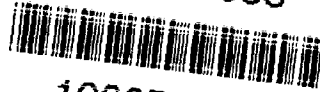


10-14-1998

EET



100850026

Attorney Docket
No.: 6154-76
(US-489)

9.29.98

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

1. Name of conveying party(ies):

Ryo Suzuki
Yuichiro Shindo
Tsuneo Suzuki

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

Japan Energy Corporation
10-1, Toranomon 2-chome
Minato-ku, Tokyo
JAPAN

3. Nature of conveyance:

- Assignment
- Security Agreement
- Other:
- Merger
- Change of Name

Execution Date: September 16, 1998



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: September 16, 1998

A. Patent Application No.(s):

B. Patent No.(s):

Additional numbers attached? Yes No

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

WILLIAM W. SCHWARZE
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Philadelphia, PA 19103-7086
Telephone: (215) 965-1270
Facsimile: (215) 567-2991
E-Mail: psjn@psjn.com

6. Total number of applications and patents involved: [1]

7. Total fee (37 CFR 3.41) Cal. 1 x \$40.00 = \$ 40.00

- Enclosed
- Authorized to be charged to deposit account

8. Deposit account number: 16-0235

10/13/1998 JSHADAZZ 00000026 160235 09162661

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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.

WILLIAM W. SCHWARZE
Name of Person Signing

William W. Schwarze
Signature

September 29, 1998
Date

Total number of pages including cover sheet, attachments and document: [3]

A S S I G N M E N T

WHEREAS, we,

Ryo Suzuki, a citizen of Japan, c/o Japan Energy Corporation,
17-35, Niizo Minami 3-chome, Toda-shi,
Saitama-ken, Japan

Yuichiro Shindo, a citizen of Japan, c/o Japan Energy Corporation,
17-35, Niizo Minami 3-chome, Toda-shi,
Saitama-ken, Japan

Tsuneo Suzuki, a citizen of Japan, c/o Japan Energy Corporation,
17-35, Niizo Minami 3-chome, Toda-shi,
Saitama-ken, Japan

have invented certain new and useful improvements in

$Ba_xSr_{1-x}TiO_{3-y}$ TARGET MATERIALS FOR SPUTTERING

for which we have on September 16, 1998 executed an application for
United States Letters Patent; and

WHEREAS, Japan Energy Corporation, a Japanese Corporation,
located at 10-1, Toranomom 2-chome, Minato-ku, Tokyo, Japan
(hereinafter called the "Assignee"), is desirous of acquiring the entire right,
title and interest in and to said application and the inventions and
improvements therein disclosed so far as the United States of America is
concerned.

NOW, THEREFORE, in good and valuable consideration paid to us by
said Assignee, receipt whereof is hereby acknowledged, we do hereby assign,
sell, transfer and set over unto said Assignee the entire right, title and
interest in and to said application and the inventions and improvements
therein disclosed for the United States and any Letters Patent which may
issue therefor in the United States and all divisions, re-issues, continuations,
renewals and/or extensions thereof, said Assignee to have and to hold the
interests herein assigned to the full ends of the terms of said Letters Patent
and any and all divisions, re-issues, continuations, renewals and/or
extensions thereof, respectively, a fully and entirely as the same would have
been held and enjoyed by us had this Assignment not been made.

The Commissioner of Patents and Trademarks is requested to issue such Letters Patent in accordance herewith. We covenant that we are the lawful owners of the said application, and of the right to make, use or sell the inventions and improvements disclosed therein within the United States and that we have the full right to make this Assignment.

And for the consideration aforesaid, we agree that we will communicate to said Assignee or the representatives thereof any facts known to us respecting the inventions and improvements of the said United States application and will, upon request, but without expense to us, testify in any legal proceedings, sign all lawful papers, execute all divisional, re-issue, continuation, renewal and/or extension applications, make all rightful oaths, and generally do all other and further lawful acts deemed necessary or expedient by said Assignee or by counsel for said Assignee, to assist or enable said Assignee to obtain and enforce full benefits from the rights and interest herein assigned. This Assignment shall be binding upon our heirs, executors, administrators and/or assigns, and shall inure to the benefit of the heirs, executors, administrators, successors, and/or assigns, as the case may be, of said Assignee.

Executed at Saitama,

this 16th day of September, 1998

Ryo Suzuki
Ryo Suzuki

Executed at Saitama,

this 16th day of September, 1998

Yuichiro Shindo
Yuichiro Shindo

Executed at Saitama,

this 16th day of September, 1998

Tsuneo Suzuki
Tsuneo Suzuki