

# PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Sony Corporation	02/26/2010
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	United Memories, Inc.
<b>Street Address:</b>	4815 List Drive, Suite 109
<b>City:</b>	Colorado Springs
<b>State/Country:</b>	COLORADO
<b>Postal Code:</b>	80919
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Patent Number:	6414897
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(303)899-7333
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
<b>Phone:</b>	719-448-5947
<b>Email:</b>	jllange@hhlaw.com
<b>Correspondent Name:</b>	Hogan & Hartson LLP
<b>Address Line 1:</b>	One Tabor Center
<b>Address Line 2:</b>	1200 17th Street, Suite 1500
<b>Address Line 4:</b>	Denver, COLORADO 80202
<b>ATTORNEY DOCKET NUMBER:</b>	UMI-313
<b>NAME OF SUBMITTER:</b>	Scott J. Hawranek
<b>Total Attachments: 12</b> source=DOC086#page1.tif source=DOC086#page2.tif source=DOC086#page3.tif source=DOC086#page4.tif	

CH \$40.00 6414897

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**PATENT**  
**REEL: 024185 FRAME: 0303**

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OMB No. 0651-0027 (exp. 03/31/2009)

## PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies):

Sony Corporation – execution date: 02/26/2010

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

Name and address of receiving party

United Memories, Inc.  
4815 List Drive, Suite 109  
Colorado Springs, CO 80919Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) February 26, 2010

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Joint Research Agreement  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other \_\_\_\_\_

4. Application or patent number(s):

☐ This document is being filed together with a new application.

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

Attorney Docket No.: UMI-313

B. Patent No.(s) 6,414,897Additional numbers attached? ☐ Yes ☒ No

5. Name and Address of party to whom correspondence concerning document should be mailed:

Name: William J. KubidaInternal Address: Hogan & Hartson LLP  
One Tabor Center1200 17th Street, Suite 1500Street Address: same as aboveCity: Denver State: CO Zip: 80202Phone Number: 719-448-5909Fax Number: 719-448-5922Email Address: PatentColorado@hhlaw.com6. Total number of applications and patents involved: 17. Total fee (37 CFR 1.21(h) & 3.41)..... \$ 40.00

- ☒ Authorized to be charged to deposit account  
☐ Enclosed  
☐ None required (government interest not affecting title)

8. Deposit Account Number:

50-1123

Authorized User Name:

9. Signature:

Signature

Date

Scott J. Hawranek  
 Name of Person signing

Total number of pages including cover sheet, attachments, and documents: 12



0m1-313  
**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

ASSISTANT SECRETARY AND COMMISSIONER  
OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

NOVEMBER 02, 2000

PTAS

HOGAN & HARTSON LLP  
WILLIAM J. KUBIDA, ESQ.  
1200 17TH STREET, SUITE 1500  
DENVER, COLORADO 80202



\*101462663A\*

**UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT**

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 08/31/2000

REEL/FRAME: 011069/0597  
NUMBER OF PAGES: 6

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

**ASSIGNOR:**

HARDEE, KIM CARVER

DOC DATE: 08/29/2000

**ASSIGNOR:**

PARRIS, MICHAEL

DOC DATE: 08/29/2000

**ASSIGNEE:**

UNITED MEMORIES, INC.  
4815 LIST DRIVE, SUITE 109  
COLORADO SPRINGS, COLORADO 80919

**ASSIGNEE:**

SONY CORPORATION  
6-7-35 KITA-SHINAGAWA  
SHINAGAWA-KU  
TOKYO, JAPAN 141-0001

SERIAL NUMBER: 09651939  
PATENT NUMBER:

FILING DATE: 08/31/2000  
ISSUE DATE:

**RECEIVED**

**NOV 10 2000**

**HOGAN & HARTSON, LLP**

**PATENT  
REEL: 024185 FRAME: 0306**

011069/0597 PAGE 2

ALLYSON PURNELL, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

09-19-2000

U.S. Department of Commerce  
Patent and Trademark Office  
PATENT10-35 U.S. PTO  
09/651939RECEIVED  
101462663  
PATENTS ONLY

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

## Submission Type

- ☒ New
- ☐ Resubmission (Non-Recordation)  
Document ID#
- ☐ Correction of PTO Error  
Reel #  Frame #
- ☐ Corrective Document  
Reel #  Frame #

## Conveyance Type

- ☒ Assignment ☐ Security Agreement
- ☐ License ☐ Change of Name
- ☐ Merger ☐ Other

U.S. Government  
(For Use ONLY by U.S. Government Agencies)

