

TRADEMARK ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

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|-----------------------|-------------------|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | SECURITY INTEREST |

CONVEYING PARTY DATA

| Name | Formerly | Execution Date | Entity Type |
|---------|----------|----------------|--|
| XY, LLC | | 06/01/2012 | LIMITED LIABILITY COMPANY: DELAWARE |

RECEIVING PARTY DATA

| | |
|-----------------|---------------------------------------|
| Name: | Compass Bank, as Administrative Agent |
| Street Address: | 1703 W. 5th Street, Suite 500 |
| City: | Austin |
| State/Country: | TEXAS |
| Postal Code: | 78703 |
| Entity Type: | CORPORATION: ALABAMA |

PROPERTY NUMBERS Total: 7

| Property Type | Number | Word Mark |
|----------------------|---------|-----------|
| Registration Number: | 2946290 | XY |
| Registration Number: | 2946289 | XY |
| Registration Number: | 2987331 | XYCLONE |
| Registration Number: | 2917606 | XY |
| Registration Number: | 2919211 | XY |
| Registration Number: | 2925517 | XY |
| Registration Number: | 2925518 | XY |

CORRESPONDENCE DATA

Fax Number: 2147568113

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

Phone: (512) 305-4807

Email: sritchie@lockelord.com

Correspondent Name: L. Jeffrey Hubenak % Locke Lord

Address Line 1: 100 Congress Avenue, Suite 300

CH \$190.00 2946290

TRADEMARK
REEL: 004857 FRAME: 0510

| | |
|-------------------------|----------------------|
| Address Line 4: | Austin, TEXAS 78701 |
| ATTORNEY DOCKET NUMBER: | 001402000346 |
| NAME OF SUBMITTER: | L. Jeffrey Hubenak |
| Signature: | /L. Jeffrey Hubenak/ |
| Date: | 09/07/2012 |

Total Attachments: 20

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**AMENDED AND RESTATED PATENT AND TRADEMARK SECURITY AGREEMENT
(XY, LLC)**

THIS AMENDED AND RESTATED PATENT AND TRADEMARK SECURITY AGREEMENT ("Agreement"), dated as of June 1, 2012, is by and between XY, LLC, a Delaware limited liability company (formerly known as XY, Inc., a Colorado corporation), whose address is 22575 State Highway 6 South, Navasota, Texas 77868 ("Debtor"), and COMPASS BANK, an Alabama banking corporation, whose address is 1703 W. 5th Street, Suite 500, Austin, Texas 78703, Attention: Ms. Sylvia Maggio, in its capacity as Administrative Agent (in such capacity, together with its successors and assigns in such capacity, the "Secured Party"), under the Credit Agreement described below.

WHEREAS, Debtor and Compass Bank previously have entered into that certain Patent and Trademark Security Agreement dated November 12, 2009 (the "Original Security Agreement"). In connection with an increase and conversion of the credit facilities covered by the Original Security Agreement to a syndicated credit facility, Debtor and Secured Party now desire to amend and restate the Original Security Agreement in its entirety. Accordingly, the Original Security Agreement is hereby amended and restated in its entirety to hereafter be and read as follows, and this amended and restated Agreement is given in replacement and substitution for the Original Security Agreement;

WHEREAS, INGURAN, LLC, a Delaware limited liability company doing business as Sexing Technologies ("Borrower"), Secured Party and the lenders now or hereafter a party thereto (collectively the "Lenders") have entered into that certain Amended and Restated Credit Agreement (as amended, restated and supplemented from time to time, the "Credit Agreement") of even date herewith;

WHEREAS, Debtor, Secured Party and certain other subsidiaries of Borrower have entered into an Amended and Restated Security Agreement (Domestic Subsidiaries) of even date herewith (as said Amended and Restated Security Agreement may be amended, restated, modified, supplemented and in effect from time to time, the "General Security Agreement"), which sets forth in more detail certain terms and conditions relating to the matters agreed to herein; and

WHEREAS, the Credit Agreement contemplates the execution of this Agreement by the parties hereto and the recordation of this Agreement in accordance with the specific terms of the Credit Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. Grant of Security Interest. Debtor does hereby grant to Secured Party, for the benefit of Secured Party, the Lenders and any other holders of any of the Obligations, a continuing security interest in all of Debtor's right, title, and interest in and to all of the following (all of the following being herein collectively referred to as the "Collateral"), whether presently existing or hereafter arising or acquired, to secure the payment of the Obligations (as defined in the Security Agreement):

- (a) any and all patents and patent applications (including, without limitation, each patents and patent applications listed on Schedule 1 attached hereto), together with (i) all inventions and improvements described and claimed therein, (ii) all reissues, divisions, continuations, renewals, extensions, and continuations-in-part thereof, (iii) all income, royalties, damages, claims, and payments now or hereafter due or payable under and with respect thereto, including, without limitation, damages and payments for past and future infringements thereof, (iv) all rights to sue for past, present, and future infringements thereof, and (v) all rights corresponding to any of the foregoing throughout the world;
- (b) all trademarks (including service marks), trade names, trade dress, and trade styles and the registrations and applications for registration thereof and the goodwill of the business symbolized by the foregoing (including, without limitation, each trademark listed on Schedule 2 attached hereto), together with (i) all renewals of the foregoing, (ii) all income, royalties, damages, and payments now or hereafter due or payable with respect thereto, including, without limitation, damages, claims, and payments for past and future infringements thereof, (iii) all rights to sue for past, present, and future infringements of the foregoing, including the right to settle suits involving claims and demands for royalties owing, and (iv) all rights corresponding to any of the foregoing throughout the world;
- (c) all licenses or similar arrangements of any of the foregoing, whether as licensee or licensor;
- (d) all general intangibles at any time evidencing or relating to any of the foregoing, together with all books and records, computer files, programs, printouts and other computer materials and records related thereto; and
- (e) all products and proceeds of any of the foregoing.

2. Miscellaneous. This security interest is granted in conjunction with the security interest granted to Secured Party, for the benefit of Secured Party, the Lenders and any other holders of any of the Obligations, pursuant to the General Security Agreement. Debtor does hereby further acknowledge and affirm that the rights and remedies of Secured Party with respect to the security interest in the Collateral made and granted hereby are more fully set forth in the General Security Agreement and the Credit Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. The terms and provisions hereof are in addition to, and not in limitation of or limited by, those of the General Security Agreement, the Credit Agreement and the other Credit Documents. The attached Schedules 1 and 2 are incorporated herein by reference for all purposes. Capitalized terms used herein and not otherwise defined shall have the meaning given to them in the Credit Agreement. **THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE UNITED STATES OF AMERICA, INCLUDING WITHOUT LIMITATION, THE UNITED STATES PATENT AND TRADEMARK LAWS.** This Agreement shall be binding upon Debtor, and the trustees, receivers, successors and assigns of Debtor, including all successors in interest of Debtor in and to all or any part of the Collateral, and shall benefit Secured Party, the Lenders, any other holders of any of the Obligations and their

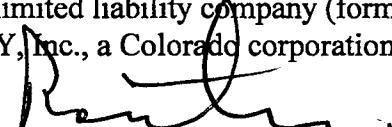
respective successors and assigns. If any provision of this Agreement is held to be illegal, invalid or unenforceable under present or future laws, the legality, validity and enforceability of the remaining provisions of this Agreement shall not be affected thereby, and this Agreement shall be liberally construed so as to carry out the intent of the parties to it. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same agreement, and any of the parties hereto may execute this Agreement by signing any such counterpart. The section headings appearing in this Agreement have been inserted for convenience only and shall be given no substantive meaning or significance whatever in construing the terms and provisions of this Agreement.

