

*MRD
10/15/99*

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

12-07-2000

Tsuguo FUKUDA et al.



Serial No.: 08/897,945

101536121

Filed: July 24, 1997

For: PROCESS FOR GROWING CRYSTALLINE SILICON PLATES, A
CRYSTALLINE SILICON PLATE-GROWTH APPARATUS, SUCH
CRYSTALLINE SILICON PLATES THEMSELVES, AND A PROCESS FOR
PRODUCING SOLAR CELL ELEMENTS

ASSIGNMENT TRANSMITTAL LETTER

Honorable Assistant Commissioner of
Patents and Trademarks
Washington, D.C. 20231

Sir:

Please record the attached Assignment in the name of the
assignor and the assignee as indicated below and return the
original document to the undersigned.

1. Name of Conveying Party(ies):

Tsuguo FUKUDA, Minoru IMAEDA and Yuichiro IMANISHI.

2. Name and Address of Receiving Party(ies):NGK INSULATORS, LTD.
2-56, Suda-Cho, Mizuho-Ku, Nagoya City, Aichi Pref., Japan.3. Execution Date of Assignment: August 12, 1997.4. If this Assignment is being filed together with a new
application, the execution date of the application is: August
12, 1997.*Charge 40.08*

5. Total number of applications and patents involved: one.

All correspondence should be addressed to:

Roger W. Parkhurst
PARKHURST & WENDEL, L.L.P.
Suite 210
1421 Prince Street
Alexandria, VA 22314-2805.

The Assignment recordation fee (\$40.00) is covered by our
attached Check Number 9699.

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. Total number of pages including
cover sheet, attachments and document three.

If there should be any questions concerning the amount of the
fee or should our check become detached, please debit or credit our
Deposit Account Number 16-0331 as needed in order to effect proper
filing of the attached document.

Respectfully submitted,

PARKHURST & WENDEL, L.L.P.

Oct 15, 1997
Date

Roger W. Parkhurst
Roger W. Parkhurst
Registration No. 25,177

RWP/ak
Attorney Docket No. NSUG:762

PARKHURST & WENDEL, L.L.P.
1421 Prince Street, Suite 210
Alexandria, Virginia 22314-2805
Telephone: (703) 739-0220

ASSIGNMENT

266
970
*

ASSIGNMENT

(1-8) Insert Name(s) of Inventor(s)

(1) Tsuguo FUKUDA (5) _____

(2) Minoru IMAEDA and (6) _____

(3) Yuichiro IMANISHI (7) _____ and

(4) _____ (8) _____

In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to

(9) Insert name of Assignee (9) NGK INSULATORS, LTD.

(10) Insert address of Assignee (10) of 2-56, Suda-Cho, Mizuho-Ku, Nagoya City, Aichi Pref., Japan

(hereinafter designated as the Assignee) the entire right, title and interest for the United States, its territories, dependencies and possessions, in the invention, and all applications for patent and any Letters Patent which may be granted therefor, known as

(11) Insert Identification of Invention, such as Title, Case Number or Foreign Application Number

(11) A PROCESS FOR GROWING CRYSTALLINE SILICON PLATES, A CRYSTALLINE SILICON PLATE-GROWTH APPARATUS, SUCH CRYSTALLINE SILICON PLATES THEMSELVES, AND A PROCESS FOR PRODUCING SOLAR CELL ELEMENTS (Case No. _____)

for which the undersigned has (have) executed an application for patent in the United States of America

(12) Insert Date of Signing of Application (12) on _____

(13) Alternative Identification for filed applications (13) U.S. application Serial Number 08/897,945
filed July 24, 1997

1) The undersigned agree(s) to execute all papers necessary in connection with the application and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

3) The undersigned agree(s) 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) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed and will not execute, any agreement in conflict herewith.

6) The undersigned hereby grant(s) the firm of PARKHURST, WENDEL & BURR the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office recordation of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date Aug. 12, 1997 Name of Inventor Tsuguo FUKUDA (SEAL)
Tsuguo FUKUDA

Date _____ Name of Inventor _____ (SEAL)

Date Aug. 12, 1997 Name of Inventor Minoru IMAEDA (SEAL)
Minoru IMAEDA

Date _____ Name of Inventor _____ (SEAL)

Date Aug. 12, 1997 Name of Inventor Yuichiro IMANISHI (SEAL)
Yuichiro IMANISHI

Date _____ Name of Inventor _____ (SEAL)

Date _____ Name of Inventor _____ (SEAL)

Date _____ Name of Inventor _____ (SEAL)

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:

Date Aug. 12, 1997 Witness Yoshiaki H. Arayama

Date Aug. 12, 1997 Witness Tsuguo FUKUDA