

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ABS GLOBAL, INC.,
Petitioner,

v.

CYTONOME/ST, LLC,
Patent Owner.

Case No. IPR2017-02184
Patent No. 7,208,265

PETITIONER'S UPDATED EXHIBIT LIST

| Exhibit # | Reference Name |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1001 | U.S. Patent No. 7,208,265 ("265 patent") |
| 1002 | U.S. Patent No. 7,208,265 File History ("265 File History") |
| 1003 | Declaration of Dr. Marvin M. Pace ("Pace Decl.") |
| 1004 | <i>Curriculum vitae</i> of Dr. Marvin M. Pace |
| 1005 | U.S. Patent No. 7,195,920 ("Seidel 1997") |
| 1006 | Salisbury et al., Physiology of Reproduction and Artificial Insemination in Cattle, 2nd Ed. 1978 ("Salisbury") |
| 1007 | E.F. Fugger, S.H. Black, K. Keyvanfar and J.D. Schulman, "Births of normal daughters after MicroSort sperm separation and intrauterine insemination, in-vitro fertilization, or intracytoplasmic sperm injection," Vol. 13, No. 9 of Human Reproduction (Sept. 1998) ("Fugger") |
| 1008 | U.S. Patent No. 5,135,759 ("Johnson 1992") |
| 1009 | Polge, C. and Rowson, L.E.A., "Long-term Storage of Bull Semen Frozen at Very Low Temperatures (-79° C.)," in "Report of The 2nd International Congress of Physiology and Pathology of Animal Reproduction and of Artificial Insemination," Vol. 111 (1952) ("Polge and Rowson 1952") |
| 1010 | LaSalle, B., "Introduction," in "The Integrity of Frozen Spermatozoa, Proceedings of a Round-Table Conference held on April 6-7, 1976," National Academy of Sciences (1978) ("LaSalle 1978") |
| 1011 | Herman, H.A. and Madden, F.W., "The Artificial Insemination of Dairy and Beef Cattle: A Handbook and Laboratory Manual" 6th Ed. (1980) ("Herman and Madden 1980") |
| 1012 | Graham, E.F., "Fundamentals of the Preservation of Spermatozoa," in "The Integrity of Frozen Spermatozoa, Proceedings of a Round-Table Conference held on April 6- 7, 1976," National Academy of Sciences (1978) ("Graham 1978") |

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| 1013 | Berndtson, W.E. and Pickett, B.W, "Techniques for The Cryopreservation and Field Handling of Bovine Spermatozoa," in "The Integrity of Frozen Spermatozoa, Proceedings of a Round-Table Conference held on April 6-7, 1976," National Academy of Sciences (1978) ("Berndtson and Pickett 1978") |
| 1014 | Bulletin 621, "Preservation of Bull Semen at Sub-Zero Temperatures," University of IL Ag. Exp. Station (1957) ("Bulletin 621") |
| 1015 | Doak, "CSS Implementation of New Antibiotic Combination," Proceedings of the 11th Tech. Conf. on Art. Insemination and Reproduction (1986) ("Doak 1986") |
| 1016 | Seidel et al., "Insemination of Heifers with Sexed Frozen or Sexed Liquid Semen," 51:1 Theriogenology: An Int'l J. of Reproduction, 400 (1999) ("Seidel 1999") |
| 1017 | Seidel, "Fertility of Bulls on the Edge of the Dose-Response Curve form Numbers of Sperm Per Inseminate," in Proceedings of the 17th Technical Conference on Artificial Insemination and Reproduction (1998) ("Seidel 1998") |
| 1018 | U.S. Patent No. 3,854,470 ("Augspurger 1974") |
| 1019 | U.S. Patent No. 4,092,229 ("Bhattacharya 1978") |
| 1020 | U.S. Patent No. 4,083,957 ("Lang 1978") |
| 1021 | U.S. Patent No. 4,362,246 ("Adair 1982") |
| 1022 | A. A. Luderer, "Separation of Bovine Spermatozoa by Density on Water Insoluble Newtonian Gels and Their Use for Insemination," Bio. of Repro., Vol. 26, pages 813-24 (1982) ("Luderer 1982") |
| 1023 | U.S. Patent No. 4,474,875 ("Shrimpton 1984") |
| 1024 | Beal, W.E., et al., "Sex Ratio after Insemination of Bovine Spermatozoa Isolated using a Bovine Serum Albumin Gradient," 58 J. Anim. Sci. 1432-36 (1984) ("Beal 1984") |
| 1025 | Foote, "Normal Dev. Of Fetuses Resulting from Holstein Semen Processed for Sex Separation," Theriogenology, Vol. 24, No. 1, pages 197-202 (1985) ("Foote 1985") |
| 1026 | U.S. Patent No. 4,007,087 ("Ericsson 1997") |

