FORM PT (Rev. 6-93		RE 08-24-1	998 SHEET U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
	0651-0011 (exp. 49)		ocket No. PD25-789 (DEC97-31)
	settings D D 7 78		D18 attached original documents or copy the eof.
	To the Honorable Commission	er of P. 100797	
	me of conveying party(ies):		Name and address of receiving party(ies)
А. В.	C ,		Name: Digital Equipment Corporation
C.			Internal Address:
Addition	. John H. Edmondson nal name(s) of conveying party(ies)	attached? D Yes D No	
3. Na	iture of conveyance:		
KK	Assignment	☐ Merger	Street Address: Powdermill Road
٥	Security Agreement	☐ Change of Name	
	Other		City: Maynard State: MA ZIP: 01754
	D 07/17/98		Additional control for addition of colors to the Color of
	D.	- 07/16/98	Additional name(s) & address(es) attached? ☐ Yes X No
4. Ap	plication number(s) or paten	t number(s):	
lf :	this document is being filed t	ogether with a new application	on, the execution date of the application is:
Α.	Patent Application No.(s)		B. Patent No.(s)
	09/103,984		
		Additional numbers a	ttached? 🖸 Yes XX No
	ame and address of party to vancerning document should b		6. Total number of applications and patents involved:
Na	ame:Mary Lou Wakim	ura, Esq.	7. Total fee (37 CFR 3.41)\$ 40.00
Int	ernal Address: Hami1	ton, Brook, Smith &	XX Enclosed
	Reyno	lds, P.C.	Authorized to be charged to deposit account
Str	reet Address: Two M	ilitia Drive	8. Deposit account number:
Cit	hy. Lexington State	e: MA ZIP: 02173	(Attach duplicate copy of this page if paying by deposit account)
	8 BHGUYEN 00000091 09103984		
01 FC:581	40.0	NO OP DO NOT U	SE THIS SPACE
To	atement and signature.  The best of my knowledge a eoriginal document.	nd belief, the foregoing infor	mation is true and correct and any attached copy is a true copy of
Ma	ary Lou Wakimura	man	m Walenson 8/1/25
	Name of Person Signing	Total number of page including	Signature Date

## ASSIGNMENT

WHEREAS, George Z. Chrysos, a citizen of the United States residing at 51-5 Briarwood Lane, Marlboro Massachusetts 01752, Joel S. Emer, a citizen of the United States residing at 20 Blackhorse Drive, Acton, Massachusetts, 01720, Bruce E. Edwards, a citizen of the United States residing at 19 Broad Street, Belmont, Massachusetts 02178, and John H. Edmondson, a citizen of the United States residing at 202 Waverley Street, Arlington, Massachusetts 02174, 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 PREDICTING MEMORY DEPENDENCE USING STORE SETS, the specification of which:

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/me, receipt and sufficiency of which we/I hereby acknowledged, we/I 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 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;
- 4. Warrant that we/I 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/I have good right to assign the same to Assignee without encumbrance;
- 5. Bind our/my heirs, legal representatives and assigns, as well as ourselves/myself, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us/me 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 is/my, our/my 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/me 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/my control or in the control of our/my heirs, legal representatives or assigns which may be useful for establishing any facts of our/my conceptions, disclosures, and reduction to practice of said inventions or discoveries.

IN WITNESS WHEREOF:
DATE I SIGNED INVENTOR'S DECLARATION: 7/17/98
Today's Date: 7/17/98  George Z. Cirysos
STATE OF: MASSACHUSE HS
COUNTY OF: Workers fore
On this $17$ day of $30/9$ ,1998, before me personally appeared George Z. Chrysos known to me to be the person describe in and who executed the foregoing instrument, and who acknowledged that he executed the same as his free act and deed.
Notary Public  My Cormission Expires: July 19, 1699
IN WITNESS WHEREOF:
DATE I SIGNED INVENTOR'S DECLARATION:
Today's Date: July 15 1998  Joel S. Emer
STATE OF: MASSACH Setts
COUNTY OF: Luoneer for
On this $17$ day of $507$ , 1998, before we personally appeared Joel S. Emer known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he executed the same as his free act and deed.
Notary Public Falta A Freeth My Commission Expires: \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

3

IN WITNESS WHEREOF:
DATE I SIGNED INVENTOR'S DECLARATION: 7/17/78
Today's
STATE OF: MASSACHUGETIS
COUNTY OF: WORKES for
On this $17$ day of $J\psi\psi$ , 1998, before me personally appeared Bruce E. Edwards known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he executed the same as his free act and seed.
Notary Public  My Commission Expires: July 1999
IN WITNESS WHEREOF:
DATE I SIGNED INVENTOR'S DECLARATION:
Today's Date:  John H. Edmondson
oom n. Editordoon
STATE CF:
COUNTY OF:
on this
Notary Public My Commission Expires:

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## ASSIGNMENT

WHEREAS, George Z. Chrysos, a citizen of the United States residing at 51-5 Briarwood Lane, Marlbord, Massachusetts 01752, Joel S. Emer, a citizen of the United States residing at 20 Blackhorse Drive, Acton, Massachusetts, 01720, Bruce E. Edwards, a citizen of the United States residing at 19 Broad Street, Belmont, Massachusetts 02178, and John H. Edmondson, a citizen of the United States residing at 202 Waverley Street, Arlington, Massachusetts 02174, have made certain inventions or discoveries (or both) set forth in an Application for Metters Patent of the United States of America entitled METHOD AND APPARATUS FOR PREDICTING MEMORY DEPENDENCE USING STORE SETS, the specification of which:

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/me, receipt and sufficiency of which we/I hereby acknowledged, we/I 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 or 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 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;
- 4. Warrant that we/f have not knowingly conveyed to others any rights in said invertions, 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/I have good right to assign the same to Assignee without encumbrance;
- 5. Bind our/my heirs, legal representatives and assigns, as well as curselves/myself, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us/me 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 is/my, our/my 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/me 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/my control or in the control of our/my heirs, legal representatives or assigns which may be useful for establishing any facts of pur/my conceptions, disclosures, and reduction to bractice of said inventions or discoveries.

IN WITNESS WHEREOF:
DATE I SIGNED INVENTOR'S DECLASATION:
Today's Date:
George Z. Chrysos
STATE OF:
COUNTY OF:
On this day of ,1998, before me personally appeared George Z. Chrysos known to me to be the person describe in and who executed the foregoing instrument, and who acknowledged that he executed the same as his free act and deed.
Notary Public My Commission Expires:
IN WITNESS WHEREOF:
DATE I SIGNED INVENTOR'S DECLARATION:
Today's Date:  Joel S. Emer
STATE OF:
COUNTY OF:
On this
Notary Public My Commission Expires:

3

IN WITNESS WHEREOF:
DATE I SIGNED INVENTOR'S DECLARATION:
Today's Date:
Bruce A. Edwards
STATE OF:
COUNTY OF:
On this
Notary Public My Commission Expires:
IN WITNESS WHEREOF:
DATE I SIGNED INVENTOR'S DECLARATION:
Today's July 16,1998  Matte:  John H. Edmondson
STATE OF: MA
COUNTY OF: Norfolk
On this /6th day of July ,1998, before me personally appeared John H. Edmondson known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he executed the same as his free act and deed.
Notary Public My/Commission Expires: 5/10/62
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