☐ Departmental File ☐ Secret File

## Conveying Party(ies)

☐ Mark if additional names of conveying parties attachedName (line 1) **Hardee, Kim Carver**Execution Date  
Month Day YearName (line 2) **August 29, 2000**

## Second Party

Name (line 1) **Parris, Michael**Execution Date  
Month Day YearName (line 2) **August 29, 2000**

## Receiving Party

☒ Mark if additional names of receiving parties attachedName (line 1) **United Memories, Inc.**Name (line 2) **a corporation**Address (line 1) **4815 List Drive, Suite 109**Address (line 2) Address (line 3) **Colorado Springs****Colorado****80919**

City

State/Country

Zip Code

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached.  
(Designation must be a separate document from Assignment)

## 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) 

09/18/2000 DNGUYEN 00000480 09651939

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**PATENT**  
**REEL: 024185 FRAME: 0308**

## Correspondent Name and Address

Area Code and Telephone Number

(719) 448-5909

Name (line 1) William J. Kubida, Esq.

Address (line 1) Hogan &amp; Hartson LLP

Address (line 2) 1200 17<sup>th</sup> Street, Suite 1500

Address (line 3) Denver, CO 80202

Address (line 4)

## Pages

Enter the total number of pages of the attached conveyance document including any attachments

#

6

## 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)


If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

## Patent Cooperation Treaty (PCT)

Enter PCT application number  
only if a U.S. Application  
Number has not been  
assigned

PCT

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PCT

## Number of Properties

Enter the total number of properties involved

#

## Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41):

\$

40.00

Method of payment:

Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Enclosed

☒

Deposit Account

☐

Deposit Account Number:

#

50-1123

Authorization to charge additional fees:

Yes

☒

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.

William J. Kubida, 29,664

Name of Person Signing



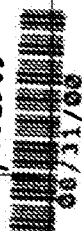
Signature

30 June 2000

Date

RECORDATION FORM COVER SHEET  
CONTINUATION  
PATENTS ONLY

10:06 U.S. PTO  
09/651939



Conveying Party(ies)

☐

Mark if additional names of conveying parties attached

*Enter additional Conveying Parties*

Name (line 1)

Execution Date  
Month Day Year

Name (line 2)

Name (line 1)

Execution Date  
Month Day Year

Name (line 2)

Receiving Party (ies)

☐

Mark if additional names of receiving parties attached

*Enter additional Receiving Party(ies)*

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

JAPAN

141-0001

City

State/Country

Zip Code

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached.  
(Designation must be a separate document from Assignment)

PATENT

REEL: 024185 FRAME: 0310



**A S S I G N M E N T**

WHEREAS, we, Kim Carver Hardee, having a residence address of 9760 Kit Carson Lane, Colorado Springs, CO 80920 and Michael Parris, having a residence address of 5715 Daltry Lane, Colorado Springs, CO 80906, have made a certain new and useful invention relating to a LOCAL WRITE DRIVER CIRCUIT FOR AN INTEGRATED CIRCUIT DEVICE INCORPORATING EMBEDDED DYNAMIC RANDOM ACCESS MEMORY (DRAM), for which we are making or we have made application for Letters Patent of the United States, said application being identified by Docket No. UMI-313 and Client/Matter No. 80450.0042, in the law firm of HOGAN & HARTSON LLP, One Tabor Center, 1200 17th Street, Suite 1500, Denver, Colorado 80202, and which is executed concurrently herewith, and

WHEREAS, we now own the entire right, title and interest therein; and

WHEREAS, United Memories, Inc., a Colorado corporation, whose post office address is 4815 List Drive, Suite 109, Colorado Springs, CO 80919, and Sony Corporation, whose post office address is 6-7-35 Kita-shinagawa, Shinagawa-ku, Tokyo, JAPAN 141-0001, hereinafter collectively known as ASSIGNEES, are desirous of acquiring the entire interest in and to said invention, said application, and the Letters Patent to be obtained therefor;

NOW THEREFORE, upon consideration of our employment and other good and valuable consideration, the adequacy of which is hereby acknowledged, we do hereby sell and assign unto ASSIGNEES, and ASSIGNEES' legal representatives, successors, and assigns, the entire right, title, and interest in and to said invention, said application, and the Letters Patent, both of the United States and of other countries, that may or shall issue thereon; and we do

hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEES, consistent with the terms of this Assignment.

