UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE PATENT TRIAL AND APPEAL BOARD ABS GLOBAL, INC., Petitioner V. XY, LLC, Patent Owner Case IPR2014-01550 Patent 7,820,425

EXPERT DECLARATION OF CYNTHIA L. LUDWIG

- 80. Claims 33 and 34 relate to cooling and read as follows:
 - 33. A method of freezing separated sperm cells as described in claim 1 and further comprising the step of cooling said sperm cells.
 - 34. A method of freezing separated sperm cells as described in claim
 33 wherein said step of cooling said sperm cells comprises the step
 of reducing the temperature of said sperm cells to about 5° Celsius.

V. THE BOARD'S DECISION TO INSTITUTE *INTER PARTES* REVIEW

81. I understand from the Board's April 15, 2015 Decision that the Board has stated that the petition establishes that there is a reasonable likelihood that Petitioner will prevail with regard to its contention that certain claims of the '425 Patent are unpatentable in view of certain combinations of the following prior art:

Name	Description	Filing or Disclosure Date	Publication or Issue Date	Exhibit
Seidel	U.S. Patent No. 7,195,920	Dec. 31, 1997	March 27, 2007	1005
Salisbury	G.W. Salisbury et al., Physiology of Reproduction and Artificial Insemination of Cattle 442–554 (W.H. Freeman & Co. 2d ed. 1978) (Chapters 16 and 17)	N/A	1978	1006

Fugger	E. F. Fugger et al., Births of	N/A	September	1007
	Normal Daughters after		1998	
	MicroSort Sperm Separation			
	and Intrauterine Insemination,			
	In-Vitro Fertilization, or			
	Intracytoplasmic Sperm			
	<i>Injection</i> , 13 Human			
	REPRODUCTION 2367–70			

82. I also understand from the Board's decision that *inter partes* review of the '425 patent has been instituted on certain grounds raised by ABS in its petition. Decision at 18. I understand that the grounds now at issue in this proceeding are all based on obviousness and include the following references or combinations of references for the identified claims:

Claims	References
1–4, 6–9, 11–13, 15, 21–28, and 31–34	Seidel and Salisbury
1–4, 6, 25, 26, 31, and 32	Fugger
7–9, 11–13, 15, 21–24, 27, 28, 33, and 34	Fugger and Salisbury

83. As set out in the table above, the grounds cover each claim twice: once in view of the combination of Seidel and Salisbury and another time in view of Fugger or the combination of Fugger and Salisbury. I have been asked to provide opinions on the grounds identified in the chart above

XVI. CONCLUSION

- 213. In summary, my opinion is that the claims of the '425 patent would not have been obvious to one of ordinary skill in the art at the time of the invention.
- 214. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Date:	7.	15 -	15	
Date:	1940	A MARK		

Cynthia L. Ludwig