



3. Beckman Coulter joins as a co-plaintiff solely as to Count XII as it is the assignee of U.S. Patent RE46,559 (reissued from U.S. Patent 9,134,220).

### **NATURE OF THE ACTION**

4. This civil action includes claims against TOG for (i) infringement of United States Patent Nos. 9,145,590, 7,723,116, 9,365,822, 7,208,265, 6,372,422, 8,652,769, and RE46,559 (the “Asserted Patents”) under the patent laws of the United States, 35 U.S.C. § 271 *et seq.*, (ii) trade secret misappropriation under the Defend Trade Secrets Act, including 18 U.S.C. § 1836, (iii) trade secret misappropriation, (iv) unfair competition, (v) quantum meruit, and (vi) unjust enrichment. For each claim, XY and ST are seeking damages, enhanced damages, disgorgement of profits, prejudgment interest, injunctive relief, attorneys’ fees, exemplary damages, and any other relief that is available and warranted under applicable law from TOG.

### **JURISDICTION AND VENUE**

5. This Court has subject matter jurisdiction over this matter pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, including 35 U.S.C. § 271 *et seq.*, and the Defend Trade Secrets Act, including 18 U.S.C. § 1836. This Court has supplemental jurisdiction over other causes of action alleged in this complaint under 35 U.S.C. § 1367 because the claims are so related to XY’s claims under the Defend Trade Secrets Act that they form part of the same case or controversy.

6. This Court has personal jurisdiction over TOG because TOG has continuous and systematic contacts with this state, and through its provision of goods and services throughout the state. In addition, this Court has personal jurisdiction over TOG because TOG has committed acts within Colorado and this judicial district and division that gave rise to this action.

7. Venue is proper against TOG under 28 U.S.C. 1391(b)(1) and 1391(b)(2) because TOG is deemed to reside in this district and division and because a substantial part of the events giving rise to the claims occurred in this district and division.

### **FACTUAL BACKGROUND**

8. XY researches, develops, and commercializes technology for sex selection of non-human mammals, such as cattle and horses. XY's proprietary technology involves the use of specialized flow cytometry instruments, software, fluid media, and techniques to enable the separation of individual sperm cells that carry an X chromosome (for producing female offspring) from those that carry a Y chromosome (for producing male offspring) based on differences in DNA content between the cells. Once separated, the sorted sperm cells may be used to produce offspring of a desired gender in non-human mammals, including through artificial insemination or the production of sexed embryos using in-vitro or in-vivo fertilization techniques. XY's technology further allows for the cryopreservation of the sorted sperm so that the sperm may be stored for extended periods of time or shipped throughout the world.

9. XY protects its proprietary rights in sex selection technology through the use of patents and trade secrets. For example, XY owns patents and trade secrets relating to improvements in (i) flow cytometry instruments and software to make them suitable for sperm sorting, (ii) the production and use of various proprietary fluid media compositions, including media used to stain sperm cells, convey the cells through the instruments, collect the cells, extend the cells to adjust their concentration, and cryopreserve the cells, (iii) techniques for staining, sorting, cryopreserving, storing, and shipping sorted semen, and (iv) techniques for producing sexed semen and sexed embryos.

10. XY's patents and trade secrets are embodied in instruments, media, and sperm sorting protocols it makes available to its licensees. For example, the MoFlo SX sperm sorting instrument incorporates numerous patented XY inventions and XY trade secrets. The MoFlo SX and its specialized parts have been made available only to XY licensees in good standing. Similarly, the Summit software used in the operation of MoFlo SX sperm sorting instruments incorporates technology exclusively licensed to XY for sorting sperm cells, and its use in that field is restricted based on XY rights. Moreover the process of converting non-sperm sorting flow cytometers, such as the MoFlo general cell sorter and parts thereof, into MoFlo SX sperm sorters is an XY trade secret and this process is known only to XY, its licensees, which are bound by confidentiality agreements, and other persons bound to maintain the confidentiality of that process. Similarly, XY's sperm sorting protocols, including procedures and instructions for sorting sperm cells, preparing and using fluid media for the sorting process, producing and cryopreserving sexed semen and sexed embryos, and using the sexed semen and embryos to produce animals of a desired sex, (the "XY Protocols" or "XY's Protocols") incorporate numerous patented XY inventions and XY trade secrets. The XY Protocols may only be used by current XY licensees in good standing.

11. Defendant, TOG, provides reproductive services to cattle breeders, including embryo transfer and in-vitro fertilization services. On April 16, 2004, TOG entered a license agreement with XY that allowed TOG use XY's proprietary technology, including the MoFlo SX instruments and the XY Protocols, to offer goods and services produced or facilitated using XY's sperm sorting technology (the "Agreement"). These goods and services included the production of sexed semen, sexed embryos, and sexed calves, as well as the ability to perform IVF and

embryo transfer services using sexed semen and embryos. The Agreement created a confidential relationship between XY and TOG as licensor and licensee and TOG knew that the XY Protocols were delivered to TOG in confidence. Pursuant to its terms, the Agreement would automatically renew every five years, unless TOG was in material breach of any term or provision of the Agreement.

12. In December, 2004, XY entered the “Lead Licensee Agreement” with ST, one of its existing licensees, wherein XY agreed that it would not grant any more licenses to its sperm sorting technology within the United States in exchange for an up-front payment from ST and other consideration. The Lead License Agreement was Amended and Restated in 2010. At all times relevant to the claims pleaded in this Complaint, ST has had the exclusive right to use XY’s patented technology to make and manufacture products and services within the United States for the collection, processing, storage, and use of certain mammalian sperm, embryos, and other semen products, except to the extent that The Semex Alliance, a provider of animal genetics, maintains a limited, non-exclusive right to make sorted semen from its own bulls.

13. In March 2012, after learning of certain highly material TOG breaches of its license agreement with XY, XY filed a lawsuit in federal court in Denver against TOG seeking a declaratory judgment that the Agreement had been terminated or that the Agreement expired by its express terms due to material, uncured breaches by TOG. On February 12, 2016, a jury found that TOG had materially breached the Agreement before April 16, 2009, and failed to cure the breach by that date. Judgment on that verdict was subsequently entered by this Court. In accordance with the jury’s verdict and the ensuing judgment, the Agreement expired on April 16, 2009 and any use of XY’s patents or trade secrets by TOG after that date was unlicensed and

unauthorized. Because TOG continued to use XY's technology after that date, the jury also found that TOG had willfully infringed ten of XY's patents. This Court entered final judgment on the jury's finding of willful patent infringement, as well.

14. In connection with that previous lawsuit, XY learned that TOG hired a former XY employee named Todd Cox, first as a consultant and later as an employee, to obtain non-sperm sorting flow cytometers and convert them into MoFlo SX sperm sorting flow cytometers using XY trade secret information. This trade secret information includes the identity of parts specific to the MoFlo SX, modifications to the MoFlo general cell sorter and other equipment and parts necessary for making a MoFlo SX sperm sorter, and the process of assembling a MoFlo SX.

15. After April, 2009, TOG continued to use XY's proprietary technology in its business. Upon information and belief, TOG continues to do so today, despite the fact that TOG lost its license to XY's technology in April, 2009.