UPON SAID CONSIDERATION, we do hereby covenant and agree with ASSIGNEES that we will not execute any writing or do any act whatsoever conflicting with this assignment, and that we will, at any time upon request, without further or additional consideration, but at the expense of ASSIGNEES, execute such additional assignments and other writings and do such additional acts as ASSIGNEES may deem necessary or desirable to perfect the ASSIGNEES' enjoyment of this grant, and render all necessary assistance in applying for and obtaining original, continuation, continuation-in-part, divisional, reexamined, renewal, reissued or extended Letters Patent of the United States, or of other countries, or inventor's certificates, on said invention, and in enforcing any rights or causes in action accruing as a result of such applications, certificates, or patents, by giving testimony in any proceedings or transactions involving such applications, certificates, or patents, and by executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of both parties.

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals on the date hereinafter set forth.

Date: 8/29/00

  
Kim Carver Hardee

STATE OF COLORADO )

) ss.

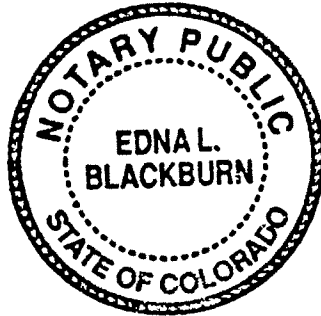
COUNTY OF EL PASO )

On this 29th day of August, 2000 before me, a notary public in and for said county, appeared Kim Carver Hardee, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he signed, sealed, and delivered the same instrument as a free and voluntary act for the uses and purposes therein set forth.

My commission expires May 17, 2001.

Witness my hand and official seal.

(SEAL)



Edna L. Blackburn  
Notary Public

Date: 8/29/00

Michael Parris  
Michael Parris

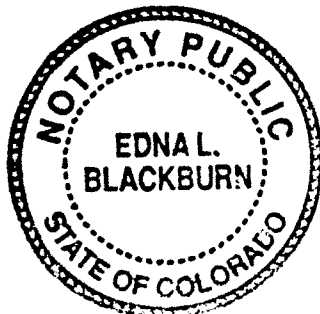
STATE OF COLORADO     )  
                                      )  
COUNTY OF EL PASO     )     ss.

On this 29th day of August, 2000 before me, a notary public in and for said county, appeared Michael Parris, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he signed, sealed, and delivered the same instrument as a free and voluntary act for the uses and purposes therein set forth.

My commission expires May 17, 2001.

Witness my hand and official seal.

(SEAL)



Edna L. Blackburn  
Notary Public

## CONFIRMATORY ASSIGNMENT OF PATENTS

This Assignment of Patents ("*Assignment*") is made and entered into on this 26<sup>th</sup> day of February 2010, by and between:

SONY Corporation, a Japan Corporation, with a principal place of business at 1-7-1 Konan, Minato-ku, Tokyo Japan 108-0075 ("*ASSIGNOR*"); and United Memories Inc., a Colorado Corporation, with a principal place of business at 4815 List Drive, Suite 109, Colorado Springs, Colorado 80919 ("*ASSIGNEE*").

WHEREAS, ASSIGNOR has agreed to assign and transfer to ASSIGNEE all right, title and interest in and to the Assignor's Rights (as defined below).

NOW, THEREFORE, in consideration of the sum of one dollar (US\$1.00), the agreements related to this Assignment, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, ASSIGNOR, intending to be legally bound, and upon the terms set forth herein, agrees as follows:

ASSIGNOR does hereby irrevocably assign, sell, transfer and set over to ASSIGNEE its entire right, title and interest in, to and under the patents and patent applications set forth on Attachment A attached hereto, including all rights pursuant to 35 U.S.C. § 154 any and all letters patents issuing from any continuing, and divisional applications; any requests for continuing examination, substitutions, reissues, extensions, renewals and reexaminations of any of the foregoing; all inventions and discoveries described in any of the foregoing; and all rights to apply in any country for any foreign counterpart, certification of invention or other governmental grant or issuance corresponding to any of the foregoing throughout the world (collectively, "*Assignor's Rights*"), including any and all past, present and future causes of action and other enforcement actions (including, without limitation, for injunctive remedies and relief) and rights to damages and profits, due or accrued, relating to any of the foregoing, including the right to sue and recover for, and the right to profits and damages, due or accrued, arising out of or in connection with, any and all past, present or future infringements or dilutions.

The terms and conditions of this Assignment will inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives and will be binding upon ASSIGNOR, its successors, assigns and other legal representatives.

IN WITNESS WHEREOF, ASSIGNOR has caused this Assignment of Patents to be executed by its duly authorized representative on the date set forth below.