[Remainder of page left intentionally blank]

IN WITNESS WHEREOF, Debtor and Secured Party have caused this Agreement to be duly executed by their respective officers thereunto as of the date first set forth above.

"Debtor"

XY, LLC,
a Delaware limited liability company (formerly known as XY, Inc., a Colorado corporation)

By: 
Name: Maurice Rosenstein
Title: Co - CEO

"Secured Party"

COMPASS BANK, an Alabama banking corporation, as Administrative Agent

By: _____
Name: _____
Title: _____

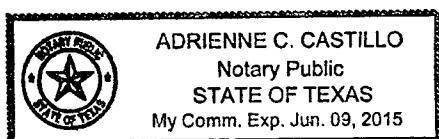
Attachment:

Schedule 1 – Patents and Applications

Schedule 2 - Trademarks

THE STATE OF TEXAS §
§
COUNTY OF BRAZOS §

This instrument was acknowledged before me on June 1st, 2012, by Maurice Rosenstein, Co-CEO of XY, LLC, a Delaware limited liability company, on behalf of said limited liability company.



Adrienne C Castillo
Notary Public in and for the State of Texas
Printed Name: Adrienne C Castillo
My Commission Expires: June 09, 2015

IN WITNESS WHEREOF, Debtor and Secured Party have caused this Agreement to be duly executed by their respective officers thereunto as of the date first set forth above.

"Debtor"

XY, LLC,
a Delaware limited liability company (formerly known as XY, Inc., a Colorado corporation)

By: _____
Name: _____
Title: _____

"Secured Party"

COMPASS BANK, an Alabama banking corporation,
as Administrative Agent

By: Sylvia Maggio
Name: Sylvia Maggio
Title: SVP

Attachment:

Schedule 1 – Patents and Applications

Schedule 2 - Trademarks

THE STATE OF TEXAS §
 §
COUNTY OF _____ §

This instrument was acknowledged before me on _____, 2012, by
_____, _____ of XY, LLC, a Delaware limited liability
company, on behalf of said limited liability company.

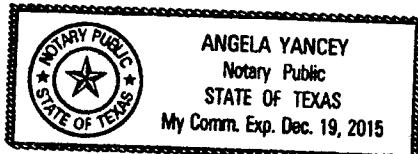
Notary Public in and for the State of Texas

Printed Name: _____

My Commission Expires: _____

THE STATE OF TEXAS §
 §
COUNTY OF TRAVIS §

This instrument was acknowledged before me on June 1, 2012, by
Sylvia Maggio, SVP of Compass Bank, an
Alabama banking corporation acting in its capacity as Administrative Agent, on behalf of said
corporation acting in said capacity.



Notary Public in and for the State of Texas

Printed Name: Angela Yancey

My Commission Expires:

12-19-15

**SCHEDULE 1 TO
AMENDED AND RESTATED PATENT AND TRADEMARK SECURITY AGREEMENT**

PATENTS AND PATENT APPLICATIONS

(See attached Patent and Patent Application Listing)

| CaseNumber | Country | SubCase | CaseType | ApplicationStatus | AppNumber | FilDate | PattNumber | IssDate |
|------------------|---------|---------|----------|-------------------|------------------|-------------|--------------|-------------|
| CMXY-01 Clean | AU | | PCT | Accepted | 2006235230 | 06-Apr-2006 | 2006235230 | 25-Nov-2010 |
| CMXY-01 Clean | CA | | PCT | Granted | 2,603,832 | 06-Apr-2006 | 2,603,832 | 22-Nov-2011 |
| CMXY-01 Clean | NZ | 1 | PCT | Granted | 562203 | 06-Apr-2006 | 562203 | 08-Jan-2011 |
| CMXY-01 Clean | BR | | PCT | Pending | PI0609749-9 | 06-Apr-2006 | | |
| CMXY-01 Clean | MX | | PCT | Pending | MX/a/2007/012362 | 06-Apr-2006 | | |
| CMXY-01 Clean | EP | 4 | PCT | Published | 06740742.9 | 06-Apr-2006 | | |
| CMXY-01 Clean | US | 1 | ORD | Published | 11/400,839 | 06-Apr-2006 | | |
| CMXY-01 Clean | US | 2 | CON | Published | 11/804,879 | 21-May-2007 | | |
| CMXY-01 Clean | US | 3 | PCT | Published | 11/887,872 | 03-Oct-2007 | | |
| CMXY-03 Evapor | US | | ORD | Granted | 11/901,915 | 19-Sep-2007 | | |
| CMXY-03 Evapor | BR | | PCT | Pending | PI 081 7127-0 | 12-Sep-2008 | | |
| CMXY-03 Evapor | CA | | PCT | Pending | 2,700,068 | 12-Sep-2008 | | |
| CMXY-03 Evapor | EP | | PCT | Published | 08832486.8 | 12-Sep-2008 | | |
| CMXY-03 Evapor | JP | | PCT | Published | 2010-525810 | 12-Sep-2008 | | |
| CMXY-03 Evapor | US | 1 | PCT | Published | 12/733,709 | 16-Mar-2010 | | |
| CMXY-04 Fluid Pr | AU | | PCT | Granted | 2005311618 | 02-Dec-2005 | 2005311618 | 10-Mar-2011 |
| CMXY-04 Fluid Pr | CN | | PCT | Granted | 200580047611.0 | 02-Dec-2005 | Z180047611.0 | 18-Nov-2010 |
| CMXY-04 Fluid Pr | MX | 1-p | PCT | Granted | MX/a/2007/006590 | 02-Dec-2005 | 293376 | 08-Dec-2011 |
| CMXY-04 Fluid Pr | NZ | | PCT | Granted | 555801 | 02-Dec-2005 | 555801 | 05-Apr-2011 |
| CMXY-04 Fluid Pr | US | 1 | CON | Granted | 12/807,231 | 31-Aug-2010 | 8,080,422 | 20-Dec-2011 |
| CMXY-04 Fluid Pr | BR | | PCT | Pending | PI 051.85980 | 02-Dec-2005 | | |
| CMXY-04 Fluid Pr | CA | | PCT | Pending | 2,590,191 | 02-Dec-2005 | | |
| CMXY-04 Fluid Pr | EP | | PCT | Pending | 05852982.7 | 02-Dec-2005 | | |
| CMXY-04 Fluid Pr | MX | Div1 | DIV | Pending | MX/a/2011/007610 | 02-Dec-2005 | | |
| CMXY-04 Fluid Pr | US | 2 | CON | Pending | 13/331,552 | 20-Dec-2011 | | |
| CMXY-06 ICSI | AU | | PCT | Pending | 2008279782 | 18-Jul-2008 | | |
| CMXY-06 ICSI | CL | | PCT | Pending | 2118-2008 | 18-Jul-2008 | | |
| CMXY-06 ICSI | EP | | PCT | Pending | 08780243.5 | 18-Jan-2008 | | |
| CMXY-06 ICSI | AR | | PCT | Published | P08 01 03151 | 21-Jul-2008 | | |
| CMXY-06 ICSI | US | | PCT | Published | 12/452,695 | 15-Jan-2010 | | |
| CMXY-06 ICSI | UY | | ORD | Published | 31.241 | 21-Jul-2008 | | |
| CMXY-07 Lubricio | CA | | PCT | Pending | 2,727,478 | 12-Jun-2009 | | |

