# PATENT ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT				
NATURE OF CONVEYANCE:			ASSIGNMENT			
CONVEYING PARTY DATA						
Name Execution Date						
Arlene H. Proebsting and Todd A. Proebsting, Trustees of The Robert J. Proebsting and 01/30/2008						
RECEIVING PARTY D	ATA					
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Property Ty	/pe		Number			
Application Number:		12635	Number State   543 State			
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NAME OF SUBMITTER:			Bianca Zhang			
Total Attachments: 7 source=PFRA_170202_Assignment#page1.tif source=PFRA_170202_Assignment#page2.tif source=PFRA_170202_Assignment#page3.tif						
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## ASSIGNMENT OF PATENT RIGHTS

For good and valuable consideration, the receipt of which is hereby acknowledged, Arlene H. Proebsting and Todd A. Proebsting, Trustees of The Robert J. Proebsting and Arlene H. Proebsting Family Trust, under the trust agreement dated February 5, 1996, as amended, also known as the Proebsting Family Trust (*"Assignor"*), does hereby sell, assign, transfer, and convey unto PRFA Technology Fund, LLC, a Delaware limited liability company, with an address at 2711 Centerville Road, Suite 400, Wilmington, DE 19808 (*"Assignee"*), or its designees, all right, title, and interest that exist today and may exist in the future in and to any and all of the following (collectively, the *"Patent Rights"*):

(a) the provisional patent applications, patent applications and patents listed in the table below (the "*Patents*");

(b) all inventions, invention disclosures, and discoveries described in the Patents and all other rights arising out of such inventions, invention disclosures, and discoveries;

(c) all rights to apply in any or all countries of the world for patents, certificates of invention, utility models, industrial design protections, design patent protections, or other governmental grants or issuances of any type related to any item in any of the foregoing categories (a) through (b), including, without limitation, under the Paris Convention for the Protection of Industrial Property, the International Patent Cooperation Treaty, or any other convention, treaty, agreement, or understanding;

(d) all causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of, any of the Patents and/or any item in any of the foregoing categories (b) through (c), including, without limitation, all causes of action and other enforcement rights for

- (i) damages,
- (ii) injunctive relief, and
- (iii) any other remedies of any kind

for past, current, and future infringement; and

(e) all rights to collect royalties and other payments under or on account of any of the Patents and/or any item in any of the foregoing categories (b) through (d).

Pat ent or Application No.	<u>Country</u>	Filing Date	<u>Title of Patent and First</u> <u>Named Inventor</u>
5,585,747	US	10/11/1994	High speed low power sense amplifier
			Robert J. Proebsting
5,687,108	US	4/10/1996	Power bussing layout for memory circuits

Patent or Application No.	<u>Country</u>	Filing Date	<u>Title of Patent and First</u> <u>Named Inventor</u>
			Robert J. Proebsting
6,115,302	US	4/7/1999	Disabling a decoder for a
			defective element in an
			integrated circuit device
			having redundant elements
			Robert J. Proebsting
6,134,176	US	11/24/1998	Disabling a defective element
			in an integrated circuit device
			having redundant elements
			Robert J. Proebsting
6,154,064	US	12/30/1998	Differential sense amplifier
			circuit
			Robert J. Proebsting
6,163,475	US	4/1/1999	Bit line cross-over layout
			arrangement
			Robert J. Proebsting
6,198,682	US	6/10/1999	Hierarchical dynamic memory
			array architecture using read
			amplifiers separate from bit
			line sense amplifiers
			Robert J. Proebsting
6,212,109	US	8/11/1999	Dynamic memory array
			having write data applied to
			selected bit line sense
			amplifiers before sensing to
			write associated selected
			memory cells
			Robert J. Proebsting
6,104,653	US	11/30/1999	Equilibration circuit and
			method using a pulsed
			equilibrate signal and a level
			equilibrate signal
			Robert J. Proebsting
6,462,998	US	12/29/1999	Programmable and electrically
			configurable latch timing
			circuit

Patent or Application No.	Country	Filing Date	<u>Title of Patent and First</u> Named Inventor
			Robert J. Proebsting
6,266,264	US	2/7/2000	Word line straps using two
			different layers of metal
			Robert J. Proebsting
6,240,046	US	2/11/2000	Integrated circuit random access memory capable of reading either one or more than one data word in a single clock cycle
			Robert J. Proebsting
6,462,584	US	2/11/2000	Generating a tail current for a differential transistor pair using a capacitive device to project a current flowing through a current source device onto a node having a different voltage than the current source device
			Robert J. Proebsting
6,208,575	US	2/11/2000	Dynamic memory array bit line sense amplifier enabled to drive toward, but stopped before substantially reaching, a source of voltage
( 25( 495		0/10/0000	Robert J. Proebsting
6,356,485	US	2/12/2000	Merging write cycles by comparing at least a portion of the respective write cycle addresses
			Robert J. Proebsting
6,282,135	US	2/12/2000	Initializing memory cells within a dynamic memory array prior to performing internal memory operations Robert J. Proebsting
6,373,753	US	2/12/2000	Memory array having selected word lines driven to an

