12-04-2006

Form PTO-1595 (Rev. 08/05)  OMB No. 0651-0027 (exp. 6/30/200	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office
REL103343796 SHEET	
1/30 PATENTS ONLY	
To the Birector of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.	
1. Name of conveying party(les)	2. Name and address of receiving party(ies)
George E. Seidel, Tae Kwang Suh	Name: Colorado State University Research
	Internal Address: Foundation
Additional name(s) of conveying party(ies) attached? Yes No.  3. Nature of conveyance/Execution Date(s):  Execution Date(s) November 28, 2001	Street Address: 601 South Howes, Room 410
★ Assignment	City:Fort Collins
Joint Research Agreement	State: CO
Government Interest Assignment Executive Order 9424, Confirmatory License	Country: US Zip: 80522
Other	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) 11/508,133	B. Patent No.(s)
1 1/300, 133	16.00 1 7 2006
Additional numbers attached? Yes No	
5. Name and address to whom correspondence	6. Total number of applications and patents
concerning document should be mailed:	involved: 1
Name: Nicole A. Ressue	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
Internal Address: Santangelo Law Offices, P.C.	Authorized to be charged by credit card
405.0	Authorized to be charged to deposit account
Street Address: 125 South Howes Third Floor	Enclosed
	None required (government interest not affecting title)
City: Fort Collins	8. Payment Information
State: CO Zip: 80521	a. Credit Card Last 4 Numbers 4327 Expiration Date 07/2010
Phone Number: (970) 224-3100	b. Deposit Account Number
Fax Number: (970) 224-3175	
Email Address:	Authorized User Name
9. Signature: Mow a. Romus Signature	Nov. 17, 2000
Nicole A. Ressue, USPTO Reg. No. 48,665  Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:
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	

12/01/2006 MJAMA1 00000043 11508133 01 FC:8021 40.00 DP

REEL: 018646 FRAME: 0962

Atty Docket: XY-IVF- PCT Express Mail No. EL9132994US

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE PCT BRANCH

In Re the Application of:

XY, Inc.

Inventors:

George E. Seidel, Kehuan Lu and Tae Kwang Suh

International Application Number:

PCT/US01/45237

International Filing Date:

29 November 2001

US Application Nos:

60/253,785 and 60/253,787

Priority Date:

29 November 2000

For:

System For In-vitro Fertilization With Spermatozoa Separated

Into X-chromosome And Y-chromosome Bearing Populations

Receiving Office:

RO/US

## ASSIGNMENT OF PATENT RIGHTS

THIS ASSIGNMENT document is between and among George E. Seidel, whose address is: 3101 Arrowhead Road, LaPorte, CO 80535 and Tae Kwang Suh, whose address is: 2044 Glenmoor Drive, Fort Collins, CO 80521, (individually and collectively the "Assignor" or "Assignors") and Colorado State University through its agent, Colorado State University Research Foundation, having its principal office at: 601 South Howes, Room 410, Fort Collins, CO 80522, (the "Assignee").

WHEREAS, the Assignors have each contributed to some degree in conceiving or developing technology relating to a system for in-vitro fertilization, including, but not limited to, the technology described or indicated in the application identified by the caption listed above, and also including for the purpose of this assignment those improvements which are related to the subject matter of such technology to the extent conceived or developed during the time serving as a consultant or employee of the Assignee, and improvements related to such technology which are identified, developed, or

conceived using trade secret or confidential information of the Assignee or which are likely to cause disclosure of such trade secret or confidential information (the "Invention");

WHEREAS, each Assignor, either by himself or in conjunction with other individuals, may be an inventor of the Invention;

WHEREAS, each Assignor acknowledges his obligation to assign all right, title and interest in the Invention to Assignee;

WHEREAS, each Assignor desires to formalize his obligation for assignment of all right, title and interest to the Invention to Assignee to the extent he has any such rights worldwide; and

