

12-27-2000



101563429

Director of the U.S. Patent  
and Trademark Office  
Box Assignments  
Washington, D.C. 20231

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

1073-00

Attorney Docket No. 106845

To the Director of the U.S. Patent and Trademark Office: Please record the attached original document or copy thereof.

1. A. Name of conveying party(ies):

- 1) Yasuki NAMIKI
- 2) Masatoshi KOBAYASHI
- 3) Akira KIDOGUCHI
- 4) Hidenobu ITOH
- 5) Masataka HIRAIDE
- 6) Kunihiro IMADA
- 7) Kenji INOKUCHI

B. Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

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

SUMITOMO METAL INDUSTRIES, LTD.  
5-33, KITAHAMA, 4-CHOME, CHUO-KU  
OSAKA-SHI, OSAKA 541-0041  
JAPAN

3. A. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date: 1) August 30, 2000; 2) September 2, 2000; 3) September 22, 2000; 4) September 22, 2000; 5) September 25, 2000; 6) September 14, 2000; 7) September 8, 2000.

B. Additional name(s) & address(es) attached?

☒ Yes ☐ No

4. A. If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

B. Patent Application No.(s) 09/623,753

C. Patent No.(s) \_\_\_\_\_

Additional numbers attached? ☐ Yes ☒ No

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

Name: James A. Oliff

Address: OLIFF & BERRIDGE, PLC  
P.O. Box 19928  
Alexandria, VA 22320

6. Total number of applications and patents involved: 1

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

B. Enclosed (Check No. 112774)

8. Credit any overpayment or charge any underpayment to deposit account number 15-0461.

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.

James A. Oliff Registration No. 27,075  
Thomas J. Pardini Registration No. 30,411

Date: October 13, 2000

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

ADDITIONAL ASSIGNEES

- 2) IDEMITSU KOSAN CO., LTD.  
1-1, Marunouchi 3-chome, Chiyoda-ku, Tokyo 100-8321 JAPAN
- 3) NIPPON STEEL CORPORATION  
6-3, Otemachi 2-chome, Chiyoda-ku, Tokyo 100-8071 JAPAN
- 4) CHIYODA CORPORATION  
12-1, Tsurumichuo 2-chome, Tsurumi-ku, Yokohama-shi, Kanagawa 230-8601 JAPAN
- 5) NKK CORPORATION  
1-2, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8202 JAPAN
- 6) MITSUI ENGINEERING & SHIPBUILDING CO., LTD.  
6-4, Tsukiji 5-chome, Chou-ku, Tokyo 104-8439 JAPAN
- 7) MITSUBISHI HEAVY INDUSTRIES, LTD.  
5-1, Marunouchi 2-chome, Chiyoda-ku, Tokyo 100-8315 JAPAN
- 8) JAPAN ENERGY CORPORATION  
10-1, Toranomom 2-chome, Minato-ku, Tokyo 105-8407 JAPAN
- 9) SUMITOMO METAL MINING CO., LTD.  
11-3, Shimbashi 5-chome, Minato-ku, Tokyo 105-0004 JAPAN
- 10) ASAHI KASEI KOGYO KABUSHIKI KAISHA  
2-6, Dojimahama 1-chome, Kita-ku, Osaka-shi, Osaka 530-8205 JAPAN
- 11) SUMITOMO COAL MINING CO., LTD.  
20-4, Nishi-shimbashi 3-chome, Minato-ku, Tokyo 105-8425 JAPAN
- 12) THE JAPAN STEEL WORKS, LTD.  
1-2, Yurakucho 1-chome, Chiyoda-ku, Tokyo 100-0006 JAPAN
- 13) YOKOGAWA ELECTRIC CORPORATION  
9-32, Nakacho 2-chome, Musashino-shi, Tokyo 180-8750 JAPAN

# ASSIGNMENT

(1-8) Insert Name(s) of Inventor(s)	(1) <u>Yasuki NAMIKI</u> (2) <u>Masatoshi KOBAYASHI</u> (3) <u>Akira KIDOGUCHI</u> (4) <u>Hidenobu ITOH</u>	(5) <u>Masataka HIRAIDE</u> (6) <u>Kunihiro IMADA</u> (7) <u>Kenji INOKUCHI</u> (8) _____
-------------------------------------	--	--

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 over to

(9) Insert Name of Assignee (10) Insert Address of Assignee	(9) <u>SUMITOMO METAL INDUSTRIES, LTD.</u> (10) <u>5-33, Kitahama 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0041 Japan</u> * SEE ATTACHED FOR ADDITIONAL ASSIGNEES
--	---

(hereinafter designated as the Assignee) and Assignee's heirs, successors, assigns and legal representatives, 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

(11) Insert Identification such as Title, Case Number, or Foreign Application Number	(11) <u>METHOD OF ESTIMATING REACTION PRODUCT IN COAL LIQUEFYING REACTION</u> _____ (Attorney Docket No. <u>106845</u> )
--	--

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 Application (13) Alternative Identification for filed applications	(12) on _____ (13) U.S. application Serial Number <u>09/623,753</u> filed <u>September 8, 2000</u>
--	--

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).

Date <u>August 30 2000</u>	Inventor Signature <u>Yasuki Namiki</u> (Yasuki NAMIKI) (SEAL)
Date <u>September 2 2000</u>	Inventor Signature <u>Masatoshi Kobayashi</u> (Masatoshi KOBAYASHI) (SEAL)
Date <u>September 22 2000</u>	Inventor Signature <u>Akira Kidoguchi</u> (AKIRA KIDOGUCHI) (SEAL)
Date <u>September 22 2000</u>	Inventor Signature <u>Hidenobu Itoh</u> (Hidenobu ITOH) (SEAL)
Date <u>September 25 2000</u>	Inventor Signature <u>Masataka Hiraide</u> (Masataka HIRAIDE) (SEAL)
Date <u>September 14 2000</u>	Inventor Signature <u>Kunihiro Imada</u> (Kunihiro IMADA) (SEAL)
Date <u>September 8 2000</u>	Inventor Signature <u>Kenji Inokuchi</u> (Kenji INOKUCHI) (SEAL)
Date _____	Inventor Signature _____ (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 <u>Oct. 5 2000</u>	Witness <u>Kazuhiko Isogai</u>
Date <u>Oct. 5, 2000</u>	Witness <u>Keiji Hasegawa</u>

RECORDED: 10/13/2000

PATENT  
REEL: 011373 FRAME: 0763