

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BIO IMAGING SAS D/B/A VILBER,
Petitioner,

v.

SPECTRAL INSTRUMENTS IMAGING, LLC,
Patent Owner.

Case IPR2023-00449
Patent No. 8,901,516

PATENT OWNER’S PRELIMINARY RESPONSE

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Exhibit	Description
2001	Declaration of David W. Piston, Ph.D.
2002	Curriculum Vitae of David W. Piston, Ph.D.
2003	Olympus Corporation's Online Microscopy Resource Center - Publications (July 21, 2004)
2004	Olympus Corporation's Online Microscopy Resource Center - Publications (March 6, 2010)
2005	Olympus Corporation's Online Microscopy Resource Center - Digital Imaging in Optical Microscopy (Apr. 26, 2003)
2006	Olympus Corporation's Online Microscopy Resource Center - Digital Imaging in Optical Microscopy (Feb. 3, 2012)
2007	Mortimer Abramowitz, MICROSCOPE: BASICS AND BEYOND (2003)
2008	U.S. District Court – Judicial Caseload Profile – Texas Southern (Dec. 31, 2022)
2009	Notice of Resetting Markman Date
2010	Scheduling Order

Patent Owner Spectral Instruments Imaging, LLC (“Spectral”) submits this Preliminary Response in opposition to Bio Imaging SAS d/b/a Vilber’s Petition for *Inter Partes* Review (“IPR”) of U.S. Patent No. 8,901,516 (“the ’516 patent”).

I. INTRODUCTION

The Board should deny the Petition, both as a sound exercise of its discretion under *Fintiv*, and because the Petition is substantively flawed. The only challenges to the independent claims of the ’516 patent are in Grounds 1 and 6.

Ground 1 is an anticipation challenge based on Olympus. Despite having the burden to identify the evidence that it relies on to support its anticipation challenge with particularity, the Petition clearly fails to establish that each and every limitation of the independent challenged claims are found in Olympus. Critically, (i) the Petition fails to show that Olympus discloses a camera and housing that are mounted to a same support structure; and (ii) the Petition fails to allege—let alone show—that Olympus discloses a camera having a field of view unobstructed by the housing.

Ground 6 is an obviousness challenge based on Olympus and GBox, which suffers the same two fatal flaws as Ground 1. None of the other grounds (Grounds 2–5, and 7) in the Petition cure the fatal defects in Grounds 1 or 6. Thus, because the Petition has failed to show that any independent or dependent claim is unpatentable for two separate and independent reasons, the Board should decline to

institute the Petition for substantive reasons. The *Fintiv* factors further indicate that the Petition should be denied.

II. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY INSTITUTION

Pursuant to the Board's precedential decision in *Apple Inc. v. Fintiv Inc.*, IPR2020-00019, Paper 11 (PTAB Mar. 20, 2020), the Board should deny institution for the following reasons.

A. *Fintiv* Factor #1: No Evidence That The District Court Would Grant A Stay If A Proceeding Is Instituted

The first *Fintiv* factor is “whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted.” *Fintiv*, Paper 11, at 6. Petitioner offers no evidence that the parallel district court proceeding—*Spectral Instruments Imaging, LLC vs. Scintica Inc.*, No. 4:22-cv-00043 (S.D. Tex.) (“Parallel District Court Proceeding”)—would be stayed if an IPR is instituted.

Thus, *Fintiv* Factor #1 is either neutral or weighs in favor of denying institution.

B. *Fintiv* Factor #2: The District Court Trial Likely Commences Seven Months Before the IPR Final Written Decision

The second *Fintiv* factor looks to whether trial will occur before the Board's deadline to issue a final written decision (“FWD”).

The most recent statistics on median time-to-trial for civil actions in the Southern District of Texas is between 23 to 31.4 months. EX2008¹, at 36; *see also* USPTO Memorandum, *Interim Procedure for Discretionary Denials in AIA Post Grant Proceedings with Parallel District Court Litigation*, at 8 (June 21, 2022) (“Guidance Memo”). We believe the average trial time, post-COVID, is actually closer to 23 months. This is based on reported averages for the Southern District of Texas from 2017 to 2021, which never exceeded 23 months. *See id.*

The Parallel District Court Proceeding was filed on January 6, 2022. Under the pre-COVID timelines (and post-COVID, we would argue), this would mean an estimated trial date of December 6, 2023. The FWD for this IPR, if instituted, would issue no later than July 24, 2024. The trial in the Parallel District Court Proceeding would be expected a full 7 months prior to the Board’s statutory deadline to issue its FWD. Under this timeline, *Fintiv* Factor #2 favors denying institution.

Under COVID-inclusive timeline, the expected trial date would be approximately August 18, 2024. Only in this worst-case scenario would trial occur after the Board’s statutory deadline, as shown below.

¹ Judicial Caseload Profile for the Southern District of Texas (Dec. 31, 2022), available at <https://www.uscourts.gov/statistics/table/na/federal-court-management-statistics/2022/12/31-1>.

	Filing Date	Time to Trial/FWD	Trial/FWD Date
District Court	Jan. 6, 2022 ²	23 months	Dec. 6, 2023
		31.4 Months	~Aug. 18, 2024
IPR2023-00449	Jan. 6, 2023	18 Months From Notice of Filing Date	July 24, 2024

Thus, the second *Fintiv* factor either favors denying institution or is neutral.

See Guidance Memo, at 8.

C. *Fintiv* Factor #3: There Has Been Substantial Investment In The Parallel Proceeding By The Court And Parties

The third *Fintiv* factor looks to the time invested by the parties in any parallel litigation. See *Fintiv*, Paper 11 at 9–10.

