

When recorded please return to:
HEWLETT-PACKARD COMPANY
Intellectual Property Administrator,
P. O. Box 272400
Fort Collins, Colorado 80527-2400

ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD COMPANY, a Delaware corporation having its principal place of business in Palo Alto, California, (hereinafter HP), in furtherance of my/our obligations to HP, and do hereby assign and transfer to HP, its successors and assigns, the entire right, title and interest, including the right of priority, in, to and under an application for Letters Patent of the United States entitled:

READ OPERATIONS ON MULTI-BIT MEMORY CELLS IN RESISTIVE CROSS POINT ARRAYS

Filing date: October 30, 2001 Application No.: 10/021223

and the invention(s) and improvement(s) set forth therein, and any and all continuations, continuations-in-part (C-I-P's), divisionals, and renewals of and substitutes for said application for said Letters Patent, and any and all Letters Patent of the United States and of countries foreign thereto which may be granted thereon or therefor; and any reissues, or reexaminations, or extensions of said Letters Patent.

I/we additionally authorize HP to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by HP, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, and transfer not been made;

AND I/we hereby covenant that I/we have full right to convey the entire interest herein assigned, and that I/we have not executed and will not execute any agreement in conflict herewith, and I/we further covenant and agree that I/we will, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said invention(s) or improvement(s), said application and said Letters Patent, to HP, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to HP, or to its nominee, all known facts respecting said invention(s) or improvement(s), said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisionals, continuations, C-I-P's, reissue and foreign applications, to make all rightful oaths and declarations, and generally to do everything possible to aid HP, its successors, assigns, nominees and legal representatives to obtain and enforce, for its or their own benefit, proper patent protection for said invention(s) or improvement(s) in any and all countries provided the expenses which may be incurred by me/us in lending such cooperation and assistance are paid by HP;

AND I/we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to HP, as assignee of the entire right, title and interest, any and all Letters Patent for said invention(s) or improvement(s), including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

I/we further authorize and direct HP attorneys to insert the serial number and filing date of said application now identified by the attorney docket number and title set forth above as soon as the same shall have been made known to them by the United States Patent and Trademark Office.

IN WITNESS WHEREOF, I/we hereunto set my/our hand(s) and seal(s):

Manish Sharma Date Assignment Signed: 26 August 2002
Inventor's Signature (Seal)

Inventor's Typed Name: Manish Sharma Date Application Signed: 26 August 2002

State of _____)
County of _____) ss.:

Before me this _____ day of _____, personally appeared Manish Sharma who is personally known or proved to me on the basis of satisfactory evidence to be the person who acknowledged the foregoing instrument of assignment to be his/her free act and deed.

Notary Public
My commission expires:

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ASSIGNMENT OF PATENT APPLICATION (cont.)

IN WITNESS WHEREOF, I we hereunto set my/our hand(s) and seal(s):

 Date Assignment Signed: 08/22/02
Inventor's Signature (Seal)

Inventor's Typed Name: Lung T. Tran Date Application Signed: 08/22/02

State of _____)
County of _____) ss.:

Before me this _____ day of _____, personally appeared Lung T. Tran who is personally known or proved to me on the basis of satisfactory evidence to be the person who acknowledged the foregoing instrument of assignment to be his/her free act and deed.

Notary Public
My commission expires:

Date Assignment Signed: _____
Inventor's Signature (Seal)

Inventor's Typed Name: _____ Date Application Signed: _____

State of _____)
County of _____) ss.:

Before me this _____ day of _____, personally appeared _____ who is personally known or proved to me on the basis of satisfactory evidence to be the person who acknowledged the foregoing instrument of assignment to be his/her free act and deed.

Notary Public
My commission expires:

Date Assignment Signed: _____
Inventor's Signature (Seal)

Inventor's Typed Name: _____ Date Application Signed: _____

State of _____)
County of _____) ss.:

Before me this _____ day of _____, personally appeared _____ who is personally known or proved to me on the basis of satisfactory evidence to be the person who acknowledged the foregoing instrument of assignment to be his/her free act and deed.

Notary Public
My commission expires: