		23960000
TO THE ASSISTANT COMMISSIONER		A.
SIR: PLEASE RECORD THE ATTACHED UNIQUINAL 102328938	OF.	, C
1. NAME OF CONVEYING PARTY(IES) (ASSIGNORS(S)):		
	B. OSBORNE signed December 16, 2002	4
3. Donald W. McCAULEY signed December 18, 2002 4.		11002
[5. 12][9][0] $[6. 12]$		7
7.	- 	
ADDITIONAL NAME(S) OF CONVEYING ARTY(IES) ATTACHED?	S ⊠NO	
2. PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST:		
NAME: Intel Corporation		
ADDRESS: 2200 Mission College Boulevard, Santa Clara, California 95054	- / 200	
ADDITIONAL NAME(S) & ADDRESS(ES) ATTACHED? ☐YES ☒NO	10/325 195	
3. NATURE OF CONVEYANCE (DOCUMENT):		
(Submit herewith only one document for recordation—multiple copies of s	same Assignment signed by different inver	tors is one
document)		
☑ASSIGNMENT OF ☑WHOLE ☐PART INTEREST	EXEC. DATE: December 16, 2002 a	nd
☐ORIGINAL ☐FACSIMILE/PHOTOCOPY	December 18, 2002	
☐ CHANGE OF NAME ☐ VERIFIED TRANSLATION		
SECURITY MERGER OTHER:		
EXECUTION DATE(S) ON THE DECLARATION IF FILED HEREWITH: (NO		
ASSIGNMENT DIFFER SEE ATTY!) December 16, 2002 and December 18,		
4.5 APPL. NO.(S) OR PAT NO.(S). OTHERS ON ADDITIONAL SHEET(S) a		
A. PAT. APP. NO.(S) M# 1# INVENTOR B. PATER series code/serial no lif not in item 1		ENTOR n item 1
Not Assigned 0275057		
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Concerning Document Should be Mailed: APPL	LNS $\underline{1}$ + PATS $\underline{0}$ = TOTAL =	<u>1</u>
		1
Pillsbury Winthrop LLP 7. AMOU	LNS <u>1</u> + PATS <u>0</u> = TOTAL = JNT OF FEE DUE: (Code 581) /E TOTAL x \$40 = \$40	1
Pillsbury Winthrop LLP Intellectual Property Group 7. AMOU ABOV	JNT OF FEE DUE: (Code 581)	1
Pillsbury Winthrop LLP 7. AMOU	JNT OF FEE DUE: (Code 581)	1
Pillsbury Winthrop LLP Intellectual Property Group 725 South Figueroa Street, Suite 2800Los Angeles, CA 90017-	JNT OF FEE DUE: (Code 581)	1
Pillsbury Winthrop LLP Intellectual Property Group 725 South Figueroa Street, Suite 2800Los Angeles, CA 90017- 5406 7. AMOU ABOV	JNT OF FEE DUE: (Code 581) /E TOTAL x \$40 = \$40	1
Pillsbury Winthrop LLP Intellectual Property Group 725 South Figueroa Street, Suite 2800Los Angeles, CA 90017- 5406 7. AMOU ABOV	JNT OF FEE DUE: (Code 581) /E TOTAL x \$40 = \$40 SE CHARGE TO OUR DEPOSIT ACCOUNT	1
Pillsbury Winthrop LLP 7. AMOU ABOVE 1725 South Figueroa Street, Suite 2800Los Angeles, CA 90017-5406 8. PLEAS NUMBE	JNT OF FEE DUE: (Code 581) /E TOTAL x \$40 = \$40 SE CHARGE TO OUR DEPOSIT ACCOUNT IER: 16-1805	
Pillsbury Winthrop LLP 7. AMOU ABOVE 725 South Figueroa Street, Suite 2800Los Angeles, CA 90017-5406 8. PLEAS NUMBER 0 0275057 P14893 UNDER CO.	JNT OF FEE DUE: (Code 581) /E TOTAL x \$40 = \$40 SE CHARGE TO OUR DEPOSIT ACCOUNT JER: 16-1805 ORDER NO 081674 0	275057
