

# PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Jonathan R. Heim	03/01/2004
Alireza Zarrabi	04/13/2011
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Artificial Muscle, Inc.
<b>Street Address:</b>	749 N. Mary Avenue
<b>City:</b>	Sunnyvale
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94085
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	12768846
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(412)777-3902
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
<b>Phone:</b>	412-777-3866
<b>Email:</b>	veronica.thompson@bayer.com
<b>Correspondent Name:</b>	Bayer MaterialScience LLC
<b>Address Line 1:</b>	100 Bayer Road
<b>Address Line 4:</b>	Pittsburgh, PENNSYLVANIA 15205-9741
<b>ATTORNEY DOCKET NUMBER:</b>	BMS103010US02
<b>NAME OF SUBMITTER:</b>	Veronica Thompson
<b>Total Attachments: 9</b> source=BMS103010US02recordationsheet052011#page1.tif source=BMS103010US02assignment052011#page1.tif source=BMS103010US02heimemploymentagreement052011#page1.tif source=BMS103010US02heimemploymentagreement052011#page2.tif	

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**PATENT**  
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**RECORDATION FORM COVER SHEET  
PATENTS ONLY**

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)**

- 1) Jonathan R. Heim
- 2) Alireza Zarrabi

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

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

Execution Date(s) 4/13/11

- ☒ 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: Artificial Muscle, Inc.

Internal Address: \_\_\_\_\_

Street Address: 749 N. Mary Avenue

City: Sunnyvale

State: CA

Country: United States of America Zip: 94085

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

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

☐ This document is being filed together with a new application.

A. Patent Application No.(s)

12/748,846

Filed: April 28, 2010

Attorney Docket No.: BMS103010US02/ARMUNA013101US

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

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

Name: Bayer MaterialScience LLC

Internal Address: \_\_\_\_\_

Street Address: 100 Bayer Road

City: Pittsburgh

State: PA Zip: 15205-9741

Phone Number: (412) 777-3866

Fax Number: (412) 777-3902

Email Address: veronica.thompson@bayer.com

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

**7. Total fee (37 CFR 1.21(h) & 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 13-3848

Authorized User Name \_\_\_\_\_

**9. Signature:**

Veronica Thompson  
Signature

5/20/11  
Date

Veronica Thompson  
Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 7

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

**PATENT**  
**REEL: 026313 FRAME: 0686**

## ASSIGNMENT

WHEREAS We, 1) Jonathan R. Heim; 2) Alireza Zarrabi  
of 1) 61 Clarendon Road, Pacifica, CA 94044-2718; 2) 1035 Jena Terrace, Sunnyvale, CA 94089  
have invented certain improvements in OPTICAL SYSTEMS EMPLOYING ELECTROACTIVE  
MATERIALS

described in a patent application executed by us and identified in the United States Patent Office as follows:

Serial No.: 12/768,845

Filed: April 28, 2010

and Attorney's Docket No.: BMS103010US2/ARMUNA01301US; and

WHEREAS, ARTIFICIAL MUSCLE, INC., of Sunnyvale, California, an incorporated company of the State of Delaware is desirous of acquiring the entire right, title and interest in and to said invention or inventions and any and all patents to be obtained therefore; this document may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same document.

NOW, THEREFORE, for valuable consideration and in accordance with the obligations in employment contracts with ARTIFICIAL MUSCLE, INC., we do hereby sell, assign and transfer unto said ARTIFICIAL MUSCLE, INC., its successors and assigns, the entire right, title, and interest in and to said invention or inventions, as described in the aforesaid application, in any form or embodiment thereof, and in and to the aforesaid application; and in and to any applications filed in any foreign country based thereon, including the right to file said foreign applications under the provisions of the International Convention; also any improvements on said invention or inventions now or hereafter made by us during the period of employment; also the entire right, title and interest in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon said invention, inventions or improvements and any divisional, continuation, continuation-in-part or substitute applications which may be filed upon said invention, inventions or improvements in this or any foreign country; and we hereby authorize and request the issuing authority to issue any and all patents on said application or applications to said ARTIFICIAL MUSCLE, INC., as assignee of the entire interest.

We further agree, without any payment by ARTIFICIAL MUSCLE, INC., other than expenses incurred by the undersigned, to communicate to said ARTIFICIAL MUSCLE, INC., its representatives or agents, any facts relating to said invention, inventions or improvements, including evidence for interference purposes or for other legal proceedings, whenever requested, testify in any interference or other legal proceedings, whenever requested; and execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective.

