# UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC., Petitioner,

v.

COREPHOTONICS LTD., Patent Owner.

> Case IPR2018-01356 Patent 9,568,712 B2

Before MARC S. HOFF, BRYAN MOORE, and MONICA S. ULLAGADDI, *Administrative Patent Judges*.

ULLAGADDI, Administrative Patent Judge.

DECISION Denying Institution of *Inter Partes* Review 37 C.F.R. § 42.108

### I. INTRODUCTION

Apple Inc. ("Petitioner") requested an *inter partes* review of claims 1 and 12–14 (the "challenged claims") of U.S. Patent No. 9,568,712 B2 (Ex. 1001, "the '712 patent"). Paper 2 ("Petition" or "Pet."). Corephotonics Ltd. ("Patent Owner") filed a Preliminary Response. Paper 8 ("Preliminary Response" or "Prelim. Resp.").

We have authority under 35 U.S.C. § 314, which provides that an *inter partes* review may not be instituted unless the information presented in the Petition and the Preliminary Response shows that "there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314; *see also* 37 C.F.R. § 42.4(a) ("The Board institutes the trial on behalf of the Director.").

For the reasons that follow, we do not institute an *inter partes* review of any of the challenged claims of the '712 patent.

# II. BACKGROUND

#### A. Related Proceedings

The '712 patent is asserted in *Corephotonics Ltd. v. Apple Inc.*, 5-17cv-06457 (N.D. Cal.) filed November 6, 2017, and in *Corephotonics Ltd. v. Apple Inc.*, 3-18-cv-02555 (N.D. Cal.) filed April 30, 2018. Pet. 1–2; Paper 4, 2.

This proceeding is related to IPR2018-01146 ("the '1146 IPR"), an *inter partes* review proceeding instituted based on Petitioner's challenges to claims 1, 2, 6, 7, 12–17, and 19 of the '712 patent. '1146 IPR, Paper 8, 27.

This proceeding is also related to IPR2018-01140, an *inter partes* review proceeding instituted based on Petitioner's challenge to U.S. Patent

No. 9,402,032 ("the '032 patent"). Both the '712 and '032 patents are part of a chain of continuity that includes PCT/IB2014/062465.

B. The '712 Patent (Ex. 1001)

The '712 patent issued on February 14, 2017 based on an application filed June 1, 2016, which claimed priority back to a provisional application filed July 4, 2013. Ex. 1001, [63]. The '712 patent concerns an optical lens assembly with five lens elements. *Id.* at [57]. Figure 1A of the '712 patent is reproduced below.



Figure 1A of the '712 patent illustrates an arrangement of lens elements in a first embodiment of an optical lens system.

In order from an object side to an image side, optical lens assembly 100 comprises: optional stop 101; first plastic lens element 102 with positive refractive power having a convex, object-side surface 102*a*; second plastic lens element 104 with negative refractive power having a meniscus, convex, object-side surface 104*a*; third plastic lens element 106 with negative refractive power having a concave, object-side surface 106*a*; fourth plastic lens element 108 with positive refractive power having a positive meniscus with a concave, object-side surface 108*a*; fifth plastic lens element 110 with negative refractive power having a negative meniscus with a concave, object-side surface 108*a*; fifth plastic lens element 110 with negative refractive power having a negative meniscus with a concave, object-side surface 108*a*; fifth plastic lens element 110 with negative refractive power having a negative meniscus with a concave, object-side surface 110*a*. *Id*. at 2:63–3:11.

In Table 1, reproduced below, the '712 patent discloses radiuses of curvature, R, for the lens elements, lens element thicknesses and/or distances between each of the lens elements, and a refractive index, Nd, for each lens element.

