03-22-2002 Form PTO-1595 PATE EET U.S. DEPARTMENT OF COMMERCE 1-31-92 102027190 To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof Name of conveying party(ies): Name and address of receiving 2. Kenneth B. Anderson party(ies): Kathleen Carrado-Gregar Name: The University of Chicago Christopher L. Marshall Internal Address: Scott R. Segal Additional name(s) of conveying party(ies) attached? ⊠ No Street Address: 5801 South Ellis Avenue 3. Nature of conveyance: City: Chicago State: Illinois ZIP: 60637 ■ Merger ☐ Security Agreement ☐ Change of Name Additional name(s) & address(es) attached: ☐ Yes ☒ No □ Other Execution Date: March 8 and 9, 2002 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: March 8 and 9, 2002 Patent No.(s) a. Patent Application No.(s) ANL-IN-96-103 Additional numbers attached? Yes 5. Name and address of party to whom correspondence concerning document should be mailed: 6. Total number of applications and patents involved: 1 Joan Pennington Name: 7. Total fee (37 CFR 3.41)..... \$ 40.00 Internal Address: Unit 1804 **Enclosed** Authorized to be charged to deposit account Street Address: 8. Deposit account number: 535 North Michigan Avenue 50-1048 of Joan Pennington 60611 State: IL -ZIP: City: Chicago (Attach duplicate copy of this page if paying by deposit account)

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To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy 9. Statement and signature. of the original document. Joan Pennington

Signature

Name of Person Signing

Date

Total number of pages: 3

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ASSIGNMENT

We, Kenneth B. Anderson of Lisle, Illinois, Kathleen-Carrado-Gregor of Naperville, Illinois, and Christopher L. Marshall of Naperville, Illinois, for good and valuable considerations to us in hand paid. the receipt and sufficiency whereof is hereby acknowledged, have sold, assigned, conveyed and set over, and do hereby sell, assign, convey and set over unto THE UNIVERSITY OF CHICAGO, an Illinois corporation, organized under the laws of the State of Illinois, having a place of business at 5801 South Ellis Avenue, Chicago, Illinois 60637, its successors and assigns, the entire right, title and interest in and to all subject matter invented or designed by us and disclosed in the patent application for the PROCESS FOR IN-SITU PRODUCTION OF HYDROGEN (H2) BY ALCOHOL DECOMPOSITION FOR EMISSION REDUCTION FROM INTERNAL COMBUSTION, ANL Case No. ANL-IN-96-103, executed by us on the date hereinafter set forth, and any divisions and continuations thereof and in and to all Letters Patent of the United States, including any reissues and extensions thereof that may be obtained therefor, and the right, where such right can be legally exercised, in its own name to apply for and obtain Letters Patent, Inventor's Certificates, Utility Models and Designs, in countries foreign to the United States, including the full right to claim for any such application the benefits of the International Convention as fully and entirely as we could have done if the application had been in our names, and the entire interest in any Letters Patent, Inventor's Certificate, Utility Model or Design which may be granted on any such application in such foreign country; and we hereby 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 Letters Patent, Inventors Certificates, Utility Models or Designs, on applications as aforesaid, to issue any and all Letters Patent, Inventor's Certificates, Utility Models and Designs that may be granted for said invention to said UNIVERSITY OF CHICAGO, its successors and assigns.

And for the above-named considerations, we hereby agree that we will without additional compensation but without cost to ourselves, promptly communicate to said UNIVERSITY OF CHICAGO, its successors and assigns, any facts known to us respecting said invention whenever requested, and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuing and reissue applications for Letters Patent, Inventor's Certificates, Utility Models and Designs and assignments thereof, make all rightful oaths and generally do everything possible to aid said assignee, its successors and assigns, as and when requested by them, in obtaining and enforcing proper Letters Patents, Inventor's Certificate, Utility Model and Design protection for said invention or inventions and improvements, in the United States and in all other countries.

rr-		
Kenneth B. Anderson Date	Jendra A. Classen Witness	3/8/02 Date
Kathleen Carrado-Gregar Date	Sandra a. ClesserWitness	3/8/¢ 2 Date
Christopher L. Marshall Date	Handes A. Classon Witness	3/8/02 Date

PATENT REEL: 012693 FRAME: 0893

ASSIGNMENT

I, Scott R. Segal of Endwell, New York, for good and valuable considerations to me in hand paid, the receipt and sufficiency whereof is hereby acknowledged, have sold, assigned, conveyed and set over, and do hereby sell, assign, convey and set over unto THE UNIVERSITY OF CHICAGO, an Illinois corporation, organized under the laws of the State of Illinois, having a place of business at 5801 South Ellis Avenue, Chicago, Illinois 60637, its successors and assigns, the entire right, title and interest in and to all subject matter invented or designed by us and disclosed in the patent application for the PROCESS **PRODUCTION IN-SITU** OF HYDROGEN (H_2) BYALCOHOL DECOMPOSITION FOR EMISSION REDUCTION FROM INTERNAL COMBUSTION ENGINES, ANL Case No. ANL-IN-96-103, executed by me on the date hereinafter set forth, and any divisions and continuations thereof and in and to all Letters Patent of the United States, including any reissues and extensions thereof that may be obtained therefor. and the right, where such right can be legally exercised, in its own name to apply for and obtain Letters Patent, Inventor's Certificates, Utility Models and Designs, in countries foreign to the United States, including the full right to claim for any such application the benefits of the International Convention as fully and entirely as I could have done if the application had been in my name, and the entire interest in any Letters Patent, Inventor's Certificate, Utility Model or Design which may be granted on any such application in such foreign country; and I hereby 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 Letters Patent, Inventors Certificates, Utility Models or Designs, on applications as aforesaid, to issue any and all Letters Patent, Inventor's Certificates, Utility Models and Designs that may be granted for said invention to said UNIVERSITY OF CHICAGO, its successors and assigns.

And for the above-named considerations, I hereby agree that I will without additional compensation but without cost to myself, promptly communicate to said UNIVERSITY OF CHICAGO, its successors and assigns, any facts known to me respecting said invention whenever requested, and testify in any legal proceedings, sign all lawful papers, execute all divisional, continuing and reissue applications for Letters Patent, Inventor's Certificates, Utility Models and Designs and assignments thereof, make all rightful oaths and generally do everything possible to aid said assignee, its successors and assigns, as and when requested by them, in obtaining and enforcing proper Letters Patents, Inventor's Certificate, Utility Model and Design protection for said invention or inventions and improvements, in the United States and in all other countries.

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