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|-------------------|----|-----------|------------------|-------------|
| CMXY-07 Lubricio | NZ | Pending | 589881 | 12-Jun-2009 |
| CMXY-07 Lubricio | US | Published | 12/992,303 | 12-Nov-2010 |
| CMXY-08 Pulse Da | AU | Pending | 2010257174 | 02-Dec-2011 |
| CMXY-08 Pulse Da | BR | Pending | | 05-Dec-2011 |
| CMXY-08 Pulse Da | CA | Pending | 2,764,032 | 01-Feb-2012 |
| CMXY-08 Pulse Da | CL | Pending | 3004-2011 | 25-Nov-2011 |
| CMXY-08 Pulse Da | CN | Pending | 201080024196.8 | 01-Dec-2011 |
| CMXY-08 Pulse Da | CO | Pending | 11-181874 | 30-Dec-2011 |
| CMXY-08 Pulse Da | IL | Pending | 216445 | 17-Nov-2011 |
| CMXY-08 Pulse Da | IN | Pending | 9017/CHENP/2011 | 05-Dec-2011 |
| CMXY-08 Pulse Da | JP | Pending | 2012-513939 | 01-Dec-2011 |
| CMXY-08 Pulse Da | KR | Pending | 10-2011-7030007 | 15-Dec-2011 |
| CMXY-08 Pulse Da | MX | Pending | MX/a/2011/012868 | 01-Dec-2011 |
| CMXY-08 Pulse Da | NZ | Pending | 596847 | 02-Dec-2011 |
| CMXY-08 Pulse Da | RU | Pending | 2011153256 | 26-Dec-2011 |
| CMXY-08 Pulse Da | UA | Pending | 2011 14291 | 02-Dec-2011 |
| CMXY-08 Pulse Da | EP | Published | 10747536.0 | 23-Dec-2011 |
| CMXY-08 Pulse Da | US | Published | 13/376,144 | 02-Dec-2011 |
| CMXY-09 Mixed Sem | US | ORD | 12/321,704 | 24-Jan-2009 |
| CMXY-09 Mixed Sem | US | Published | 12/587,909 | 15-Oct-2009 |
| XY-03 Equine | AT | CIP | 99937611.4 | 29-Jul-1999 |
| XY-03 Equine | AT | EPC | 07023690.6 | 29-Jul-1999 |
| XY-03 Equine | BE | DIV | 07023690.6 | 29-Jul-1999 |
| XY-03 Equine | CH | DIV | 99937611.4 | 29-Jul-1999 |
| XY-03 Equine | CH | EPC | 07023690.6 | 29-Jul-1999 |
| XY-03 Equine | DE | DIV | 69938000 | 29-Jul-1999 |
| XY-03 Equine | DE | EPC | 07023690.6 | 29-Jul-1999 |
| XY-03 Equine | DE | DIV | 99937611.4 | 29-Jul-1999 |
| XY-03 Equine | EP | PCT | 07023690.6 | 29-Jul-1999 |
| XY-03 Equine | EP | 1 | 99937611.4 | 29-Jul-1999 |
| XY-03 Equine | ES | EPC | 99937611.4 | 29-Jul-1999 |
| XY-03 Equine | ES | 1 | 07023690.6 | 29-Jul-1999 |
| XY-03 Equine | FR | EPC | 99937611.4 | 29-Jul-1999 |

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|------------------|----|------|---------|------------------|------------------|-------------|-------------|-------------|
| XY-03 Equine | FR | 2 | DIV | Granted | 07023690.6 | 29-Jul-1999 | EP1100534B2 | 17-Nov-2010 |
| XY-03 Equine | GB | 1 | EPC | Granted | 99937611.4 | 29-Jul-1999 | EP1917974 | 16-Jan-2008 |
| XY-03 Equine | GB | 2 | DIV | Granted | 07023690.6 | 29-Jul-1999 | EP1917974 | 17-Nov-2010 |
| XY-03 Equine | IE | 2 | DIV | Granted | 07023690.6 | 29-Jul-1999 | EP1100534B1 | 17-Nov-2010 |
| XY-03 Equine | IT | 1 | EPC | Granted | 99937611.4 | 29-Jul-1999 | EP1917974 | 16-Jan-2008 |
| XY-03 Equine | IT | 2 | DIV | Granted | 07023690.6 | 29-Jul-1999 | 256614 | 17-Nov-2010 |
| XY-03 Equine | MX | ORD | Granted | PA/a/2001/000968 | 29-Jul-1999 | EP1100534B1 | 24-Apr-2008 | |
| XY-03 Equine | NL | 1 | EPC | Granted | 99937611.4 | 29-Jul-1999 | EP1917974 | 16-Jan-2008 |
| XY-03 Equine | NL | 2 | DIV | Granted | 07023690.6 | 29-Jul-1999 | 509434 | 17-Nov-2010 |
| XY-03 Equine | NZ | 1 | ORD | Granted | 509434 | 29-Jul-1999 | 527659 | 05-Jul-2004 |
| XY-03 Equine | NZ | 2 | PCT | Granted | 527659 | 29-Jul-1999 | EP1917974 | 08-Jun-2006 |
| XY-03 Equine | PT | 2 | DIV | Granted | 07023690.6 | 29-Jul-1999 | EP1917974 | 17-Nov-2010 |
| XY-03 Equine | SE | 2 | DIV | Granted | 07023690.6 | 29-Jul-1999 | 7,772,005 | 17-Nov-2010 |
| XY-03 Equine | US | 1 | DIV | Pending | 09/744,675 | 29-Jan-2001 | | 10-Aug-2010 |
| XY-03 Equine | BR | 1 | PCT | Pending | PI 991.7888-5 | 21-Jul-2009 | | |
| XY-03 Equine | CL | 1 | ORD | Pending | 1767-2000 | 29-Jul-1999 | | |
| XY-03 Equine | MX | 1 | PCT | Published | MX/a/2008/005257 | 23-Apr-2008 | | |
| XY-03 Equine | AR | | PCT | Published | 99 01 03763 | 29-Jul-1999 | | |
| XY-03 Equine | BR | | PCT | Published | PI 991.2539-0 | 29-Jul-1999 | | |
| XY-03 Equine | CA | | PCT | Published | 2338194 | 29-Jul-1999 | | |
| XY-03 Equine | EP | 2 | DIV | Published | 10173313.7 | 29-Nov-2001 | AR036869B1 | 30-Mar-2010 |
| XY-04 FreezeSort | AR | | ORD | Granted | PO10105573 | 29-Nov-2001 | 2002237689 | |
| XY-04 FreezeSort | AU | | PCT | Granted | 2002237689 | 29-Nov-2001 | 2008200810 | 24-Apr-2008 |
| XY-04 FreezeSort | AU | 1 | DIV | Granted | 2008200810 | 29-Nov-2001 | 2011201281 | 07-Apr-2011 |
| XY-04 FreezeSort | AU | 2 | DIV | Granted | 2011201281 | 29-Nov-2001 | 7713687 | 12-Jan-2012 |
| XY-04 FreezeSort | US | 3 | PCT | Granted | 10/433,183 | 29-May-2003 | 7,771,921 | 11-May-2010 |
| XY-04 FreezeSort | US | 4 | CON | Granted | 11/536,576 | 28-Sep-2006 | | 10-Aug-2010 |
| XY-04 FreezeSort | BR | | PCT | Pending | PI 0115792-2 | 29-Nov-2001 | | |
| XY-04 FreezeSort | CO | 1 | DIV | Pending | 03054828 A | 29-Nov-2001 | | |
| XY-04 FreezeSort | CO | 1PCT | PCT | Pending | 03054828 | 29-Nov-2001 | | |
| XY-04 FreezeSort | UY | | ORD | Pending | 27,052 | 29-Nov-2001 | | |
| XY-04 FreezeSort | CA | | PCT | Published | 2468772 | 29-Nov-2001 | | |
| XY-04 FreezeSort | CL | | ORD | Published | 3017-2001 | 11-Dec-2001 | | |
| XY-04 FreezeSort | US | 5 | CON | Published | 12/853,196 | 09-Aug-2010 | 1257168 | |