Patent or Application No.	<u>Country</u>	Filing Date	<u>Title of Patent and First</u> <u>Named Inventor</u>
			internally-generated boosted voltage that is substantially independent of VDD
6,871,261	US	11/15/2001	Robert J. Proebsting
0,071,201	05	11/13/2001	Integrated circuit random access memory capable of automatic internal refresh of memory array
			Robert J. Proebsting
11/085,770	US	3/21/2005	Integrated circuit random access memory capable of automatic internal refresh of memory array
			Robert J. Proebsting
5,495,445	US	5/31/1994	Redundancy scheme for memory circuits
			Robert J. Proebsting
5,737,267	US	4/10/1996	Word line driver circuit
			Robert J. Proebsting
5,793,383	US	5/31/1996	Shared bootstrap circuit
			Robert J. Proebsting
DE69714350.3	DE	5/22/1997	Shared bootstrap circuit
			Robert J. Proebsting
GB0810608	GB	5/22/1997	Shared bootstrap circuit
			Robert J. Proebsting
NL0810608	NL	5/22/1997	Shared bootstrap circuit
			Robert J. Proebsting
5,936,905	US	7/9/1997	Self adjusting delay circuit and method for compensating sense amplifier clock timing
			Robert J. Proebsting
KR0487098	KR	9/1/1997	Sense amplifier timing circuit
			Robert J. Proebsting

Patent or Application No.	Country	<b>Filing Date</b>	<u>Title of Patent and First</u> Named Inventor
ЈР09-236670	JP	9/2/1997	Sense amplifier timing circuit
			Robert J. Proebsting
KR0514024	KR	7/29/1997	
			Robert J. Proebsting
6,323,722	US	3/1/2000	Apparatus for translating a
·;····		57112000	voltage
			Robert J. Proebsting
5,453,951	US	8/26/1994	Fast voltage equilibration of
			complementary data lines
			following write cycle in memory circuits
			Robert J. Proebsting
5,546,338	US	5/9/1995	Fast voltage equilibration of differential data lines
			differential data mies
			Robert J. Proebsting
JP07-217153	JP	8/25/1995	High-speed voltage balance of
			complementary data line in succession to write cycle of
			memory circuit
6,947,100	US	11/12/1999	Robert J. Proebsting
0,947,100	05	11/12/1999	High speed video frame buffer
			Robert J. Proebsting
KR0487005	KR	8/8/1997	
			Robert J. Proebsting
TW103466	TW	4/17/1997	Shared bootstrap circuit
			Robert J. Proebsting
L			

Assignor represents, warrants and covenants that:

(1) Assignor has the full power and authority, and has obtained all third party consents, approvals and/or other authorizations required to enter into this Agreement and to

carry out its obligations hereunder, including the assignment of the Patent Rights to Assignee; and

(2) Assignor owns, and by this document assigns to Assignee, all right, title, and interest to the Patent Rights, including, without limitation, all right, title, and interest to sue for infringement of the Patent Rights. Assignor has obtained and properly recorded previously executed assignments for the Patent Rights as necessary to fully perfect its rights and title therein in accordance with governing law and regulations in each respective jurisdiction. The Patent Rights are free and clear of all liens, claims, mortgages, security interests or other encumbrances, and restrictions. There are no known actions, suits, investigations, claims or proceedings threatened, pending or in progress relating in any way to the Patent Rights. There are no existing contracts, agreements, options, commitments, proposals, bids, offers, or rights with, to, or in any person to acquire any of the Patent Rights.

Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to issue any and all patents, certificates of invention, utility models or other governmental grants or issuances that may be granted upon any of the Patent Rights in the name of Assignee, as the assignee to the entire interest therein.

The terms and conditions of this Assignment of Patent Rights 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 this Assignment of Patent Rights is executed at \_\_\_\_\_\_\_ on \_\_\_\_\_\_\_ JANVARY 30, 2008\_\_\_\_\_\_.

## ASSIGNOR:

Arlene H. Proebsting, Trustee of The Robert J. Proebsting and Arlene H. Proebsting Family Trust under trust agreement dated February 5, 1996, as amended, also known as The Proebsting Family Trust (Signature MUST be notarized)

Todd A. Proebsting, Trustee of The Robert J. Proebsting and Arlene H. Proebsting Family Trust under trust agreement dated February 5, 1996, as amended, also known as The Proebsting Family Trust *(Signature MUST be notarized)* 

## **NOTARIZATION (Arlene H. Proebsting)**

STATE OF <u>CA</u>) SS. COUNTY OF <u>TUD</u> UNINE On <u>1-29-08</u>, before me, <u>(</u> Notary Public in and for said State, personally appeared Arlene H. Proebsting, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument. WITNESS my hand and official seal. Signature M (Seal) **NOTARIZATION** (Todd A. Proebsting) STATE OF  $\bigvee A$  ) COUNTY OF  $\ltimes NG$  ) On January 30,2008, before me, ale Queeno Notary Public in and for said State, personally appeared Todd A. Proebsting, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument. Notary Public WITNESS my hand and official seal. The State Of Washington Signature akin Qyam \_\_\_\_ AKIKO (SEAMA My Commission Expires JUL 28, 2009

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**RECORDED: 12/10/2009**