To date, the parties have engaged in substantial fact discovery (including third party discovery) in the Parallel District Court Proceeding. Further substantial investment will also be incurred in relation to a *Markman* hearing, scheduled for May 25, 2023. See EX2009, at 1. Moreover, the district court's *Markman* order will likely issue by July 13, 2023, before the Board's July 25, 2023, institution decision deadline. See EX2010 (scheduling order), at 5 (indicating a *Markman* order within seven (7) weeks of the *Markman* hearing).³

Thus, the third *Fintiv* factor weighs in favor of denying institution.

² See EX1020 (Complaint), at 1.

³ The parties agreed to modify the scheduling order if the Court grants Spectral's motion to amend its complaint, but it is unclear if that will have any impact on the estimated time between the *Markman* hearing and *Markman* order.

D. *Fintiv* Factor #4: The Petition Is Copied From The Invalidity Contentions Served In The Parallel District Court Proceedings

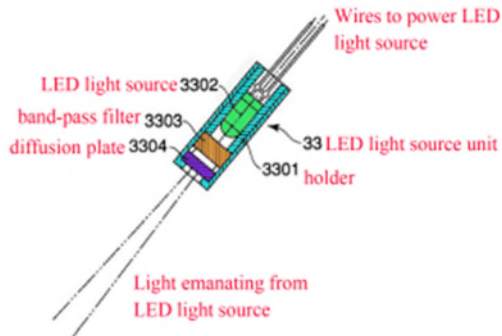
The fourth *Fintiv* factor weighs ***heavily*** in favor of denying institution “[i]f the petition includes the same or substantially the same claims, grounds, arguments, and evidence as presented in the parallel [district court] proceeding.” Guidance Memo, at 7. In its Petition, Petitioner relies on nearly the exact same grounds relied upon by Scintica Inc. (“Scintica”) in the Parallel District Court Proceedings:

Petition at 5–6	Scintica’s Invalidity Contentions (EX1025) at 4–5
“Ground 1: Claims 1, 3, 4, 7, 9-11, 14-17, 23, and 25 are anticipated by Olympus.”	“Scintica asserts that claims 1-7, 9, 14-18, 20, and 22-23 and 25 of the ’516 patent are anticipated by Olympus”
“Ground 2: Claims 2, 5, and 20 are obvious in view of Olympus.”	“Claims 1-7, 9, 14-18, 20, and 22-23 and 25 of the ’516 patent are obvious over . . . the Fujifilm LAS-3000 or LAS-4000[] and Olympus”
“Ground 5: Claim 24 is obvious in view of Olympus and Brydegaard.”	“Claim 24 is obvious under the foregoing combinations [Olympus] and further in view of Nilson[] or Brydegaard”
“Ground 6: Claims 1-23 and 25-27 are obvious in view of GBox and Olympus.”	“Claims 1-7, 9, 14-18, 20, and 22-23 and 25 of the ’516 patent are obvious over . . . the Syngene G:Box[] and Olympus[]”
“Ground 7: Claim 24 is obvious in view of GBox, Olympus, and Brydegaard.”	“claim 24 is obvious over Olympus in view of Nilson[] or Brydegaard[]” “Claim 24 is obvious under the foregoing combinations [Olympus] and further in view of Nilson[] or Brydegaard”

Indeed, many of the images used by Petitioner in its petition are copied from the invalidity contentions Scintica served in the Parallel District Court Case:

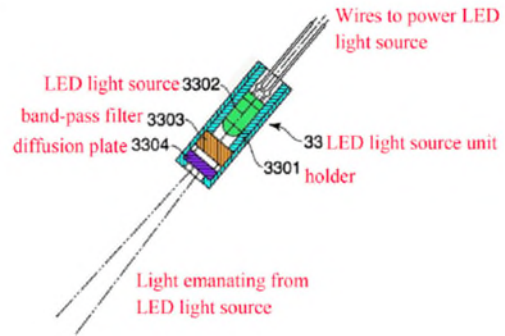
Olympus, Figure 11

[Fig. 11]



E.g., Petition at 32

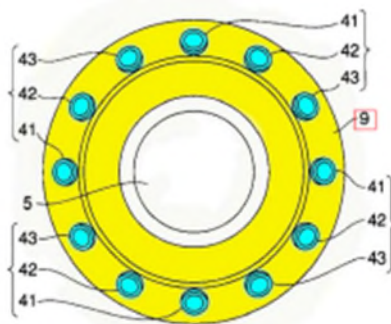
[Fig. 11]



E.g., Scintica's Invalidity Contentions
(EX1025) at 18

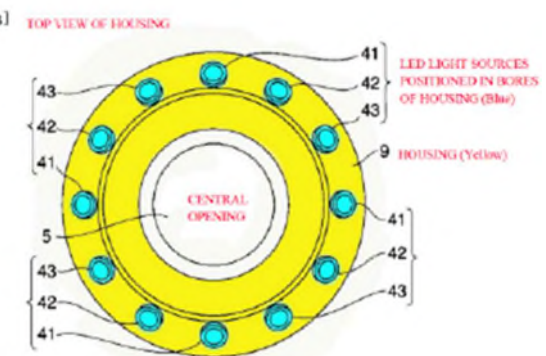
Olympus, Figure 13

[Fig. 13]