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|-------------------|-----|----------|------------------|------------------|---------------|-------------|
| XY-05 FROZEN | PCT | Appealed | 00980267.9 | 22-Nov-2000 | 782919 | 02-Feb-2005 |
| XY-05 FROZEN | AU | Granted | 17552/01 | 22-Nov-2000 | 2005203165 | 17-May-2007 |
| XY-05 FROZEN | AU | Granted | 2005203165 | 21-Jul-2005 | 2391370 | 12-Feb-2009 |
| XY-05 FROZEN | CA | Granted | 2391370 | 22-Nov-2000 | 1257168 | 11-Aug-2009 |
| XY-05 FROZEN | CH | Granted | 00980267.9 | 22-Nov-2000 | ZL00818617.0 | 02-Feb-2005 |
| XY-05 FROZEN | CN | Granted | DE20006017945 | 22-Nov-2000 | 1257168 | 13-Feb-2008 |
| XY-05 FROZEN | DE | Granted | 00818617.0 | 22-Nov-2000 | 1257168 | 02-Feb-2005 |
| XY-05 FROZEN | DK | Granted | 00980267.9 | 22-Nov-2000 | 1257168 | 02-Feb-2005 |
| XY-05 FROZEN | ES | Granted | 00980267.9 | 22-Nov-2000 | 1257168 | 02-Feb-2005 |
| XY-05 FROZEN | GB | Granted | 00980267.9 | 22-Nov-2000 | 1257168 | 02-Feb-2005 |
| XY-05 FROZEN | IE | Granted | 00980267.9 | 22-Nov-2000 | 149802 | 02-Feb-2005 |
| XY-05 FROZEN | IL | Granted | 149802 | 22-Nov-2000 | 10-0757753 | 01-Feb-2011 |
| XY-05 FROZEN | KR | Granted | 2002-7006696 | 22-Nov-2000 | 297715 | 05-Sep-2007 |
| XY-05 FROZEN | MX | PCT | PA/a/2002/005134 | 22-Nov-2000 | 519078 | 30-Mar-2012 |
| XY-05 FROZEN | NZ | 1 | PA/a/2002/005134 | 22-Nov-2000 | 530441 | 08-Jun-2004 |
| XY-05 FROZEN | NZ | 2 | PA/a/2002/005134 | 22-Nov-2000 | 12-Jan-2006 | 12-Jan-2006 |
| XY-05 FROZEN | PL | PCT | P-355853 | 22-Nov-2000 | 7,208,265 | 16-Nov-2011 |
| XY-05 FROZEN | US | 1 | ORD | 09/478,299 | 05-Jan-2000 | 7,820,425 |
| XY-05 FROZEN | US | 4 | CON | 11/608,079 | 07-Dec-2006 | 24-Apr-2007 |
| XY-05 FROZEN | MX | 1 | DIV | MX/a/2012/003682 | 27-Mar-2012 | 26-Oct-2010 |
| XY-05 FROZEN | AR | PCT | P 00 01 06162 | 22-Nov-2000 | P 00 01 06162 | |
| XY-05 FROZEN | BR | PCT | PI 0016049-0 | 22-Nov-2000 | PI 0016049-0 | |
| XY-05 FROZEN | EP | 1 | DIV | 05001937.1 | 22-Nov-2000 | 05001937.1 |
| XY-05 FROZEN | HK | REP | 06100369.7 | 22-Nov-2000 | 06100369.7 | |
| XY-05 FROZEN | US | 5 | CON | 12/807,555 | 07-Sep-2010 | |
| XY-05 FROZEN | UY | 1 | ORD | 26,449 | 22-Nov-2000 | |
| XY-07 High Purity | AU | 2 | DIV | 2010202152 | 27-May-2010 | AR034121B1 |
| XY-07 High Purity | AR | ORD | Accepted | 09-May-2001 | 2001263039 | 30-Jan-2009 |
| XY-07 High Purity | AU | 1 | ORD | P0102198 | 09-May-2001 | 2006230651 |
| XY-07 High Purity | AU | PCT | 2001263039 | 09-May-2001 | 2006230651 | 26-Oct-2006 |
| XY-07 High Purity | AU | DIV | Granted | 09-May-2001 | 2408939 | 09-Jul-2010 |
| XY-07 High Purity | CA | PCT | Granted | 09-May-2001 | ZL01810748.6 | 08-Nov-2011 |
| XY-07 High Purity | CN | PCT | Granted | 09-May-2001 | 210382 | 19-Nov-2008 |
| XY-07 High Purity | IN | PCT | Granted | 09-May-2001 | 10-0849948 | 10-Mar-2007 |
| XY-07 High Purity | KR | PCT | Granted | 09-May-2001 | 266967 | 28-Jul-2008 |

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|------------------|-----|---------|------------------|-------------|--------------|-------------|
| XY-07 High Purty | PCT | Granted | PA/a/2002/010971 | 09-May-2001 | 522613 | 30-Apr-2009 |
| XY-07 High Purty | PCT | Granted | 522613 | 09-May-2001 | 535812 | 08-Dec-2005 |
| XY-07 High Purty | DIV | Granted | 535812 | 09-May-2001 | 545311 | 09-Nov-2006 |
| XY-07 High Purty | DIV | Granted | 545311 | 09-May-2001 | 551401 | 10-Jul-2008 |
| XY-07 High Purty | DIV | Granted | 551401 | 09-May-2001 | 2297198 | 08-Apr-2010 |
| XY-07 High Purty | PCT | Granted | 2002132899 | 09-May-2001 | 2393815 | 20-Apr-2007 |
| XY-07 High Purty | DIV | Granted | 2006141419 | 09-May-2001 | 81219 | 10-Jul-2010 |
| XY-07 High Purty | PCT | Granted | 2002129791 | 09-May-2001 | 95899 | 25-Dec-2007 |
| XY-07 High Purty | UA | Granted | 200709359 | 16-Aug-2007 | 7,371,517 | 26-Sep-2011 |
| XY-07 High Purty | UA | DIV | 10/275,770 | 07-Feb-2003 | | 13-May-2008 |
| XY-07 High Purty | US | 1 | DIV | 2011265548 | | |
| XY-07 High Purty | AU | 3 | DIV | Pending | 22-Dec-2011 | |
| XY-07 High Purty | CA | Div1 | DIV | Pending | 09-May-2001 | |
| XY-07 High Purty | CL | | PCT | Pending | 09-May-2001 | |
| XY-07 High Purty | CN | 2 | DIV | Pending | 09-May-2001 | |
| XY-07 High Purty | IL | 1 | ORD | Pending | 09-May-2001 | |
| XY-07 High Purty | IL | 2 | DIV | Pending | 09-May-2001 | |
| XY-07 High Purty | IN | 3 | DIV | Pending | 09-May-2001 | |
| XY-07 High Purty | MX | 1 | DIV | Pending | 09-May-2001 | |
| XY-07 High Purty | UY | | ORD | Pending | 09-May-2001 | |
| XY-07 High Purty | BR | | PCT | Pending | 09-May-2001 | |
| XY-07 High Purty | CN | 1 | DIV | PCT | 09-May-2001 | |
| XY-07 High Purty | EP | | PCT | Published | 09-May-2001 | |
| XY-07 High Purty | EP | 1 | DIV | Published | 09-May-2001 | |
| XY-07 High Purty | EP | 2 | DIV | Published | 09-May-2001 | |
| XY-07 High Purty | EP | 3 | DIV | Published | 09-May-2001 | |
| XY-07 High Purty | EP | | PCT | Published | 09-May-2001 | |
| XY-07 High Purty | EP | 4 | DIV | Published | 09-May-2001 | |
| XY-07 High Purty | EP | 5 | DIV | Published | 09-May-2001 | |
| XY-07 High Purty | EP | 6 | DIV | Published | 09-May-2001 | |
| XY-07 High Purty | EP | | PCT | Published | 09-May-2001 | |
| XY-07 High Purty | EP | 7 | DIV | Published | 09-May-2001 | |
| XY-07 High Purty | HK | 3 | REP | Published | 09-May-2001 | |
| XY-07 High Purty | HK | 5 | REP | Published | 09-May-2001 | |
| XY-07 High Purty | HK | 6 | REP | Published | 08-Jun-2011 | |
| XY-07 High Purty | HK | 7 | REP | Published | 08-Jun-2011 | |
| XY-07 High Purty | IN | 2 | DIV | Published | 354/KOL/2006 | |

