01-07-2005

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Form PTO-1595 (Rev. 06/04) OMB No. 0651-0027 (exp. 6/30/2005)

RECORDATION FC

PATENIS

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To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below 1. Name of conveying party(ies)/Execution Date(s): 2. Name and address of receiving party(ies) Name: UT-Battelle LLC John S. Hsu Internal Address: Execution Date(s) December 20, 2004 Street Address: Oak Ridge National Laboratory Additional name(s) of conveying party(ies) attached? Yes V No Post Office Box 2008 3. Nature of conveyance: City: Oak Ridge ✓ Assignment Merger Change of Name J Security Agreement State: Tennessee Government Interest Assignment Country: USA Zip: 37831-6498 Executive Order 9424, Confirmatory License Other Additional name(s) & address(es) attached? Yes Vo 4. Application or patent number(s): This document is being filed together with a new application. B. Patent No.(s) A. Patent Application No.(s) Additional numbers attached? Yes No 5. Name and address to whom correspondence 6. Total number of applications and patents concerning document should be mailed: involved: Name: Michael J. McGovern 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40 Internal Address:____ Authorized to be charged by credit card Authorized to be charged to deposit account Street Address: Quarles & Brady LLP Enclosed 411 E. Wisconsin Avenue None required (government interest not affecting title) City: Milwaukee 8. Payment Information State: WI a. Credit Card Last 4 Numbers Zip: 53202 Expiration Date 414-277-5725 Phone Number: b. Deposit Account Number 17-0055 414-271-3552 Fax Number: Authorized User Name Qualres & Brady LLP mjm@quarles.com Email Address: 9. Signature: December 21, 2004 Signature Date Michael J. McGovern Total number of pages including cover sheet, attachments, and documents: Name of Person Signing

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Docket Number: 920976,00020

01/06/2005 NGETACHE 00000077 170055 11019075

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PATENT

REEL: 016121 FRAME: 0668

Doc. No.: 5674368

ASSIGNMENT

WHEREAS, I, the below-named inventor whose residence and post office is as stated below, have invented certain new and useful improvements in a

PERMANENT MAGNET MACHINE AND METHOD WITH RELUCTANCE POLES FOR HIGH STRENGTH UNDIFFUSED BRUSHLESS OPERATION

for which an application for United States Letters Patent was executed by us on even date herewith, and

WHEREAS, UT-Battelle LLC, a limited liability company organized and existing under the laws of the State of Tennessee, having an office at Oak Ridge National Laboratory, Post Office Box 2008, Oak Ridge, Tennessee 37831-6498, hereinafter called the ASSIGNEE, is desirous of acquiring the entire right, title and interest in the application and invention and to any Letters Patent that may be granted therefor in the United States of America and in any and all foreign countries.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby assign to ASSIGNEE the entire right, title and interest in the application and the invention, to all rights of priority thereto pursuant to the International Convention for the Protection of Industrial Property, and in any Letters Patent on the invention that may be granted in the United States of America and in any and all foreign countries, including any and all Letters Patent that are divisions, reissues, continuations, substitutions or extensions of any Letters Patent or applications therefor on the invention.

I hereby authorize and request the Director of the United States Patent and Trademark Office and the officials of any and all foreign countries to issue any and all of said Letters Patent, when granted, to the ASSIGNEE.

Further, I hereby agree to communicate to said ASSIGNEE or its representatives any facts known to me respecting said invention, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, substitution, renewal and reissue applications, to execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, and to make all rightful oaths and generally do everything possible to aid said ASSIGNEE and its representatives to obtain and enforce proper protection for said invention in the United States of America and in any and all foreign countries.

I further agree that the terms, covenants and conditions of this assignment shall inure to the benefit of ASSIGNEE, its successors, assigns, and legal representatives, and shall be binding on me, my heirs, legal representatives, and assigns.

Full name of first inventor:

John S. Hsu

Signature:

Residence:

Oak Ridge, TN

Post Office Address:

139 Marietta Circle, Oak Ridge, TN 37830

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PATENT REEL: 016121 FRAME: 0669

Docket No. 920976.00020 (ID 1452.1)

State of Termessee
County of Anderson)
On this day of, 2004, before me, a Notary Public in and for the County and State aforesaid, appeared, John S. Hsu to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.
WITNESS my hand and seal the day and year last above given.
Dane Lawe
Notary Public
SEAL My Commission Expires: 12-27-05
SEAL
My Commission Expires:

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RECORDED: 12/21/2004

PATENT REEL: 016121 FRAME: 0670