16. After April, 2009, TOG continued to make and use MoFlo SX sperm sorting flow cytometers to produce sexed semen.

17. After April, 2009, TOG's protocols for sorting sperm cells continued to incorporate the XY Protocols, and TOG continued to use those protocols to sort semen commercially.

18. After April, 2009, Todd Cox, as an employee of TOG and at TOG's behest, taught others at TOG, including at least Javier Tellez, how to convert non-sperm sorting flow cytometers into MoFlo SXs. This is a trade secret process involving XY proprietary parts and Todd Cox was under a specific obligation to XY to not teach this process to anyone else, including XY's licensees. On information and belief, prior to becoming a TOG employee, Mr.

Cox taught TOG employees how to convert non-sperm sorting flow cytometers into MoFlo SXs as a consultant for TOG. At all times when Mr. Cox was teaching TOG employees how to convert non-sperm sorting flow cytometers into MoFlo SXs, Mr. Cox was acting at TOG's request and in furtherance of TOG's business, and was performing the duties for which he was employed.

19. TOG has known about Todd Cox's obligation to not teach the conversion process since at least as early as the first time Todd Cox taught anyone at TOG how to perform the conversion process, and no later than Mr. Cox's admission at trial in February 2016. At trial in February 2016, Todd Cox admitted in open court, and in the presence of TOG's President and CEO, Dr. David Faber, that he had been warned by XY not to teach others how to convert non-sperm sorting flow cytometers into MoFlo SXs, and that Mr. Cox had agreed not to do so.

20. TOG has used the trade secret knowledge it learned from Todd Cox to convert multiple non-sperm sorting flow cytometers into MoFlo SXs. To XY's knowledge, at no point has TOG done anything to prevent its employees from using XY's trade secrets in converting non-sperm sorting flow cytometers into MoFlo SXs, and, unless it is enjoined from doing so, TOG is highly likely to continue to improperly use those trade secrets to convert flow cytometers in the future.

21. TOG continues to use MoFlo SX sperm sorting flow cytometers, XY's Protocols, and XY's other trade secrets and intellectual property without XY's authorization to produce sexed semen to this day.

22. Some or all of the MoFlo SX sperm sorting flow cytometers TOG has made have the Summit software installed. Since September 15, 2015, TOG has used the Summit software

in connection with TOG-made MoFlo SX sperm sorting flow cytometers to produce sexed semen.

**COUNT I – XY’S AND ST’S CLAIM OF INFRINGEMENT OF U.S. PATENT NO. 9,145,590**

23. The above paragraphs are incorporated by reference as if fully restated herein.

24. On September 29, 2015, United States Patent No. 9,145,590 (the ’590 Patent) was duly and legally issued for an invention entitled “Methods and Apparatus for High Purity X-Chromosome Bearing and Y-Chromosome Bearing Populations of Spermatozoa.” A true and correct copy of the ’590 Patent is attached hereto as Exhibit A. XY is the owner of the ’590 Patent and has the right to sue on and seek enforcement of the ’590 Patent. ST has exclusive rights in the ’590 Patent. At all times relevant to this claim, ST has had standing to bring a claim for infringement of the ’590 Patent because of its exclusive rights in the relevant field and because the patent owner, XY, is participating in this litigation as a party. XY has owned the ’590 Patent at all times relevant to this complaint and still owns the ’590 Patent.

25. TOG has infringed, and continues to infringe, at least claim 1 of the ’590 Patent. The claims of the ’590 Patent are directed to a “particle differentiation apparatus.” XY’s MoFlo SX sperm sorter meets all of the limitations of at least claim 1 of the ’590 Patent. By converting MoFlo machines into MoFlo SX machines and using MoFlo SX machines to sort sperm cells, TOG makes and uses an apparatus that includes every limitation of at least claim 1 of the ’590 patent. TOG’s use of the patented invention is without XY’s authorization. Accordingly, after September 29, 2015, TOG has directly infringed, and continues to directly infringe, the ’590 Patent. Moreover, TOG has indirectly infringed, and continues to indirectly infringe, the ’590



Patent by contributorily infringing or inducing infringement, wherein the direct infringers include, but are not limited to, TOG's employees, contractors, affiliates, users, and customers.

26. Upon information and belief, as a former licensee of XY's patents and technology, TOG has been aware of the '590 Patent since the date it issued and has been aware of the application that matured into the '590 Patent since at least as early as its date of publication. In addition, due to the loss of its license from XY in April, 2009, TOG is and has been aware that it does not have a license to practice the claims of the '590 Patent. TOG is also aware that, by continuing to use XY's technology without a license, TOG is infringing the '590 Patent. TOG's continued infringement of the '590 Patent is and has been willful and deliberate.

27. TOG's infringement has caused harm to XY and ST and they are entitled to recover damages from TOG in an amount subject to proof at trial. In addition, such damages should be increased pursuant to 35 U.S.C. § 284 in light of TOG's willful conduct, including its continued use of XY's patents despite TOG's knowledge that it no longer has a license to XY's patents on sperm sorting technology.

28. TOG should be permanently enjoined from practicing the '590 Patent. Most of XY's revenues are in the form of royalties from exclusive and semi-exclusive licenses to use its technology in various territories throughout the world. A substantial portion of the value of such licenses is derived from their territorial exclusivity. Trans Ova's unlicensed use of XY's patents has destroyed or substantially reduced the value of the exclusivity ST bargained and paid for. If TOG is permitted to continue to use XY's technology, it would undermine the exclusive rights XY granted to Inguran in the Lead Licensee Agreement, including XY's agreement not to issue any further licenses in the United States. This is likely to cause other existing and prospective

XY licensees to lose confidence in XY's ability to grant and enforce exclusive licenses, harming the value of XY's technology and XY's reputation and causing irreparable injury to XY. ST will also be irreparably harmed by Trans Ova's continued infringement of the '590 Patent. ST obtained exclusive rights to the '590 Patent that have continued to gain in value. If Trans Ova is permitted to practice the '590 Patent, ST will be deprived of its exclusive rights now and in the future. Moreover, Trans Ova directly competes with ST in providing sex selection services in the field of bovine genetics. Permitting Trans Ova to use the '590 Patent to directly compete with ST will harm ST's reputation and its position within the bovine genetics field. Trans Ova further has obtained unfair competitive advantages as a result of its infringement of the '590 Patent, such as an ability to lock up distribution channels for its products and services and to make improvements to its sex-selected products and services that Trans Ova can keep to itself, rather than licensing it back to XY and/or ST. This puts ST and Trans Ova on uneven competitive footing when selling similar goods and services to similar customers. Moreover, Trans Ova is not held to the same quality control requirements that licensees are held to. Thus, Trans Ova's sales of infringing products and services that are not of comparable quality to those products and services sold by ST irreparably harms the reputation of ST's products and services. Additionally, Trans Ova and its parent company have made public statements that Trans Ova continues to hold a license to XY's patents, which creates market confusion and loss of goodwill towards ST. A permanent injunction against TOG is necessary to avoid these irreparable injuries to XY and ST.