Assignor:  
SONY Corporation  
A Japan Corporation

By: 

Name: Fumihiko Moriya

Title: VP, Senior General Manager  
Intellectual Property Division

Date: Feb. 26, 2010

Address  
1-7-1 Konan Minato-Ku  
Tokyo Japan 108-0078

Accepted by Assignee:  
United Memories Corporation  
A Colorado Corporation

By: 

Name: Robert L. Gower

Title: President and CEO

Date: Feb. 28, 2010

Address  
4815 List Drive, Suite 109  
Colorado Springs CO 80919

# ATTACHMENT A

<u>Jurisdiction</u>	<u>Title</u>	<u>Appl. Number</u>	<u>Filing Date</u>	<u>Issue No.</u>	<u>Issue Date</u>
US	Two Phase Charge Sharing Data ...			6,434,069	8/13/02
JP	Two Phase Charge Sharing Data ...			3,488,433	10/31/03
US	Reduced Skew Write Circuit			6,278,653	8/21/01
JP	Reduced Skew Write Circuit			3,492,321	11/15/03
US	Delayed Start Oscillator			6,317,007	11/13/01
JP	Sync. Re-align Tech For Time ...			3,493,176	11/14/03
US	Local Write Driver Ckt. For DRAM			6,414,897	7/02/02
JP	Local Write Driver Ckt. For DRAM			3,939,493	3/13/07
JP	Local Write Driver Ckt. For DRAM	260,686/06	9/26/06		
US	Method For Constant Testing ...			6,732,305	5/04/04
US	Look Ahead Refresh			6,625,078	9/22/03
JP	Look Ahead Refresh	247,223/07	8/27/02		
JP	Look Ahead Refresh (DIV)	009,511/08	2/15/08		
US	Method for Non-VCC/2 BL Prechg			6,570,799	5/27/03
JP	Method for Non-VCC/2 BL Prechg	240,327/06	09/05/06		
US	Auto Delay for Early R/W SDRAM			6,608,797	8/19/03
JP	Auto Delay for Early R/W SDRAM			3,952,393	5/11/07
US	Data Path Decoding for an EDRAM			6,625,066	9/22/03
JP	Data Path Decoding for an EDRAM			4,246,454	1/16/09
US	Data Path Decoding for an EDRAM			6,625,069	9/22/03
US	Simultaneous Function DRAM			6,643,212	11/04/03
JP	Simultaneous Function DRAM			3,949,543	4/27/07
US	Look Ahead Refresh DRAM			6,667,927	12/23/03
JP	Look Ahead Refresh DRAM			3,979,950	7/06/07
US	Asynchronous Input Data Path			6,744,690	6/01/04
US	Reduced Output Delay Buffer			7,161,214	1/09/07
JP	Reduced Output Delay Buffer			4,124,699	5/16/08
US	Non-Contiguous Masked Refresh			6,912,168	6/28/05
US	Bitline Reference Voltage Circuit			6,788,590	9/07/04
US	Bandgap Reference Circuit			6,815,941	11/09/04
JP	Bandgap Reference Circuit			3,759,513	1/13/06
US	Dual WL Mode for DRAMs			7,002,874	2/21/06
US	Synchronous SRAM Compatible	11/062,974	2/22/05		
JP	Synchronous SRAM Compatible			4,304,176	5/01/09
US	SRAM Compatible High Avail...			7,506,100	3/17/09
US	SRAM Compatible High Avail ...	12/254,702	10/20/08		
JP	SRAM Compatible High Avail ...			4,304,172	4/07/09
US	Dynamic Exclusive OR Gate			7,298,171	11/20/07
US	Switched Capacitor Charge Sharing			7,609,570	10/27/09
JP	Switched Capacitor Charge Sharing	212,229/07	9/15/07		
US	Optimized Charge Sharing			7,606,093	10/20/09
JP	Optimized Charge Sharing	248,988/07	11/21/07		
US	Multiple Data Bus Charge Sharing			7,580,304	8/25/09
JP	Multiple Data Bus Charge Sharing	212,249/07	8/3/07		

PATENT

REEL: 024185 FRAME: 0315

US	Data Inversion Testing Memories			7,631,233	12/08/09
JP	Data Inversion Testing Memories	315,170/07	12/05/07		
US	Error Correction Code Circuit Test	11/840,203	8/16/07		
JP	Error Correction Code Circuit Test	267,178/07	10/12/07		
US	Check Bits in H Matrix Error Det	11/855,070	9/13/07		
JP	Check Bits in H Matrix Error Det	269,577/07	10/16/07		
US	DRAM Early Write with Masking	11/855,804	9/14/07		
JP	DRAM Early Write with Masking	274,362/07	10/22/07		
US	Short Circuit Charge Sharing	11/855,091	9/13/07		
JP	Short Circuit Charge Sharing	269,576/07	10/16/07		

PATENT

RECORDED: 04/05/2010

REEL: 024185 FRAME: 0316