

FORM PTO-1596  
1-31-92

06-25-1998

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark

DOCKET NO.: 03139-00095  
6-18-98 PD25807



U.S. PTO  
09099400  
06/18/98

To the Honorable Commissione. 100747031 Please enclose the attached original documents or copy thereto:

<p>1. Name of conveying party(ies): Rahul RAZDAN; Solomon J. KATZMAN; James B. KELLER; Richard E. KESSLER</p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>2. Name and address of receiving party(ies): Name: <u>Digital Equipment Corporation</u></p> <p>Internal Address:</p> <p>Street Address: <u>111 Powdermill Road, MS02-3/G3</u></p> <p>City: <u>Maynard</u> State/Country: <u>MA</u> ZIP: <u>01754-1499</u></p> <p>Additional name(s) &amp; address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>3. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger</p> <p><input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Other</p> <p>Execution Date: <u>May 22, 1998; May 29, 1998; June 16, 1998; and May 21, 1998, respectively</u></p>	<p>4. Application number(s) or patent number(s):</p> <p>If the document is being filed together with a new application, the execution date of the application is: <u>May 22, 1998; May 29, 1998; June 16, 1998; and May 21, 1998, respectively</u></p>
<p>A. Patent Application No(s). _____ Filed: <u>June 18, 1998</u></p> <p><u>09099400</u></p>	<p>B. Patent No(s). _____</p> <p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>Patent Law Group</u> <u>Digital Equipment Corporation</u></p> <p>Internal Address:</p> <p>Street Address: <u>111 Powdermill Road, MS02-3/G3</u></p> <p>City: <u>Maynard</u> State: <u>MA</u> ZIP: <u>01754-1499</u></p>	<p>6. Total number of applications and patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41): _____ \$<u>40.00</u></p> <p><input type="checkbox"/> Enclosed</p> <p><input checked="" type="checkbox"/> Authorized to be charged to deposit account</p> <p>8. Deposit account number:</p> <p><u>10-0447</u></p>
DO NOT USE THIS SPACE <span style="float: right;">40E</span>	
<p>9. Statement and signature. <i>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.</i></p> <p><u>Alfred A. Stadnicki, 30,226</u> _____ June 18, 1998 Name and Registration No. of Person Signing Signature Date</p>	

06/24/1998 SSMITH 00000094 100447 09099400

Total number of pages comprising cover sheet: 1

01 FC:581 CMB No. 09099400 (exp. 4/94)

## ASSIGNMENT

WHEREAS, **Rahul RAZDAN** of Patent Law Group, Digital Equipment Corporation, 111 Powdermill Road, MS02-3/G3, Maynard, Massachusetts 01754-1499, **Solomon J. KATZMAN** of Patent Law Group, Digital Equipment Corporation, 111 Powdermill Road, MS02-3/G3, Maynard, Massachusetts 01754-1499; **James B. KELLER** of Patent Law Group, Digital Equipment Corporation, 111 Powdermill Road, MS02-3/G3, Maynard, Massachusetts 01754-1499, and **Richard E. KESSLER** of Patent Law Group, Digital Equipment Corporation, 111 Powdermill Road, MS02-3/G3, Maynard, Massachusetts 01754-1499 have made certain inventions or discoveries (or both) set forth in an Application for Letters Patent of the United States of America entitled "METHOD AND APPARATUS FOR RESOLVING PROBES IN MULTIPROCESSOR SYSTEMS WHICH DO NOT USE EXTERNAL DUPLICATE TAGS FOR PROBE FILTERING", the specification of which:

  X   was executed by us on the date(s) indicated below;

       was filed on    as Application Serial No.   ;

       was patented under U.S. Patent No.    on   ;

WHEREAS, Digital Equipment Corporation, a corporation of the Commonwealth of Massachusetts, whose address is 111 Powdermill Road, Maynard, Massachusetts 01754, and who, together with its successors and assigns is hereinafter called "Assignee", is desirous of acquiring the entire right, title, and interest together with the 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 the entire right, title and interest together with the benefits and privileges in and to said inventions and discoveries, said Application for Letters Patent or similar forms of protection of the United States of America, and all other

applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation and convention applications based in whole or in part upon said inventions or discoveries, or upon said application, and any and all Letters Patent, reissues and extensions of Letters Patent or similar forms of protection 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 or groups of countries on any or all of said inventions and discoveries in our name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or any other relevant convention or treaty or otherwise;

3. Authorize and request the Assistant Commissioner for Patents 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;

4. Warrant that we have not knowingly conveyed to others any rights 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 to Assignee without encumbrance;

5. Bind our heirs, legal representatives and assigns, as well as ourselves, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us or them, all acts reasonable serving to assure that said inventions and discoveries, said patent applications and 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 any facts of our conceptions, disclosures, and reduction to practice of said inventions or discoveries.

IN WITNESS WHEREOF:

DATE I SIGNED INVENTOR'S DECLARATION: May 22, 1998

Today's Date: May 22, 1998 [Signature]  
Rahul RAZDAN

STATE OF: Massachusetts

COUNTY OF: Worcester

On this 22 day of May, 1998, before me personally appeared Rahul RAZDAN known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the same as his/her free act and deed.

[Signature]  
Notary Public  
My Commission Expires: 12/31/99

PD25807

IN WITNESS WHEREOF:

DATE I SIGNED INVENTOR'S DECLARATION: May 19 1998

Today's

Date: May 20, 1998 Solomon J. Katzman  
Solomon J. KATZMAN

STATE OF: Massachusetts

COUNTY OF: Middlesex

On this 20th day of May, 1998, before me personally appeared Solomon J. KATZMAN known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the same as his/her free act and deed.