**COUNT II – XY'S AND ST'S CLAIM OF INFRINGEMENT OF U.S. PATENT NO. 7,723,116**

29. The above paragraphs are incorporated by reference as if fully restated herein.

30. On May 25, 2010, United States Patent No. 7,723,116 (the '116 Patent) was duly and legally issued for an invention entitled "Apparatus, Methods and Processes for Sorting Particles and for Providing Sex-Sorted Animal Sperm." A true and correct copy of the '116 Patent is attached hereto as Exhibit B. XY is the owner of the '116 Patent and has the right to sue on and seek enforcement of the '116 Patent. ST has exclusive rights in the '116 Patent. At all times relevant to this claim, ST has had standing to bring a claim for infringement of the '116 Patent because of its exclusive rights in the relevant field and because the patent owner, XY, is participating in this litigation as a party.

31. TOG has infringed, and continues to infringe, at least claims 1 and 42 of the '116 Patent. The claims of the '116 patent are directed to flow cytometry methods and systems. Each of the claims of the '116 patent require the step of splitting a radiation source into at least two beams or incorporating a beam splitter into a flow cytometer. Upon information and belief, TOG modified at least two MoFlo SX instruments to share a single interrogation laser through the use of beam splitters and mirrors. A MoFlo SX modified in this fashion and used to sort sperm cells handled according to the XY Protocols meets all of the limitations of at least claims 1 and 42 of the '116 Patent. By converting MoFlo machines into MoFlo SX machines, incorporating a beam splitter for splitting the radiation source between two instruments, and using the modified instruments to sort sperm cells in accordance with the XY Protocols, TOG performs and uses all of the limitations of claim 1 of the '116 Patent and makes and uses a system that includes every limitation of claim 42 of the '116 Patent. TOG's use of the patented inventions is without XY's authorization. Accordingly, after May 25, 2010, TOG has directly infringed, and continues to directly infringe, the '116 Patent. Moreover, TOG has indirectly infringed, and continues to

indirectly infringe, the '116 Patent by contributorily infringing or inducing infringement, wherein the direct infringers include, but are not limited to, TOG's employees, contractors, affiliates, users, and customers.

32. Upon information and belief, as a former licensee of XY's patents and technology, TOG has been aware of the '116 Patent since the date it issued and has been aware of the application that matured into the '116 Patent since at least as early as its date of publication. In addition, due to the loss of its license from XY in April, 2009, TOG is and has been aware that it does not have a license to practice the claims of the '116 Patent. TOG is also aware that, by continuing to use XY's technology without a license, TOG is infringing the '116 Patent. TOG's continued infringement of the '116 Patent is and has been willful and deliberate.

33. TOG's infringement has caused harm to XY and ST, and they are entitled to recover damages from TOG in an amount subject to proof at trial. In addition, such damages should be increased pursuant to 35 U.S.C. § 284 in light of TOG's willful conduct, including its continued use of XY's patents despite its knowledge that it no longer has a license to XY's patents on sperm sorting technology.

34. TOG should be permanently enjoined from practicing the '116 Patent. Most of XY's revenues are in the form of royalties from exclusive and semi-exclusive licenses to use its technology in various territories throughout the world. A substantial portion of the value of such licenses is derived from their territorial exclusivity, and Trans Ova's unlicensed use of XY's patents has destroyed or substantially reduced the value of the exclusivity ST bargained and paid for. If TOG is permitted to continue to use XY's technology, it would further undermine the exclusive rights XY granted to Inguran in the Lead Licensee Agreement, including XY's

agreement not to issue any further licenses in the United States. This is likely to cause other existing and prospective XY licensees to lose confidence in XY's ability to grant and enforce exclusive licenses, harming the value of XY's technology and XY's reputation and causing irreparable injury to XY. ST will also be irreparably harmed by Trans Ova's continued infringement of the '116 Patent. ST obtained exclusive rights to the '116 Patent that have continued to gain in value. If Trans Ova is permitted to practice the '116 Patent, ST will be deprived of its exclusive rights now and in the future. Moreover, Trans Ova directly competes with ST in providing sex selection services in the field of bovine genetics. Permitting Trans Ova to use the '116 Patent to directly compete with ST will harm ST's reputation and its position within the bovine genetics field. Trans Ova further has obtained unfair competitive advantages as a result of its infringement of the '116 Patent, such as an ability to lock up distribution channels for its products and services and to make improvements to its sex-selected products and services that Trans Ova can keep to itself, rather than licensing it back to XY and/or ST. This puts ST and Trans Ova on uneven competitive footing when selling similar goods and services to similar customers. Moreover, Trans Ova is not held to the same quality control requirements that licensees are held to. Thus, Trans Ova's sales of infringing products and services that are not of comparable quality to those products and services sold by ST irreparably harms the reputation of ST's products and services. Additionally, Trans Ova and its parent company have made public statements that Trans Ova continues to hold a license to XY's patents, which creates market confusion and loss of goodwill towards ST. A permanent injunction against TOG is necessary to avoid these irreparable injuries to XY and ST.

**COUNT III – XY’S AND ST’S CLAIM OF INFRINGEMENT OF U.S. PATENT NO. 9,365,822**

35. The above paragraphs are incorporated by reference as if fully restated herein.

36. On June 14, 2016, United States Patent No. 9,365,822 (the ’822 Patent) was duly and legally issued for an invention entitled “System and Method for Sorting Cells.” A true and correct copy of the ’822 Patent is attached hereto as Exhibit C. XY is the owner of the ’822 Patent and has the right to sue on and seek enforcement of the ’822 Patent. ST has exclusive rights in the ’822 Patent. At all times relevant to this claim, ST has had standing to bring a claim for infringement of the ’822 Patent because of its exclusive rights in the relevant field and because the patent owner, XY, is participating in this litigation as a party .

37. TOG has infringed, and continues to infringe, at least claim 11 of the ’822 Patent. The claims of the ’822 Patent are directed to methods of producing at least one sexed embryo. TOG practices every step of at least claim 11 of the ’822 Patent, and thus uses the claimed invention, by producing sexed embryos through in-vitro or in-vivo fertilization of eggs with sexed semen processed on MoFlo SX instruments using the fluid media described in XY’s Protocols. TOG’s use of the patented invention is without XY’s authorization. TOG, therefore, has directly infringed the ’822 Patent since June 14, 2016, and continues to directly infringe the ’822 Patent. Moreover, TOG has indirectly infringed, and continues to indirectly infringe, the ’822 Patent by contributorily infringing or inducing infringement, wherein the direct infringers include, but are not limited to, TOG’s employees, contractors, affiliates, users, and customers.

38. Upon information and belief, as a former licensee of XY’s patents and technology, TOG has been aware of the ’822 Patent since the date it issued and has been aware of the application that matured into the ’822 Patent since at least as early as its date of publication. In

addition, due to the loss of its license from XY in April, 2009, TOG is and has been aware that it does not have a license to practice the claims of the '822 Patent. TOG is also aware that, by continuing to use XY's technology without a license, TOG is infringing the '822 Patent. TOG's continued infringement of the '822 Patent is and has been willful and deliberate.

39. TOG's infringement has caused harm to XY and ST, and they are entitled to recover damages from TOG in an amount subject to proof at trial. In addition, such damages should be increased pursuant to 35 U.S.C. § 284 in light of TOG's willful conduct, including its continued use of XY's patents despite its knowledge that it no longer has a license to XY's patents on sperm sorting technology.

