10-31-2003 Docket No.: 03226.328001;SUN030060 FORM PTO-1595 (Modified) :T U.S. DEPARTMENT OF COMMERCE (Rev. 03-01) Patent and Trademark Office OMB No. 0651-0027 (exp.5/31/2002) P08A/RFV03 Tab settings → → To the Director of the United States Patent and Trademark Office: Please record the attached original documents or copy thereof. 1. Name of conveying party(ies): Name and address of receiving party(ies): Brian AMICK, Dong YOON, Tri TRAN, Name: Sun Microsystems, Inc. Gajendra SINGH, Aparna RAMACHANDRAN and Claude GAUTHIER Address: 4150 Network Circle ☐ Yes 🛛 No Additional names(s) of conveying party(ies) 3. Nature of conveyance: ☐ Merger City: Santa Clara State/Prov.: CA ☐ Change of Name ☐ Security Agreement ZIP: 95054 Country: USA Other Execution Date: October 16, 2003 ⊠ No Additional name(s) & address(es) ☐ Yes 4. Application number(s) or patent numbers(s): If this document is being filed together with a new application, the execution date of the application is: October 16, 2003 B. Patent No.(s) Filing date Patent Application No. ☐ Yes 🛛 No Additional numbers 5. Name and address of party to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name: Jonathan P. Osha 7. Total fee (37 CFR 3.41):....\$ 40.00 Registration No. 33,986 ☑ Enclosed - Any excess or insufficiency should be credited or debited to deposit account Address: ROSENTHAL & OSHA L.L.P. Authorized to be charged to deposit account 1221 McKinney, Suite 2800 8. Deposit account number: 용 8 50-0591 City: Houston State/Prov.: Texas (Attach duplicate copy of this page if paying by deposit account) ZIP: 77010 Country: USA 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 copy is a truscopy

of the original document.

Name of Person Signing

Total number of pages including cover sheet, attachments, and

Mail documents to be recorded with required cover sheet information to:
 Mail Stop Assignment Recordation Services
 Director of the United States Patent and Trademark Office
 P.O. Box 1450, Alexandria, VA 22313-1450

PATENT

Date

ü

REEL: 014636 FRAME: 0747

Assignment - Worldwide

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned individual(s) (referred to herein as the "INVENTOR(S)") hereby assign, transfer, and set over to:

SUN MICROSYSTEMS, INC.

having the following address:

4150 Network Circle Santa Clara, California 95054

(referred to herein as "COMPANY"), its successors, and assigns, the entire right, title, and interest, worldwide, in and to the invention known by the following title:

DIGITAL DELAY LOCKED LOOP WITH EXTENDED PHASE CAPTURE RANGE

for which the undersigned has/have executed an application for patent in the United States of America on this same day, together with said patent application, all divisions, continuations, continuations-in-part, reissues, and extensions thereof, and all Letters Patent (domestic and foreign) which may be granted therefor. Such interest represents the entire ownership of said applications and Letters Patent when granted and is to be owned by COMPANY, its successors, and assigns, or their legal representatives, for the full and entire term for which such Letters Patent may be granted or extended, as fully and entirely as the same would have been enjoyed by the INVENTOR(S) if this assignment had not been made.

In addition, the undersigned INVENTOR(S) each hereby agrees:

- 1. To sign and execute any further documents which may be necessary or desirable, lawful, and proper in connection with the prosecution of all applications for patent(s) on the INVENTION in the United States, including without limitation said application and all divisions, continuations, continuations-in-part, amendments thereof, and all interference proceedings associated therewith, or otherwise necessary or desirable to secure the title thereto to COMPANY;
- 2. To execute all papers and documents and to perform all lawful acts which may be necessary in connection with claims to priority or otherwise under the International Convention for the Protection of Industrial Property or similar treaties or agreements;
- 3. To perform all lawful affirmative acts which may be necessary to obtain the grant of a valid and enforceable patent to COMPANY;

The undersigned INVENTOR(S) each hereby authorizes and requests the Commissioner of Patents and Trademarks in the United States to issue any and all Letters Patent resulting from said application, including without limitation any division, continuation, continuation-in-part, or reissue thereof to COMPANY.

ROSENTHAL & OSHA L.L.P.

PATENT REEL: 014636 FRAME: 0748 The undersigned INVENTOR(S) each hereby grants to the firm of ROSENTHAL & OSHA L.L.P. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for the recordation of this document.

IN WITNESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individual's signature:

10/16/03	Signature: 7	Brian amick
Date	Print or Type Name: Br	
Date	Signature:	ong YOON
Date	Signature: Print or Type Name: Tr	i TRAN
Date	Signature:	ajendra SINGH
Date	Signature:	parna RAMACHANDRAN
	Signature:	
Date	Print or Type Name: Cl	aude GAUTHIER

When this Assignment is <u>not</u> filed concurrently with the patent application, the following identifying information may be added <u>after</u> execution:

U.S. Application Serial No.:

Filing Date:

ROSENTHAL & OSHA L.L.P.

PATENT REEL: 014636 FRAME: 0749 The undersigned INVENTOR(S) each hereby grants to the firm of ROSENTHAL & OSHA L.L.P. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for the recordation of this document.

IN WITNESS WHEREOF, this Assignment has been executed by each of the undersigned individuals on the date appearing by such individual's signature:

Signature:

Date

Print or Type Name:

Brian AMICK

Signature:

Dong YOON

Print or Type Name:

Dong YOON

Signature:

Frint or Type Name:

Dong YOON

Tri TRAN

Signature:

Frint or Type Name:

Gajendra SINGH

Print or Type Name:

Aparna RAMACHANDRAN

Signature:

Print or Type Name:

Aparna RAMACHANDRAN

Signature:

Print or Type Name:

Claude GAUTHIER

When this Assignment is <u>not</u> filed concurrently with the patent application, the following identifying information may be added <u>after</u> execution:

U.S. Application Serial No.:

RECORDED: 10/21/2003

Filing Date:

ROSENTHAL & OSHA L.L.P.

PATENT REEL: 014636 FRAME: 0750