Edward G. Garrow  
Notary Public  
My Commission Expires: Mar. 5, 2004

IN WITNESS WHEREOF:

DATE I SIGNED INVENTOR'S DECLARATION: \_\_\_\_\_

Today's

Date: \_\_\_\_\_ James B. KELLER

STATE OF: \_\_\_\_\_

COUNTY OF: \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 1998, before me personally appeared James B. KELLER known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the same as his/her free act and deed.

\_\_\_\_\_  
Notary Public  
My Commission Expires: \_\_\_\_\_

IN WITNESS WHEREOF:

DATE I SIGNED INVENTOR'S DECLARATION: 5/21/98

Today's

Date: 5/21/98 \_\_\_\_\_  
Richard E. KESSLER

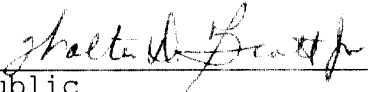
STATE OF: MASSACHUSETTS

COUNTY OF: Worcester

On this 21 day of May, 1998, before me personally appeared Richard E. KESSLER known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the

PD25807

same as his/her free act and deed.

  
\_\_\_\_\_  
Notary Public  
My Commission Expires: July 29, 1999

## ASSIGNMENT

WHEREAS, **Rahul RAZDAN** of Patent Law Group, Digital Equipment Corporation, 111 Powdermill Road, MS02-3/G3, Maynard, Massachusetts 01754-1499, **Solomon J. KATZMAN** of Patent Law Group, Digital Equipment Corporation, 111 Powdermill Road, MS02-3/G3, Maynard, Massachusetts 01754-1499; **James B. KELLER** of Patent Law Group, Digital Equipment Corporation, 111 Powdermill Road, MS02-3/G3, Maynard, Massachusetts 01754-1499, and **Richard E. KESSLER** of Patent Law Group, Digital Equipment Corporation, 111 Powdermill Road, MS02-3/G3, Maynard, Massachusetts 01754-1499 have made certain inventions or discoveries (or both) set forth in an Application for Letters Patent of the United States of America entitled "METHOD AND APPARATUS FOR RESOLVING PROBES IN MULTIPROCESSOR SYSTEMS WHICH DO NOT USE EXTERNAL DUPLICATE TAGS FOR PROBE FILTERING", the specification of which:

  X   was executed by us on the date(s) indicated below;

       was filed on    as Application Serial No.   ;

       was patented under U.S. Patent No.    on   ;

WHEREAS, Digital Equipment Corporation, a corporation of the Commonwealth of Massachusetts, whose address is 111 Powdermill Road, Maynard, Massachusetts 01754, and who, together with its successors and assigns is hereinafter called "Assignee", is desirous of acquiring the entire right, title, and interest together with the 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 the entire right, title and interest together with the benefits and privileges in and to said inventions and discoveries, said Application for Letters Patent or similar forms of protection of the United States of America, and all other



applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation and convention applications based in whole or in part upon said inventions or discoveries, or upon said application, and any and all Letters Patent, reissues and extensions of Letters Patent or similar forms of protection 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 or groups of countries on any or all of said inventions and discoveries in our name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or any other relevant convention or treaty or otherwise;

3. Authorize and request the Assistant Commissioner for Patents 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;

4. Warrant that we have not knowingly conveyed to others any rights 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 to Assignee without encumbrance;

5. Bind our heirs, legal representatives and assigns, as well as ourselves, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us or them, all acts reasonable serving to assure that said inventions and discoveries, said patent applications and 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 any facts of our conceptions, disclosures, and reduction to practice of said inventions or discoveries.

IN WITNESS WHEREOF:

DATE I SIGNED INVENTOR'S DECLARATION: \_\_\_\_\_

Today's  
Date: \_\_\_\_\_

\_\_\_\_\_  
Rahul RAZDAN

STATE OF: \_\_\_\_\_

COUNTY OF: \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 1998, before me personally appeared Rahul RAZDAN known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the same as his/her free act and deed.

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_

PD25807

IN WITNESS WHEREOF:

DATE I SIGNED INVENTOR'S DECLARATION: \_\_\_\_\_

Today's

Date: \_\_\_\_\_  
Solomon J. KATZMAN

STATE OF: \_\_\_\_\_

COUNTY OF: \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 1998, before me personally appeared Solomon J. KATZMAN known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the same as his/her free act and deed.

\_\_\_\_\_  
Notary Public  
My Commission Expires: \_\_\_\_\_

IN WITNESS WHEREOF:

DATE I SIGNED INVENTOR'S DECLARATION: June 16, 1998

Today's Date: June 16, 1998

[Signature]  
James B. KELLER

STATE OF: Massachusetts

COUNTY OF: Middlesex

On this 16<sup>th</sup> day of June, 1998, before me personally appeared James B. KELLER known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the same as his/her free act and deed.

[Signature]  
Notary Public  
My Commission Expires: 12/31/2000

IN WITNESS WHEREOF:

DATE I SIGNED INVENTOR'S DECLARATION: \_\_\_\_\_

Today's Date: \_\_\_\_\_

\_\_\_\_\_  
Richard E. KESSLER

STATE OF: \_\_\_\_\_

COUNTY OF: \_\_\_\_\_

On this \_\_\_\_\_ day of \_\_\_\_\_, 1998, before me personally appeared Richard E. KESSLER known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the

PD25807

same as his/her free act and deed.

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_

PLG 10/94  
ASSIGNE.FRM

6

RECORDED: 06/18/1998

PATENT  
REEL: 9256 FRAME: 0027