40. TOG should be permanently enjoined from practicing the '822 Patent. Most of XY's revenues are in the form of royalties from exclusive and semi-exclusive licenses to use its technology in various territories throughout the world. A substantial portion of the value of such licenses is derived from their territorial exclusivity, and Trans Ova's unlicensed use of XY's patents has destroyed or substantially reduced the value of the exclusivity ST bargained and paid for. If TOG is permitted to continue to use XY's technology, it would further undermine the exclusive rights XY granted to Inguran in the Lead Licensee Agreement, including XY's agreement not to issue any further licenses in the United States. This is likely to cause other existing and prospective XY licensees to lose confidence in XY's ability to grant and enforce exclusive licenses, harming the value of XY's technology and XY's reputation and causing irreparable injury to XY. ST will also be irreparably harmed by Trans Ova's continued infringement of the '822 Patent. ST obtained exclusive rights to the '822 Patent that have continued to gain in value. If Trans Ova is permitted to practice the '822 Patent, ST will be

deprived of its exclusive rights now and in the future. Moreover, Trans Ova directly competes with ST in providing sex selection services in the field of bovine genetics. Permitting Trans Ova to use the '822 Patent to directly compete with ST will harm ST's reputation and its position within the bovine genetics field. Trans Ova further has obtained unfair competitive advantages as a result of its infringement of the '822 Patent, such as an ability to lock up distribution channels for its products and services and to make improvements to its sex-selected products and services that Trans Ova can keep to itself, rather than licensing it back to XY and/or ST. This puts ST and Trans Ova on uneven competitive footing when selling similar goods and services to similar customers. Moreover, Trans Ova is not held to the same quality control requirements that licensees are held to. Thus, Trans Ova's sales of infringing products and services that are not of comparable quality to those products and services sold by ST irreparably harms the reputation of ST's products and services. Additionally, Trans Ova and its parent company have made public statements that Trans Ova continues to hold a license to XY's patents, which creates market confusion and loss of goodwill towards ST. A permanent injunction against TOG is necessary to avoid these irreparable injuries to XY and ST.

**COUNT IV – XY'S AND ST'S CLAIM OF INFRINGEMENT OF U.S. PATENT NO. 7,208,265**

41. The above paragraphs are incorporated by reference as if fully restated herein.

42. On April 24, 2007, United States Patent No. 7,208,265 (the '265 Patent) was duly and legally issued for an invention entitled "Method of Cryopreserving Selected Sperm Cells." A true and correct copy of the '265 Patent is attached hereto as Exhibit D. XY is the owner of the '265 Patent and has the right to sue on and seek enforcement of the '265 Patent. ST has exclusive rights in the '265. At all times relevant to this claim, ST has had standing to bring a



claim for infringement of the '265 Patent because of its exclusive rights in the relevant field and because the patent owner, XY, is participating in this litigation as a party. XY has owned the '265 Patent at all times relevant to this complaint and still owns the '265 Patent.

43. Since April 16, 2009, TOG has infringed at least claim 1 of the '265 Patent, and continues to infringe the '265 Patent. The claims of the '265 Patent are directed to methods of cryopreserving sex-selected sperm cells. Processing and cryopreserving sperm cells sorted with a MoFlo SX according to the methods described in XY's Protocols would meet every limitation of at least claim 1 of the '265 Patent. By producing and freezing sex selected sperm cells on its MoFlo SX instruments according to XY's Protocols, TOG practices and uses every limitation of at least claim 1 of the '265 Patent. TOG's use of the patented invention is without XY's authorization. Accordingly, after April 16, 2009, TOG has directly infringed, and continues to directly infringe, the '265 Patent. Moreover, TOG has indirectly infringed, and continues to indirectly infringe, the '265 Patent by contributorily infringing or inducing infringement, wherein the direct infringers include, but are not limited to, TOG's employees, contractors, affiliates, users, and customers.

44. Upon information and belief, as a former licensee of XY's patents and technology, TOG has been aware of the '265 Patent since the date it issued. In addition, due to the loss of its license from XY in April, 2009, TOG is and has been aware that it does not have a license to practice the claims of the '265 Patent. TOG is also aware that, by continuing to use XY's technology without a license, TOG is infringing the '265 Patent. TOG's continued infringement of the '265 Patent is and has been willful and deliberate.

45. TOG's infringement has caused harm to XY and ST, and they are entitled to recover damages from TOG in an amount subject to proof at trial. In addition, such damages should be increased pursuant to 35 U.S.C. § 284 in light of TOG's willful conduct, including its continued use of XY's patents despite its knowledge that it no longer has a license to XY's patents on sperm sorting technology.

46. TOG should be permanently enjoined from practicing the '265 Patent. Most of XY's revenues are in the form of royalties from exclusive and semi-exclusive licenses to use its technology in various territories throughout the world. A substantial portion of the value of such licenses is derived from their territorial exclusivity, and Trans Ova's unlicensed use of XY's patents has destroyed or substantially reduced the value of the exclusivity ST bargained and paid for. If TOG is permitted to continue to use XY's technology, it would further undermine the exclusive rights XY granted to Inguran in the Lead Licensee Agreement, including XY's agreement not to issue any further licenses in the United States. This is likely to cause other existing and prospective XY licensees to lose confidence in XY's ability to grant and enforce exclusive licenses, harming the value of XY's technology and XY's reputation and causing irreparable injury to XY. ST will also be irreparably harmed by Trans Ova's continued infringement of the '265 Patent. ST obtained exclusive rights to the '265 Patent that have continued to gain in value. If Trans Ova is permitted to practice the '265 Patent, ST will be deprived of its exclusive rights now and in the future. Moreover, Trans Ova directly competes with ST in providing sex selection services in the field of bovine genetics. Permitting Trans Ova to use the '2650 Patent to directly compete with ST will harm ST's reputation and its position within the bovine genetics field. Trans Ova further has obtained unfair competitive advantages

as a result of its infringement of the '265 Patent, such as an ability to lock up distribution channels for its products and services and to make improvements to its sex-selected products and services that Trans Ova can keep to itself, rather than licensing it back to XY and/or ST. This puts ST and Trans Ova on uneven competitive footing when selling similar goods and services to similar customers. Moreover, Trans Ova is not held to the same quality control requirements that licensees are held to. Thus, Trans Ova's sales of infringing products and services that are not of comparable quality to those products and services sold by ST irreparably harms the reputation of ST's products and services. Additionally, Trans Ova and its parent company have made public statements that Trans Ova continues to hold a license to XY's patents, which creates market confusion and loss of goodwill towards ST. A permanent injunction against TOG is necessary to avoid these irreparable injuries to XY and ST.

**COUNT V – XY'S AND ST'S CLAIM OF INFRINGEMENT OF U.S. PATENT NO. 6,372,422**

47. The above paragraphs are incorporated by reference as if fully restated herein.

48. On April 16, 2002, United States Patent No. 6,372,422 (the '422 Patent) was duly and legally issued for an invention entitled "Multiple Sexed Embryo Production System for Mammals." A true and correct copy of the '422 Patent is attached hereto as Exhibit E. XY is the owner of the '422 Patent and has the right to sue on and seek enforcement of the '422 Patent. ST has exclusive rights in the '422 Patent. At all times relevant to this claim, ST has had standing to bring a claim for infringement of the '422 Patent because of its exclusive rights in the relevant field and because the patent owner, XY, is participating in this litigation as a party. XY has owned the '422 Patent at all times relevant to this complaint and still owns the '422 Patent.