Pillsbury Winthrop LLP Intellectual Property Group 725 South Figueroa Street, Suite 2800Los Angeles, CA 90017- 5406 5.5 ATTY DKT: 8. PLEAS NUMBI P 0275057 P14893 UNDER C MATTER NO. CLIENT REF. dup. sheet	JNT OF FEE DUE: (Code 581) /E TOTAL x \$40 = \$40 SE CHARGE TO OUR DEPOSIT ACCOUNT JER: 16-1805 ORDER NO 081674 Control of the required CLIENT NO. MA	275057 TTER NO.
Pillsbury Winthrop LLP Intellectual Property Group 725 South Figueroa Street, Suite 2800Los Angeles, CA 90017- 5406 5.5ATTY DKT: 8. PLEAS NUMBI P 0275057 P14893 UNDER 0 MATTER NO. CLIENT REF. dup. sheet 9. To the best of my knowledge and belief, the foregoing information is true	JNT OF FEE DUE: (Code 581) /E TOTAL x \$40 = \$40 SE CHARGE TO OUR DEPOSIT ACCOUNT JER: 16-1805 ORDER NO 081674 Control of the required CLIENT NO. MA	275057 TTER NO.
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Pillsbury Winthrop LLP Intellectual Property Group 725 South Figueroa Street, Suite 2800Los Angeles, CA 90017- 5406 5.5ATTY DKT: P 0275057 P14893 UNDER C MATTER NO. CLIENT REF. 9. To the best of my knowledge and belief, the foregoing information is true the original document. 10. Total cover she	JNT OF FEE DUE: (Code 581) /E TOTAL x \$40 = \$40 SE CHARGE TO OUR DEPOSIT ACCOUNT IER: 16-1805 ORDER NO 081674 CHARGE TO OUR DEPOSIT ACCOUNT INTER: 16-1805 ORDER NO 081674 CHARGE TO OUR DEPOSIT ACCOUNT IER: 16-1805 OR	275057 TTER NO.
Pillsbury Winthrop LLP Intellectual Property Group 725 South Figueroa Street, Suite 2800Los Angeles, CA 90017- 5406 5.5ATTY DKT: P 0275057 P14893 UNDER C MATTER NO. CLIENT REF. June Sheet To the best of my knowledge and belief, the foregoing information is true the original document. 10. Total cover sheet (do not file)	JNT OF FEE DUE: (Code 581) /E TOTAL x \$40 = \$40 SE CHARGE TO OUR DEPOSIT ACCOUNT SER: 16-1805 ORDER NO 081674 COUNT SET ON ORDER NO MA The and correct and any attached copy is a true number of pages including this	275057 TTER NO. le copy of
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Pillsbury Winthrop LLP Intellectual Property Group 725 South Figueroa Street, Suite 2800Los Angeles, CA 90017- 5406 5.5 ATTY DKT: P 0275057 P14893 UNDER C MATTER NO. CLIENT REF. 9. To the best of my knowledge and belief, the foregoing information is true the original document. 10. Total cover she (do not fill Signature Attorney: Reg. No. Roger R. Wise Reg. No. Roger R. Wise Reg. No. 7. AMOU ABOV ABOV ABOV ABOV ABOV ABOV ABOV ABOV	JNT OF FEE DUE: (Code 581) /E TOTAL x \$40 = \$40 SE CHARGE TO OUR DEPOSIT ACCOUNT IER: 16-1805 ORDER NO 081674 CHARGE TO OUR DEPOSIT ACCOUNT INTER: 16-1805 ORDER NO 081674 CHARGE TO OUR DEPOSIT ACCOUNT IER: 16-1805 OR	275057 TTER NO. le copy of