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| XY-07 High Purity | JP | 1 | PCT | Published | 2001-582502 | 09-May-2001 |
| XY-07 High Purity | JP | 2 | DIV | Published | 2008-257883 | 09-May-2001 |
| XY-07 High Purity | JP | 3 | DIV | Published | 2011-166045 | 28-Jul-2011 |
| XY-07 High Purity | US | 2 | CON | Published | 12/113,684 | 01-May-2008 |
| XY-08 Hypoderm | AU | PCT | Granted | 60404279 | 15-Aug-2003 | 2003265471 |
| XY-08 Hypoderm | CN | PCT | Granted | 03819362.0 | 15-Aug-2003 | ZL03819362.0 |
| XY-08 Hypoderm | MX | PCT | Granted | PA/a/2005/001654 | 15-Aug-2003 | 276926 |
| XY-08 Hypoderm | US | PCT | Granted | 10/524,793 | 15-Feb-2005 | 7,855,078 |
| XY-08 Hypoderm | US | DIV | Granted | 12/927,620 | 19-Nov-2010 | 7,981,682 |
| XY-08 Hypoderm | BR | PCT | Pending | PI 031.3476-8 | 15-Aug-2003 | 21-Dec-2010 |
| XY-08 Hypoderm | CA | PCT | Published | 2,534,394 | 15-Aug-2003 | 19-Jul-2011 |
| XY-10 IVF | AR | PCT | Granted | P010105574 | 30-Nov-2001 | 03-Mar-2009 |
| XY-10 IVF | CO | PCT | Granted | 03054825 | 29-Nov-2001 | 19-Feb-2010 |
| XY-10 IVF | US | 1 | PCT | Granted | 10/433,191 | 22-Aug-2006 |
| XY-10 IVF | US | 2 | CON | Granted | 11/508,133 | 20-Mar-2012 |
| XY-10 IVF | BR | PCT | Pending | PI 011 5791-4 | 29-Nov-2001 | |
| XY-10 IVF | US | 3 | CON | Pending | 13/404,706 | 24-Feb-2012 |
| XY-10 IVF | UY | ORD | Pending | 27.051 | 30-Nov-2001 | |
| XY-10 IVF | CA | PCT | Published | 2468774 | 29-Nov-2001 | |
| XY-12 LoDose | AR | 1 | ORD | 98 01 06775 | 30-Dec-1998 | 29-Sep-2006 |
| XY-12 LoDose | AT | EP | Granted | 19980965046 | 31-Dec-1998 | 15-Oct-2008 |
| XY-12 LoDose | AU | 1 | PCT | 20239/99 | 31-Dec-1998 | 2003213537 |
| XY-12 LoDose | AU | 2 | DIV | 2003213537 | 31-Dec-1998 | 18-Mar-2004 |
| XY-12 LoDose | BE | 1 | EP | 98965046.0 | 31-Dec-1998 | 05-Mar-2007 |
| XY-12 LoDose | BR | 1-p | PCT | PI 981.4568-1 | 30-Jun-2000 | 15-Oct-2008 |
| XY-12 LoDose | CH | 1 | EP | 98965046.0 | 31-Dec-1998 | 16-Feb-2012 |
| XY-12 LoDose | CN | 1 | PCT | 98813255.9 | 31-Dec-1998 | 15-Oct-2008 |
| XY-12 LoDose | DE | 1 | EP | 98965046.0 | 31-Dec-1998 | 15-Oct-2008 |
| XY-12 LoDose | DK | | Granted | 98965046.0 | 31-Dec-1998 | 11-Jul-2002 |
| XY-12 LoDose | EP | | Granted | 98965046.0 | 31-Dec-1998 | 15-Oct-2008 |
| XY-12 LoDose | ES | | Granted | 2000-50052 | 31-Dec-1998 | 2 161 656 |
| XY-12 LoDose | FR | | EP | 98965046.0 | 31-Dec-1998 | GB2350619 |
| XY-12 LoDose | GB | 1 | PCT | 0016132.3 | 31-Dec-1998 | 03-May-2003 |
| XY-12 LoDose | GB | 2 | DIV | 0300479.3 | 31-Dec-1998 | GB2381006 |

