501841037 03/05/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
David L Lewis	01/24/2012
David B Rozema	01/24/2012
Darren H Wakefield	01/24/2012
Jonathan D Benson	01/24/2012
Andrei V Blokhin	01/24/2012
Jeffrey C Carlson	01/24/2012
Jon A Wolff	02/28/2012
Philipp Hadwiger	01/30/2012
Torsten Hoffmann	01/25/2012
Eric A Kitas	01/25/2012
Peter Mohr	01/25/2012
Kerstin Jahn-Hofmann	02/07/2012
Hans Martin Mueller	02/10/2012
Guenther Ott	02/07/2012
Ingo Roehl	02/14/2012

RECEIVING PARTY DATA

Name:	Arrowhead Madison Inc.	
Street Address:	465 Science Drive	
Internal Address:	Suite C	
City:	Madison	
State/Country:	WISCONSIN	
Postal Code:	53711	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13336028

CORRESPONDENCE DATA

PATENT REEL: 027803 FRAME: 0132

Fax Number: (608)441-0741 **Phone**: 608-316-3896

Email: kirk.ekena@arrowres.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: Arrowhead Madison Inc., Kirk Ekena

Address Line 1: 465 Science Drive

Address Line 2: Suite C

Address Line 4: Madison, WISCONSIN 53711

ATTORNEY DOCKET NUMBER: 27189 US1

NAME OF SUBMITTER: Kirk Ekena

Total Attachments: 16

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WHEREAS, WE, the undersigned inventors (Assignors) have invented certain new and useful improvements which are described and claimed in application for United States Patent and identified as U.S. Application No. 13/336,028 filed on 23 December 2011, entitled

In Vivo Polynucleotide Delivery Conjugates Having Enzyme Sensitive Linkages

WHEREAS, ROCHE MADISON INC., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having its principal place of business at Madison, Wisconsin, is desirous of acquiring the entire interest in and to said invention, said application and the Patent to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, we have sold, assigned, and set over, and by these presents do hereby sell, assign, and set over unto the said ROCHE MADISON INC. (Assignee), and said Assignee's legal representatives, successors, the entire right, title and interest, for the whole world, in and to said invention and said application, as well as any subsequent application which claims priority based upon the filing date of said application identified as U.S. Application No. 13/336,028 and the patents, both domestic and foreign, that may or shall result therefrom including the right to claim in respect of any subsequent United States and foreign patent applications and patents, the priority date of said application under any United States statute and international convention or treaty; and we do hereby authorize and request the issuance of said patents, domestic and foreign, conformably to the terms of this Agreement.

UPON SAID CONSIDERATION, we do hereby covenant and agree with the said Assignee that we will not execute any writing or do any act whatsoever conflicting with these presents, and that we will at any time upon request, without further or additional consideration, but at the expense of the said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance application for and obtaining provisional, original. continuation-in-part, divisional, reissued, re-examined or extended Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, including but not limited to, giving testimony in any proceedings or transactions involving such applications or patents, and executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind and inure to the benefit of the assigns and legal representatives of all parties hereto.

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IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this 24th day	Į.
of January 2012.	
David L. Lewis	
505 Maple Avenue, Madison, WI 53704	
DI Ry	
David B. Rozema	
9418 Whippoorwill Way Middleton, WI 53562	
Del Walty	
Darren H. Wakefield	
3168 Stoneman Drive, Fitchburg, WI 53711	
Jonathan Berron	
Monathan D. Benson	
701 Hoel Avenue, Stoughton, WI 53589	
Andrei V. Blokhin	
5770 Dawley Drive, Fitchburg, WI 53711	
Jeffrey C// Carlson	
303 N. Hamilton #309, Madison, WI 53703	
<u>ACKNOWLEDGMENT</u>	
United States of America	
State of Wisconsin	
County of Dane	
· -	
On 24 1 and 2012, before me personally appeared, David L. Lewis, David B. Rozema, Darren H. Wakefield, Jonathan D. Benson, Andrei V. Blokhin, and Jeffrey C. Carlson, to me known to be the person described in the foregoing Assignment, who acknowledged that he/she executed the foregoing Assignment of his/her own free will for the purposes therein set forth.	
Zul Sã	
Kirk Ekena, Notary Public	
My commission expires 10 February, 2013	