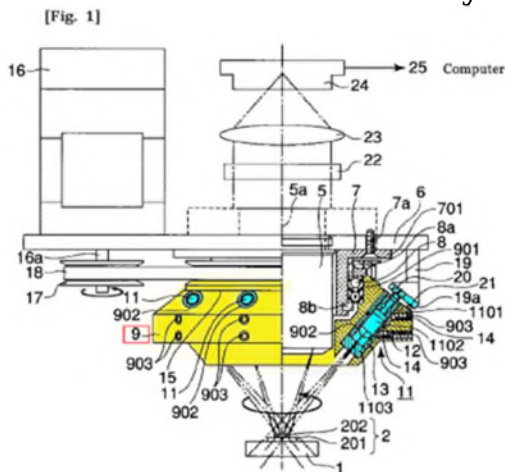
E.g., Petition, at 31

[Fig. 13]

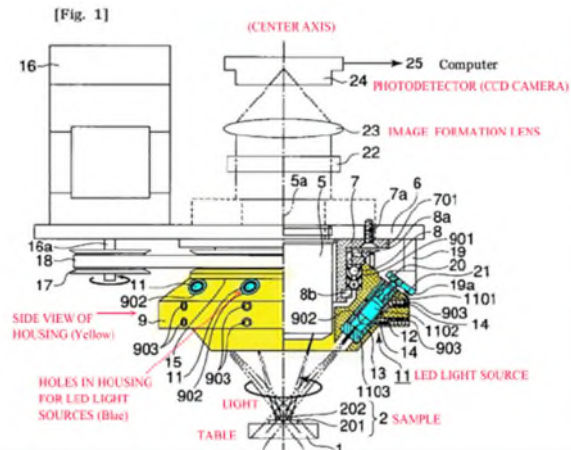


E.g., Scintica's Invalidity Contentions
(EX1025) at 16

Olympus, Figure 1

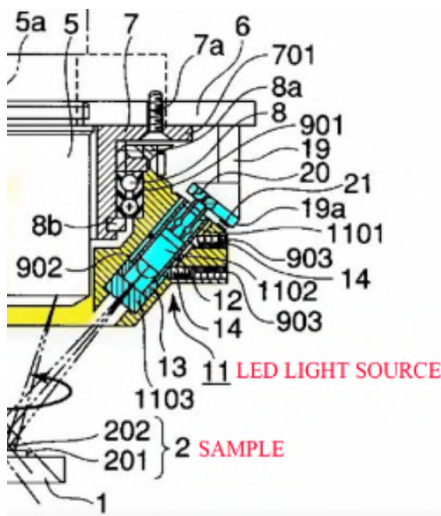


E.g., Petition at 31

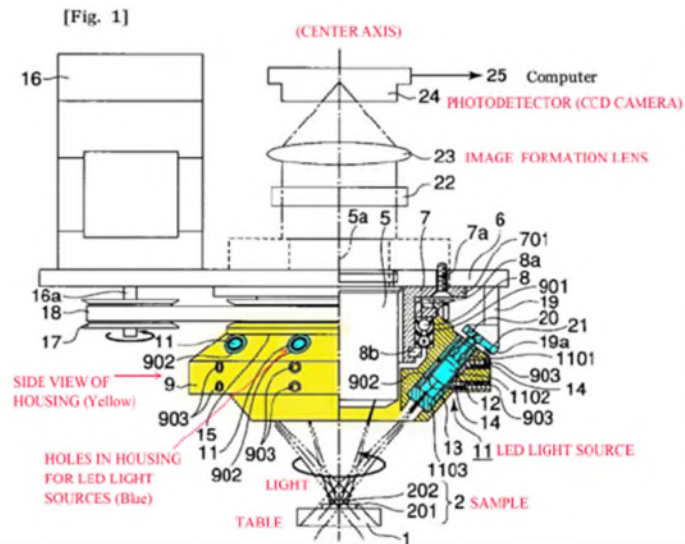


E.g., Scintica's Invalidity Contentions
(EX1025) at 14

Olympus, Figure 1



E.g., Petition at 47



E.g., Scintica's Invalidity Contentions (EX1025)
at 14

Neither Petitioner nor any other real party-in-interest (*e.g.*, Scintica) stipulated not to pursue in the Parallel District Court Proceeding the same grounds as in the Petition. Thus, were the Board to institute review, the Board would be deciding the near-exact same issues raised in the Parallel District Court Proceeding—the epitome

of inefficiency and potentially conflicting decisions that were cautioned against in *Fintiv* and the Guidance Memo. Guidance Memo, at 7; *Fintiv*, Paper 11, at 12.

Thus, the fourth *Fintiv* factor weighs **heavily** in favor of denying institution.

E. *Fintiv* Factor #5: The Real Parties-In-Interest Are The Same

The fifth *Fintiv* factor looks to whether the “petitioner is unrelated to a defendant in an earlier court proceeding.” *Fintiv*, Paper 11, at 13. Petitioner is related to the defendant—Scintica—in the Parallel District Court Proceeding. Indeed, Petitioner listed Scintica as a real party-in-interest here—namely because Scintica is accused of infringing the ’516 patent based on its sales of Petitioner’s products. See EX1024 (preliminary infringement contentions).

Thus, the fifth *Fintiv* factor favors denying institution.

F. *Fintiv* Factor #6: Petitioner’s Challenges Lack Merit

The sixth *Fintiv* factor looks to whether Petitioner has put forth compelling unpatentability challenges. See *CommScope Techs. LLC v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23 (Feb. 27, 2023) (precedential) (“[T]he Board evaluates whether the Petition presents challenges ‘in which the evidence, if unrebutted in trial, would plainly lead to a conclusion that one or more claims are unpatentable by a preponderance of the evidence.’”) (quoting Guidance Memo, at 4). As explained below, the Petition is weak because the challenges in the Petition are fatally flawed for two separate and independent reasons.

Thus, the sixth *Fintiv* factor therefore also favors denying institution.

