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To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
Kozo YAMASAKI, Osamu HISADA, Katsuhiko HASEGAWA,
Naoki KITO, Satoshi HIRANO and Yutaro KAMEYAMA

2. Name and address of receiving party(ies)?
Name:
NGK SPARK PLUG CO., LTD.
Internal Address:
14-18, Takatsuji-cho, Mizuho-ku, Nagoya-shi, Aichi 467-0872,
JAPAN
Street Address:
Same as above

Additional name(s) of conveying party(ies) attached?
___ yes ___ x no

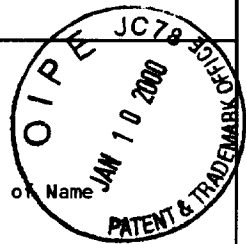
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3. Nature of Conveyance:

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Execution Date: November 24, 22 and 19, 1999,
respectively



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)

B. Patent No(s).

09/422,119

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:
One (1)

SUGHRUE, MION, ZINN, MACPEAK & SEAS
2100 Pennsylvania Avenue, N.W.
Suite 800
Washington, D.C. 20037-3202

7. Total Fee (37 CFR 3.41): \$ 40.00
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January 10, 2000
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ASSIGNMENT

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1006-491 89

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor has sold and assigned, and by these presents hereby sells and assigns, unto

name and
address of
assignee

NGK SPARK PLUG CO., LTD.
14-18, Takatsuji-cho, Mizuho-ku,
Nagoya-shi, Aichi 467-0872, JAPAN

(hereinafter ASSIGNEE) all right, title and interest for the United States, its territories and possessions in and to his invention relating to

title of
invention

METHOD OF MAKING A PRINTED BOARD

as set forth in his/her United States Patent Application

check one

- executed concurrently herewith
 executed on November 24, 22 & 19, 1999
 Serial No. 09/422,119 Filed October 20, 1999

in and to said United States Patent Application including any and all divisions or continuations and Convention applications based in whole or in part on said invention or upon said application, including the right to make applications for Letters Patents throughout the world in respect to the invention and to claim priority under the International Convention for the Protection of Industrial Property, and in and to any and all Letters Patent of any country which may issue on any such application or for said invention, including any and all reissues, reexaminations, or extensions, to be held and enjoyed by said ASSIGNEE, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not be made;

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Each of the undersigned hereby grants the firm of **SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC** the power to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

names and
signatures
of
inventors

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