WHEREAS, WE, the undersigned inventors (Assignors) have invented certain new and useful improvements which are described and claimed in application for United States Patent and identified as U.S. Application No. 13/336,028 filed on 23 December 2011, entitled

In Vivo Polynucleotide Delivery Conjugates Having Enzyme Sensitive Linkages

WHEREAS, ROCHE MADISON INC., a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having its principal place of business at Madison, Wisconsin, is desirous of acquiring the entire interest in and to said invention, said application and the Patent to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, we have sold, assigned, and set over, and by these presents do hereby sell, assign, and set over unto the said ROCHE MADISON INC. (Assignee), and said Assignee's legal representatives, successors, the entire right, title and interest, for the whole world, in and to said invention and said application, as well as any subsequent application which claims priority based upon the filing date of said application identified as U.S. Application No. 13/336,028 and the patents, both domestic and foreign, that may or shall result therefrom including the right to claim in respect of any subsequent United States and foreign patent applications and patents, the priority date of said application under any United States statute and international convention or treaty; and we do hereby authorize and request the issuance of said patents, domestic and foreign, conformably to the terms of this Agreement.

UPON SAID CONSIDERATION, we do hereby covenant and agree with the said Assignee that we will not execute any writing or do any act whatsoever conflicting with these presents, and that we will at any time upon request, without further or additional consideration, but at the expense of the said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining provisional, original, continuation, continuation-in-part, divisional, reissued, re-examined or extended Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, including but not limited to, giving testimony in any proceedings or transactions involving such applications or patents, and executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind and inure to the benefit of the assigns and legal representatives of all parties hereto.

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IN WITNESS WHEREOF, I have of2012. Jon A. Wolff 3506 Lake Mendota Drive, Madison	ve hereunto set my hand and affixed my seal this Day
3500 Lake Weildota Diffe, Wadison	i, wi 33703
	ACKNOWLEDGMENT
United States of America State of Wisconsin County of Dane	
the person described in the foregoing	e personally appeared, Jon A. Wolff, to me known to be Assignment, who acknowledged that he/she executed own free will for the purposes therein set forth.
	Notary Public My commission expires:

WHEREAS, WE, the undersigned inventors (Assignors) have invented certain new and useful improvements which are described and claimed in application for United States Patent and identified as U.S. Application No. 13/336,028 filed on 23 December 2011, entitled

In Vivo Polynucleotide Delivery Conjugates Having Enzyme Sensitive Linkages

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NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, we have sold, assigned, and set over, and by these presents do hereby sell, assign, and set over unto the said ROCHE MADISON INC. (Assignee), and said Assignee's legal representatives, successors, the entire right, title and interest, for the whole world, in and to said invention and said application, as well as any subsequent application which claims priority based upon the filing date of said application identified as U.S. Application No. 13/336,028 and the patents, both domestic and foreign, that may or shall result therefrom including the right to claim in respect of any subsequent United States and foreign patent applications and patents, the priority date of said application under any United States statute and international convention or treaty; and we do hereby authorize and request the issuance of said patents, domestic and foreign, conformably to the terms of this Agreement.

UPON SAID CONSIDERATION, we do hereby covenant and agree with the said Assignee that we will not execute any writing or do any act whatsoever conflicting with these presents, and that we will at any time upon request, without further or additional consideration, but at the expense of the said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining provisional, original, continuation, continuation-in-part, divisional, reissued, re-examined or extended Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, including but not limited to, giving testimony in any proceedings or transactions involving such applications or patents, and executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind and inure to the benefit of the assigns and legal representatives of all parties hereto.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this \(\) day
of 2012.
Philipp Hadwiger
Heinrich-Hoffmann-Str. 17, 95326 Kulmbach, Germany
Kerstin Jahn-Hofmann Stoltzestrasse 39, 63263 Neu-Isenburg, Germany
Guenther Ott
Munckerstrasse 32, 95444 Bayreuth, Germany
Ingo Roehl
Am Bohen Kreuz 1, 96117 Memmelsdorf, Germany