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|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1027 | Polge, "Historical Perspective of AI: Commercial Methods of Producing Sex Specific Semen IVF Procedures," in Proceedings of the 16th Tech. Conf. on Artificial Insemination and Reproduction (1996) ("Polge 1996") |
| 1028 | The American Heritage College Dictionary, 3rd Ed. (1997) |
| 1029 | Catalog No. 90128; Irvine Scientific |
| 1030 | File History of U.S. Serial No. 09/577,246 ("246 File History") |
| 1031 | U.S. Patent No. 5,021,244 ("Spaulding") |
| 1032 | R. Johann, R.S. Jeyendranm, J.P.W. Vermedien, L. J.D. Zaneveld published "Human sperm selection by glass wool filtration and two-layer, discontinuous Percoll gradient centrifugation," in Vol. 51, No. 4 of Fertility and Sterility ("Johann 1989") |
| 1033 | U.S. Patent No. 7,820,425 ("425 patent") |
| 1034 | Jondet, R. "Contribution to the assessment of the minimum number of frozen spermatozoa necessary to obtain fertilization in the cow," 7th Int'l Congress on Animal Reproduction and Artificial Insemination, Vol. 2 (1972) ("Jondet 1972") |
| 1035 | E.F. Fugger, S.H. Black, K. Keyvanfar and J.D. Schulman, "Births of normal daughters after MicroSort sperm separation and intrauterine insemination, in-vitro fertilization, or intracytoplasmic sperm injection," Vol. 13, No. 9 of Human Reproduction (Sept. 1998) (U. Minn. Bio-Medical Library) [served May 7, 2018 but not filed] |
| 1036 | E.F. Fugger, S.H. Black, K. Keyvanfar and J.D. Schulman, "Births of normal daughters after MicroSort sperm separation and intrauterine insemination, in-vitro fertilization, or intracytoplasmic sperm injection," Vol. 13, No. 9 of Human Reproduction (Sept. 1998) (Iowa State U. of Sci. and Tech.) [served May 7, 2018 but not filed] |
| 1037 | E.F. Fugger, S.H. Black, K. Keyvanfar and J.D. Schulman, "Births of normal daughters after MicroSort sperm separation and intrauterine insemination, in-vitro fertilization, or intracytoplasmic sperm injection," Vol. 13, No. 9 of Human Reproduction (Sept. 1998) (U. Missouri Health Scis. Library) [served May 7, 2018 but not filed] |

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| 1038 | E.F. Fugger, S.H. Black, K. Keyvanfar and J.D. Schulman, "Births of normal daughters after MicroSort sperm separation and intrauterine insemination, in-vitro fertilization, or intracytoplasmic sperm injection," Vol. 13, No. 9 of Human Reproduction (Sept. 1998) (Univ. of Iowa) [served May 7, 2018 but not filed] |
| 1039 | E.F. Fugger, S.H. Black, K. Keyvanfar and J.D. Schulman, "Births of normal daughters after MicroSort sperm separation and intrauterine insemination, in-vitro fertilization, or intracytoplasmic sperm injection," Vol. 13, No. 9 of Human Reproduction (Sept. 1998) (British Library) [served May 7, 2018 but not filed] |
| 1040 | Case No. IPR2014-01550, Ex. 1007, E.F. Fugger, S.H. Black, K. Keyvanfar and J.D. Schulman, "Births of normal daughters after MicroSort sperm separation and intrauterine insemination, in-vitro fertilization, or intracytoplasmic sperm injection," Vol. 13, No. 9 of Human Reproduction (Sept. 1998) [served May 7, 2018 but not filed] |
| 1041 | Declaration of Deborah Ward [served May 7, 2018 but not filed] |
| 1042 | Excerpts from File History of Application Number 13/752,082 [served May 7, 2018 but not filed] |
| 1043 | Supplemental Declaration of Dr. Marvin M. Pace [served May 7, 2018 but not filed] |
| 1044 | Case No. IPR2014-01550, Excerpt from Paper No. 15, Patent Owner XY, LLC's Response [served May 7, 2018 but not filed] |
| 1045 | Case No. IPR2014-01550, Ex. 2018, Text of E.F. Fugger, S.H. Black, K. Keyvanfar and J.D. Schulman, "Births of normal daughters after MicroSort sperm separation and intrauterine insemination, in-vitro fertilization, or intracytoplasmic sperm injection," Vol. 13, No. 9 of Human Reproduction (Sept. 1998) [served May 7, 2018 but not filed] |
| 1046 | Case No. IPR2014-01550, Excerpt from Ex. 2015, Expert Declaration of Cynthia L. Ludwig [served May 7, 2018 but not filed] |
| 1047 | Case No. IPR2014-01550, Paper No. 25, Final Written Decision [served May 7, 2018 but not filed] |

CERTIFICATE OF SERVICE

I hereby certify that on this 7th day of May, 2018, I caused a true and correct copy of the foregoing and any accompanying exhibits to be served by email on the following counsel:

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Dated: May 7, 2018

Respectfully Submitted,
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