SIGNED AT Pacifica, California, USA

\_\_\_\_\_  
(Date) (L.S.) 1) Jonathan R. Heim

SIGNED AT Sunnyvale, California, USA

04/28/2011  
(Date) (L.S.) 2) Alireza Zarrabi  
Alireza Zarrabi

/s/jt/BMS103010US2assignment

**Artificial Muscle Inc**

Alex N. Beavers, Jr., Ph.D.  
Chief Executive Officer

333 Ravenswood  
Menlo Park, CA 94025  
Cell: 941 704 0948  
Office: 650 859 3136  
email: alex@artificialmuscle.com

February 27, 2004

Jon Heim  
61 Clarendon Road  
Pacifica, CA 94044

Dear Jon,

It is my pleasure to extend to you the opportunity to become an employee and a founder of the new company, Artificial Muscle, Inc. (AMI). As a founder, you will always be able to refer to the energy, experience, and intellect that you invested in the creation of a new company that has the promise of becoming one of the most important and exciting new technology companies in decades. There will be many decisions that we will be making, beginning almost immediately, that will determine the future of the company, and I am expecting you to be a company leader as well as a key part of the team that makes those decisions.

The terms of the offer are as follows:

*Title:* Director, Product Development

*Starting salary:* \$130,000 per annum, less applicable withholding, payable semi-monthly according to AMI's normal payroll practices

*Stock options:* Subject to the approval of the Company's Board of Directors, you will be granted an option to purchase 45,000 shares of Company common stock under the Company's stock option plan at an exercise price equal to the fair market value of that stock on your option grant date. Your option will vest monthly over a period of four years, and will be subject to the terms and conditions of the Company's stock option plan and standard form of stock option agreement, which you will be required to sign as a condition of receiving the option.

*Benefits:* Participation in the company's benefit plans, which is currently planned to include medical, dental, life and disability insurance. More information on the total AMI benefits package will be available shortly.

*Paid Time Off:* Twenty (20) days of vacation time per year accrued at 2 days per month up to the annual amount, plus ten (10) company holidays.

*Start date:* As soon as possible.

Your employment with the Company is "at will"; it is for no specified term, and may be terminated by you or the Company at any time, with or without cause or advance notice. As a condition of your employment, you will be required to sign the Company's standard form of employee nondisclosure and assignment agreement, and to provide the Company with documents establishing your identity and right to work in the United States. Those documents must be provided to the Company within three days after your employment start date.

February 27, 2004

This agreement, the non-disclosure and assignment agreement, and the stock option agreements referred to above constitute the entire agreement between you and the Company regarding the terms and conditions of your employment, and they supersede all prior negotiations, representations or agreements between you and the Company. The provisions of this agreement regarding "at will" employment may only be modified by a document signed by you and an authorized representative of the Company.

Jon, I look forward to working with you on the founding team at the AMI. Please sign and date this letter on the spaces provided below to acknowledge your acceptance of the terms of this agreement.

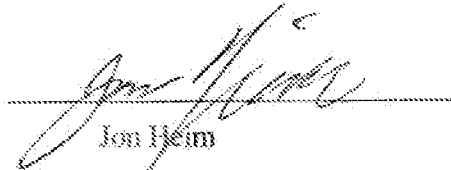
Sincerely,

Artificial Muscle, Inc.

By   
Alex N. Beavers, Jr.  
Chief Executive Officer

I agree to and accept employment with Artificial Muscle, Inc. on the terms and conditions set forth in this agreement.

Date: 3/1, 2004

  
Jon Heim

## EMPLOYEE NONDISCLOSURE AND ASSIGNMENT AGREEMENT

This Agreement formalizes in writing certain understandings and procedures which have been in effect since the time I was initially employed by Artificial Muscle, Inc. ("Company").