#	Comment	Radius R [mm]	Distances [mm]	Nd/Vd	Diameter [mm]
1	Stop	Infinite	-0.466		2.4
2	L11	1.5800	0.894	1.5345/57.095	2.5
3	L12	-11.2003	0.020		2.4
4	L21	33.8670	0.246	1.63549/23.91	2.2
5	L22	3.2281	0.449		1.9
6	L31	-12.2843	0.290	1.5345/57.095	1.9
7	L32	7.7138	2.020		1.8
8	L41	-2.3755	0.597	1.63549/23.91	3.3
9	L42	-1.8801	0.068		3.6
10	L51	-1.8100	0.293	1.5345/57.095	3.9
11	L52	-5.2768	0.617		4.3
12	Window	Infinite	0.210	1.5168/64.17	3.0
13		Infinite	0.200		3.0

TABLE 1

Table 1 of the '712 patent sets forth optical parameters for the optical lens assembly.

The '712 patent discloses that,

[T]he distances between various elements (and/or surfaces) are marked "Lmn" (where m refers to the lens element number, n=1 refers to the element thickness and n=2 refers to the air gap to the next element) and are measured on the optical axis z, wherein the stop is at z=0. Each number is measured from the previous surface. Thus, the first distance -0.466 mm is measured from the stop to surface 102*a*, the distance L11 from surface 102*a* to surface 102*b* (i.e. the thickness of first lens element 102) is 0.894 mm, the gap L12 between surfaces 102*b* and 104*a* is 0.020 mm, the distance L21 between surfaces 104*a* and 104*b* (i.e. thickness d2 of second lens element 104) is 0.246 mm, etc. Also, L21=d<sub>2</sub> and L51=d<sub>5</sub>.

Id. at 3:54–67.

# C. Challenged Claims

Claim 1 is independent. Challenged claims 12–14 depend from claim

1. Independent claim 1 is reproduced below.

1. A lens assembly, comprising: a plurality of refractive lens elements arranged along an optical axis, wherein at least one surface of at least one of the plurality of lens elements is aspheric, wherein the lens assembly has an effective focal length (EFL), a total track length (TTL) of 6.5 millimeters or less and a ratio TTL/EFL of less than 1.0, and wherein the plurality of lens elements comprises, in order from an object side to an image side, a first lens element with a focal length f1 and positive refractive power, a second lens element with a focal length f2 and negative refractive power and a third lens element with a focal length f3, the focal length f1, the focal length f2 and the focal length f3 fulfilling the condition  $1.2 \times |f3| > |f2| > 1.5 \times f1$ .

Ex. 1001, 7:55–67.

# D. Proposed Ground of Unpatentability

Petitioner advances the following challenge supported by the declaration of Dr. José Sasián (Ex. 1003).

Reference	Basis	Claims Challenged
U.S. Patent No. 9,678,310 B2	§ 102	1 and 12–14
(Ex. 1021) to Iwasaki et al.		
("Iwasaki")		

### III. ANALYSIS

#### A. Legal Framework of 35 U.S.C. § 314(a)

35 U.S.C. § 314(a) provides that:

The Director [of the USPTO] may not authorize an inter partes review to be instituted unless the Director determines that the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.

Section 314(a) does not require the Director to institute an inter partes review. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) ("[T]he PTO is permitted, but never compelled, to institute an IPR proceeding."). Rather, a decision whether to institute is within the Director's discretion, and that discretion has been delegated to the Board. *See* 37 C.F.R. § 42.4(a); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016) ("[T]he agency's decision to deny a petition is a matter committed to the Patent Office's discretion.").

In a precedential decision in *General Plastic Industrial Co., Ltd. v. Canon Kabushiki Kaisha*, the Board articulated a non-exhaustive list of factors to be considered in evaluating whether to exercise discretion, under 35 U.S.C. § 314(a), to deny a petition that challenges a patent that was previously challenged before the Board. *General Plastic Industrial Co., Ltd. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 at 9–10 (P.T.A.B. Sep. 6, 2017) (precedential). These factors are: 1. whether the same petitioner previously filed a petition directed to the same claims of the same patent;

2. whether at the time of filing of the first petition the petitioner knew of the prior art asserted in the second petition or should have known of it;

3. whether at the time of filing of the second petition the petitioner already received the patent owner's preliminary response to the first petition or received the Board's decision on whether to institute review in the first petition;

4. the length of time that elapsed between the time the petitioner learned of the prior art asserted in the second petition and the filing of the second petition;

5. whether the petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent;

6. the finite resources of the Board; and

7. the requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review.

