Commissioner for Patents Form PTO-1595 (Rev. 03/01)

05-28-2004



Alexandria, VA 22313-1450 U.S. DEPARTMENT OF COMMERCE

U.S. PATENT AND TRADEMARK OFFICE To the honorable Commissioner of Patents and Trademarks: Please record the attached original document or copy thereof: 2. Name and Address of Receiving Party(ies): 1. Name of Conveying Party(ies): Mouafak Arif Zaher United Institute of Technology Street Address: 47 Grande Avenue 5.25-04 Street Address: City: Mt. Albert, Auckland Postal Code: State/Country: **New Zealand** Additional name(s) and addresses attached? Yes No Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of Conveyance: ☐ Change of Name Assignment ☐ Other: **Execution Date:** 11032003 ☐ Merger 4. Application Number(s) or Patent Number(s): igsplus Assignment is being filed together with new application and the first execution date of application is : Application has been filed already and the application filing date is: 05/26/2004 BABRAHA1 00000092 6517309 B. Issued Patent Number(6): FC:8021 -A. Patent Application Number(s): 40.00 OP 6517309 Additional numbers attached? Yes No. 5. Name and address of party to whom correspondence 6. Total number of applicaconcerning this matter should be mailed: tions and patents involved: CUSTOMER NUMBER 00136 -or-7. Total Fee (37 CFR 3.41): \$ 40.00 JACOBSON HOLMAN PLLC Enclosed - Credit Card Payment Form 400 Seventh Street, N.W. Any deficiencies in enclosed fees are Washington, D.C. 20004-2218 authorized to be charged to Deposit Tel. 202-638-6666 Account No. 06-1358. P65932US0 Attorney Docket Number: DO NOT USE THIS SPACE 8. 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. John C. Holman 22,769 May 25, 2004 Name of Person Signing, Reg. No. Total number of pages including cover sheet, attachments, and documents:

> PATENT REEL: 015361 FRAME: 0727

JCH 103-2/02

DEED OF ASSIGNMENT made this ³ day of November 2003.

BETWEEN

UNITEC INSTITUTE OF TECHNOLOGY, a New Zealand institution under the Education Act 1989 of Carrington Road, Mt Albert, Auckland, New Zealand and MOUAFAK ARIF ZAHER, a New Zealand citizen of 47 Grande Avenue, Mt Albert, Auckland, New Zealand (collectively and severally the "Assignor")

AND

MOUAFAK ARIF ZAHER, a New Zealand citizen of 47 Grande Avenue, Mt Albert, Auckland, New Zealand (the "Assignee")

RECITALS:

- O.1 THE Assignor has derived title to an invention entitled "Improved Pumping Apparatus", "Improved Pumping Apparatus and Methods" and "Improvements in or to Axial Flow Devices" (together "the Invention") and is the proprietor of the Patent Applications listed in Schedule A ("the Applications"), the Letters Patents listed in Schedule B ("the Patents") and is the proprietor of all rights ("the Patent Rights") in the Invention including the right to apply for patent or equivalent protection in any countries throughout the world, to claim priority under international conventions and treaties from the Patent Application, the right to proceed with the Applications as well as including the right to proceed with National Phase Entries of any PCT International Application filed from the Applications, and the rights conferred by such patent or equivalent protection when granted.
- 0.2 **THE** Assignor is the proprietor in original artistic works and literary works in relation to the **Invention**, the **Applications** or the **Patents** ("the Copyright").
- 0.3 THE Assignor has agreed to assign to the Assignee all rights in the Applications, Copyright existing in the Applications, Letters Patent that may be granted on the Applications, the Patents and all Patent Rights.
- 0.4 **THE** Assignee has requested the Assignor to execute this Deed of Assignment.

PATENT REEL: 015361 FRAME: 0728

T

OPERATIVE PROVISIONS:

1. **ASSIGNMENT**

IN consideration of the sum of NZ One Dollar (NZ\$1.00) paid by the Assignee to the Assignor, the receipt of which is acknowledged, the Assignor HEREBY ASSIGNS to the Assignee the Invention, the Applications, the Patents, the Patent Rights and the Copyright.

day of November

EXECUTED as a Deed

3

DATED this

Occupation:

| Signature | Mullettell |
|--------------------|---|
| Name | DR MARKIN A. HALL |
| | (Please sign include both a printed name and signature) |
| Witness Signature: | |
| Name: | Daniel Fremana |
| Address | UNINEC |
| Occupation: | lermen. |
| | |
| Signed by MOUAFA | K ARIF ZAHER |
| Signature | Tulled |
| | |
| Witness Signature: | |
| Name: | Daniel Rumana. |
| Address | 11/1001 |