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Please return signed/recorded to: Pillsbury Winthrop LLP Intellectual Property Group 725 South Figueroa Avenue, Suite 2800 Los Angeles, CA 90017-5406 Atty. Dkt. No. PW 275057 P14893

Attorney Ref. Client Ref.

ASSIGNMENT OF U.S. ORIGIN PATENT APPLICATION (to Corporation) (or Limited Partnership)

WHEREAS, the undersigned, to wit:

Hemant	G. ROTITHOR, Rand	dy B. OSBORNE and D	onaid W. i	MCCAUL	EY	
(hereinafter A	SSIGNOR), have ma	ade an invention known	as Dkt.		PW 275057	
and entitled:	High Performance	Memory Device-State	e Aware C	hipset F	refetcher	
for which an a	application for Letters	Patent of the United S	tates			
was execu	ited even date herew	rith and is about to be fi	led in the l	Jnited St	lates Patent and Trad	iemark Office;
was filed o	n	, Appln. No.	./		•	
			·			

AND WHEREAS **Intel Corporation** (hereinafter ASSIGNEE), a corporation duly organized and existing under the laws of the State of **Delaware** and having its principal office and place of business at 2200 Mission College Boulevard, Santa Clara, CA 95054, desires to acquire an interest therein;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR, does hereby sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all improvements that are disclosed in the application for the United States patent that has been executed by the undersigned prior hereto or concurrently herewith on the dates indicated below and is entitled **High Performance Memory Device-State Awars Chipset Prefetcher** and in and to said application and all divisional applications, continuation, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filling of said United States application;

agree that said ASSIGNEE may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said ASSIGNEE, its successors, assigns, and legal representatives, to carry out in good faith the Intent and purpose of this Assignment, the undersigned will execute all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said ASSIGNEE, its successors, assigns, and representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally assist said ASSIGNEE, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title

-1-

PW 275057/ P14893

PATENT REEL: 013619 FRAME: 0216 to said improvements, and all applications for patents and all patents on said improvements, in said ASSIGNEE, its successors, assigns, and legal representatives; and

covenant with said ASSIGNEE, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

<u>NOTE</u>: The undersigned hereby authorizes PILLSBURY WINTHROP LLP of the above address to insert hereon any further identification necessary or desirable for recordation of this document.

Executed on the date(s) below indicated.

Each Inventor: Please Sign and Date Below:	Inventor: Please also list the date that you signed the accompanying DECLARATION AND POWER OF ATTORNEY:
Date Name: Hemant G. ROTTTHOR	12-18-,2002 Date
	Inventor: Please also list the date that you signed the accompanying DECLARATION AND POWER OF ATTORNEY:
December 16, 2002 Mane: Randy B. OSBORNE	Date 16, 2002
Each Inventor: Please Sign and Date Below:	Inventor: Please also list the date that you signed the accompanying DECLARATION AND POWER OF ATTORNEY:
Date Name: Donald W. McCAULEY	, 20

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Please return signed/recorded to: Pillsbury Winthrop LLP Intellectual Property Group 725 South Figueroa Avenue, Suite 2800 Los Angeles, CA 90017-5406

Atty. Dkt. No. PW 275057 Attorney Ref. Client Ref.

ASSIGNMENT OF U.S. ORIGIN PATENT APPLICATION (to Corporation) (or Limited Partnership)

WHEREAS, the undersigned, to wit:

Hemant	G. ROTITHOR, Randy B. OSBORNE and Do	onaid W. M	ICCAULEY
(hereinafter A	SSIGNOR), have made an invention known	as Dkt.	PW 275057
and entitled:	High Performance Memory Device-State	Aware Ch	nipset Prefetcher
for which an a	application for Letters Patent of the United St	ates	
🗵 was execu	ted even date herewith and is about to be file	ed in the U	nited States Patent and Trademark Office;
was filed o	n , Appin . No.	1	;

AND WHEREAS Intel Corporation (hereinafter ASSIGNEE), a corporation duly organized and existing under the laws of the State of Delaware and having its principal office and place of business at 2200 Mission College Boulevard, Santa Clara, CA 95054, desires to acquire an interest therein;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said ASSIGNOR, does hereby sell, assign and transfer unto ASSIGNEE, its successors, assigns and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all improvements that are disclosed in the application for the United States patent that has been executed by the undersigned prior hereto or concurrently herewith on the dates indicated below and is entitled High Performance Memory Device-State Aware Chipset Prefetcher and in and to said application and all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions, that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said ASSIGNEE may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said ASSIGNEE, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said ASSIGNEE, its successors, assigns, and representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally assist said ASSIGNEE, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title

PW 275057/ P14893

to said improvements, and all applications for patents and all patents on said improvements, in said ASSIGNEE, its successors, assigns, and legal representatives; and

covenant with said ASSIGNEE, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

<u>NOTE</u>: The undersigned hereby authorizes **PILLSBURY WINTHROP LLP** of the above address to insert hereon any further identification necessary or desirable for recordation of this document.

Executed on the date(s) below indicated.

	Inventor: Please also list the date that you signed the accompanying DECLARATION AND POWER OF ATTORNEY:
Each Inventor: Please Sign and Date Below:	
Date Name: Hemant G. ROTITHOR	, 20
Each Inventor: Please Sign and Date Below:	Inventor: Please also list the date that you signed the accompanying DECLARATION AND POWER OF ATTORNEY:
Lach Inventor: Please Sign and Date Below:	, 20
, 20	, 20
Date Name: Randy B. OSBORNE	
	Inventor: Please also list the date that you signed the accompanying DECLARATION AND POWER OF ATTORNEY:
Each Inventor: Please Sign and Date Below:	
Dec 18, 2002 Sand W. McCAULEY Name: Donald W. McCAULEY	DEC 18, 2002 Date

-2-

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