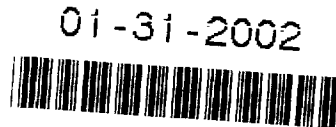


ASSIG



101971186

R SHEET

J1017 U.S. PTO
10/051984
01/15/02

To: Honorable Commissioner of Patents and Trademarks:

Please record the attached original document(s) or copy thereof.

1. Name of conveying party(ies)
a) Michael Richard Ehlert
b) William Jeffrey Schaefer
2. Name and address of receiving party(ies):
a) Name: National Semiconductor Corporation
Address: 2900 Semiconductor Drive
Santa Clara, CA 95051-8090

1-15-02

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 _____ | <input type="checkbox"/> License Agreement |

Execution Dates: January 10 & 14, 2002

4. Application Number(s) or Patent Number(s):

10,051,984

The title of the (new) application is:

MATERIALS AND STRUCTURE FOR A HIGH RELIABILITY BGA CONNECTION BETWEEN LTCC
AND PB BOARDS

5. Please send all correspondence concerning this (these) documents to:

Beyer Weaver & Thomas, LLP
P.O. Box 778
Berkeley, CA 94704-0778
Ph: (650) 961-8300
Fax: (650) 961-8301
(Customer Number: 022434)

6. Total number of applications and patents involved: 1

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

- ☒ Enclosed
☒ Any additional fees are authorized to be charged to Deposit Account No. 500388
(Order No. NSC1P202)

8. 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.

Date: January 15, 2002

Phillip P. Lee
Registration No. 46,866

01/28/2002 WABDELRI 00000040 10051984

04 FC:581

40.00 DP

Attorney Docket No. NSC1P202/P04892

(Revised 12/01)

PATENT
REEL: 012511 FRAME: 0776

ASSIGNMENT OF PATENT APPLICATION

Whereas I an undersigned inventor have invented certain new and useful improvements as set forth in the patent application entitled:

MATERIALS AND STRUCTURE FOR A HIGH RELIABILITY BGA CONNECTION BETWEEN LTCC AND PB BOARDS

(Atty. Docket No. NSC1P202/P04892), (check one)

- ☒ for which I have executed a U.S. patent application on even date herewith. (Accompanying)
☐ which bears U.S. application No. _____. (Not accompanying)
☐ which is a U.S. provisional application. (Accompanying)

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I an undersigned inventor hereby:

- 1) Sell, assign and transfer to **National Semiconductor Corporation**, a Delaware corporation having a place of business at 2900 Semiconductor Drive, Santa Clara, California, ("ASSIGNEE"), the entire right, title and interest in any and all improvements and inventions disclosed in, applications based upon, and patents (including foreign patents and the right to claim priority) granted upon, the above-referenced application.
- 2) Authorize and request the Commissioner of Patents to issue any and all Letters Patents resulting from said application or any division, continuation, substitute, renewal, re-examination or reissue thereof to the ASSIGNEE.
- 3) Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.
- 4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the ASSIGNEE, its successors, assigns and other legal representative, and shall be binding upon the inventor, as well as the inventor's heirs, legal representatives and assigns.
- 5) Warrant and represent that I have not entered, and will not enter into any assignment, contract, or understanding that conflicts with this assignment.
- 6) Authorize and request my attorney/agent to insert above the application No. in order to assist with recordal of this assignment.

Signed on the date indicated beside my signature.

1. Inventor Signature: Michael R. Ehlert Date: Jan 10, 2002
Michael R. EHLERT

State of California)
County of Orange) ss.

On this 10 day of January, in the year 2002, before me, _____, Notary Public, personally appeared Michael R. EHLERT, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature _____ (SEAL)

2. Inventor Signature: _____ Date: _____
William J. SCHAEFER

State of California)
County of _____) ss.

On this _____ day of _____, in the year 2002, before me, _____, Notary Public personally appeared William J. SCHAEFER, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature _____ (SEAL)

ASSIGNMENT OF PATENT APPLICATION

Whereas I an undersigned inventor have invented certain new and useful improvements as set forth in the patent application entitled:

MATERIALS AND STRUCTURE FOR A HIGH RELIABILITY BGA CONNECTION BETWEEN LTCC AND PB BOARDS

(Atty. Docket No. NSC1P202/P04892), (check one)

- ☒ for which I have executed a U.S. patent application on even date herewith. (Accompanying)
☐ which bears U.S. application No. _____. (Not accompanying)
☐ which is a U.S. provisional application. (Accompanying)

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I an undersigned inventor hereby:

- 1) Sell, assign and transfer to **National Semiconductor Corporation**, a Delaware corporation having a place of business at 2900 Semiconductor Drive, Santa Clara, California, ("ASSIGNEE"), the entire right, title and interest in any and all improvements and inventions disclosed in, applications based upon, and patents (including foreign patents and the right to claim priority) granted upon, the above-referenced application.
- 2) Authorize and request the Commissioner of Patents to issue any and all Letters Patents resulting from said application or any division, continuation, substitute, renewal, re-examination or reissue thereof to the ASSIGNEE.
- 3) Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.
- 4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the ASSIGNEE, its successors, assigns and other legal representative, and shall be binding upon the inventor, as well as the inventor's heirs, legal representatives and assigns.
- 5) Warrant and represent that I have not entered, and will not enter into any assignment, contract, or understanding that conflicts with this assignment.
- 6) Authorize and request my attorney/agent to insert above the application No. in order to assist with recordal of this assignment.

Signed on the date indicated beside my signature.

1. Inventor Signature: _____

Date: _____

Michael R. EHLERT

State of California)
)
County of _____) SS.

On this _____ day of _____, in the year 2002, before me, _____, Notary Public, personally appeared Michael R. EHLERT, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature _____

(SEAL)

2. Inventor Signature: William J. Schaefer
William J. SCHAEFER

Date: 01/14/02

State of California)
)
County of Santa Clara) SS.

On this 14th day of January, in the year 2002, before me, Karen L. Metz Notary Public personally appeared William J. SCHAEFER, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature Karen L. Metz