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| XY-12 LoDose | GB | 3 | DIV | 0300480.1 | 31-Dec-1998 | GB2381004 | 03-May-2003 |
| XY-12 LoDose | GB | 4 | DIV | 0300478.5 | 31-Dec-1998 | 1044262 | 03-May-2003 |
| XY-12 LoDose | IE | 1 | EPC | 98965046.0 | 31-Dec-1998 | 1044262 | 15-Oct-2008 |
| XY-12 LoDose | IT | | EPC | 98965046.0 | 31-Dec-1998 | 4577666 | 15-Oct-2008 |
| XY-12 LoDose | JP | 1 | DIV | 2002-44035 | 31-Dec-1998 | 264194 | 03-Sep-2010 |
| XY-12 LoDose | MX | 1 | PCT | PA/a/2000/006526 | 31-Dec-1998 | 1044262 | 28-Jan-2009 |
| XY-12 LoDose | NL | | EPC | 98965046.0 | 31-Dec-1998 | 505330 | 15-Oct-2008 |
| XY-12 LoDose | NZ | 1 | PCT | 505330 | 31-Dec-1998 | 522607 | 09-Jun-2003 |
| XY-12 LoDose | NZ | 2 | DIV | 522607 | 31-Dec-1998 | 532939 | 09-Dec-2004 |
| XY-12 LoDose | NZ | 3 | DIV | 532939 | 31-Dec-1998 | 2303354 | 08-Jun-2006 |
| XY-12 LoDose | RU | 1 | PCT | 2000120216 | 31-Dec-1998 | 2442324 | 09-Jan-2007 |
| XY-12 LoDose | RU | 2 | DIV | 2007112783 | 05-Apr-2007 | 1044262 | 20-Feb-2012 |
| XY-12 LoDose | SE | | EPC | 98965046.0 | 31-Dec-1998 | 77641 | 15-Oct-2008 |
| XY-12 LoDose | UA | | PCT | 2000074569 | 31-Dec-1998 | 6149867 | 15-Jan-2007 |
| XY-12 LoDose | US | 1 | ORD | 09/001,394 | 31-Dec-1997 | 6524860 | 21-Nov-2000 |
| XY-12 LoDose | US | 2 | DIV | 09/511,959 | 23-Feb-2000 | 7195920 | 25-Feb-2003 |
| XY-12 LoDose | US | 3 | DIV | 10/378,109 | 25-Feb-2003 | 13.965 | 27-Mar-2007 |
| XY-12 LoDose | UY | 1 | ORD | 25.333 | 30-Dec-1998 | | 15-Jan-2002 |
| XY-12 LoDose | BR | | Div1 | PI 981.6371-0 | 25-Jul-2011 | | |
| XY-12 LoDose | MX | 2 | DIV | MX/a 2008/014518 | 31-Dec-1998 | | |
| XY-12 LoDose | UY | 2 | ORD | 26.669 | 17-Apr-2001 | | |
| XY-12 LoDose | AR | 2 | DIV | P0601103544 | 14-Aug-2006 | | |
| XY-12 LoDose | CA | | Published | 2316080 | 31-Dec-1998 | | |
| XY-12 LoDose | CL | | PCT | 1766-00 | 30-Jun-2000 | | |
| XY-12 LoDose | CN | 2 | DIV | 200810128055.5 | 31-Dec-1998 | | |
| XY-12 LoDose | CN | 3 | DIV | 200810128056.X | 31-Dec-1998 | | |
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| XY-12 LoDose | CN | 5 | DIV | 200810128059.3 | 31-Dec-1998 | | |
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| XY-12 LoDose | CN | 6 | DIV | 19882943.4 | 31-Dec-1998 | | |
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| XY-12 LoDose | CN | 8 | DIV | 07008703.6 | 31-Dec-1998 | | |
| XY-12 LoDose | DE | 2 | EPC | | | | |
| XY-12 LoDose | DE | 3 | DIV | | | | |
| XY-12 LoDose | EP | 1 | DIV | | | | |

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| XY-12 LoDose | EP | 2 | DIV | Published | 10185715.9 - 1222 | 31-Dec-1998 |
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| XY-12 LoDose | EP | 4 | DIV | Published | 10185733.2 | 31-Dec-1998 |
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| XY-12 LoDose | HK | 6 | RCN | Published | 10101120.9 | 31-Dec-1998 |
| XY-12 LoDose | JP | 4 | DIV | Published | 2010-139978 | 18-Jun-2010 |
| XY-12 LoDose | US | 4 | CON | Published | 11/536,492 | 28-Sep-2006 |
| XY-13 Low Press | US | | PCT | Allowed | 10/523,268 | 07-Jul-2005 |
| XY-13 Low Press | AU | | PCT | Granted | 2003265362 | 01-Aug-2003 |
| XY-13 Low Press | JP | | PCT | Granted | 2004-526449 | 01-Aug-2003 |
| XY-13 Low Press | MX | | PCT | Granted | PA/a/2005/001100 | 01-Aug-2003 |
| XY-13 Low Press | NZ | | PCT | Granted | 538462 | 01-Aug-2003 |
| XY-13 Low Press | BR | | PCT | Pending | PI 0313163-7 | 01-Feb-2005 |
| XY-13 Low Press | MX | | PCT | Pending | MX/a/2011/007999 | 28-Jul-2011 |
| XY-13 Low Press | CA | | PCT | Published | 2532376 | 01-Aug-2003 |
| XY-13 Low Press | EP | | PCT | Published | 03767201.1 | 01-Aug-2003 |
| XY-13 Low Press | EP | 1 | DIV | Published | 10178407.3 | 01-Aug-2003 |
| XY-13 Low Press | EP | 2 | DIV | Published | 10178436.1 | 01-Aug-2003 |
| XY-13 Low Press | EP | 3 | DIV | Published | 10178491.6 | 01-Aug-2003 |
| XY-13 Low Press | US | 1 | CON | Published | 12/806,945 | 24-Aug-2010 |
| XY-14 NO EGG YOK | MX | | PCT | Granted | MX/a/2008/001276 | 24-Jul-2006 |
| XY-14 NO EGG YOK | MX | 1 | DIV | Granted | MX/a/2010/004738 | 24-Jul-2006 |
| XY-14 NO EGG YOK | NZ | | ORD | Granted | 566129 | 24-Jul-2006 |
| XY-14 NO EGG YOK | US | | ORD | Granted | 11/219,607 | 02-Sep-2005 |
| XY-14 NO EGG YOK | AR | | ORD | Pending | P06 01 03251 | 27-Jul-2006 |
| XY-14 NO EGG YOK | AU | | PCT | Pending | 2006275984 | 24-Jul-2006 |
| XY-14 NO EGG YOK | BR | | PCT | Pending | PI 061.4912-0 | 24-Jul-2006 |
| XY-14 NO EGG YOK | NZ | 1 | DIV | Pending | 592266 | 24-Jul-2006 |
| XY-14 NO EGG YOK | NZ | 2 | DIV | Pending | 592267 | 24-Jul-2006 |
| XY-14 NO EGG YOK | NZ | 3 | DIV | Pending | 592268 | 24-Jul-2006 |
| XY-14 NO EGG YOK | NZ | 4 | DIV | Pending | 592269 | 24-Jul-2006 |
| XY-14 NO EGG YOK | NZ | 5 | DIV | Pending | 592270 | 24-Jul-2006 |
| XY-14 NO EGG YOK | CA | | PCT | Published | 2619951 | 24-Jul-2006 |
| XY-14 NO EGG YOK | EP | | PCT | Published | 06800316.9 | 24-Jul-2006 |