WHEREAS, each Assignor acknowledges his obligation to assign all right, title and interest in any and all patent rights and any other proprietary rights related to the business of the Assignee, and in particular the Invention, to Assignee;

NOW, THEREFORE, for US \$10.00 or other good and valuable consideration, receipt of which is hereby acknowledged, each of the undersigned hereby agree as follows:

- 1. Each Assignor warrants that:
- a. he has the authority to assign all right, title, and interest originated now or hereafter by him involving the Invention;
- b. he has conveyed no right, title, or interest in the Invention to any party other than the Assignee;
- c. to the extent each individual Assignor conducted any efforts relevant to the ownership of all rights to the Invention under, on behalf of, or through any entity or assumed name, he has the authority to act as agent for such an entity and to fully transfer such rights; and
- d. at the time of signing of this Assignment, he neither knows nor has reason to know of any outstanding right, title, or interest in the Invention inconsistent with a full assignment of rights to the Assignee other than any right, title, or interest which may exist as a result of any coinventorship.
- 2. Each Assignor, for good and valuable consideration, hereby sells, grants, transfers, authorizes application for, agrees to support, and assigns to the Assignee the entire right, title, and interest in and to the Invention, including, but not limited to:
  - a. all such worldwide rights to make, use, and sell the Invention;

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- b. any applications for United States or foreign patents relating to the Invention, and specifically to the above-identified application, and to make a claim for any priority to which such applications are entitled, and to any division, substitution, continuation, or continuation-in-part, of such applications, all patents which may be granted thereon, and all reissues, and extensions thereof;
- c. the right to file applications for United States or foreign patents based upon the Invention, and to make a claim for any priority to which such applications are entitled, and to any division, substitution, continuation, or continuation-in-part, of such applications, all patents which may be granted thereon, and all reissues and extensions thereof;
- d. all related rights involving the Invention in any country such as utility-model registrations, inventor's certificates, and the like, and all rights, titles, and interests involving the Invention under any foreign government;
- e. all rights to any documents, notes, and evidence regarding any aspect of the Invention; and
- all rights to seek protection covering such aspects or claims as the Assignee deems appropriate, specifically, including, but not limited to: claims which seek protection for device, apparatus, method, process, business method, or other coverage; claims which seek protection for as broad a level of coverage as might be desired by the Assignee; claims which address any aspect conceived, developed, or disclosed as separate inventions; claims which address any permutations or combinations of any aspects; claims which address any aspects independent of any initial context considered as preferred embodiments; and claims which seek broad protection in general.
- 3. Each Assignor acknowledges a legal and equitable obligation to assign to the Assignee any and all patent rights and any other proprietary rights related to the business of the Assignee to the extent conceived or developed while he is an employee of the Company, Colorado State University through its agent Colorado State University Research Foundation and covenants that he has not and will not execute any agreement in conflict with this Assignment and will not offer any opinions, or take or assist in taking any actions which might tend to diminish the scope of protection available to the Assignee for the Invention. Further, each Assignor warrants that other than rights of the Assignee, he maintains the entire right, title, and interest in and to the Invention as may exist by virtue or his contribution and has made no conveyance of any rights whatsoever to any other person. Each Assignor also covenants that he will promptly and continuously inform the Assignee of any articles, patents, or other references, or prior art of which he becomes aware which may be material to the assessment of patentability of the Invention.
- 4. Each Assignor further covenants and agrees that he will communicate to the Assignee any facts known to him respecting any improvements involving or in any way related to the Invention, and will testify in any legal proceeding, sign all lawful papers, execute all division,

continuation, continuation-in-part, substitute, foreign, or reissue applications, make all rightful oaths, and generally do everything possible to aid the Assignee to obtain and enforce full protection and title in and to said Invention and to such improvements in all countries without further consideration but at the expense of the Assignee.