These factors are "a non-exhaustive list" and "additional factors may arise in other cases for consideration, where appropriate." *Id.* at 16, 18.

B. Patent Owner's 35 U.S.C. § 314(a) Arguments

In its Preliminary Response, Patent Owner argues that we should exercise our discretion to deny institution under 35 U.S.C. 314(a). Prelim. Resp. 3–6.

With respect to factor 1, Patent Owner argues that Petitioner earlier challenged claims 1 and 12–14 of the '712 patent in the '1146 IPR. Prelim. Resp. 3. With respect to factor 2, we note that Iwasaki (Ex. 1021) is a U.S. patent. Petitioner does not indicate whether Iwasaki was available or unavailable at the time of filing the Petition in the '1146 IPR. *See generally* Pet. As Patent Owner notes, Petitioner merely argues that its Petition "is not

redundant to the '1146 IPR since it presents the Iwasaki reference (which was not previously presented in the '1146 IPR)," and thus, demonstrates how claim 14 "is anticipated rather than rendered obvious over the prior art." *See* Prelim. Resp. 3 (citing Pet. 2). Thus, factors 1 and 2 weigh in favor of exercising our discretion to deny institution of the present proceeding on the basis of 35 U.S.C. § 314(a).

With respect to factor 3, Patent Owner did not file a preliminary response in the '1146 IPR. The Petition in the present proceeding was also filed before we instituted review in the '1146 proceeding and thus, Petitioner did not have the benefit of Patent Owner's arguments or our findings with respect to the '1146 IPR in preparing the present Petition. Thus, factor 3 weighs against exercising our discretion to deny institution of the present proceeding.

With respect to factors 4 and 5, the Petition in the '1146 IPR was accorded a filing date of May 23, 2018. '1146 IPR, Paper 3, 1. The Petition in the present proceeding was accorded a filing date of July 6, 2018. Paper 3, 1. As noted above, Petitioner does not provide *any* explanation as to when it learned of Iwasaki or as to the length of time elapsed between the filings of the Petition in the '1146 IPR and the Petition in the present proceeding. To the extent a reasonable explanation exists for Petitioner's delay, it was incumbent upon Petitioner to identify those circumstances in its Petition. Thus, factors 4 and 5 weigh strongly in favor of exercising our discretion to deny institution of the present proceeding.

With respect to factors 6 and 7, we know of no reason why this proceeding would tax unduly the resources of the Board, or why we could not meet the requirement of 35 U.S.C. § 316(a)(11) to issue a final

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determination within one year after institution. Accordingly, we determine that these factors are neutral to the analysis.

Based on the analysis above, we determine that the factors enumerated in *General Plastics* weigh in favor of exercising our discretion to deny institution of the present proceeding. We further note that, aside from indicating that dependent claim 14 is subject to an anticipation challenge in the present proceeding, but subject to an obviousness challenge in the '1146 IPR, Petitioner does not explain how its application of Iwasaki differs substantively from its application of Konno in the '1146 IPR. Thus, Petitioner has also failed to explain whether the instant Petition raises, "substantially the same . . . arguments" that "previously were presented to the Office" in the '1146 proceeding. 35 U.S.C. § 325(d). That is one of several circumstances that inform our decision to decline to institute review. For example, both references disclose a lens arrangement of multiple aspheric lenses having specified, implicitly or explicitly, optical design parameters.

#### IV. ORDER

In consideration of the foregoing, it is

ORDERED that the petition for *inter partes* review is *denied* and no trial is instituted.

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