On balance, the various *Fintiv* factors weigh in favor of the exercise of the Board's discretion to deny the Petition for the reasons discussed above, and Patent Owner respectfully requests that the Board do so.

III. CLAIM CONSTRUCTION

The Petition fails to demonstrate a reasonable probability that any claim of the '516 patent is unpatentable for reasons unrelated to any of the four constructions explicitly addressed in the Petition. In view of those shortcomings, those constructions will not be addressed in this Preliminary Response. See EX2001 (Piston Decl.), ¶¶ 16–17. Patent Owner reserves the right to address in its Response those four claim constructions and any other claim construction issue should the Board decide to institute trial for this IPR.

IV. ORDINARY LEVEL OF SKILL IN THE ART

For purposes of this Preliminary Response only, Patent Owner applies the skill level proposed by Petitioner. Patent Owner reserves the right to propose an alternative level of skill in the art should the Board decide to institute trial for this IPR. See also EX2001 (Piston Decl.), ¶¶ 14–15.

V. GROUND 1: CLAIMS 1, 3, 4, 7, 9–11, 14–17, 23, AND 25 ARE NOT ANTICIPATED BY OLYMPUS

To demonstrate anticipation, the Petition must show where “each and every element of the claim is expressly or inherently disclosed in a single prior art

reference.” *Apple Inc. v. Corephotonics, Ltd.*, 861 Fed. Appx. 443, 449 (Fed. Cir. 2021). “An element may be inherently disclosed only if it is necessarily present, not merely probably or possibly present, in the prior art.” *Guangdong Alison Hi-Tech Co. v. Int’l Trade Comm’n*, 936 F.3d 1353, 1364 (Fed. Cir. 2019). Additionally, citations to different embodiments in a single reference do not establish anticipation unless the reference discloses the claim elements arranged as in the claim or one of skill in the art could readily envisage the claimed arrangement or combination in view of the reference. *Microsoft Corp. v. Biscotti, Inc.* 878 F.3d 1052, 1060-70 (Fed. Cir. 2017) (citations omitted).

“It is [also] of the utmost importance that petitioners in the IPR proceedings adhere to the requirement that the initial petition identify with particularity the evidence that supports the grounds for the challenge to each claim...” *Wasica Finance GMBH v. Continental Auto. Sys., Inc.*, 853 F.3d 1272, 1286 (Fed. Cir. 2017) (quoting *Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016)).

As explained in detail below, Ground 1 of the Petition fails to establish anticipation of any challenged claim because it fails to demonstrate that Olympus discloses at least two limitations found in each challenged independent claim.

A. The Petition Fails To Show That Olympus Discloses a Camera And Housing Mounted To a Same Support Structure

Each of the independent challenged claims 1, 14, and 25 requires a “camera” that is mounted to the same “support structure” to which a housing is also mounted.⁴ Ground 1 of the Petition fails to identify any “support structure” to which Olympus’ “camera” is mounted, as explained below for each independent claim.

1. Independent Claim 1

For independent claim 1, the Petition does not explicitly identify what in Olympus it contends the claimed “support structure” is. Rather, the Petition states the following:

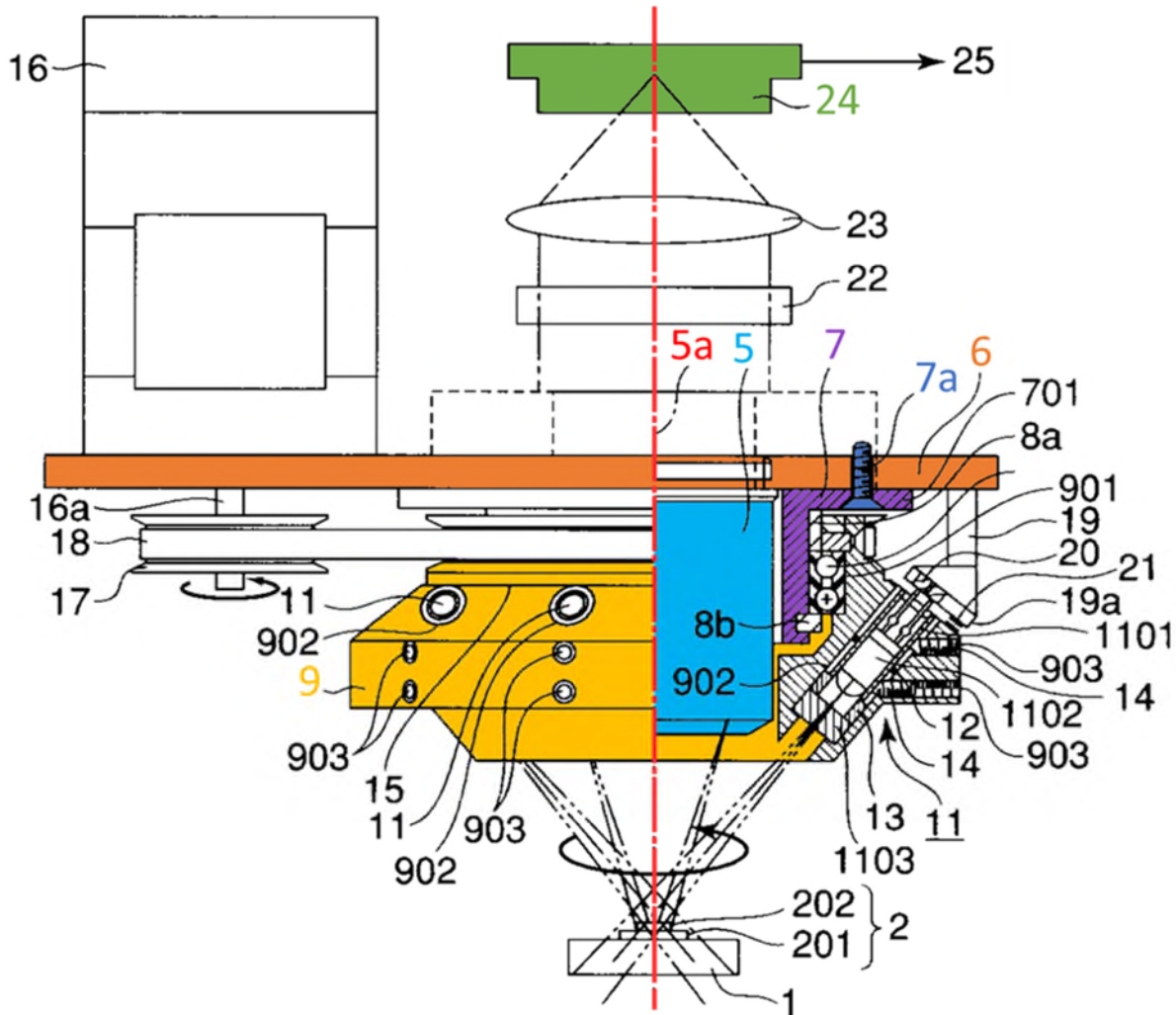
Light source holding member 9 is “mountable to a support structure so that the central opening is aligned with a camera also mounted to the support structure so that a field of view of the camera is unobstructed by said housing.” In the embodiment of FIG. 1, Olympus references base 6, shaft 7, bearing 8, C-ring 8b, and associated hardware to position the light source holding member 9 with respect to the camera and to maintain them above sample table 1.

