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James A. Oliff Registration No. 27,075 Eric D. Morehouse Registration No. 38,565

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Attorney Docket No. Please record the attached original document or copy thereof. Name and address of receiving party: Name of conveying parties: NGK INSULATORS, LTD. 1) Yukihito ICHIKAWA 2) Mitsuru MIYAMOTO 2-56, SUDA-CHO, MIZUHO-KU, NAGOYA-CITY, AICHI-PREFECTURE, 3) Shinya MORI 467-8530 JAPAN Additional name(s) of conveying party(ies) attached? ☐ Yes 🛛 No Additional name(s) & address(es) attached? Nature of conveyance: ☐Yes ☐ No Assignment Merger Change of Name Security Agreement Other _ Execution Date: All) June 1, 2005 This document is being filed together with a new application. Patent Application No.(s)_ Patent No.(s) Additional numbers attached?

Yes

No Title of Application: PLUGGED HONEYCOMB STRUCTURE AND METHOD OF MANUFACTURING THE SAME Name and address of party to whom correspondence Total number of applications and patents involved: 1 concerning document should be mailed: Name: James A. Oliff Total fee (37 CFR 3.41).....\$ 40.00 LLANDGRA 00000011 10537810 Enclosed (Check No. <u>167436</u>) Address: & Berridgé, plc Credit any overpayment or charge any underpayment to P.O. Box 19928 deposit account number 15-0461. Alexandria VA 22320 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. Date: June 7, 2005

Total number of pages including cover sheet, attachments, and document: $\underline{2}$

PATENT

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ASSIGNMENT

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Yukihito ICHIKAWA (5) (1)Mitsuru MIYAMOTO (6) (1-8)Insert (2)Name(s) Shinya MORI of Inventor(s) (7) (3)_ (8) _ (4)In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, each undersigned agrees to assign, and hereby does assign, transfer and set (9)Insert Name of NGK Insulators, Ltd. Assignee (9)(10)Insert Address of (10) 2-56, Suda-cho, Mizuho-ku, Nagoya-city,
Aichi-prefecture, 467-8530 Japan
(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, Assignee the entire right, title and interest for the United States of America as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, substitute, and reissue application(s), and all Letters Patent, extensions, reissues and reexamination certificates that may be granted on the invention known as PLUGGED HONEYCOMB STRUCTURE AND METHOD OF (11)Insert Identification MANUFACTURING THE SAME such as Title, Case Number, or Foreign Application Number (Attorney Docket No. for which the undersigned has (have) executed an application for patent in the United States of America on even date herewith or (12)Insert Date of Signing of (12) on ___ Application (13)Alternative (13) U.S. application Serial Number Identification for filed applications filed 1) Each undersigned agrees to execute all papers necessary in connection with any application and any continuing, divisional or reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary. 2) Each undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference. 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements. 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee. 5) Each undersigned authorizes and requests the Director of Patents to issue any and all Letters Patents of the United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he has full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreements in conflict herewith, and agrees that this assignment is binding on him and his heirs, successors, assigns and legal representatives. 6) Each undersigned hereby grants the firm of OLIFF & BERRIDGE, PLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document. In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s). Inventor Signature <u>Fishitol Chikawa</u> (SEAL)

Inventor Signature <u>mitauru miyamoto</u> (SEAL) June 1, 2005 Date June 1, 2005 Inventor Signature Shinya Mori (SEAL) June 1, 2005 Date Date Inventor Signature (SEAL) Date Inventor Signature (SEAL) Date Inventor Signature _____ (SEAL) Date Inventor Signature This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses who also sign here: Witness

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Date