



Atty Ref/Docket No.: 884.844US1

To the Honorable Commissioner of Patents and Trademarks

102395348

original documents or copy thereof.

1. Name of conveying party(ies): **3-5-03**

2. Name and address of receiving party(ies):

Debendra Mallik and Robert L. Sankman

Name: Intel Corporation

Additional name(s) of conveying party(ies) attached? [ ]Yes [X]No

Street Address: 2200 Mission College Blvd.

3. Nature of conveyance:

City: Santa Clara State: CA Zip: 95052

- Assignment       Merger
- Security Agreement     Change of Name
- Other

Additional name(s) & address(es) attached? [ ]Yes [X]No

Execution Date: March 4, 2003 and March 5, 2003, respectively

JC715 U.S. PTO  
10/382680  
03/06/03

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: March 4, 2003 and March 5, 2003, respectively

A. Patent Application No.(s)

B. Patent No.(s)

**10,382,680**

Additional numbers attached? [ ]Yes [X]No

5. Name and address of party to whom correspondence concerning document should be mailed:

6. Total number of applications and patents involved: 1

Name: Charles A. Lemaire

7. Total fee (37 CFR 3.41): \$ 40.00

Address: Schwegman, Lundberg, Woessner & Kluth, P.A.

P.O. Box 2938  
Minneapolis, MN 55402

- Enclosed
- Authorized to be charged to deposit account

8. Please charge any additional fees or credit any overpayments to our Deposit account number: 19-0743.

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.

Charles A. Lemaire/Reg. No. 36,198  
Name of Person Signing

Charles A. Lemaire  
Signature

5 March 2003  
Date

cover sheet: 3

Total number of pages including

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks  
Box Assignments  
Washington, D.C. 20231

03/19/2003 ECOOPER 00000210 190743 10382680

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## ASSIGNMENT

WHEREAS, We, Debendra Mallik residing at 1210 N. Judd Place, Chandler, AZ 85226, and Robert L. Sankman residing at 4753 E. Pearce Road, Phoenix, AZ 85044, made certain new and useful inventions and improvements for which we executed an application for Letters Patent of the United States on Even Date Herewith, which is entitled THERMALLY ENHANCED ELECTRONIC FLIP-CHIP PACKAGING WITH EXTERNAL-CONNECTOR-SIDE DIE AND METHOD.

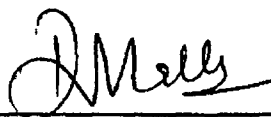
AND WHEREAS, Intel Corporation, a corporation organized and existing under and by virtue of the laws of the State of , and having an office and place of business at 2200 Mission College Blvd., Santa Clara, CA 95052, (hereinafter "Assignee") is desirous of acquiring the entire right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefore;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us

IN TESTIMONY WHEREOF, I have hereunto set my hand this 4<sup>th</sup> day of  
March, 2003



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Debendra Mallik

IN TESTIMONY WHEREOF, I have hereunto set my hand this 5<sup>th</sup> day of  
March, 2003



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Robert L. Sankman