Petition at 34 (citations omitted). Based on this statement, it appears the Petition contends that “base 6, shaft 7, bearing 8, C-ring 8b, and associated hardware”

⁴ **Claim 1 and 25:** “said housing being mountable to a support structure so that the central opening is aligned with a camera also mounted to the support structure”
Claim 14: “a camera mounted to said Support structure; an excitation light source assembly mounted to said support structure, said excitation light Source assembly comprising: a housing”

represents the “support structure,” but it is far from clear. *See* EX2001 (Piston Decl.), ¶¶ 20–22, 29–30. The Petition’s catchall “associated hardware” provides no additional insight into what Petitioner contends the “support structure” is.

However, regardless of what Petitioner contends the “support structure” is, the Petition fails to establish that the “camera” is mounted to it. *See* EX2001 (Piston Decl.), ¶¶ 29–30. The Petition identifies the “camera” as Olympus’ “photodetector/CCD camera 24.” Petition at 36; *see also* EX1004 (Talghader Decl.) ¶ 92 (same); *see also* EX2001 (Piston Decl.), ¶ 21. The camera is featured in Figure 1, as a “photodetector/CCD camera,” identified by callout 24. However, nothing in Figure 1 illustrates a connection of this “photodetector/CCD camera” to the “support structure.” Indeed, the “photodetector/CCD camera 24” (shown below in green) is not connected to anything in Figure 1 other than computer 25, which the Petition does not allege to be part of any “support structure.”



Olympus, Figure 1 (Annotated)

Further, nothing in the analysis of claim 1 in the Petition or Dr. Talghader's declaration even purports to identify anything to which the "photodetector/CCD camera 24" is mounted. That the photodetector/CCD camera 24 is aligned along optical axis 5a with the central opening of the light source holding member 9 does not establish that the photodetector/CCD camera 24 is mounted to the same support structure as the light source holding member 9. See EX2001 (Piston Decl.), ¶¶ 29–

30. Optical **axis 5a** is also not a support structure—it is an imaginary line denoting the axis. *See* EX2001 (Piston Decl.), ¶ 30.

The Petition also references Figure 22, and again states that “light source holding member 9 is fixed and is mounted to a cylindrical fixed shaft 7 and associated hardware to position it with respect to the camera and to maintain them above sample table 1.” Petition at 36. But as discussed above, the fact that the *light source holding member 9* is mounted to a cylindrical fixed shaft 7 to position it with respect to the camera *does not establish that the camera* is also mounted to the same cylindrical fixed shaft 7. Figure 22 does not even include the camera 24, much less demonstrate that it is attached to any support structure identified in the Petition. *See* EX2001 (Piston Decl.), ¶¶ 29–30.

Olympus does not disclose, and Petition has failed to establish that Olympus discloses, a camera mounted to a same support structure as a housing as required by claim 1.

2. Independent Claim 14

Contrary to its position for claim 1, the Petition changes course for claim 14 and makes the bald assertion that “the camera” encompasses “e.g., photodetector/CCD camera 24 and associated lenses.” Petition at 49 (emphasis added). No support is provided for this assertion.