ACKNOWLEDGMENT

2

WHEREAS, WE, the undersigned inventors (Assignors) have invented certain new and useful improvements which are described and claimed in application for United States Patent and identified as U.S. Application No. 13/336,028 filed on 23 December 2011, entitled

In Vivo Polynucleotide Delivery Conjugates Having Enzyme Sensitive Linkages

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NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, we have sold, assigned, and set over, and by these presents do hereby sell, assign, and set over unto the said ROCHE MADISON INC. (Assignee), and said Assignee's legal representatives, successors, the entire right, title and interest, for the whole world, in and to said invention and said application, as well as any subsequent application which claims priority based upon the filing date of said application identified as U.S. Application No. 13/336,028 and the patents, both domestic and foreign, that may or shall result therefrom including the right to claim in respect of any subsequent United States and foreign patent applications and patents, the priority date of said application under any United States statute and international convention or treaty; and we do hereby authorize and request the issuance of said patents, domestic and foreign, conformably to the terms of this Agreement.

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IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this 25th day
of <u>January</u> 2012.
Torsten Hoffmann
•
Kleinhueningerstrasse 15, 79576 Weil am Rhein, Germany
Eve liters
Eric A. Kitas
Eichbergweg 4, 4147 Aesch BL, Switzerland
Par May
Peter Mohr
Benkenstrasse 26, 4054 Basel, Switzerland
Hans Martin Mueller
Westendstrasse 30, 80339 Muenchen, Germany

ACKNOWLEDGMENT

WHEREAS, WE, the undersigned inventors (Assignors) have invented certain new and useful improvements which are described and claimed in application for United States Patent and identified as U.S. Application No. 13/336,028 filed on 23 December 2011, entitled

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IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this A day of 1000 2012.

Kerstin Jahn-Hofmann

Stoltzestrasse 39, 63263 Neu-Isenburg, Germany

ACKNOWLEDGMENT

2

WHEREAS, WE, the undersigned inventors (Assignors) have invented certain new and useful improvements which are described and claimed in application for United States Patent and identified as U.S. Application No. 13/336,028 filed on 23 December 2011, entitled

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IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this 10 day of February 2012.

Torsten Hoffmann

Kleinhueningerstrasse 15, 79576 Weil am Rhein, Germany

Eric A. Kitas

Eichbergweg 4, 4147 Aesch BL, Switzerland

Peter Mohr

Benkenstrasse 26, 4054 Basel, Switzerland

Hans Martin Mueller

Westendstrasse 30, 80339 Muenchen, Germany

ACKNOWLEDGMENT

WHEREAS, WE, the undersigned inventors (Assignors) have invented certain new and useful improvements which are described and claimed in application for United States Patent and identified as U.S. Application No. 13/336,028 filed on 23 December 2011, entitled

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Case Docket No. 27189 US1

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this $\frac{7}{4}$ day of $\frac{1}{4}$ day 2012.

Guenther Ott

Munckerstrasse 32, 95444 Bayreuth, Germany

<u>ACKNOWLEDGMENT</u>

2

WHEREAS, WE, the undersigned inventors (Assignors) have invented certain new and useful improvements which are described and claimed in application for United States Patent and identified as U.S. Application No. 13/336,028 filed on 23 December 2011, entitled

In Vivo Polynucleotide Delivery Conjugates Having Enzyme Sensitive Linkages

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NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged, we have sold, assigned, and set over, and by these presents do hereby sell, assign, and set over unto the said ROCHE MADISON INC. (Assignee), and said Assignee's legal representatives, successors, the entire right, title and interest, for the whole world, in and to said invention and said application, as well as any subsequent application which claims priority based upon the filing date of said application identified as U.S. Application No. 13/336,028 and the patents, both domestic and foreign, that may or shall result therefrom including the right to claim in respect of any subsequent United States and foreign patent applications and patents, the priority date of said application under any United States statute and international convention or treaty; and we do hereby authorize and request the issuance of said patents, domestic and foreign, conformably to the terms of this Agreement.

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1

Case Docket No. 27189 US1

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal this 14 day of 2012.

Ingo Roehl

Am Bohen Kreuz 1, 96117 Memmelsdorf, Germany

ACKNOWLEDGMENT

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