1. **Duties.** In return for the compensation now and hereafter paid to me, I will perform such duties for Company as the Company may designate from time to time. During my employment with Company, I will devote my best efforts to the interests of Company, will not engage in any activities that Company determines to be detrimental to its best interests and will otherwise abide by all of Company's policies and procedures. Furthermore, I will not (a) reveal, disclose or otherwise make available to any person any Company password or key, whether or not the password or key is assigned to me or (b) obtain, possess or use in any manner a Company password or key that is not assigned to me. I will use my best efforts to prevent the unauthorized use of any laptop or personal computer, peripheral device, software or related technical documentation that the Company issues to me, and I will not input, load or otherwise attempt any unauthorized use of software in any Company computer, whether or not such computer is assigned to me.
2. **"Proprietary Information" Definition.** "Proprietary Information" includes (a) any information that is confidential or proprietary, technical or non-technical information of Company, including for example and without limitation, information related to Innovations (as defined in Section 4 below), concepts, techniques, processes, methods, systems, designs, computer programs, source documentation, trade secrets, formulas, development or experimental work, work in progress, forecasts, proposed and future products, marketing plans, business plans, customers and suppliers and any other nonpublic information that has commercial value or (b) any information Company has received from others that Company is obligated to treat as confidential or proprietary, which may be made known to me by Company, a third party or otherwise that I may learn during my employment with Company.
3. **Ownership and Nondisclosure of Proprietary Information.** All Proprietary Information is the sole property of Company, Company's assigns, Company's customers and Company's suppliers, as applicable. Company, Company's assigns, Company's customers and Company's suppliers, as applicable, are the sole and exclusive owners of all patents, copyrights, mask works, trade secrets and other rights in and to the Proprietary Information. I will not disclose any Proprietary Information to anyone outside Company, and I will use and disclose Proprietary Information to those inside Company only as may be necessary in the ordinary course of performing my duties as an employee of Company. If I have any questions as to whether information constitutes Proprietary Information, or to whom, if anyone, inside Company, any Proprietary Information may be disclosed, I will consult with my manager at Company.
4. **"Innovations" Definition.** In this Agreement, "Innovations" means all discoveries, designs, developments, improvements, inventions (whether or not protectable under patent laws), works of authorship, information fixed in any tangible medium of expression (whether or not protectable under copyright laws), trade secrets, know-how, ideas (whether or not protectable under trade secret laws), mask works, trademarks, service marks, trade names and trade dress.

5. "Non-Company Bicycle Innovations" Definition. In this Agreement, "Non-Company Bicycle Innovations" means all Innovations concerning bicycle components that are conceived on non-Company time, using non-Company facilities, and that do not involve the application of Company Proprietary Information or Company Customer's Proprietary Information.
6. Disclosure and License of Prior Innovations. I have listed on Exhibit A ("Prior Innovations") attached hereto all Innovations relating in any way to Company's business or demonstrably anticipated research and development or business, which were conceived, reduced to practice, created, derived, developed, or made by me prior to my employment with Company (collectively, the "Prior Innovations"). I represent that I have no rights in any such Company-related Innovations other than those Innovations listed in Exhibit A ("Prior Innovations"). If nothing is listed on Exhibit A ("Prior Innovations"), I represent that there are no Prior Innovations at the time of signing this Agreement. I hereby grant to Company and Company's designees a royalty-free, irrevocable, worldwide, fully paid-up license (with rights to sublicense through multiple tiers of sublicensees) to practice all patent, copyright, moral right, mask work, trade secret and other intellectual property rights relating to any Prior Innovations that I incorporate, or permit to be incorporated, in any Innovations that I, solely or jointly with others, conceive, develop or reduce to practice during my employment with Company (the "Company Innovations"). Notwithstanding the foregoing, I will not incorporate, or permit to be incorporated, any Prior Innovations in any Company Innovations without Company's prior written consent.
7. Disclosure and Assignment of Company Innovations. I will promptly disclose and describe to Company all Company Innovations. I hereby do and will assign to Company or Company's designee all my right, title, and interest in and to any and all Company Innovations. To the extent any of the rights, title and interest in and to Company Innovations cannot be assigned by me to Company, I hereby grant to Company an exclusive, royalty-free, transferable, irrevocable, worldwide license (with rights to sublicense through multiple tiers of sublicensees) to practice such non-assignable rights, title and interest. To the extent any of the rights, title and interest in and to Company Innovations can neither be assigned nor licensed by me to Company, I hereby irrevocably waive and agree never to assert such non-assignable and non-licensable rights, title and interest against Company or any of Company's successors in interest. This Section 6 shall not apply to any Innovations that (a) do not relate, at the time of conception, reduction to practice, creation, derivation, development or making of such Innovation to Company's business or actual or demonstrably anticipated research, development or business; and (b) were developed entirely on my own time; and (c) were developed without use of any of Company's equipment, supplies, facilities or trade secret information; and (d) did not result from any work I performed for Company.
8. Future Innovations. I will disclose promptly in writing to Company all Innovations, with the exception of Non-Company Bicycle Innovations, conceived, reduced to practice, created, derived, developed, or made by me during the term of my employment and for three (3) months thereafter, whether or not I believe such Innovations are subject to this Agreement, to permit a determination by Company as to whether or not the Innovations should be considered Company Innovations. Company will receive any such information in confidence.