49. Since April 16, 2009, TOG has infringed at least claim 1 of the '422 Patent, and continues to infringe the '422 Patent. The claims of the '422 Patent are directed to methods of producing multiple sexed embryos. Trans Ova's goods and services include in-vivo embryo transfer wherein a cow is made to produce multiple eggs through superovulation and is then inseminated with sex sorted sperm cells. By performing in-vivo embryo transfer with superovulated cows and semen sorted using XY's technology, TOG practices and uses every limitation of at least claim 1 of the '422 Patent. TOG's use of the patented invention is without XY's authorization. Accordingly, after April 16, 2009, TOG has directly infringed, and continues to directly infringe, the '422 Patent. Moreover, TOG has indirectly infringed, and continues to indirectly infringe, the '422 Patent by contributorily infringing or inducing infringement, wherein the direct infringers include, but are not limited to, TOG's employees, contractors, affiliates, users, and customers.

50. Upon information and belief, as a former licensee of XY's patents and technology, TOG has been aware of the '422 Patent since the date it issued. In addition, due to the loss of its license from XY in April, 2009, TOG is and has been aware that it does not have a license to practice the claims of the '422 Patent. TOG is also aware that, by continuing to use XY's technology without a license, TOG is infringing the '422 Patent. TOG's continued infringement of the '422 Patent is and has been willful and deliberate.

51. TOG's infringement has caused harm to XY and ST, and they are entitled to recover damages from TOG in an amount subject to proof at trial. In addition, such damages should be increased pursuant to 35 U.S.C. § 284 in light of TOG's willful conduct, including its

continued use of XY's patents despite its knowledge that it no longer has a license to XY's patents on sperm sorting technology.

52. TOG should be permanently enjoined from practicing the '422 Patent. Most of XY's revenues are in the form of royalties from exclusive and semi-exclusive licenses to use its technology in various territories throughout the world. A substantial portion of the value of such licenses is derived from their territorial exclusivity, and Trans Ova's unlicensed use of XY's patents has destroyed or substantially reduced the value of the exclusivity ST bargained and paid for. If TOG is permitted to continue to use XY's technology, it would further undermine the exclusive rights XY granted to Inguran in the Lead Licensee Agreement, including XY's agreement not to issue any further licenses in the United States. This is likely to cause other existing and prospective XY licensees to lose confidence in XY's ability to grant and enforce exclusive licenses, harming the value of XY's technology and XY's reputation and causing irreparable injury to XY. ST will also be irreparably harmed by Trans Ova's continued infringement of the '422 Patent. ST obtained exclusive rights to the '422 Patent that have continued to gain in value. If Trans Ova is permitted to practice the '422 Patent, ST will be deprived of its exclusive rights now and in the future. Moreover, Trans Ova directly competes with ST in providing sex selection services in the field of bovine genetics. Permitting Trans Ova to use the '422 Patent to directly compete with ST will harm ST's reputation and its position within the bovine genetics field. Trans Ova further has obtained unfair competitive advantages as a result of its infringement of the '422 Patent, such as an ability to lock up distribution channels for its products and services and to make improvements to its sex-selected products and services that Trans Ova can keep to itself, rather than licensing it back to XY and/or ST. This

puts ST and Trans Ova on uneven competitive footing when selling similar goods and services to similar customers. Moreover, Trans Ova is not held to the same quality control requirements that licensees are held to. Thus, Trans Ova's sales of infringing products and services that are not of comparable quality to those products and services sold by ST irreparably harms the reputation of ST's products and services. Additionally, Trans Ova and its parent company have made public statements that Trans Ova continues to hold a license to XY's patents, which creates market confusion and loss of goodwill towards ST. A permanent injunction against TOG is necessary to avoid these irreparable injuries to XY and ST.

**COUNT VI – XY'S AND ST'S CLAIM OF INFRINGEMENT OF U.S. PATENT NO. 8,652,769**

53. The above paragraphs are incorporated by references as if fully restated herein.

54. On February 18, 2014, United States Patent No. 8,652,769 (the '769 Patent) was duly and legally issued for an invention entitled "Methods for Separating Frozen-Thawed Spermatozoa into X-Chromosome Bearing and Y-Chromosome Bearing Populations." A true and correct copy of the '769 Patent is attached hereto as Exhibit F. XY is the owner of the '769 Patent and has the right to sue on and seek enforcement of the '769 Patent. ST has exclusive rights in the '769 Patent. At all times relevant to this claim, ST has had standing to bring a claim for infringement of the '769 Patent because of its exclusive rights in the relevant field and because the patent owner, XY, is participating in this litigation as a party.

55. Since February 18, 2014, TOG has infringed at least claim 16 of the '769 Patent, and continues to infringe the '769 Patent. The claims of the '769 Patent are directed to methods of producing a frozen-thawed sorted sperm sample. Trans Ova's goods and services include "reverse sorting" wherein Trans Ova sorts previously frozen sperm cells using the MoFlo SX

machine and protocols derived from XY's Protocols. By performing its "reverse sort" services using the MoFlo SX according to the protocols derived from XY's reverse sorting protocols, TOG practices and uses every limitation of at least claim 16 of the '769 Patent. TOG's use of the patented invention is without XY's authorization. Accordingly, after February 18, 2014, TOG has directly infringed, and continues to directly infringe, the '769 Patent. Moreover, TOG has indirectly infringed, and continues to indirectly infringe, the '769 Patent by contributorily infringing or inducing infringement, wherein the direct infringers include, but are not limited to, TOG's employees, contractors, affiliates, users, and customers.

56. Upon information and belief, as a former licensee of XY's patents and technology, TOG has been aware of the '769 Patent since the date it issued. In addition, due to the loss of its license from XY in April, 2009, TOG is and has been aware that it does not have a license to practice the claims of the '769 Patent. TOG is also aware that, by continuing to use XY's technology without a license, TOG is infringing the '769 Patent. TOG's continued infringement of the '769 Patent is and has been willful and deliberate.

57. TOG's infringement has caused harm to XY and ST, and they are entitled to recover damages from TOG in an amount subject to proof at trial. In addition, such damages should be increased pursuant to 35 U.S.C. § 284 in light of TOG's willful conduct, including its continued use of XY's patents despite its knowledge that it no longer has a license to XY's patents on sperm sorting technology.