- Each Assignor acknowledges that pursuant to the sale, grant, transfer, and assignment to the Assignee of the entire right, title, and interest in and to the Invention, as provided in the above paragraphs, this assignment shall be complete as to all rights owned. As such, each Assignor consents to a waiver of any and all access rights to any applications for United States or foreign patents relating to the Invention, and including but not limited to the above-identified application, and to any division, substitution, continuation, or continuation-in-part, of such applications, all related access rights involving the Invention in any country such as utility-model registrations, inventor's certificates and the like, and all access rights, titles, and interests involving the Invention under any foreign government, to the extent permissible. Access rights may particularly include: any and all rights to any files, documents, notes, or evidence regarding any aspect of the prosecution of the Invention in the United States or foreign countries; any right to obtain, view or copy in any form the files, documents, notes, or evidence related to prosecution history or status of any application for United States or foreign patents relating to the Invention; any other right to obtain information relating to prosecution history, or status of any application for United States, or foreign patents relating to the Invention.
- 6. Each Assignor further covenants and agrees that he will sign all lawful papers, consents, and generally do everything possible to aid the Assignee in petitioning waiver of access of each Assignor to the United States or foreign patent offices of any and all applications for United States or foreign patents relating to the invention, as provided above.
- 7. Each Assignor grants the firm of Santangelo Law Offices, P.C., the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office or any foreign patent office for recordation of this document, including, but not limited to, inserting the application number, the execution date, or the filing date of the above-identified United States Patent Application based upon the Invention.
- 8. This assignment shall be binding on all parties, their heirs, executors, administrators, successors, or assigns, and may be recorded in the United States Patent and Trademark Office or elsewhere. In the event any provision of this Agreement is found to be unenforceable or to be unreasonable in scope, such provision shall be modified to the extent necessary to make it enforceable, and as so modified, this Agreement shall remain in full force and effect.

SIGNATURES:	
George E. Seidel	Date of Assignment Signature: 11/26/0 Date of Execution of Application: (signing the Declaration)
UNITED STATES OF AMERICA ) STATE OF COLORADO ) COUNTY OF LARIMER )	
	efore me in the County of Larimer, State of Colorado, United States Tovember, in the year 2001. WITNESS my hand and official seal public by the State of Colorado.  Notary Public My Commission Expires: 7-15-2003
Tackway Sale Tae Kwang Suh	Date of Assignment Signature:
UNITED STATES OF AMERICA ) STATE OF COLORADO ) COUNTY OF LARIMER )	
	office me in the County of Larimer, State of Colorado, United States ovember, in the year 2001. WITNESS my hand and official seal public by the State of Colorado.  Manuar M. Mahim - Lammerer  Notary Public  My Commission Expires: 7-15-2003
The properties and the second	£

PATENT REEL: 018646 FRAME: 0967

Facsimile Number: (571) 273-0140

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Number:

11/508,133

Filed:

August 21, 2006

Applicants:

George E. Seidel, Kehuan Lu and Tae Kwang Suh

Title:

In-Vitro Fertilization Systems with Spermatozoa Separated Into X-

Chromosome and Y-Chromosome Bearing Populations

Assignee:

XY, Inc. and Colorado State University through its agent Colorado

State University Research Foundation

Attorney Docket:

XY-IVF-US-Cont

Customer No.:

33549

## CERTIFICATE OF FACSIMILE TRANSMITTAL

I, Barbara Schroeer, hereby certify to the truth of the following items:

- 1. I am an employee of Santangelo Law Offices, P.C., 125 South Howes, Third Floor, Fort Collins, Colorado 80521.
- 2. I have this day transmitted the attached Letter of Facsimile Transmittal; an Assignment of Patent Rights; a Recordation Cover Sheet; a Credit Card Payment Form authorizing a credit card payment in the amount of \$40.00 for the recordation fee; and Certificate of Facsimile Transmittal via Facsimile Number (571) 273-0140, Attention Assignment Recordation Services, United States Patent and Trademark Office.

Dated this /7 day of November, 2006.

Barbara Schroeer

PATENT REEL: 018646 FRAME: 0968

**RECORDED: 11/30/2006**