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| XY-14 NO EGG YOK | JP | 2 | PCT | CON | Published | 2008-524607 | 24-Jul-2006 |
| XY-14 NO EGG YOK | US | 1 | DIV | Granted | 12/619,586 | 16-Nov-2009 | AR053878B2 |
| XY-15 NOZZLE | AR | 2 | DIV | Granted | P060102226 | 29-Nov-2000 | AR053879 |
| XY-15 NOZZLE | AR | 3 | DIV | Granted | P060102227 | 29-Nov-2000 | AR036412B2 |
| XY-15 NOZZLE | AR | 4 | PCT | Granted | P020103317 | 29-Nov-2000 | AR026683B1 |
| XY-15 NOZZLE | AT | 5 | EPC | Granted | P000106346 | 29-Nov-2000 | 31-May-2006 |
| XY-15 NOZZLE | AU | 5 | PCT | Granted | 00991511.7 | 29-Nov-2000 | 09-Apr-2010 |
| XY-15 NOZZLE | CA | | PCT | Granted | 32728/01 | 29-Nov-2000 | 05-Jan-2006 |
| XY-15 NOZZLE | CH | | EPC | Granted | 2393121 | 29-Nov-2000 | 26-Feb-2010 |
| XY-15 NOZZLE | DE | | EPC | Granted | 00991511.7 | 29-Nov-2000 | 31-Oct-2008 |
| XY-15 NOZZLE | DK | | EPC | Granted | 00991511.7 | 29-Nov-2000 | 31-Oct-2006 |
| XY-15 NOZZLE | EP | | PCT | Granted | 00991511.7 | 29-Nov-2000 | 31-Oct-2006 |
| XY-15 NOZZLE | ES | | EPC | Granted | 00991511.7 | 29-Nov-2000 | 31-Oct-2006 |
| XY-15 NOZZLE | FR | | EPC | Granted | 00991511.7 | 29-Nov-2000 | 31-Oct-2006 |
| XY-15 NOZZLE | GB | | EPC | Granted | 00991511.7 | 29-Nov-2000 | 31-Oct-2006 |
| XY-15 NOZZLE | IT | | EPC | Granted | 00991511.7 | 29-Nov-2000 | 31-Oct-2006 |
| XY-15 NOZZLE | KR | 2 | DIV | Granted | 10-2007-7011095 | 16-May-2007 | 26-Mar-2009 |
| XY-15 NOZZLE | MX | 1 | PCT | Granted | PA/a/2002/005488 | 29-Nov-2000 | 23-Jan-2008 |
| XY-15 NOZZLE | MX | 2 | PCT | Granted | MX/a/2007/011734 | 29-Nov-2000 | 30-Oct-2008 |
| XY-15 NOZZLE | NL | | EPC | Granted | 00991511.7 | 29-Nov-2000 | 09-Apr-2010 |
| XY-15 NOZZLE | NZ | | PCT | Granted | 519275 | 29-Nov-2000 | 12-May-2005 |
| XY-15 NOZZLE | SG | | ORD | Granted | 200203182-1 | 29-Nov-2000 | 30-Nov-2004 |
| XY-15 NOZZLE | TW | | ORD | Granted | 89125453 | 29-Nov-2000 | 24-Oct-2003 |
| XY-15 NOZZLE | US | 1 | DIV | Granted | 09/909,483 | 20-Jul-2001 | 19-Mar-2002 |
| XY-15 NOZZLE | US | 2 | DIV | Granted | 10/098,036 | 13-Mar-2002 | 12-Aug-2003 |
| XY-15 NOZZLE | US | 3 | DIV | Granted | 10/640,337 | 12-Aug-2003 | 31-Aug-2004 |
| XY-15 NOZZLE | US | 4 | PRI | Granted | 09/454,488 | 03-Dec-1999 | 24-Jul-2001 |
| XY-15 NOZZLE | BR | | DIV | Pending | PI 001.7624-9 | 08-Aug-2011 | |
| XY-15 NOZZLE | CA | 1 | DIV | Pending | 2,739,572 | 05-May-2011 | |
| XY-15 NOZZLE | UY | 1 | ORD | Pending | 26,469 | 14-Dec-2000 | |
| XY-15 NOZZLE | UY | 2 | ORD | Pending | 27,444 | 29-Nov-2002 | |
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| XY-15 NOZZLE | EP | 2 | DIV | RBP | Published | 10182264.1 | 29-Nov-2000 |
| XY-15 NOZZLE | HK | 2 | REP | Published | 10110051.3 | 29-Nov-2000 | |
| XY-15 NOZZLE | HK | 2 | PCT | Published | 11105785.5 | 08-Jun-2011 | |
| XY-15 NOZZLE | JP | 1 | DIV | Published | 2001-542181 | 29-Nov-2000 | |
| XY-15 NOZZLE | JP | 1 | PCT | Granted | 2011-265651 | 29-Nov-2000 | |
| XY-16 OPTIMUM | AU | | PCT | Granted | 2003259205 | 22-Jul-2003 | |
| XY-16 OPTIMUM | CN | | PCT | Granted | 03817484.7 | 21-Jan-2010 | |
| XY-16 OPTIMUM | MX | | PCT | Granted | PA/a/2005/000865 | 30-Mar-2011 | |
| XY-16 OPTIMUM | NZ | | PCT | Granted | 538265 | 21-Jan-2011 | |
| XY-16 OPTIMUM | BR | | PCT | Pending | PI 031.2843-1 | 09-Apr-2009 | |
| XY-16 OPTIMUM | CA | 2 | PCT | Published | 2,531,176 | 22-Jul-2003 | |
| XY-16 OPTIMUM | EP | 2 | DIV | Published | 10178450.2 | 22-Jul-2003 | |
| XY-16 OPTIMUM | JP | 2 | PCT | Published | 2004-523293 | 21-Jan-2005 | |
| XY-16 OPTIMUM | JP | 2 | DIV | Published | 2011-164799 | 27-Jul-2011 | |
| XY-16 OPTIMUM | US | | PCT | Published | 10/522,320 | 17-Oct-2005 | |
| XY-17 Pulse lasr | AU | | PCT | Granted | 2004242121 | 15-May-2004 | |
| XY-17 Pulse lasr | NZ | | PCT | Granted | 544103 | 15-May-2004 | |
| XY-17 Pulse lasr | US | 2 | CON | Granted | 11/442,735 | 25-May-2006 | |
| XY-17 Pulse lasr | CA | | PCT | Published | 2,566,749 | 14-Nov-2006 | |
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| XY-17 Pulse lasr | HK | | REP | Published | 06108876.6 | 15-May-2004 | |
| XY-17 Pulse lasr | US | 1 | PCT | Published | 10/556,981 | 15-Nov-2005 | |
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| XY-18 Radial Imp | CA | | PCT | Pending | 2,733,259 | 21-Aug-2008 | |
| XY-18 Radial Imp | EP | | PCT | Published | 08820026.6 | 21-Aug-2008 | |
| XY-18 Radial Imp | US | | PCT | Published | 13/058,574 | 11-Feb-2011 | |
| XY-19 Radial III | AU | 1 | DIV | Granted | 57836/98 | 02-Feb-1998 | |
| XY-19 Radial III | AU | 2 | DIV | Granted | 2002318853 | 02-Feb-1998 | |
| XY-19 Radial III | AU | 3 | DIV | Granted | 2005203372 | 02-Feb-1998 | |
| XY-19 Radial III | CA | 1 | PCT | Granted | 2008200836 | 02-Feb-1998 | |
| XY-19 Radial III | CA | 2 | DIV | Granted | 2279574 | 2279574 | |
| XY-19 Radial III | CH | | EPC | Granted | 2,588,622 | 02-Feb-1998 | |
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| | | | | Granted | 98910601.9 | 02-Feb-1998 | |