58. TOG should be permanently enjoined from practicing the '769 Patent. Most of XY's revenues are in the form of royalties from exclusive and semi-exclusive licenses to use its technology in various territories throughout the world. A substantial portion of the value of such

licenses is derived from their territorial exclusivity, and Trans Ova's unlicensed use of XY's patents has destroyed or substantially reduced the value of the exclusivity ST bargained and paid for. If TOG is permitted to continue to use XY's technology, it would further undermine the exclusive rights XY granted to Inguran in the Lead Licensee Agreement, including XY's agreement not to issue any further licenses in the United States. This is likely to cause other existing and prospective XY licensees to lose confidence in XY's ability to grant and enforce exclusive licenses, harming the value of XY's technology and XY's reputation and causing irreparable injury to XY. ST will also be irreparably harmed by Trans Ova's continued infringement of the '769 Patent. ST obtained exclusive rights to the '769 Patent that have continued to gain in value. If Trans Ova is permitted to practice the '769 Patent, ST will be deprived of its exclusive rights now and in the future. Moreover, Trans Ova directly competes with ST in providing sex selection services in the field of bovine genetics. Permitting Trans Ova to use the '769 Patent to directly compete with ST will harm ST's reputation and its position within the bovine genetics field. Trans Ova further has obtained unfair competitive advantages as a result of its infringement of the '769 Patent, such as an ability to lock up distribution channels for its products and services and to make improvements to its sex-selected products and services that Trans Ova can keep to itself, rather than licensing it back to XY and/or ST. This puts ST and Trans Ova on uneven competitive footing when selling similar goods and services to similar customers. Moreover, Trans Ova is not held to the same quality control requirements that licensees are held to. Thus, Trans Ova's sales of infringing products and services that are not of comparable quality to those products and services sold by ST irreparably harms the reputation of ST's products and services. Additionally, Trans Ova and its parent company have made public



statements that Trans Ova continues to hold a license to XY's patents, which creates market confusion and loss of goodwill towards ST. A permanent injunction against TOG is necessary to avoid these irreparable injuries to XY and ST.

**COUNT VII – XY'S CLAIM OF MISAPPROPRIATION OF TRADE SECRETS UNDER THE DEFEND TRADE SECRETS ACT**

59. The above paragraphs are incorporated by reference as if fully restated herein.

60. TOG is liable to XY for misappropriation of XY trade secrets under the Defend Trade Secrets Act of 2016, 18 U.S.C. § 1836.

61. XY is the owner of the trade secret XY Protocols. XY has used this information in its business, both for research and for providing to its licensees, and the information gives XY a competitive and economic advantage over others who do not know the trade secrets. The XY Protocols are not generally known to others.

62. XY is the owner of trade secret information regarding the conversion of non-sperm sorting flow cytometers into MoFlo SX sperm sorters. This trade secret includes know-how and a compilation of proprietary information regarding the identity of parts specific to the MoFlo SX, modifications to off-the-shelf equipment incorporated into the MoFlo SX, the process of assembling a MoFlo SX, initializing its features and functions for sperm sorting, and "dialing in" the sorting machine for sperm sorting. XY has used this information in its business for the purpose of setting up sperm sorting machinery for licensees and the trade secrets give XY a competitive and economic advantage over others who do not know the trade secrets. XY's trade secrets regarding the conversion of non-sperm sorting flow cytometers into MoFlo SX sperm sorters is not generally known to others.

63. XY has maintained the secrecy of its trade secrets by, among other things, limiting the number of persons who have access to the trade secret information and by imposing confidentiality obligations on those who learn the trade secrets.

64. After TOG's license expired in April 2009, TOG misappropriated XY trade secrets by continuing to use the XY Protocols for sorting sperm. TOG's use of the XY Protocols was without authorization from XY, and that use constituted a breach of the confidential relationship established by the Agreement.

65. TOG also misappropriated XY trade secrets by hiring former XY employee Todd Cox and having him teach others at TOG how to convert non-sperm sorting flow cytometers into MoFlo SXs. TOG knew or should have known that Todd Cox was not authorized to disclose that information to TOG employees. At least as early as Todd Cox's first teaching of the conversion process to a TOG employee, and no later than Mr. Cox's testimony at trial in February 2016, TOG knew that Mr. Cox had promised XY that he would not teach the conversion process to others. TOG has used and continues to use the MoFlo SXs that were wrongly converted by those at TOG who were taught by Todd Cox. On information and belief, Todd Cox continues to teach others at TOG how to convert non-sperm sorting flow cytometers into MoFlo SXs.

66. TOG misappropriated XY's trade secrets with flagrant and knowing disregard for XY's rights and with an intent to harm XY's business.

67. XY has been injured by TOG's misappropriations. TOG has profited from its use of XY's trade secrets after the expiration of the Agreement, and XY has not been compensated for TOG's use. XY is therefore entitled to damages in an amount subject to proof at trial. XY is also entitled to exemplary damages as a result of TOG's willful and malicious misappropriations.

68. TOG should be permanently enjoined from further use or dissemination of XY's trade secrets. Most of XY's revenues are in the form of royalties from exclusive and semi-exclusive licenses to use its technology in various territories throughout the world. A substantial portion of the value of such licenses is derived from their territorial exclusivity. If TOG is permitted to continue to use XY's technology, it would undermine the exclusive rights XY granted to Inguran in the Lead Licensee Agreement, including XY's agreement not to issue any further licenses in the United States. This is likely to cause other existing and prospective XY licensees to lose confidence in XY's ability to grant and enforce exclusive licenses, harming the value of XY's technology and XY's reputation and causing irreparable injury to XY. A permanent injunction against TOG is necessary to avoid this irreparable injury.

#### **COUNT VIII – XY'S CLAIM OF TRADE SECRET MISAPPROPRIATION**

69. The above paragraphs are incorporated by reference as if fully restated herein.

70. TOG is liable to XY for misappropriation of XY trade secrets under Texas, Colorado, Iowa, or other applicable state's law governing misappropriation of trade secrets.

71. XY is the owner of the trade secret XY Protocols. XY has used this information in its business, both for research and for providing to its licensees, and the information gives XY a competitive and economic advantage over others who do not know the trade secrets. The XY Protocols are not generally known to others.

72. XY is the owner of trade secret information regarding the conversion of non-sperm sorting flow cytometers into MoFlo SX sperm sorters. This trade secret includes know-how and a compilation of proprietary information regarding the identity of parts specific to the MoFlo SX, modifications to off-the-shelf equipment incorporated into the MoFlo SX, and the

process of assembling a MoFlo SX. XY has used this information in its business for the purpose of setting up sperm sorting machinery for licensees and the trade secrets give XY a competitive and economic advantage over others who do not know the trade secrets. XY's trade secrets regarding the conversion of non-sperm sorting flow cytometers into MoFlo SX sperm sorters is not generally known to others.

73. XY has maintained the secrecy of its trade secrets by, among other things, limiting the number of persons who have access to the trade secret information and by imposing confidentiality obligations on those who learn the trade secrets.

74. After TOG's license expired in April 2009, TOG misappropriated XY trade secrets by continuing to use the XY Protocols for sorting sperm. TOG's use of the XY Protocols was without authorization from XY, and that use constituted a breach of the confidential relationship established by the Agreement.

75. TOG also misappropriated XY trade secrets by hiring former XY employee Todd Cox and having him teach others at TOG how to convert non-sperm sorting flow cytometers into MoFlo SXs. TOG knew or should have known that Todd Cox was not authorized to disclose that information to TOG employees. At least as early as Todd Cox's first teaching of the conversion process to a TOG employee, and no later than Mr. Cox's testimony at trial in February 2016, TOG knew that Mr. Cox had promised XY that he would not teach the conversion process to others. TOG has used and continues to use the MoFlo SXs that were wrongly converted by those at TOG who were taught by Todd Cox. On information and belief, Todd Cox continues to teach others at TOG how to convert non-sperm sorting flow cytometers into MoFlo SXs.

76. TOG misappropriated XY's trade secrets with flagrant and knowing disregard for XY's rights and with an intent to harm XY's business.

77. XY has been injured by TOG's misappropriations. TOG has profited from its use of XY's trade secrets after the expiration of the Agreement, and XY has not been compensated for TOG's use. XY is therefore entitled to damages in an amount subject to proof at trial. XY is also entitled to exemplary damages as a result of TOG's willful and malicious misappropriations.

