

Form PTO-1595 (Rev. 03-09)  
OMB No. 0851-0027 (exp. 03/31/2009)

03-30-2009

U.S. DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office

HEET

To the Director of the U.S. Pat

103554468

ed documents or the new address(es) below.

## 1. Name of conveying party(ies)

Richard Andrew Holland

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

## 3. Nature of conveyance/Execution Date(s):

Execution Date(s) January 16, 2009

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Joint Research Agreement  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other

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

Name: Applied Computational Technologies, LLC

Internal Address:

Street Address: 620 7th Street

City: Windber

State: PA

Country: USA Zip: 15963

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

## 4. Application or patent number(s):

A. Patent Application No.(s)

☐ This document is being filed together with a new application.  
B. Patent No.(s)

7,197,404

Additional numbers attached? ☐ Yes ☒ No

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

Name: McQuaide, Blasko, Fleming &amp; Faulkner, Inc.

Internal Address: Livinia N. Jones, Esquire

Street Address: 811 University Drive

City: State College

State: PA Zip: 16801

Phone Number: 814-238-4926

Fax Number: 814-234-5620

Email Address: lnjones@mqblaw.com

## 6. Total number of applications and patents involved: 1

## 7. Total fee (37 CFR 1.21(h) &amp; 3.41) \$40.00

- ☒ Authorized to be charged to deposit account  
☐ Enclosed  
☐ None required (government interest not affecting title)

## 8. Payment Information

Deposit Account Number 50-1740

Authorized User Name Livinia N. Jones

## 9. Signature:

Signature

March 26, 2009

Date

Livinia N. Jones, Esquire  
Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

4

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
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03/27/2009 DBYRNE 00000055 501740 7197404

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PATENT  
REEL: 022473 FRAME: 0785

**INTELLECTUAL PROPERTY ASSIGNMENTS**Docket No. 120478-1**ASSIGNMENT**

FOR VALUE RECEIVED, and in consideration of the sum of \$1.00 and other good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, I, Richard Andrew Holland sell, assign and transfer unto Applied Computational Technologies, LLC, as assignee, and its successors, assigns and legal representatives, the entire worldwide right, title and interest in and to all subject matter invented by me and disclosed or claimed in the invention entitled:

**"COMPUTATION OF RADIATING PARTICLE AND WAVE DISTRIBUTIONS USING A  
GENERALIZED DISCRETE FIELD CONSTRUCTED FROM REPRESENTATIVE RAY SETS"**

and which is found in:

U.S. Patent No. 7,197,404  
International Patent Application No. PCT/US05/05835  
Australia Patent Application No. 2005220732  
Canadian Patent Application No. 2,557,888  
European Patent Application No. 05714004.8  
Indian Patent Application No. 1175/MUMNP/2006  
Japanese Patent Application No. 2007-501833

and any legal equivalents thereof in a foreign country, including the right to claim priority and

in and to any and all continuations, continuations-in-part, divisions, reissues, renewals, extensions, substitutions, additions or reexaminations of such applications and any U.S. or foreign patents issuing thereon; and in and to any and all corresponding international and foreign applications for Letters Patent and any foreign patents issuing thereon; and all Convention and Treaty Rights of any kind, in all countries throughout the world, for all such subject matter; together with all claims for damages by reason of future, present and past infringement, with the right to sue for and collect the same for assignee's use and on behalf of assignee's successors, assigns and legal representative.

I request that any and all patents, registrations and similar protection for said inventions be issued to said assignee, its successors, assigns and legal representatives, or to such nominees as it may designate.

I agree that, when requested, I will, without charge to said assignee but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing, maintaining and enforcing patents for said inventions in any and all countries and for vesting title thereto in said assignee, its successors, assigns and legal representatives or nominees.

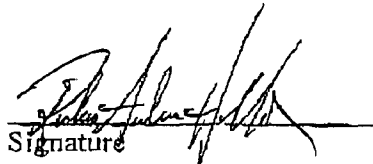
I authorize and empower said assignee, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from me.

{00960914.2}

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of said assignee or nominee to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

I covenant with said assignee, its successors, assigns and legal representatives, that the rights and property herein conveyed are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Name: Richard Andrew Holland

  
Signature

Date: 1/16/09

Commonwealth of Pennsylvania

County of Somerset

Before me this 16<sup>th</sup> day of January, 2009, personally appeared the above named individual, to me known to be the person who is described in, and who executed the foregoing instrument and acknowledged to me that he/she executed the same of his/her own free will for the purposes therein expressed.

  
Notary Public

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal

Nancy A. Walker, Notary Public

My Comm. Exp. 6/14/09

Expires June 14, 2009

Member of the Association of Notaries

**MCQUAIDE BLASKO****ATTORNEYS AT LAW**

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**FACSIMILE TRANSMITTAL**

**To:** Assignment Recordation Services  
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**Fax:** 703-308-7124  
**Phone:**

**From:** Livinia N. Jones, Esquire

**Date:** March 26, 2009

**Client-Matter:** 120478-120478

**No. of Pages:** 4  
(incl. cover)

**In Re:** Recordation of Assignment  
U.S. Patent No. 7,197,404

**Original will not follow**

*If you have not received all pages of this facsimile,  
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**PATENT**

**RECORDED: 03/26/2009**

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