

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

COREPHOTONICS LTD.,
Patent Owner

Declaration of José Sasián, PhD
under 37 C.F.R. § 1.68

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I. INTRODUCTION

1. I am making this declaration at the request of Apple Inc. in the matter of the *inter partes* review of U.S. Patent No. 9,857,568 (“the ‘568 Patent”) to Dror, *et al.*

2. I am being compensated for my work in this matter at the rate of \$525/hour. I am also being reimbursed for reasonable and customary expenses associated with my work and testimony in this investigation. My compensation is not contingent on the outcome of this matter or the specifics of my testimony.

3. I have been asked to provide my opinions regarding whether claims 1-5 of the ‘568 Patent are unpatentable, either because they are anticipated or would have been obvious to a person having ordinary skill in the art (“POSITA”) at the time of the alleged invention, in light of the prior art. After a careful analysis it is my opinion that all of the limitations of claims 1-5 would have been either anticipated or obvious to a POSITA.

4. In the preparation of this declaration, I have reviewed:

- The ‘568 Patent, Ex.1001;
- The prosecution history of the ‘568 Patent, Ex.1002;
- U.S. Patent No. 9,128,267 to Ogino et al. (“Ogino”), Ex.1005;
- Warren J. Smith, MODERN LENS DESIGN (1992) (“Smith”), Ex.1006;

- U.S. Patent No. 7,918,398 to Li et al. (“Li”), Ex.1007;
- U.S. Patent No. 7,777,972 to Chen et al. (“Chen”), Ex.1008;
- Max Born et al., PRINCIPLES OF OPTICS, 6th Ed. (1980) (“Born”), Ex.1010;
- Jane Bateau et al., “The optics of miniature digital camera modules,” SPIE Proceedings Volume 6342, *International Optical Design Conference 2006*; 63421F (2006)
<https://doi.org/10.1117/12.692291> (“Bateau”), Ex.1012;
- U.S. Patent App. Pub. No. 2013/0077183 to An et al. (“An”), Ex.1017;
- Michael P. Schaub, THE DESIGN OF PLASTIC OPTICAL SYSTEMS (2009) (“Schaub”), Ex.1018;
- Optical Society of America, HANDBOOK OF OPTICS, vol. II 2nd ed. (1995) (“Handbook of Optics”), Ex.1019; and
- William S. Beich et al., “Polymer Optics: A manufacturer’s perspective on the factors that contribute to successful programs,” SPIE Proceedings Volume 7788, *Polymer Optics Design, Fabrication, and Materials* (August 12, 2010);
<https://doi.org/10.1117/12.861364> (“Beich”), Ex.1020.

5. In forming the opinions expressed below, I have considered:

- a) The documents listed above;
- b) My own knowledge and experience based upon my work in the fields of optics and lens designs, as described below; and
- c) The level of skill of a POSITA at the time of the alleged invention of the '568 patent.

II. QUALIFICATIONS AND PROFESSIONAL EXPERIENCE

6. My complete qualifications and professional experience are described in my *Curriculum Vitae*, a copy of which can be found in Ex.1004. The following is a brief summary of my relevant qualifications and professional experience.

7. As shown in my *curriculum vitae* (Ex.1004), I have extensive academic and industry experience with optical engineering. Specifically, I have over thirty years of academic and industry experience in the field of optical sciences and optical engineering in general, including optical instrumentation, optical design, and optical fabrication and testing.

8. I am currently a full-time, tenured Professor of Optical Sciences at the College of Optical Sciences at the University of Arizona in Tucson, Arizona, a position I have held since 2002. As a professor, I teach and perform research in the field of optical design. For example, I teach my students how to design lenses and mirrors and how to think about light so that they can design useful optical systems.

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