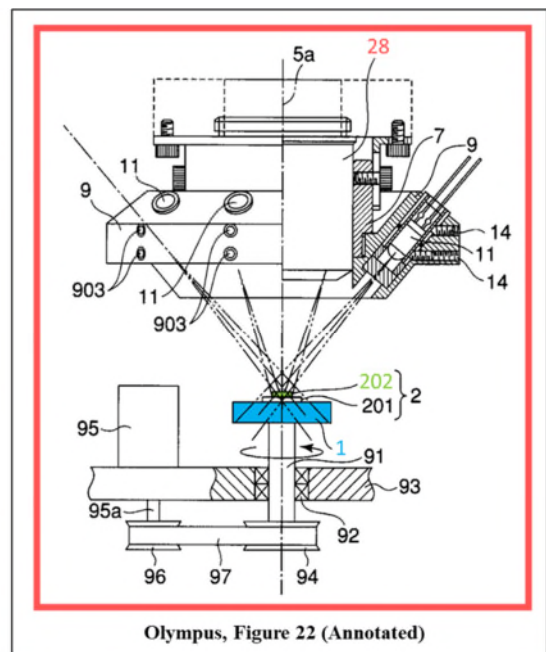
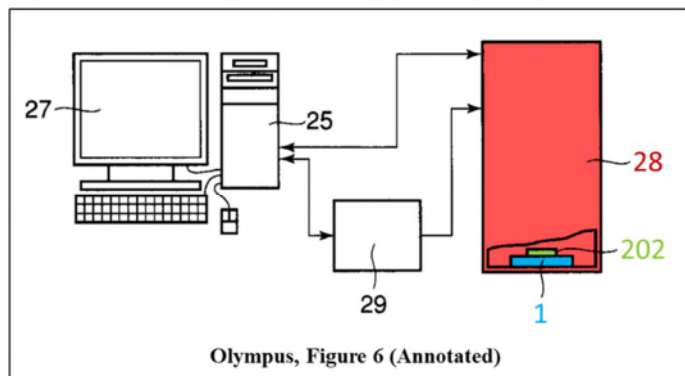
The Petition's identification of the camera as including "associated lenses" is both vague (because the associated lenses are not identified) and unsupported by any fact of record. It also contradicts Petitioner's own expert's identification of the camera as just "photodetector/CCD camera 24"—without any "associated lenses." EX1004 (Talghader Decl.) ¶ 92; *see also* ¶ 104 (referring to Olympus' "[c]amera 24"). Further, neither the "photodetector/CCD camera 24," nor any "associated lenses" are attached to anything identified in the Petition as the claimed support structure of Olympus' Figure 1. Neither the Petition nor Dr. Talghader contend otherwise. *See also* EX2001 (Piston Decl.), ¶¶ 20–22, 29–30.

The Petition again also references Figure 22 of Olympus for this limitation in its claim 14 analysis. Petition at 50. In particular, the Petition alleges:

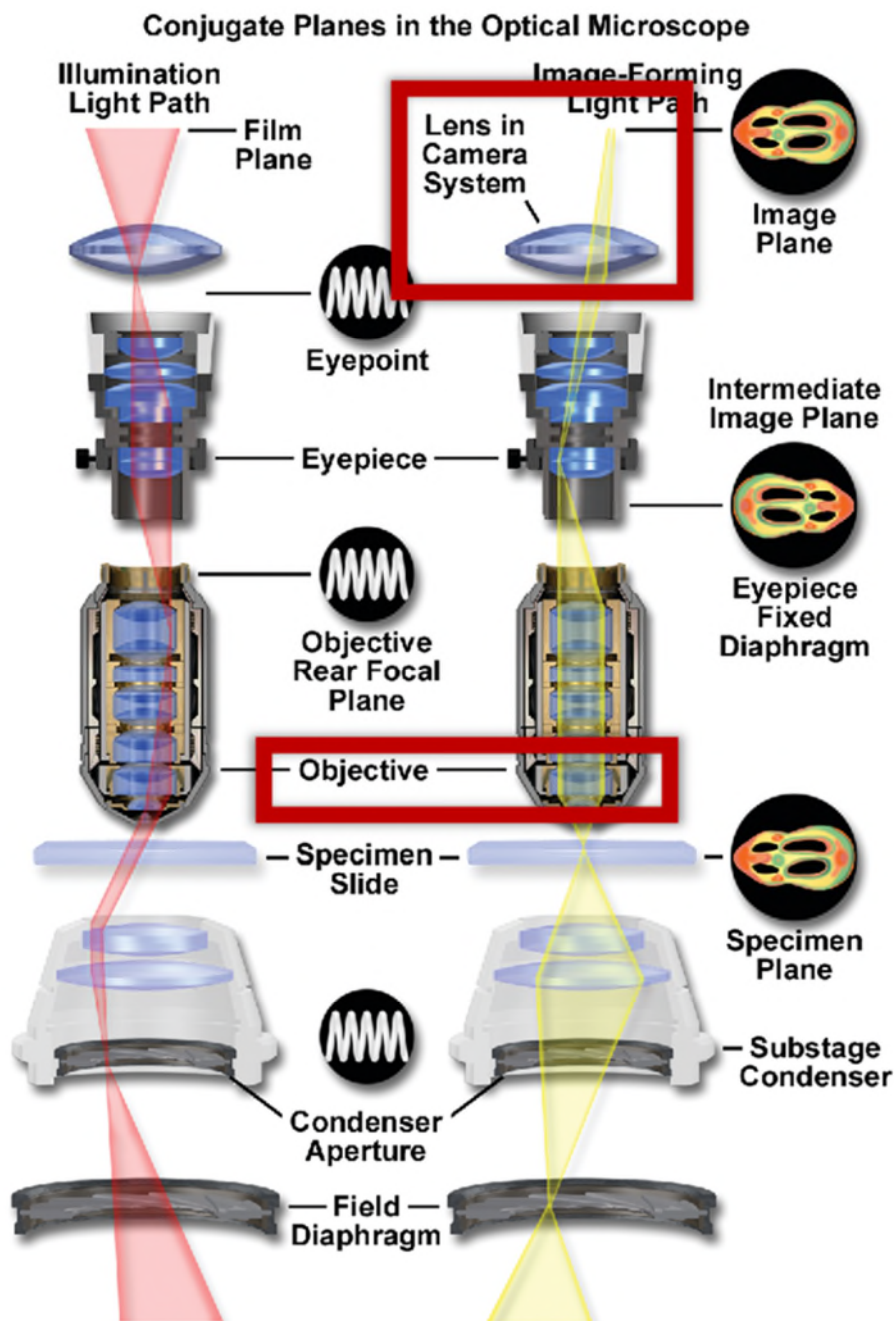
With respect to the embodiment of FIG. 22, Olympus teaches a support structure [a cylindrical fixed shaft 7 and associated hardware], and a camera [fluorescence detecting unit 28 and lenses] mounted to the support structure [the support structure holds the objective lens 5 and the fluorescence detecting unit 28 is connected to it]. EX1040, FIG. 22, ¶ 0203.

