

**UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE PATENT TRIAL AND APPEAL BOARD**

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APPLE INC.,  
Petitioner

v.

COREPHOTONICS, LTD.  
Patent Owner

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U.S. Patent No. 10,230,898

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**DECLARATION OF FRÉDO DURAND, PH.D.**  
**UNDER 37 C.F.R. § 1.68 IN SUPPORT OF PETITION**  
**FOR INTER PARTES REVIEW**

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**I. INTRODUCTION**

1. I, Frédo Durand, have been retained by counsel for Apple Inc.

(“Apple” or “Petitioner”) as a technical expert in connection with the proceeding identified above. I submit this declaration in support of Apple’s Petition for *Inter Partes* Review of U.S. Patent No. 10,230,898 (“the ’898 Patent”).

2. Compensation for my work in this matter is based on an hourly rate. In addition, reasonable and customary expenses associated with my work and testimony in this matter are reimbursed. This compensation is not contingent on the outcome of this matter, nor is it contingent on the specifics of my testimony. I have no personal or financial stake, nor any interest in the outcome of the present proceeding.

3. In the preparation of this declaration, I have studied:

- (1) The ’898 Patent, APPL-1001;
- (2) The prosecution file history of the ’898 Patent (’720 App), APPL-1002;
- (3) U.S. Patent Application Publication No. 2012/0026366 to Golan, et al. (“Golan”), APPL-1005;
- (4) U.S. Patent No. 8,081,206 to Martin et al. (“Martin”), APPL-1006;
- (5) U.S. Patent No. 7,990,422 to Ahiska et al. (“Ahiska”), APPL-1007;
- (6) U.S. Patent No. 7,859,588 to Parulski et al. (“Parulski”), APPL-1008;

- (7) U.S. Patent Application Publication No. 2008/0030592 to Border et al. (“Border”), APPL-1009;
- (8) J.P. Patent Application Publication No. JP 2011-55246 to Togo (“Togo”), APPL-1010;
- (9) U.S. Patent No. 8,553,106 to Scarff (“Scarff”), APPL-1012;
- (10) Richard Szeliski, Computer Vision: Algorithms and Applications, 2011 (“Szeliski”), APPL-1013;
- (11) U.S. Patent No. 8,854,432 to Orimoto (“Orimoto”), APPL-1014;
- (12) U.S. Patent Application Publication No. 2012/0019704 to Levey (“Levey”), APPL-1015;
- (13) Xiong, et al., “A critical review of image registration methods,” International Journal of Image and Data Fusion, June 2010 (“Xiong”), APPL-1016;
- (14) Ralph E. Jacobson et al., The Manual of Photography: photographic and digital imaging, 9<sup>th</sup> Edition, 2000 (“Jacobson”), APPL-1017;
- (15) Hansen, et al., “Online continuous stereo extrinsic parameter estimation,” 2012 IEEE Conference on Computer Vision and Pattern Recognition, June 2012 (“Hansen”), APPL-1019;
- (16) U.S. Patent No. 9,571,731 to Shabtay, et al. (“731 Patent”), APPL-1020;

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