99	
06-30-19	ISON R SHEET
To the Honorable commissioner	
1. Name of conveying party(ies 1010796	o address of receiving party(ies):
2. Miriam C. Kadansky	N. C. M.
3. Dah Ming Chiu	Name: Sun Microsystems
4. Stephen R. Hanna	ni. S
<ul><li>5. Stephen A. Hurst</li><li>6. Joseph S. Wesley</li></ul>	Street Address: Mail Stop UBUR 02-311
7. Philip M. Rosenzweig	Street Address. Wall Stop ODOR 02-311
8. Radia J. Perlman	City:Burlington
8. Radia J. I elilliali	City. Dutinigton
Additional name(s) of conveying	
party(ies) attached? Yes X No	
3. Nature of conveyance:	State: MA Zip:01803
X Assignment	
Merger	Additional name(s) & address(es)
Security Agreement	attached?Yes _X_No
Change of Name	
Other	
C	
Execution Date: _06/10/99,06/11/99,06/14/99	<u></u>
<b>4.</b> Application number(s) or patent number(s):	934660
If this document is being filed together with a new application, the execution	
date of the application is: June 10-14, 1999	pprication, the execution
auto of the approximation of the state of th	
A. Patent Application No.(s)	B. Patent No. (s)
Additional numbers attached	<del></del>
5. Name and address of party to whom	6. Total number of applications and
correspondence concerning document should be mailed:	patents involved:1
maneu:	7. Total fee (37 CFR 3.41)\$40.00
Name: A. Sidney Johnston, Esq.	Enclosed
Traine. 11. States voluntion, Esq.	
Street Address: Cesari and McKenna	Authorized to be charged to deposit
	account  8. Demosit account no 02 1227 (Attach dunlicate
City: 30 Rowes Wharf State:Boston MA	8. Deposit account no. 03-1237 (Attach duplicate copy of this page if paying by deposit account)
Zip: 02110 (	copy of this page if paying by deposit account)
DO NOT U	SE THIS SPACE
153/1333 HIMHT 00000038 03339990	
FC:581 40.00 0P	
9. 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.	1
1 Li Lane Mahuston	June 18, 1999
A. Sidney Johnston Signature Date	
	Total number of pages comprising cover sheet:

PATENT REEL: 010053 FRAME: 0255

## **ASSIGNMENT**

Whereas We, Miriam C. Kadansky, who reside at 165 Westview Drive, Westford, MA 01886, Dah Ming Chiu, who reside at 736 Main Street, Acton, MA 01720, Stephen R. Hanna, who reside at 3 Beverly Road, Bedford, MA 01730, Stephen A. Hurst, who reside at 8 Dora Street, Nashua, NH 03060, Joseph S. Wesley, who reside at 21 Trevore Street, Quincy, MA 02171, Philip M. Rosenzweig, who reside at 26 Marshall Path, Acton, MA 01720, and Radia J. Perlman, who reside at 10 Huckleberry Lane, Acton, MA 01720, have made certain inventions or discoveries (or both) set forth in an application for Letters Patent of the United States of America entitled Dynamic Optimization For Receivers Using Distance Between A Repair Head And A Member Station In A Repair Group For Receivers Having A Closely Knit Topological Arrangement To Locate Repair Heads Near The Member Stations Which They Serve In Tree Based Repair In Reliable Multicast Protocol, identified by Cesari and McKenna File No. 112047-0022, which application was executed by us on

Date: 6/6/99

Date: 6/6/99

Miriam C. Kadansky

Date: 5/10/19

Date: 5/10/19

Stephen R. Hanna

Date: 5/10/19

Stephen A. Hurst

Date: 5/10/19

Date: 5/10/19

Date: 5/10/19

Radia J. Perlman

Whereas Sun Microsystems, Inc., whose address is 1 Network Drive, Burlington, MA 01803, and which, together with its successors and assigns, is hereinafter called "Assignee," is desirous of acquiring the title, rights, benefits, and privileges hereinafter recited;

Now, Therefore, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation:

- 1. Assign, transfer, and convey to Assignee our entire right, title, and interest in and to said inventions and discoveries, said application for Letters Patent of the United States of America, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-in-part, and Convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues, reexaminations, and extensions of Letters Patent granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications, and said Letters Patent;
- 2. Authorize Assignee to file patent applications in any or all countries on any or all of said inventions and discoveries in our names or in the name of Assignee or

PATENT REEL: 010053 FRAME: 0256

otherwise as Assignee may deem advisable, under the International Convention or otherwise:

- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as assignee of the entire right, title, and interest therein or otherwise as Assignee may direct;
- Warrant that we have not knowingly conveyed to others any right in said inventions, discoveries, applications, or patents or any license to use the same or to make, use, or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same Assignee without encumbrance;
- Bind our heirs, legal representatives and assigns, as well as ourselves, to 5. do, upon Assignee's request and at Assignee's expense, but without additional consideration to us or them, all acts reasonably serving to assure that the said inventions and discoveries, the said patent applications, and the said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives, and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples, and other physical exhibits in our control or in the control of our heirs, legal representatives or assigns which may be useful for establishing the facts of our conceptions, disclosures, and reduction to practice of said inventions and discoveries.

In testimony of which we have executed this Assignment as an instrument under seal on the dates indicated next to our names.

(-/10/99 Date	Miriam C. Kadansky, Inventor
6/10/99 Date	Dah Ming Chiu, Inventor
June 10, 1999 Date	Stephen R. Hanna, Inventor
June 14 1999 Date	Stephen A. Hurst, Inventor
June, 10, 1999 Date	Joseph S. Wesley, Inventor
June 11, 1999  Date	Philip M. Rosenzweig, Inventor
Jun 17, 1997  Date	Radia J. Perlman, Inventor