Petition at 50. These allegations also fail to establish that Figure 22 discloses the limitation requiring the camera to be mounted to the same support structure as the housing.

First, the Petition’s contention that “fluorescence detecting unit 28” is “the camera” is not correct. Fluorescence detecting unit 28 is the **entire** rectangular cabinet as shown in Figure 6 of Olympus (shown below in red), not just a camera or a part of a camera. See Olympus, ¶¶ 71–75, Fig. 6; EX2001 (Piston Decl.), ¶¶ 26–28; see also Olympus, ¶ 202 (“FIG. 22 shows a schematic configuration of the 6 [sic, 6th] embodiment, and the same reference numerals as in FIG. 1 denote the same reference numerals.”); *id.*, Brief Description of the Drawings (“FIG. 6 is a block diagram showing an **entire fluorescence inspection device** according to a 1 embodiment”) (emphasis added); Petition at 36 (admitting Fig. 22 “uses the same reference numerals” as Fig. 1). Thus, while *something* in the entire rectangular cabinet in Fig. 6 may be connected to the objective lens 5, the cited passage does not establish that the *photodetector* 24 is connected to the objective lens 5.



Second, to the extent the Petition can be read to imply the objective lens depicted in Fig. 22 (labeled with reference numeral 5 in Figure 1) is one of the “associated lenses” that is a part of the camera, such an implication is again unsupported attorney argument. It also contradicts Petitioner’s own expert’s identification of the camera as being the “photodetector/CCD camera 24.” Moreover, a POSITA would understand that an “objective lens” is a lens which is separate from the camera. See EX2001 (Piston Decl.), ¶¶ 22–25. An objective lens is most commonly associated with microscopes, not cameras, as further explained by Dr. Piston. See *id.* Indeed, Olympus Corporation’s own marketing and sales history further supports this differentiation. From at least 2004 to 2010, Olympus Corporation openly distributed “Mortimer Abramowitz’s renowned introduction to optical microscopy” (EX2003, at 3 (2004); EX2004, at 3 (2010)), which emphasizes the difference between an “Objective” lens and a “Lens in [the] Camera System:”



EX2007, at 35 (annotations added); *see also* EX2001 (Piston Decl.), ¶ 23. Indeed, from at least 2003 to 2012, Olympus Corporation, on its website, showed a “Fluorescence Microscope with Digital Camera” in which the “Digital Camera” and “Objective” lenses are separate components:

Fluorescence Microscope with Digital Camera

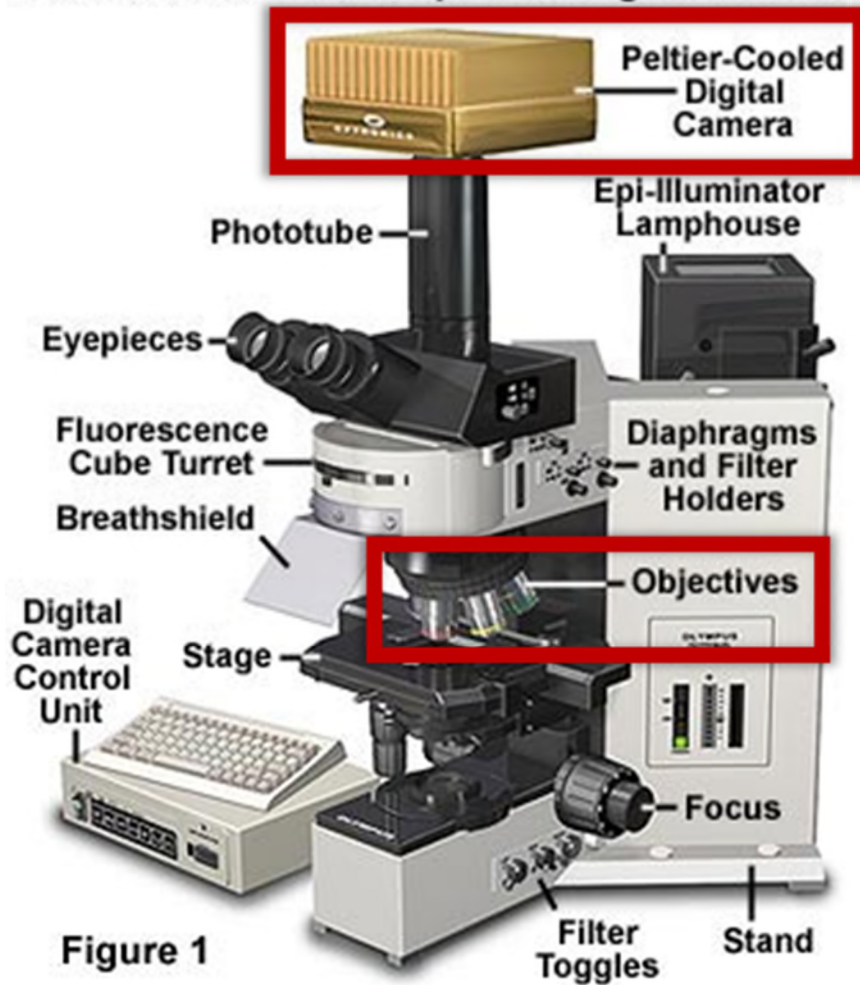


Figure 1

EX2005, at 1 (2003) (annotations added); EX2006, at 1 (2012); EX2001 (Piston Decl.), ¶ 24.