Signed for and on behalf of UNITEC INSTITUTE OF TECHNOLOGY

PATENT REEL: 015361 FRAME: 0729

2003

II

SCHEDULE A - PENDING APPLICATIONS

| Country | Date | Number | Pitle |
|-------------|------------|----------------|--|
| New Zealand | 13/03/1998 | 526852 | IMPROVED PUMPING APPARATUS |
| Europe | 12/03/1999 | 99913767.2 | IMPROVED PUMPING APPARATUS & METHODS |
| Norway | 12/03/1999 | 20004544 | IMPROVED PUMPING APPARATUS & METHODS |
| Japan | 12/03/1999 | 2000-535854 | IMPROVED PUMPING APPARATUS & METHODS |
| Australia | 12/03/1999 | 20324/02 | IMPROVED PUMPING APPARATUS & METHODS |
| New Zealand | 13/03/1998 | 517598 | IMPROVED PUMPING APPARATUS & METHODS |
| PCT | 12/03/1999 | PCT/NZ99/00029 | IMPROVED PUMPING APPARATUS & METHODS |
| Brazil | 12/03/1999 | PI9909246-8 | IMPROVED PUMPING APPARATUS & METHODS |
| New Zealand | 25/06/2001 | 512607 | IMPROVEMENTS IN OR TO AXIAL FLOW DEVICES |

SCHEDULE B – GRANTED PATENTS

| Country | Date | Number | Title | di di di disempenta di Salamana | e de la companya de l | |
|-------------|------------|---------------|---------------------|---------------------------------|--|---|
| New Zealand | 13/03/1998 | 329969/334408 | IMPROVED METHODS | PUMPING | APPARATUS | & |
| New Zealand | 13/03/1998 | 506939 | IMPROVED METHODS | PUMPING | APPARATUS | & |
| USA | 12/03/1999 | 6,517,309 | IMPROVED METHODS | PUMPING | APPARATUS | & |
| Australia | 12/03/1999 | 747592 | IMPROVED METHODS | PUMPING | APPARATUS | & |

PATENT REEL: 015361 FRAME: 0730 DEED OF ASSIGNMENT made this 4 day of November 2003.

BETWEEN MOUAFAK ARIF ZAHER, a New Zealand citizen of 47 Grande

Avenue, Mt Albert, Auckland, New Zealand

(the "Assignor")

AND APPLIED SCIENCE RESEARCH FOUNDATION LIMITED, a

company duly incorporated under the laws of New Zealand of Level 6,

43 High Street, Auckland, New Zealand

(the "Assignee")

RECITALS:

- O.1 THE Assignor has derived title to an invention entitled "Improved Pumping Apparatus", "Improved Pumping Apparatus and Methods" and "Improvements in or to Axial Flow Devices" (together "the Invention") and is the proprietor of the Patent Applications listed in Schedule A ("the Applications"), the Letters Patents listed in Schedule B ("the Patents") and is the proprietor of all rights ("the Patent Rights") in the Invention including the right to apply for patent or equivalent protection in any countries throughout the world, to claim priority under international conventions and treaties from the Patent Application, the right to proceed with the Applications as well as including the right to proceed with National Phase Entries of any PCT International Application filed from the Applications, and the rights conferred by such patent or equivalent protection when granted.
- 0.2 THE Assignor is the proprietor in original artistic works and literary works in relation to the Invention, the Applications or the Patents ("the Copyright").
- 0.3 THE Assignor has agreed to assign to the Assignee all rights in the Applications, Copyright existing in the Applications, Letters Patent that may be granted on the Applications, the Patents and all Patent Rights.
- 0.4 THE Assignee has requested the Assignor to execute this Deed of Assignment.

100049671-1

PATENT REEL: 015361 FRAME: 0731

OPERATIVE PROVISIONS:

1. ASSIGNMENT

IN consideration of the sum of NZ One Dollar (NZ\$1.00) paid by the Assignee to the Assignor, the receipt of which is acknowledged, the Assignor HEREBY ASSIGNS to the Assignee the Invention, the Applications, the Patents, the Patent Rights and the Copyright.

DATED this

4

11

day of

November

2003

EXECUTED as a Deed

| Signed by MOUAFA | K ARIF ZAHER |
|--------------------|-----------------|
| Signature | - Tule. |
| Witness Signature: | |
| Name: | Daniel Fremanos |
| Address | UNITEC |
| Occupation: | LECTIONER |

PATENT REEL: 015361 FRAME: 0732

SCHEDULE A – PENDING APPLICATIONS

| Country | Date | Number | Title |
|-------------|------------|----------------|--|
| New Zealand | 13/03/1998 | 526852 | IMPROVED PUMPING APPARATUS |
| Europe | 12/03/1999 | 99913767.2 | IMPROVED PUMPING APPARATUS & METHODS |
| Norway | 12/03/1999 | 20004544 | IMPROVED PUMPING APPARATUS & METHODS |
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| Brazil | 12/03/1999 | PI9909246-8 | IMPROVED PUMPING APPARATUS & METHODS |
| New Zealand | 25/06/2001 | 512607 | IMPROVEMENTS IN OR TO AXIAL FLOW DEVICES |

SCHEDULE B - GRANTED PATENTS

| Country | Date | Number | Title | rado Alemana | | |
|-------------|------------|---------------|---------------------|--------------|-----------|---|
| New Zealand | 13/03/1998 | 329969/334408 | IMPROVED METHODS | PUMPING | APPARATUS | & |
| New Zealand | 13/03/1998 | 506939 | IMPROVED METHODS | PUMPING | APPARATUS | & |
| USA | 12/03/1999 | 6,517,309 | IMPROVED METHODS | PUMPING | APPARATUS | & |
| Australia | 12/03/1999 | 747592 | IMPROVED METHODS | PUMPING | APPARATUS | & |

PATENT
RECORDED: 05/25/2004 REEL: 015361 FRAME: 0733