

12-22-09

A/D 581.40

IAP10Rec'd PCT 22 DEC 2009

12/452223

Form PTO-1595 (Rev. 03-01-01) OMB No. 0651-0027 (exp. 03-31-05)

12-29-2009

U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office



103584649

COVER SHEET ONLY

the attached documents or the new address(es) below.

**1. Name of conveying party(ies):**  
 Shinkichi Shimizu (12/09/2009), Firoz Alam Chowdhury (12/09/2009), Hiromichi Okabe (12/09/2009), and Kazuya Goto (12/09/2009)

Additional name(s) of conveying party(ies) attached?  Yes  No

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

Name: RESEARCH INSTITUTE OF INNOVATIVE TECHNOLOGY FOR THE EARTH

Internal Address: \_\_\_\_\_

Street Address: \_\_\_\_\_

9-2, Kizugawadai, Kizugawa-shi  
 Kyoto 6190292, JAPAN

City: \_\_\_\_\_

State: \_\_\_\_\_

Country: \_\_\_\_\_ Zip: \_\_\_\_\_

Additional name(s) & address(es) attached?  Yes  No

**3. Nature of conveyance/Execution Date(s):**

Execution Date(s): in parentheses after inventor name

Assignment  Merger  Change of Name

Security Agreement  Joint Research Agreement

Government Interest Assignment

Executive Order 9424, Confirmatory License

Other \_\_\_\_\_

**4. Application or patent number(s):**  This document is being filed together with a new application.

A. Patent Application No.(s)  
 This application  
 12 45 22 23

B. Patent No.(s)

Additional numbers attached?  Yes  No

Yes  No

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

Name: James E. Armstrong, IV  
 EDWARDS ANGELL PALMER & DODGE LLP

Internal Address: Atty. Dkt.: 85407(302610)  
 Street Address: P.O. Box 55874

City: Boston  
 State: MA Zip: 02205

Phone Number: (202) 478-7375  
 Fax Number: (866) 658-1050  
 Email Address: jarmstrong@eapdlaw.com

**6. Total number of applications and patents involved:** 1

**7. Total fee (37 CFR 1.21(h) & 3.41)** \$ 40.00

Authorized to be charged to deposit account

Enclosed

None required (government interest not affecting title)

**8. Payment Information**

Deposit Account Number 04-1105  
 Authorized User Name James E. Armstrong, IV

**9. Signature:**

Signature  
 James E. Armstrong, IV - 42,266  
 Name of Person Signing

12/24/2009 LNUELLER 06510022 041105 12452223

01 FC:8021 40.00 DA  
 December 22, 2009

Date

Total number of pages including cover sheet, attachments, and documents: 4

## ASSIGNMENT BY INVENTOR

**THIS ASSIGNMENT**, made this \_\_\_\_\_ day of \_\_\_\_\_, by  
1) Shinkichi SHIMIZU, 2) Firoz Alam CHOWDHURY, 3) Hiromichi OKABE, and 4)  
Kazuya GOTO (hereinafter referred to as Assignor), residing at 1)-4) c/o RESEARCH  
INSTITUTE OF INNOVATIVE TECHNOLOGY FOR THE EARTH, 9-2, Kizugawadai,  
Kizugawa-shi, Kyoto 6190292, Japan;

**WHEREAS**, Assignor has invented certain new and useful improvements in  
METHOD FOR EFFICIENTLY RECOVERING CARBON DIOXIDE IN GAS, set forth in  
a Patent application for Letters Patent of the United States, filed herewith or if not filed  
herewith, being earlier filed on \_\_\_\_\_ and having Serial  
No. \_\_\_\_\_; and

**WHEREAS**, RESEARCH INSTITUTE OF INNOVATIVE TECHNOLOGY FOR THE  
EARTH, a Juridical Person organized under and pursuant to the laws of Japan having  
its principal place of business at 9-2, Kizugawadai, Kizugawa-shi, Kyoto 6190292,  
Japan (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title  
and interest in and to said inventions and said Application for Letters Patent of the  
United States, and in and to any Letters Patent of the United States to be obtained  
therefore and thereon.

**NOW, THEREFORE**, in consideration of One Dollar (\$1.00) and other good and  
sufficient consideration, the receipt of which is hereby acknowledged, Assignor has sold,  
assigned, transferred and set over, and by these presents does sell, assign, transfer  
and set over, unto Assignee, its successors, legal representatives and assigns, the  
entire right, title and interest in and to the above-mentioned inventions and application  
for Letters Patent, and in and to any and all direct and indirect divisions, continuations  
and continuations-in-part of said application, and any and all Letters Patent in the  
United States and all foreign countries which may be granted therefore and thereon,  
and reissues, reexaminations and extensions of said Letters Patent, and all rights under  
the International Convention for the Protection of Industrial Property, the same to be  
held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its  
successors, legal representatives and assigns, to the full end of the term or terms for  
which Letters Patent may be granted and/or extended, as fully and entirely as the same  
would have been held and enjoyed by Assignor, had this sale and assignment not been  
made.

**AND** for the same consideration, Assignor hereby represents and warrants to Assignee,  
its successors, legal representatives and assigns, that, at the time of execution and  
delivery of these presents, except for any rights, titles and/or interests that have arisen  
to Assignee under law or that have already been transferred to Assignee, Assignor is  
the sole and lawful owner of the entire right, title and interest in and to the said  
inventions and application for Letters Patent above-mentioned, and that the same are  
unencumbered and that Assignor has good and full right and lawful authority to sell and  
convey the same in the manner herein set forth.

**AND** for the same consideration, Assignor hereby covenants and agrees to and with Assignee, its successors, legal representatives and assigns, that Assignor will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

**AND** Assignor hereby requests the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

**AND** Assignor hereby grants the following individuals 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 for recordation of this document:

**EDWARDS ANGELL PALMER & DODGE LLP**

All practitioners at Customer Number 21874

**AND** Assignor acknowledges an obligation of assignment of this invention to Assignee at the time the invention was made.

December 9, 2009  
Date

Shinkichi Shimizu  
Name: Shinkichi SHIMIZU

December 9, 2009  
Date

Firoz Alam Chowdhury  
Name: Firoz Alam CHOWDHURY

December 9, 2009  
Date

Hiromichi Okabe.  
Name: HIROMICHI OKABE

December 9, 2009  
Date

Kazuya Goto  
Name: KAZUYA GOTO