

Form PTO-1595

RECORDATION FORM COVER SHEET

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

PATENTS ONLY

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

1. Name of conveying party(ies)

- 1. Yung-An CHAO
- 2. Shengyi SI
- 3. Frank D. POPA

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

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

Name: Westinghouse Electric Co. LLC  
 Street Address: Law Department - IPS  
 P.O. Box 355  
 Pittsburgh, PA 15230-0355

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

3. Nature of conveyance:

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

Execution Date: 5/10/03; 5/20/03; 5/9/03

4. Application number(s) or patent number(s): 10/374,691

Filing Date: 2/25/03

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached? Yes  No

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

Name: Patricia Leshnock  
 Internal Address: Westinghouse Electric Co. LLC  
 Law Department - IPS  
 Energy Center - Room 205E  
 Street Address: 4350 Northern Pike  
 Monroeville, PA 15146-2866

6. Total number of applications and patents involved: 1

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

Enclosed  
 Authorized to be charged to deposit account

8. Deposit account number: 50-0947  
(Attach duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

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.

Patricia Leshnock  
Name of Person Signing

*Patricia Leshnock*  
Signature

6/3/03  
Date

Total number of pages including cover sheet, attachments, and document: 1

Docket No. ARF2002-017

ASSIGNMENT

In accordance with existing Employee Intellectual Property Agreement(s) and/or other undertakings, entered into for good and valuable consideration, receipt of which is hereby acknowledged, I, Yung-An CHAO, residing at 5391 Northumberland St., Pittsburgh, PA 15217; Shengyi SI, residing at Building 35, Apt. 1305, 85 Guilin Street West, Shanghai 200233, Peoples Republic of China; and Frank D. POPA, residing at 3519 Ivy Drive, Murrysville, PA 15668; hereby sell and assign to WESTINGHOUSE ELECTRIC COMPANY LLC, a Limited Liability Company organized and existing under the laws of the state of Delaware, U.S.A., having its principal place of business at 4350 Northern Pike, Monroeville, Pennsylvania 15146-2866, U.S.A., its successors, assigns, nominees, or other legal representatives, the entire right, title and interest in and to the invention in METHOD OF ESTABLISHING A NUCLEAR REACTOR CORE FUEL ASSEMBLY LOADING PATTERN invented by me and the application for United States patent therefor, executed on the

\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_;  
\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_;  
\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_;

and all original and reissued patents granted therefor, and all divisions and continuations thereof, including the subjects-matter of any and all claims which may be obtained in every such patent, and the right to apply for and obtain patents and Utility Model Registrations in countries foreign to the United States, and in and to any Letters Patent or Utility Model Registration which may be granted thereon in such foreign countries, and authorize and request the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue the said Letters Patent or Utility Model Registration to the said WESTINGHOUSE ELECTRIC COMPANY LLC its successors, assigns, nominees or other legal representatives, as assignee of the entire interest, and covenant that I have full right to convey the entire interest herein assigned and that I have not executed and will not execute any agreement in conflict herewith, and agree that I will communicate to said Company, its successors, assigns, nominees or other legal representatives, all facts known to me respecting said invention, whenever requested, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and do all lawful acts requisite for the application for such divisional, continuing or reissue applications, or the procuring thereof, and that if and when said WESTINGHOUSE ELECTRIC COMPANY LLC its successors, assigns, nominees or other legal representatives desire to file a disclaimer relating thereto, I will, upon request, sign all lawful papers requisite for the filing of such disclaimer, and I further covenant and agree that I will, at any time upon request, do everything legally possible to aid said Company, its successors, assigns, nominees or other legal representatives, either in its or their own name, to apply for, obtain and enforce proper patent and/or Utility Model protection for said invention in all countries, all without further consideration but at the expense of said WESTINGHOUSE ELECTRIC COMPANY LLC its successors, assigns, nominees or other legal representatives.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Yung-An CHAO

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 20 day of May, 2003.

Shengyi SI  
\_\_\_\_\_  
Shengyi SI

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
Frank D. POPA

Docket No. ARF2002-017

ASSIGNMENT

In accordance with existing Employee Intellectual Property Agreement(s) and/or other undertakings, entered into for good and valuable consideration, receipt of which is hereby acknowledged, I, Yung-An CHAO, residing at 5391 Northumberland St., Pittsburgh, PA 15217; Shengyi SI, residing at Building 35, Apt. 1305, 85 Guilin Street West, Shanghai 200233, Peoples Republic of China; and Frank D. POPA, residing at 3519 Ivy Drive, Murrysville, PA 15668; hereby sell and assign to WESTINGHOUSE ELECTRIC COMPANY LLC, a Limited Liability Company organized and existing under the laws of the state of Delaware, U.S.A., having its principal place of business at 4350 Northern Pike, Monroeville, Pennsylvania 15146-2866, U.S.A., its successors, assigns, nominees, or other legal representatives, the entire right, title and interest in and to the invention in METHOD OF ESTABLISHING A NUCLEAR REACTOR CORE FUEL ASSEMBLY LOADING PATTERN invented by me and the application for United States patent therefor, executed on the

10 day of May, 2003;

day of \_\_\_\_\_, 20\_\_\_\_;

9<sup>th</sup> day of May, 2003;

and all original and reissued patents granted therefor, and all divisions and continuations thereof, including the subjects-matter of any and all claims which may be obtained in every such patent, and the right to apply for and obtain patents and Utility Model Registrations in countries foreign to the United States, and in and to any Letters Patent or Utility Model Registration which may be granted thereon in such foreign countries, and authorize and request the Commissioner of Patents and Trademarks of the United States, and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue the said Letters Patent or Utility Model Registration to the said WESTINGHOUSE ELECTRIC COMPANY LLC its successors, assigns, nominees or other legal representatives, as assignee of the entire interest, and covenant that I have full right to convey the entire interest herein assigned and that I have not executed and will not execute any agreement in conflict herewith, and agree that I will communicate to said Company, its successors, assigns, nominees or other legal representatives, all facts known to me respecting said invention, whenever requested, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and do all lawful acts requisite for the application for such divisional, continuing or reissue applications, or the procuring thereof, and that if and when said WESTINGHOUSE ELECTRIC COMPANY LLC its successors, assigns, nominees or other legal representatives desire to file a disclaimer relating thereto, I will, upon request, sign all lawful papers requisite for the filing of such disclaimer, and I further covenant and agree that I will, at any time upon request, do everything legally possible to aid said Company, its successors, assigns, nominees or other legal representatives, either in its or their own name, to apply for, obtain and enforce proper patent and/or Utility Model protection for said invention in all countries, all without further consideration but at the expense of said WESTINGHOUSE ELECTRIC COMPANY LLC its successors, assigns, nominees or other legal representatives.

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 10<sup>th</sup> day of

May, 2003.

Yung-An Chao  
Yung-An CHAO

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

Shengyi SI

IN TESTIMONY WHEREOF, I have hereunto set my hand and seal this 9<sup>th</sup> day of

May, 2003.

Frank D. Popa  
Frank D. POPA

PATENT

RECORDED: 06/03/2003

REEL: 013702 FRAME: 0012