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Attorney Docket Number
9772-0333-999

TO THE HONORABLE COMMISSIONER OF PATENTS AND TRADEMARKS
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Please record the attached original documents or copy thereof.

1. Name of conveying party(ies): <u>3-25-02</u> Kourosh Gharachorloo, Luiz A. Barroso, Mosur K. Ravishankar and Robert J. Stets, Jr.		2. Name and address of receiving party(ies): Name: <u>Compaq Information Technologies Group, L.P.</u>	
Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Address: <u>20555 SH 249 - MC 110701</u> <u>Houston, Texas 77070</u>	
3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____		Country (if other than USA): _____	
Execution Date: <u>January 7, 2002</u>			
4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: _____ A. Patent Application No.(s) <u>10/042,029 (January 7, 2002)</u> B. Patent No.(s) _____ Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
5. Name and address of party to whom correspondence concerning document should be mailed: PENNIE & EDMONDS LLP 3300 Hillview Avenue Palo Alto, CA. 94304		6. Number of applications and patents involved: <u>1</u>	
		7. Total fee (37 CFR 3.41):.....\$ <u>40.00</u> Please charge to the deposit account listed in Section 8.	
		8. Deposit account number: <u>16-1150</u>	
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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>			
<u>Gary S. Williams</u> Name of Person Signing	<u>31,066</u> Reg. No.	<u>[Signature]</u> Signature	<u>March 25, 2002</u> Date
Total number of pages including cover sheet:			<u>4</u>

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Attorney Docket Number
9772-0333-999

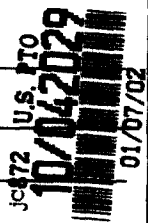
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Washington, DC 20231

01/07/02

Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies): Kourosch Ghatachorloo, Luiz A. Barroso, MosurK. Ravishankar and Robert J. Stets, Jr.</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>Compaq Information Technologies Group, L.P.</u></p>
<p>3. Nature of conveyance: <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____</p> <p>Execution Date: <u>January 7, 2002</u></p>	<p>Address: <u>20555 SH 249 - MC 110701</u> <u>Houston, Texas 77070</u></p> <p>Country (if other than USA): _____</p>



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A. Patent Application No.(s) _____ B. Patent No.(s) _____

Additional numbers attached? Yes No

<p>5. Name and address of party to whom correspondence concerning document should be mailed: PENNIE & EDMONDS LLP 3300 Hillview Avenue Palo Alto, CA. 94304</p>	<p>6. Number of applications and patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41):.....\$ <u>40.00</u> Please charge to the deposit account listed in Section 8.</p> <p>8. Deposit account number: <u>16-1150</u></p>
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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.

Wilfred H. Lam 41,923 Wilfred H. Lam January 7, 2002
Name of Person Signing Reg. No. Signature Date

for Gary S. Williams (Reg. No. 31.066) Total number of pages including cover sheet: 4

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JOINT

ASSIGNMENT

WHEREAS, WE, Kourosh Gharachorloo, Lulz A. Barroso, Mosur K. Ravishankar and Robert J. Stets, Jr., ASSIGNORS, citizens of Iran, Brazil, India and the United States, residing at 2260 Camino A Los Cerros, Menlo Park, CA 94025, 1980 California St. #20, Mountain View, CA 94040, 707 Continental Cir. #133, Mountain View, CA 94040 and 166 Bryant St., Apt. D, Palo Alto, CA 94301 (hereinafter "ASSIGNORS"), have invented certain new and useful improvements in a **CACHE COHERENCE PROTOCOL ENGINE AND METHOD FOR EFFICIENT PROCESSING OF INTERLEAVED MEMORY TRANSACTIONS IN A MULTIPROCESSOR SYSTEM** having executed concurrently herewith an application for a United States patent disclosing and identifying the invention; which is identified by Peanie & Edmonds LLP docket no. **9772-0333-999**; and

WHEREAS, **COMPAQ INFORMATION TECHNOLOGIES GROUP, L.P. (CITG)**, a Texas limited partnership located in Houston, Texas, (hereinafter "ASSIGNEE") is desirous of obtaining our entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered by said Inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries. to and under the said invention and the said application:

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, the said ASSIGNORS, hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our entire right, title and interest in, to and under the said invention, and the said application for U.S. Letters Patent, and any and all divisions, continuations and renewals thereof, and any and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventor's certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, renewals and reissues thereof;

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 or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant and agree that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

The terms, covenants and conditions of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding on said Inventors, their heirs, legal representatives and assigns.

CA1 - 294008.1

PATENT
REEL: 012728 FRAME: 0823

IN TESTIMONY WHEREOF, said Inventors have executed and delivered this instrument to said Assignee the day and year below written.

1.

Kourosh Gharachorloo

Date

Witness:

Date

2.

LAP
Luiz A. Barroso

01-07-2002
Date

Walter Maria Brito
Witness:

1-7-2002
Date

3.

Mosur K. Ravishankar

Date

Witness:

Date

4.

Robert J. Stets, Jr.

Date

Witness:

Date

IN TESTIMONY WHEREOF, said Inventors have executed and delivered this instrument to said Assignee the day and year below written.

1. Kouros Gharachorloo
Kouros Gharachorloo

1/7/02
Date

Witness: [Signature]

1-7-2002
Date

2. _____
Luiz A. Barroso

Date

Witness: _____

Date

3. M.K. Ravishankar
Mosur K. Ravishankar

1/7/02
Date

Witness: [Signature]

1-7-2002
Date

4. Robert J. Stets, Jr.
Robert J. Stets, Jr.

1-7-02
Date

Witness: [Signature]

1.7.2002
Date