78. TOG should be permanently enjoined from further use or dissemination of XY's trade secrets. Most of XY's revenues are in the form of royalties from exclusive and semi-exclusive licenses to use its technology in various territories throughout the world. A substantial portion of the value of such licenses is derived from their territorial exclusivity. If TOG is permitted to continue to use XY's technology, it would undermine the exclusive rights XY granted to Inguran in the Lead Licensee Agreement, including XY's agreement not to issue any further licenses in the United States. This is likely to cause other existing and prospective XY licensees to lose confidence in XY's ability to grant and enforce exclusive licenses, harming the value of XY's technology and XY's reputation and causing irreparable injury to XY. A permanent injunction against TOG is necessary to avoid this irreparable injury.

**COUNT IX – XY'S CLAIM OF UNFAIR COMPETITION**

79. The above paragraphs are incorporated by reference as if fully restated herein.

80. TOG is liable to XY for unfair competition by common law misappropriation.

81. XY developed the trade secret and confidential information incorporated into the XY Protocols and the trade secret and confidential information relating to the conversion of non-

sperm sorting flow cytometers into MoFlo SX sperm sorters through extensive use of its time, labor, skill and money.

82. After the Agreement expired, TOG used the XY Protocols and trade secret and confidential information regarding MoFlo SX conversions in competition with XY. In that time, TOG has gained special commercial advantages over XY. Specifically Trans Ova has obtained all of the benefit of XY's trade secrets and confidential information while being burdened with none of the costs of testing, developing, or refining those trade secrets and confidential information.

83. XY has been commercially damaged by TOG's unauthorized use of XY's trade secrets and confidential information. Most of XY's revenues are in the form of royalties from exclusive and semi-exclusive licenses to use its technology in various territories throughout the world. A substantial portion of the value of such licenses is derived from their territorial exclusivity. If TOG is permitted to continue to use XY's technology, it would undermine the exclusive rights XY granted to Inguran in the Lead Licensee Agreement, including XY's agreement not to issue any further licenses in the United States. This is likely to cause other existing and prospective XY licensees to lose confidence in XY's ability to grant and enforce exclusive licenses, harming the value of XY's technology and XY's reputation and causing irreparable injury to XY. XY has not been compensated for TOG's use of XY trade secrets and confidential information after April 2009. Further, XY's reputation and ability to grant or enforce licenses has been and will continue to be harmed by Trans Ova's unauthorized use of XY trade secrets and confidential information. XY has therefore been deprived of the fair opportunity to market its exclusive and semi-exclusive licenses and will continue to be deprived

of that fair opportunity should TOG be allowed to continue its unauthorized use of XY's trade secret and confidential information. A permanent injunction against TOG is necessary to avoid this irreparable injury.

**COUNT X – XY'S CLAIM OF QUANTUM MERUIT**

84. The above paragraphs are incorporated by reference as if fully restated herein.

85. XY is entitled to an equitable remedy for Trans Ova's use of XY's trade secrets and confidential information.

86. XY furnished TOG with valuable materials, including the XY Protocols and other trade secret and confidential information. These trade secrets and confidential information were developed by XY at XY's expense.

87. XY provided the XY trade secrets and confidential information to TOG, and both parties understood that TOG would pay a royalty to use those trade secrets and confidential information. This understanding was memorialized in an Agreement, which expired in April 2009. TOG knew or should have known that upon expiration of the Agreement, Trans Ova could no longer use XY's trade secrets and confidential information without paying XY for the right to do so.

88. TOG has used XY's trade secrets and confidential information, including the XY Protocols, outside the scope of the Agreement, namely after April 2009. Specifically, since April 2009, TOG has used XY's trade secrets and confidential information to provide bovine sex-selection products and services to its customers. Despite profiting from these services, TOG has not paid a royalty to XY for any use of XY's trade secrets or confidential information occurring after April 2009.

89. Because XY was entitled to compensation for TOG's use of XY's trade secrets and confidential information after April 2009, TOG's acceptance and use of those trade secrets and confidential information without payment has injured XY, and XY is entitled to restitution for the reasonable value of TOG's use of the XY Protocols and other trade secrets and confidential information.

#### **COUNT XI – XY'S CLAIM OF UNJUST ENRICHMENT**

90. The above paragraphs are incorporated by reference as if fully restated herein.

91. XY is entitled to damages for unjust enrichment.

92. XY provided XY trade secrets and confidential information, including the XY Protocols, to TOG, and both parties understood that TOG would pay a royalty to use those trade secrets and confidential information. This understanding was memorialized in an Agreement, which expired in April 2009. TOG knew or should have known that upon expiration of the Agreement, Trans Ova would be required to pay a royalty to XY to continue using XY's trade secrets and confidential information.

93. TOG has used XY trade secrets and confidential information outside the scope of the Agreement, namely after the Agreement expired in April 2009. Since that date, TOG has used XY's trade secrets and confidential information, including the XY Protocols, to provide bovine sex-selection products and services to its customers. TOG has also used XY trade secrets and confidential information to convert non-sperm sorting flow cytometers into MoFlo SXs. Despite benefiting and profiting from these activities, TOG has not paid a royalty to XY for any use of XY's trade secrets or confidential information occurring after April 2009.



94. TOG has taken undue advantage of XY by using XY's trade secrets and confidential information after the Agreement's expiration without compensating XY. It would be unconscionable for TOG to continue to retain the benefits of its unauthorized use of XY's trade secrets and confidential information. Moreover, because XY expected compensation for TOG's use of XY's trade secrets and confidential information after April 2009, TOG's acceptance and use of the XY trade secrets and confidential information without payment has injured XY, and XY is entitled to restitution for the reasonable value of TOG's use of XY's trade secrets and confidential information, including the XY Protocols.

95. Most of XY's revenues are in the form of royalties from exclusive and semi-exclusive licenses to use its technology in various territories throughout the world. A substantial portion of the value of such licenses is derived from their territorial exclusivity. If TOG is permitted to continue to use XY's technology, it would undermine the exclusive rights XY granted to Inguran in the Lead Licensee Agreement, including XY's agreement not to issue any further licenses in the United States. This is likely to cause other existing and prospective XY licensees to lose confidence in XY's ability to grant and enforce exclusive licenses, harming the value of XY's technology and XY's reputation and causing irreparable injury to XY. XY has not been compensated for TOG's use of XY trade secrets and confidential information after April 2009. Further, XY's reputation and ability to grant or enforce licenses has been and will continue to be harmed by Trans Ova's unauthorized use of XY trade secrets and confidential information. XY has therefore been deprived of the fair opportunity to market its exclusive and semi-exclusive licenses and will continue to be deprived of that fair opportunity should TOG be

allowed to continue its unauthorized use of XY's trade secret and confidential information. A permanent injunction against TOG is necessary to avoid this irreparable injury.

**COUNT XII – XY AND BECKMAN COULTER'S CLAIM OF INFRINGEMENT OF  
U.S. PATENT NO. RE46,559**

96. The above paragraphs are incorporated by reference as if fully restated herein.

97. On September 15, 2015, United States Patent No. 9,134,220 (the '220 Patent) was duly and legally issued for an invention entitled "Enhanced Flow Cytometry Discrimination with Geometric Transformation." A true and correct copy of the '220 Patent is attached hereto as Exhibit G.