9. Notice of Nonassignable Innovations to Employees in California. This Agreement does not apply to an Innovation that qualifies fully as a nonassignable invention under the provisions of Section 2870 of the California Labor Code. I acknowledge that a condition for an Innovation to qualify fully as a non-assignable invention under the provisions of Section 2870 of the California Labor Code is that the invention must be protected under patent laws. I have reviewed the notification in Exhibit B ("Limited Exclusion Notification") and agree that my signature acknowledges receipt of the notification.
10. Cooperation in Perfecting Rights to Innovations. I agree to perform, during and after my employment, all acts that Company deems necessary or desirable to permit and assist Company, at its expense, in obtaining and enforcing the full benefits, enjoyment, rights and title throughout the world in the Innovations as provided to Company under this Agreement. If Company is unable for any reason to secure my signature to any document required to file, prosecute, register or memorialize the assignment of any rights or application or to enforce any right under any Innovations as provided under this Agreement, I hereby irrevocably designate and appoint Company and Company's duly authorized officers and agents as my agents and attorneys-in-fact to act for and on my behalf and instead of me to take all lawfully permitted acts to further the filing, prosecution, registration, memorialization of assignment, issuance, and enforcement of rights under such Innovations, all with the same legal force and effect as if executed by me. The foregoing is deemed a power coupled with an interest and is irrevocable.
11. Return of Materials. At any time upon Company's request, and when my employment with Company is over, I will return all materials (including, without limitation, documents, drawings, papers, diskettes and tapes) containing or disclosing any Proprietary Information (including all copies thereof), as well as any keys, pass cards, identification cards, computers, printers, pagers, personal digital assistants or similar items or devices that the Company has provided to me. I will provide Company with a written certification of my compliance with my obligations under this Section.
12. No Violation of Rights of Third Parties. During my employment with Company, I will not (a) breach any agreement to keep in confidence any confidential or proprietary information, knowledge or data acquired by me prior to my employment with Company or (b) disclose to Company, or use or induce Company to use, any confidential or proprietary information or material belonging to any previous employer or any other third party. I am not currently a party, and will not become a party, to any other agreement that is in conflict, or will prevent me from complying, with this Agreement.
13. Survival. This Agreement (a) shall survive my employment by Company; (b) does not in any way restrict my right to resign or the right of Company to terminate my employment at any time, for any reason or for no reason; (c) inures to the benefit of successors and assigns of Company; and (d) is binding upon my heirs and legal representatives.
14. No Solicitation. During my employment with Company and for one (1) year thereafter, I will not solicit, encourage, or cause others to solicit or encourage any employees of Company to terminate their employment with Company.

15. No Disparagement. During my employment with Company and after the termination thereof, I will not disparage Company, its products, services, agents or employees.
16. Injunctive Relief. I agree that if I violate this Agreement, Company will suffer irreparable and continuing damage for which money damages are insufficient, and Company shall be entitled to injunctive relief and/or a decree for specific performance, and such other relief as may be proper (including money damages if appropriate).
17. Notices. Any notice required or permitted by this Agreement shall be in writing and shall be delivered as follows, with notice deemed given as indicated: (a) by personal delivery, when actually delivered; (b) by overnight courier, upon written verification of receipt; (c) by facsimile transmission, upon acknowledgment of receipt of electronic transmission; or (d) by certified or registered mail, return receipt requested, upon verification of receipt. Notices to me shall be sent to any address in Company's records or such other address as I may provide in writing. Notices to Company shall be sent to Company's Human Resources Department or to such other address as Company may specify in writing.
18. Governing Law; Forum. This Agreement shall be governed by the laws of the United States of America and by the laws of the State of California, as such laws are applied to agreements entered into and to be performed entirely within California between California residents. Company and I each irrevocably consent to the exclusive personal jurisdiction of the federal and state courts located in California, as applicable, for any matter arising out of or relating to this Agreement, except that in actions seeking to enforce any order or any judgment of such federal or state courts located in California, such personal jurisdiction shall be nonexclusive.
19. Severability. If a court of law holds any provision of this Agreement to be illegal, invalid or unenforceable, (a) that provision shall be deemed amended to provide Company the maximum protection permitted by applicable law and (b) the legality, validity and enforceability of the remaining provisions of this Agreement shall not be affected.
20. Waiver; Modification. If Company waives any term, provision or breach by me of this Agreement, such waiver shall not be effective unless it is in writing and signed by Company. No waiver shall constitute a waiver of any other or subsequent breach by me. This Agreement may be modified only if both Company and I consent in writing.
21. Entire Agreement. This Agreement represents my entire understanding with Company with respect to the subject matter of this Agreement and supersedes all previous understandings, written or oral.

February 27, 2004

I certify and acknowledge that I have carefully read all of the provisions of this Agreement and that I understand and will fully and faithfully comply with such provisions.

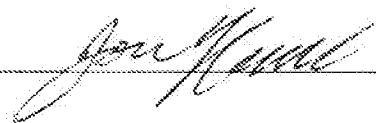
"COMPANY"

EMPLOYEE:

ARTIFICIAL MUSCLE, INC.

Jon Heim

By:   
Alex N. Beavers, Jr.

By: 

Title: Chief Executive Officer

Dated: 2/27/04

Dated: 3/1/04