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| XY-19 Radial III | EP | Granted | 98901601.9 | 02-Feb-1998 | 1017987 | 15-Jun-2005 |
| XY-19 Radial III | GB | Granted | 98901601.9 | 02-Feb-1998 | 4323571 | 15-Jun-2005 |
| XY-19 Radial III | JP | Granted | 10-532763 | 02-Feb-1998 | 4727595 | 12-Jun-2009 |
| XY-19 Radial III | JP | Granted | 2007-6458 | 02-Feb-1998 | 337340 | 22-Apr-2011 |
| XY-19 Radial III | NZ | Granted | 337340 | 02-Feb-1998 | 512050 | 10-Jan-2002 |
| XY-19 Radial III | NZ | Granted | 512050 | 02-Feb-1998 | 512678 | 12-May-2003 |
| XY-19 Radial III | NZ | Granted | 512678 | 02-Feb-1998 | 522984 | 11-Nov-2004 |
| XY-19 Radial III | NZ | Granted | 522984 | 02-Feb-1998 | 523347 | 13-Jan-2005 |
| XY-19 Radial III | NZ | Granted | 523347 | 02-Feb-1998 | 6,819,411 | 11-Nov-2004 |
| XY-19 Radial III | US | Granted | 09/355,461 | 17-Sep-1999 | 7,221,453 | 16-Nov-2004 |
| XY-19 Radial III | US | CON | 10/990,648 | 16-Nov-2004 | 7,586,604 | 22-May-2007 |
| XY-19 Radial III | US | DIV | 11/805,572 | 22-May-2007 | 7,929,137 | 08-Sep-2009 |
| XY-19 Radial III | US | DIV | 12/555,641 | 17-Sep-1999 | | 19-Apr-2011 |
| XY-19 Radial III | EP | Published | 05009620.5 | 02-Feb-1998 | | |
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| XY-19 Radial III | US | CON | | 15-Sep-2003 | 200327709 | 10-Aug-2011 |
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| XY-20 Recryo | AU | PCT | | 15-Sep-2003 | EP1546325 | 10-Aug-2011 |
| XY-20 Recryo | BE | EPP | | 15-Sep-2003 | ZL 03821753.8 | 10-Aug-2011 |
| XY-20 Recryo | CH | EPP | | 15-Sep-2003 | EP1546325 | 20-Jan-2010 |
| XY-20 Recryo | CN | PCT | | 15-Sep-2003 | DK/EP1546325 | 10-Aug-2011 |
| XY-20 Recryo | DE | EPP | | 15-Sep-2003 | EP1546325 | 10-Aug-2011 |
| XY-20 Recryo | DK | EPP | | 15-Sep-2003 | EP1546325 | 10-Aug-2011 |
| XY-20 Recryo | EP | Granted | 03795716.4 | 03795716.4 | EP1546325 | 10-Aug-2011 |
| XY-20 Recryo | ES | EPP | 03821753.8 | 03821753.8 | EP1546325 | 10-Aug-2011 |
| XY-20 Recryo | FR | EPP | 03795716.4 | 03795716.4 | EP1546325 | 10-Aug-2011 |
| XY-20 Recryo | GB | EPP | 03795716.4 | 03795716.4 | EP1546325 | 10-Aug-2011 |
| XY-20 Recryo | HK | Granted | 300038892 | 22-Aug-2011 | EP1546325 | 10-Aug-2011 |
| XY-20 Recryo | HU | EPP | 03795716.4 | 03795716.4 | EP1546325 | 10-Aug-2011 |
| XY-20 Recryo | IE | EPP | 03795716.4 | 038217538 | 038217538 | 16-Apr-2010 |
| XY-20 Recryo | | | | 15-Sep-2003 | E012111 | 18-Aug-2011 |
| XY-20 Recryo | | | | 15-Sep-2003 | EP1546325 | 10-Aug-2011 |
| XY-20 Recryo | | | | 15-Sep-2003 | EP1546325 | 10-Aug-2011 |

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| XY-20 Recryo | IT | EPP | Granted | 03795716.4 | 15-Sep-2003 | EP1546325 | 10-Aug-2011 |
| XY-20 Recryo | NL | EPP | Granted | EP 03795716.4 | 15-Sep-2003 | 539388 | 10-Aug-2011 |
| XY-20 Recryo | NZ | PCT | Granted | 539388 | 15-Sep-2003 | 5771126 | 09-Jul-2009 |
| XY-20 Recryo | NZ | DIV | Granted | 571126 | 15-Sep-2003 | EP1546325 | 08-Jan-2011 |
| XY-20 Recryo | SE | EPP | Granted | 03795716.4 | 15-Sep-2003 | T4 | 10-Aug-2011 |
| XY-20 Recryo | TR | EPP | Granted | EP1546325 | 15-Sep-2003 | 7,169,548 | 15-Sep-2003 |
| XY-20 Recryo | US | ORD | Granted | 10/340,881 | 09-Jan-2003 | | 30-Jan-2007 |
| XY-20 Recryo | HK | 1 | Pending | 11111864.7 | 15-Sep-2003 | | |
| XY-20 Recryo | BR | PCT | Published | PI 031,4218-3 | 15-Sep-2003 | | |
| XY-20 Recryo | CA | PCT | Published | 2,538,118 | 15-Sep-2003 | | |
| XY-20 Recryo | EP | 1 | DIV | 10186250.6 | 15-Sep-2003 | | |
| XY-20 Recryo | US | 1 | CON | 11/668,148 | 29-Jan-2007 | 775339 | |
| XY-21 Sonicator | AU | PCT | Published | 33037/99 | 19-Feb-1999 | 2321075 | 25-Nov-2004 |
| XY-21 Sonicator | CA | PCT | Granted | 2321075 | 19-Feb-1999 | ZL99803760.5 | 06-Oct-2009 |
| XY-21 Sonicator | CN | PCT | Granted | 99803760.5 | 17-Sep-2000 | 137,194 | 19-Nov-2008 |
| XY-21 Sonicator | IL | PCT | Granted | 137944 | 19-Feb-1999 | 224469 | 11-Jul-2006 |
| XY-21 Sonicator | MX | PCT | Granted | PA/A/2000/008024 | 19-Feb-1999 | 506454 | 24-Nov-2004 |
| XY-21 Sonicator | NZ | PCT | Granted | 506454 | 19-Feb-1999 | 6,746,873 | 09-Feb-2004 |
| XY-21 Sonicator | US | PCT | Granted | 09/622,621 | 18-Aug-2000 | | 08-Jun-2004 |
| XY-21 Sonicator | EP | PCT | Published | 99934338.7 | 19-Feb-1999 | 6,071,689 | |
| XY-22 SUPER-O | US | 1 | ORD | 09/015,454 | 29-Jan-1998 | 6,372,422 | 06-Jun-2000 |
| XY-22 SUPER-O | US | 2 | ORD | 09/448,643 | 24-Nov-1999 | 7,629,113 | 16-Apr-2002 |
| XY-22 SUPER-O | US | 3 | CON | 10/081955 | 02-Feb-2002 | 6617107 | 08-Dec-2009 |
| XY-24 Y-PROBE | US | ORD | Granted | 09/601,599 | 03-Aug-2000 | | 09-Sep-2003 |
| XY-25 Cytrack | US | Cnt1 | CON | Pending | 10-Apr-2012 | | |

**SCHEDULE 2 TO
AMENDED AND RESTATED PATENT AND TRADEMARK SECURITY AGREEMENT**

TRADEMARKS

| TM # Name | Cntry/Class | Application No. | Status | R or TM |
|------------------------|----------------------|------------------------|---------------|-----------------------|
| XY | US | 2,946,290 | Registered | TM/Word Mark |
| XY & Design | US | 2,946,289 | Registered | TM/Design |
| Reprogenetics & Design | US | | Registered | TM/Design |
| XY Clone & Design | US | 2,987,331 | Registered | TM/Design |
| XY | US | 2,917,606 | Registered | TM |
| XY | US | 2,919,211 | Registered | TM Word Mark |
| XY (Design) | US | 2,925,517 | Registered | TM Service Mark |
| XY (Design) | US | 2,925,518 | Registered | TM Principal Register |
| XY | MX/ CI 05, 09, 42 | 834737 | Registered | Mark |
| XY | BR | | Registered | Word and Design Mark |
| XY | BR | 826055605 | Registered | TM and Word Mark |
| XY | CN | 4,219,155 | Registered | Design Mark |
| | | | | |

SCHEDULE 2 – Page 1

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RECORDED: 09/07/2012

**TRADEMARK
REEL: 004857 FRAME: 0531**