SS:

COUNTY OF SAN FRANCISCO

I. Rok Fech two a Notary Public in and for said County, in the State aforesaid, DO HEREBY CERTIFY that Wicho a Suntana, appeared before me this day in person, and acknowledged that he executed and delivered the Instrument of Assignment of Patents above as his free and voluntary act and in his representative capacity for Music Corporation, a Philippina corporation, for the uses and purposes herein set forth.

IN WITNESS WHEREOF, I have hereunto my hand and notarial seal this bth day of March 2002.

R. FECHTNER
Commission # 1266763
Notary Public - California
San Francisco County
My Corrent Explose Jun 9, 2004

Notary Public

My Commission Expires: 677-2004

STATE OF CALIFORNIA

ACKNOWLEDGMENT - MUSIC SEMICONDUCTORS PHILIPPINES, INC.

COUNTY OF SAN FRANCISCO) SS :
1. Roxi Fechtner	a Notary Public in and for said County, in the State aforesaid, DO
	elivered the Instrument of Assignment of Patents shows as his free and

IN WITNESS WHERBOF, I have hereunto my hand and notarial seal this 6th day of March 2002.

voluntary act and in his representative capacity for Music Semiconductors Philippines, Inc., a Philippine

R. FECHTNER
Commission # 1266763
Notary Public - Cultornia
San Francisco County
Laconton Basins Jun 9, 2004

corporation, for the uses and purposes herein set forth.

Notary Public

My Commission Expires: <u>b-4-200</u>

STATE OF CALIFORNIA

<u> ACKNOWLEDGMENT – INNOVATIVE TECHNOLOGY, LLC</u>

COUNTY OF SAN FRANCISCO) \$ \$:)	•
1 Roxi Fechtner	a Notary Public in and for said County in the	n State :

HERBBY CERTIFY that Laure Municipal and for said County, in the State aforesaid, DO HERBBY CERTIFY that Laure Municipal and acknowledged that he executed and delivered the Instrument of Assignment of Patents above as his free and voluntary act and in his representative capacity for Innovative Technology, LLC, a California limited liability company, for the uses and purposes herein set forth.

IN WITNESS WHEREOF, I have herounto my hand and notarial seal this that of March 2002.

R. FECHTNER
Commission-# 1266763
Notary Public - Cofficinia §
San Francisco County
My Comm. Bakes Jun 9, 2004

Notary Public

My Commission Expires: 6-9-2004

- Further Assurances. Each Seller hereby covenants and agrees that from time to time and at the expense of the Sellers, and without further consideration, upon request of Purchaser, each Seller shall and shall cause each of its affiliates to execute and deliver such instruments and documents, and take such further actions, as Purchaser reasonably may request in order to sell, convey, transfer and assign to Purchaser, or to record Purchaser's interest in or title to, any of the Assigned Patents.
- Power of Attorney. Each Seller hereby constitutes and appoints Purchaser as its true and lawful attorney in fact, with full power of substitution in each Seller's name and stead, to take any and all steps, including proceedings at law, in equity or otherwise, to execute, acknowledge and deliver any and all instruments and assurances necessary or expedient in order to vest or perfect the aforesaid rights and causes of action more effectively in Purchaser or to protect the same or to enforce any claim or right of any kind with respect thereto. Each Seller hereby declares that the foregoing power is coupled with an interest and as such is irrevocable.
- Successors and Assigns. This Assignment of Patents shall be enforceable against the successors and assigns of the Sellers and shall inure to the benefit of the successors and assigns of Purchaser.
- Governing Law. This Assignment of Patents shall be governed by and construed 5. in accordance with the laws of the United States, in respect to patent issues and in all other respects, including as to validity, interpretation and effect, by the internal laws of the State of California, without giving effect to the conflict of laws rules thereof.

REEL: 013484 FRAME: 0323

Patent Dept.

Ø 004

IN WITNESS WHEREOF, Music, MC, MSPI, Musem, Innovative and Purchaser have caused this Assignment of Patents to be signed by their respective officers thereunto duly authorized, all as of the date first written above.

MICRON TECHNOLOGY, INC.
By:
Namo:
Title:
MUSIC SEMICONDUCTORS, INC.
By: Ma literal
Name: ENWARD M. MICCAR Title: PRESIDENT & COO
///
MUSIC CORPORATION
By:
Named Miller Busines + CEO
MUSIC SEMICONDUCTORS PHILIPPINES,
INC.
Ву:
Name MICHAEL BONTON
Title: / LEO
MUSEM ELECTRONICS NV
Ву:
Named Michael Brason

(Signature page to Assignment of Palents continues on next page)

PATENT

REEL: 013484 FRAME: 0324

₩008

IN WITNESS WHEREOF, Music, MC, MSPI, Musem, Innovative and Purchaser have caused this Assignment of Patents to be signed by their respective officers thereunto duly authorized, all as of the date first written above.

MICRON TECHNOLOGY, INC.
By: Name lay N. Hawkins
Name lay N. Hawkins
Title: Vice President of Operations
v
MUSIC SEMICONDUCTORS, INC.
Day.
By:
Name:
Title:
MUSIC CORPORATION
Bv:
By:
Title:
,
MUSIC SEMICONDUCTORS PHILLIPINES,
INC.
•
Ву:
Name:
Title:
MUSEM ELECTRONICS NV
, , , , , , , , , , , , , , , , , , ,
By:
Name:

[Signature page to Assignment of Patents continues on next page]