98. Beckman Coulter became the owner of the '220 Patent following XY's assignment of its rights in the '220 Patent to Beckman Coulter.

99. On February 21, 2017, Beckman Coulter filed a Reissue Application with the United States Patent and Trademark Office (the USPTO) for the '220 Patent.

100. XY and Beckman Coulter included their claim of infringement of the '220 Patent as Count XII of their Second Amended Complaint filed on April 21, 2017.

101. The '220 Patent reissued as RE46,559 (the '559 Patent) to Beckman Coulter as the assignee on September 26, 2017. A true and correct copy of the '559 Patent is attached hereto as Exhibit H.

102. The claims of the '220 Patent and '559 Patent are identical. The parties have agreed that the '559 Patent should be substituted for the '220 Patent for all purposes in the pending litigation.

103. Beckman Coulter is the current assignee of the '559 Patent.

104. XY has the sole and exclusive right, within the field of separation of spermatozoa in semen, to make, have made, use, sell, offer for sell, and import products and services covered by the claims of the '559 Patent. XY also has the right to sue and recover for past infringement of the '559 Patent in the field of separation of spermatozoa in semen. XY has standing to bring a claim for infringement of the '559 Patent because of its exclusive rights in the relevant field of use and because the patent owner, Beckman Coulter, is also a named plaintiff as to Count XII of this Fourth Amended Complaint.

105. TOG has infringed, and continues to infringe, at least claim 1 of the '559 Patent. The claims of the '559 Patent are directed to methods of operating a flow cytometer. By using the Summit software, which, among other features, is capable of rotationally altering data, to sort sperm cells on MoFlo SX instruments made by TOG, TOG practices every step of at least claim 1 of the '559 Patent, and thus uses the claimed invention. TOG's use of the patented invention is without XY's or Beckman Coulter's authorization. TOG, therefore, has directly infringed the '559 Patent since September 15, 2015, and continues to directly infringe the '559 Patent. Moreover, TOG has indirectly infringed, and continues to indirectly infringe, the '559 Patent by contributorily infringing or inducing infringement, wherein the direct infringers include, but are not limited to, TOG's employees, contractors, affiliates, users, and customers.

106. Upon information and belief, TOG has been aware of the '559 Patent since the date it issued as the '220 Patent. Moreover, TOG is aware that MoFlo SX instruments with the Summit software installed are patented and proprietary to XY within the field of separation of spermatozoa in semen. TOG's continued infringement of the '559 Patent without a license is and has been willful and deliberate.

107. TOG's infringement of the '559 Patent in the field of separation of spermatozoa in semen has caused harm to XY. XY is entitled to recover damages from TOG in an amount subject to proof at trial. In addition, such damages should be increased pursuant to 35 U.S.C. § 284 in light of TOG's willful conduct, including its continued use of the '559 Patent despite its knowledge that it no longer has a license to XY's patents on sperm sorting technology and does not otherwise have a license to the '559 Patent.

108. TOG should be permanently enjoined from practicing the '559 Patent. XY has the sole and exclusive right to grant sublicenses to the '559 Patent in the field of separation of spermatozoa in semen. Most of XY's revenues are in the form of royalties from exclusive and semi-exclusive licenses to use its technology in various territories throughout the world. A substantial portion of the value of such licenses is derived from their territorial exclusivity, and Trans Ova's unlicensed use of XY's patents has destroyed or substantially reduced the value of the exclusivity ST bargained and paid for. If TOG is permitted to continue to use XY's technology, it would further undermine the exclusive rights XY granted to Inguran in the Lead Licensee Agreement, including XY's agreement not to issue any further licenses in the United States. This is likely to cause other existing and prospective XY licensees to lose confidence in XY's ability to grant and enforce exclusive licenses, harming the value of XY's technology and XY's reputation and causing irreparable injury to XY. A permanent injunction against TOG is necessary to avoid this irreparable injury.

#### **ATTORNEYS' FEES**

109. The above paragraphs are incorporated by reference as if fully restated herein.

110. TOG's conduct, including its willful patent infringement and its continued use of the asserted patents despite its knowledge that it does not have a license to XY's technology (including the '559 Patent exclusively licensed from Beckman in the field of sperm sorting), makes this case exceptional. XY and Beckman, therefore, are entitled to collect reasonable attorneys' fees pursuant to 35 U.S.C. § 285.

### **PRAYER FOR RELIEF**

WHEREFORE, XY and ST pray for judgment and seek relief against TOG as follows:

- (a) For Judgment that TOG has infringed the '590 Patent;
- (b) For Judgment that TOG has infringed the '116 Patent;
- (c) For Judgment that TOG has infringed the '822 Patent;
- (d) For Judgment that TOG has infringed the '265 Patent;
- (e) For Judgment that TOG has infringed the '422 Patent;
- (f) For Judgment that TOG has infringed the '769 Patent;
- (g) For Judgment that TOG has infringed the '559 Patent;
- (h) For Judgment that TOG's infringement of any or all of the Asserted Patents is and has been willful;
- (i) For an accounting of all damages sustained by XY and ST as the result of the acts of infringement by TOG, but not less than a reasonable royalty under 35 U.S.C. § 284;
- (j) For increased damages pursuant to 35 U.S.C. § 284;
- (k) For a permanent injunction against TOG's continuing infringement or, in the alternative, an ongoing royalty for future infringement;

- (l) For an accounting and disgorgement of TOG's profits and other sums unlawfully obtained;
- (m) For an award of attorneys' fees and costs pursuant to 35 U.S.C. § 285, or as otherwise permitted by law;
- (n) For actual damages incurred by XY due to TOG's trade secret misappropriations;
- (o) For actual damages incurred by XY due to TOG's unfair competition;
- (p) For exemplary damages due to TOG's willful and malicious misappropriation of XY's trade secrets, pursuant to Tex. Civ. Prac. & Rem. Code §41.003 or other applicable state's law governing trade secret misappropriation;
- (q) For exemplary damages due to TOG's willful and malicious misappropriation of XY's trade secrets, pursuant to the Defend Trade Secrets Act;
- (r) For exemplary damages due to TOG's unfair competition;
- (s) For restitution damages in the amount of the reasonable value of the trade secrets and confidential information TOG has taken and used without compensating XY;
- (t) For a permanent injunction enjoining TOG from further use and dissemination of XY's trade secrets and/or confidential information, and the fruits thereof, including but not limited to further use of any MoFlo SX sperm sorters converted by Todd Cox, or by others taught by Todd Cox, or, in the alternative an ongoing royalty for TOG's continued use of XY trade secrets and confidential information;
- (u) For all actual damages together with prejudgment interest and post-judgment interest; and
- (v) For such other and further relief as the Court may deem just and proper.

WHEREFORE, Beckman Coulter prays for judgment and seeks relief against TOG as follows:

- (a) For an award of attorneys' fees and costs pursuant to 35 U.S.C. § 285, or as otherwise permitted by law;

**JURY DEMAND**

Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiffs demand a jury trial on all issues so triable.

Dated: October 18, 2017

AKIN, GUMP, STRAUSS, HAUER & FELD LLP

K&L GATES LLP

/s/ KIRT S. O'NEILL

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