05-02-2002

Form **PTO-1595** RECO (Rev. 03/01)

S. DEPARTMENT OF COMMERCE

OMB No. 0651-0027 (exp. 5/31/2002)	201211
Tab settings ⇔ ⇔ ▼ ▼ ▼	Y Y Y
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 party(ies)
Colin Ramshaw	Name: _University of Newcastle
Rosham Jeet Jee Jachuck 4- 27 -02	(a higher education institution incorporated in England) Internal Address:
	internal Address.
Additional name(s) of conveying party(ies) attached? Yes Vo	
3. Nature of conveyance:	
Assignment Merger	
Security Agreement Change of Name	Street Address: 6 Kensington Terrace
Other	
	Newcastle upon Tyne NE1 RU, UK
False 4 17 2-22	City:State:Zip:
Execution Date: February 17, 2000	Additional name(s) & address(es) attached? Yes 🗸 No
4. Application number(s) or patent number(s):	
If this document is being filed together with a new appli	cation, the execution date of the application is:
A. Patent Application No.(s) 09/913,903	B. Patent No.(s)
Additional numbers attached? Yes No	
5. Name and address of party to whom correspondence	6. Total number of applications and patents involved:
concerning document should be mailed:	7. Total fee (37 CFR 3.41)\$_40
Name:	
Internal Address:	✓ Enclosed
GARVEY, SMITH, NEHRBASS & DOODY, L.L.C.	Authorized to be charged to deposit account
GARVET, SIVITITI, INCHREDAGG & DOODT, E.E.O.	any deficiencies
	8. Deposit account number:
Street Address: 3838 N. Causeway Blvd.	and the second s
	50-0694
Suite 3290	
City: Metairie State: LA Zip: 70002	
,	THIS SPACE
DO NOT USE THIS SPACE	
9. Signature.	~ 100
9. Signature.	21AS ululna
9. Signature. BRETT A. NORTH	3 1/11/02 17/11/02
BRETT A. NORTH Name of Person Signing	Signature Per sheet, attachments, and documents: 2 Date

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Mail documents to be recorded with required

Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

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PATENT REEL: 012840 FRAME: 0248

ASSIGNMENT

WHEREAS, we, Colin RAMSHAW and Rosham Jeet Jee JACHUCK, are the inventors of an invention entitled "ROTATING SURFACE OF REVOLUTION REACTOR WITH SHEARING MECHANISMS", a Patent Cooperation Treaty Patent Application for which having been filed on 17 February 2000, and bearing Serial No. PCT/GB00/00523; and,

WHEREAS, UNIVERSITY OF NEWCASTLE, (hereinafter "ASSIGNEE"), a higher education institution incorporated in England, is desirous of acquiring the entire right, title and interest in and to the aforesaid invention throughout the world, and all right, title and interest in, to and under any and all Letters Patent of the United Kingdom and all other countries throughout the world;

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to me in hand paid by ASSIGNEE and for other good and valuable considerations, the receipt of which is hereby acknowledged, effective 17 February 2000 we hereby sell, assign, transfer and set over to ASSIGNEE all right, title and interest in and to the said invention throughout the world, and said application for U.S. Letters Patent and any and all divisions, continuations, continuations-in-part, and reissues thereof, and any and all Letters Patent of the United States and foreign countries which may be granted therefor, the same to be held and enjoyed by ASSIGNEE for its own use and benefit, and for the use and benefit of its successors, assigns or other legal representatives, to the end of the term or terms for which said Letters Patent of the United States or foreign countries are or may be granted or reissued, as fully and entirely as the same would have been held and enjoyed by me if this assignment and sale had not been made.

And we hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all Letters Patent of the United States on said invention or resulting from said application and from any and all divisions, continuations, continuations-in-part, and reissues thereof, to ASSIGNEE as assignee of my entire interest, and hereby covenant that I have the full right to convey the entire interest herein assigned, and that I have not executed and will not execute any agreement in conflict herewith.

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PATENT REEL: 012840 FRAME: 0249 And we further hereby covenant and agree that we will, at any time, upon request, execute and deliver any and all papers that may be necessary or desirable to perfect the title of said invention and to such Letters Patent as may be granted therefor, to ASSIGNEE, its successors, assigns, or other legal representatives and that if ASSIGNEE, its successors, assigns or other legal representatives shall desire to file any divisional or continuation applications or to secure a reissue of such Letters Patent, or to file a disclaimer relating thereto, will upon request, sign all papers, make all rightful oaths and do all lawful acts requisite for the filing of such divisional, continuation, or continuation-in-part application, or such application for reissue and the procuring thereof, and for the filing of such disclaimer, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

And we do further covenant and agree that I will, at any time upon request, communicate to ASSIGNEE, its successors, assigns or other legal representatives, such facts relating to said invention and Letters Patent or the file history thereof as may be known to me, and testify as to the same in any interference or other litigation when requested so to do, without further compensation but at the expense of said assignee, its successors, or other legal representatives.

Colin RAMSHAW

Roshan Jeet Jee JACHUCK

RECORDED: 04/22/2002