

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**  
**in Support of Petitioner Reply**

**TABLE OF CONTENTS**

I. INTRODUCTION .....4

II. CLAIMS 1-3 AND 5 ARE OBVIOUS OVER IWASAKI’S EX. 4 EMBODIMENT.....5

III. CLAIMS 1 AND 4 ARE OBVIOUS OVER OGINO’S EX. 5 EMBODIMENT IN VIEW OF BAREAU.....5

    A. A POSITA would have been motivated to modify the L2 lens of Ogino’s Ex. 5 based on the teachings of Chen II. ....5

    B. A POSITA would have used the same well-known techniques to generate the modified Ogino Ex. 5 lens as discussed in my Declaration. ....9

    C. Manufacturing considerations are not required by claims 1 and 4 of the ’647 patent nor can they be imported into the claims.....11

        1. Dr. Milster seeks to import manufacturing requirements into the ’647 claims where there are none. ....11

        2. Dr. Milster’s arguments contradict earlier statements in a related case that lens design is separate from manufacturing.....13

        3. The modified Example 5 lens would be suitable for applications outside of large-scale manufacturing.....15

        4. Manufacturing considerations are preferences, and do not show that lenses cannot be physically produced.....16

        5. Whether a prior art lens design is “finished” is not relevant to the claims of the ’647 patent.....17

    D. Dr. Mister’s arguments about differences in relative illumination plots of the Ex. 5 lens are irrelevant. ....19

IV. CLAIMS 2, 3, 5, AND 8-11 ARE OBVIOUS OVER OGINO’S EXAMPLE 5 EMBODIMENT IN VIEW OF CHEN II AND BAREAU.....22

    A. A POSITA would have been motivated to modify Ogino’s Ex. 5 lens as discussed in my Declaration. ....22

B. A POSITA would have used the same techniques to generate the first and second modified Ex. 5 lens designs as discussed in my Declaration .....23

C. The modified Ex. 5 lens assemblies do not include overlapping lenses. ....24

D. Manufacturing considerations are not required by claims 2, 3, 5, and 8-11 of the '647 patent nor can they be imported into the claims. ....27

V. CLAIM 6 IS OBVIOUS OVER OGINO'S EXAMPLE 5 EMBODIMENT IN VIEW OF CHEN II, BAREAU, AND KINGSLAKE. ....28

A. A POSITA would have been motivated to modify Ogino's Ex. 5 lens as discussed in my Declaration. ....28

B. The third modified Ex. 5 lens assembly does not include overlapping lenses.....31

C. Manufacturing considerations are not required by claim 6 of the '647 patent nor can they be imported into the claims. ....33

D. The claims of the '647 patent do not include relative illumination requirements.....34

E. Manufacturing considerations such as tolerances and desensitization are not required by claim 7 of the '647 patent.....35

F. The combination of Hsieh and Beich does not require modifications to meet the limitations of claim 7 of the '647 patent.....35

VI. CLAIM 12 IS OBVIOUS OVER CHEN, IWASAKI, AND BEICH.....36

A. The combination of Chen, Iwasaki, and Beich teaches all of the limitations of claim 12 as well as claim 8, from which claim 12 depends. ....36

VII. CONCLUSION.....41

VIII. APPENDIX.....42

I, José Sasián, Ph.D., declare as follows:

**I. Introduction**

1. I am the José Sasián who has previously submitted a declaration as APPL-1003 in this proceeding. The terms of my engagement, my background, qualifications and prior testimony, and the legal standards and claim constructions I am applying are set forth in my previous CV and declaration. *See* APPL-1003; APPL-1004. I offer this declaration in reply to Dr. Milster’s declaration filed in this proceeding as Exhibit 2001. In forming my opinion, I have considered the materials noted in my previous declaration, as well as the following additional materials:

- APPL-1028 – Deposition Transcript of Tom Milster, Ph.D.
- APPL-1029 – IPR 2019-00030, Paper 21
- APPL-1030 – IPR 2019-00030, Ex. 2005
- APPL-1038 – H. M. Leung et al., “Diamond turning and soft lithography processes for liquid tunable lenses” 20 J. Micromechanics Microengineering 1 (Jan. 18, 2010)
- APPL-1039 – Sebastian Scheiding et al., “Diamond milling or turning for the fabrication of micro lens arrays: comparing different diamond machining technologies” Proc. SPIE 7927, Advanced Fabrication Technologies for Micro/Nano Optics and Photonics IV, 79270N (14 February 2011)

- APPL-1040 – Sandy Suet To et al., Materials Characterisation and Mechanism of Micro-Cutting in Ultra-Precision Diamond Turning (2018)

**II. Claims 1-3 and 5 are obvious over Iwasaki’s Ex. 4 embodiment.**

2. Dr. Milster does not dispute that Iwasaki’s Example 4 embodiment renders obvious claims 1-3 and 5.

**III. Claims 1 and 4 are obvious over Ogino’s Ex. 5 embodiment in view of Bareau.**

**A. A POSITA would have been motivated to modify the L2 lens of Ogino’s Ex. 5 based on the teachings of Chen II.**

3. As discussed in my previous Declaration, it is my opinion that a POSITA would have been motivated to modify Ogino’s Example 5 lens system to have a meniscus second lens (as taught by Chen II) to decrease vignetting due to total internal reflection and ray aberration. Petition, pp.26-37, APPL-1003, ¶¶55-68. As established in my Declaration, a POSITA would have been motivated to make these modifications using techniques within his or her skill level. *See id.* Dr. Milster challenges this argument by claiming that the meniscus shape of Chen II’s second lens “has nothing to do with vignetting” and instead is due to different aspheric shapes. Ex. 2001, ¶87.

4. This issue has been extensively addressed by the parties in IPR 2018-01140. Petition, p.36. In that case, I testified that it would have been obvious for a POSITA to combine the teaching of Chen II using a meniscus L2 lens with

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