Simply put, a POSITA would not consider the objective lens 5 as part of a camera. EX2001 (Piston Decl.), ¶¶ 21–25.

Accordingly, the Petition's contention that Olympus' *objective lens 5* is mounted to the same support structure as the housing in Figure 22 does not establish that Olympus discloses a *camera* being mounted to the same support structure as the housing as required by claim 14.

3. Independent Claim 25

For independent claim 25, the Petition cites back to its analysis in independent claim 1. Petition at 55. For the same reasons as independent claim 1, the Petition fails to identify or explain where Olympus discloses this limitation.

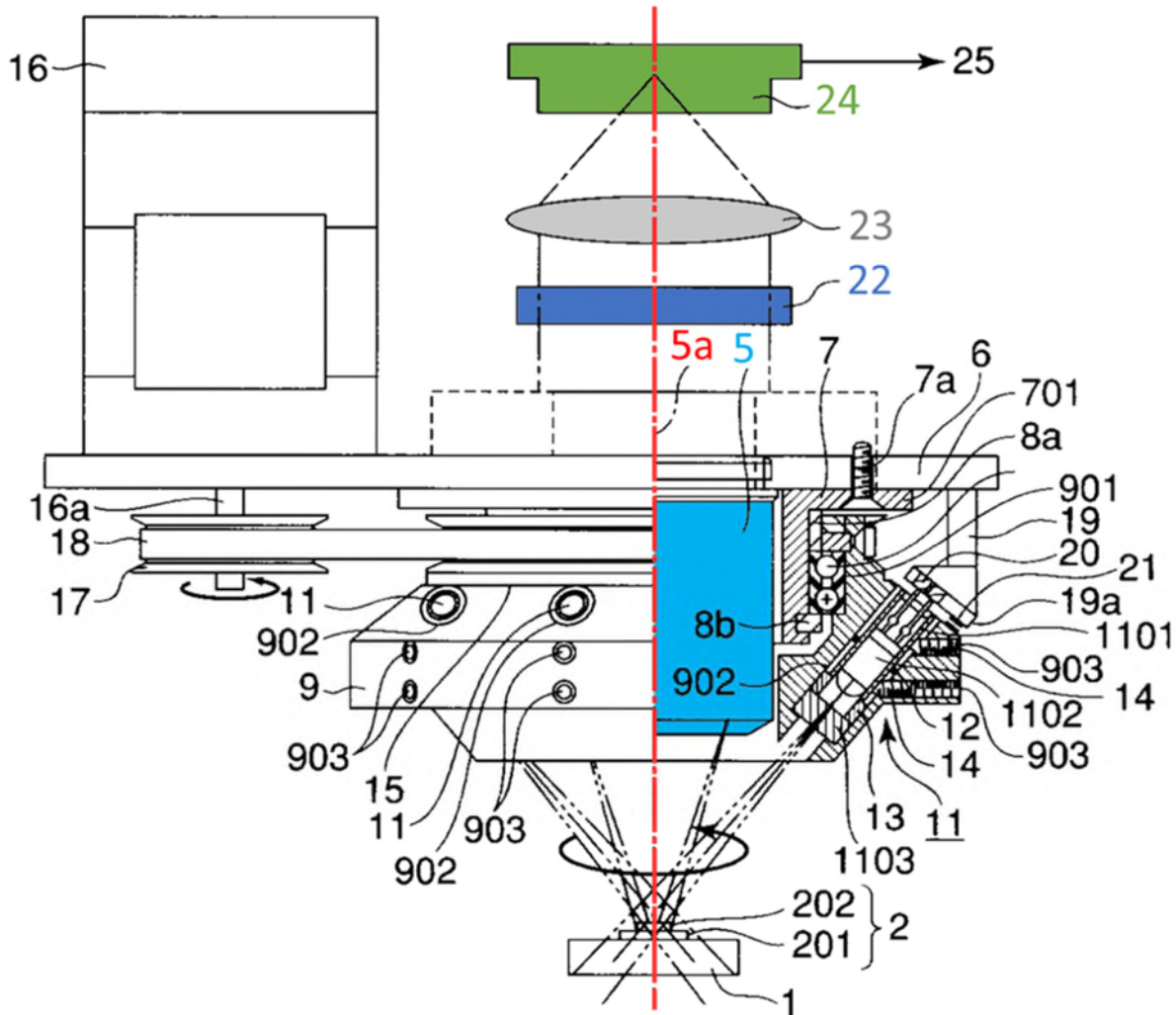
Thus, for the reasons discussed above, the Petition fails to establish that Olympus discloses the limitations in each challenged independent claim that require a camera to be mounted to a same support structure as a housing. The Petition should therefore be denied for this first reason.

B. The Petition Fails to Show That Olympus Discloses a Camera Having a Field Of View Unobstructed by the Housing

Each independent claim requires a camera having a field of view unobstructed by the housing.⁵ Critically, the Petition does not even attempt to explain how or where Olympus allegedly discloses this limitation, let alone identify any evidence that would support such an assertion. Rather, the Petition states that various components shown in Olympus Figure 1—namely, “[l]ens 5, lens 23, and photodetector/CCD camera 24”—are allegedly aligned “on optical axis 5a.” Petition at 35–36.

⁵ **Claim 1 and 25:** “so that a field of view of the camera is unobstructed by said housing”

Claim 14: “so that a field of view of said camera is substantially unobstructed by said housing”

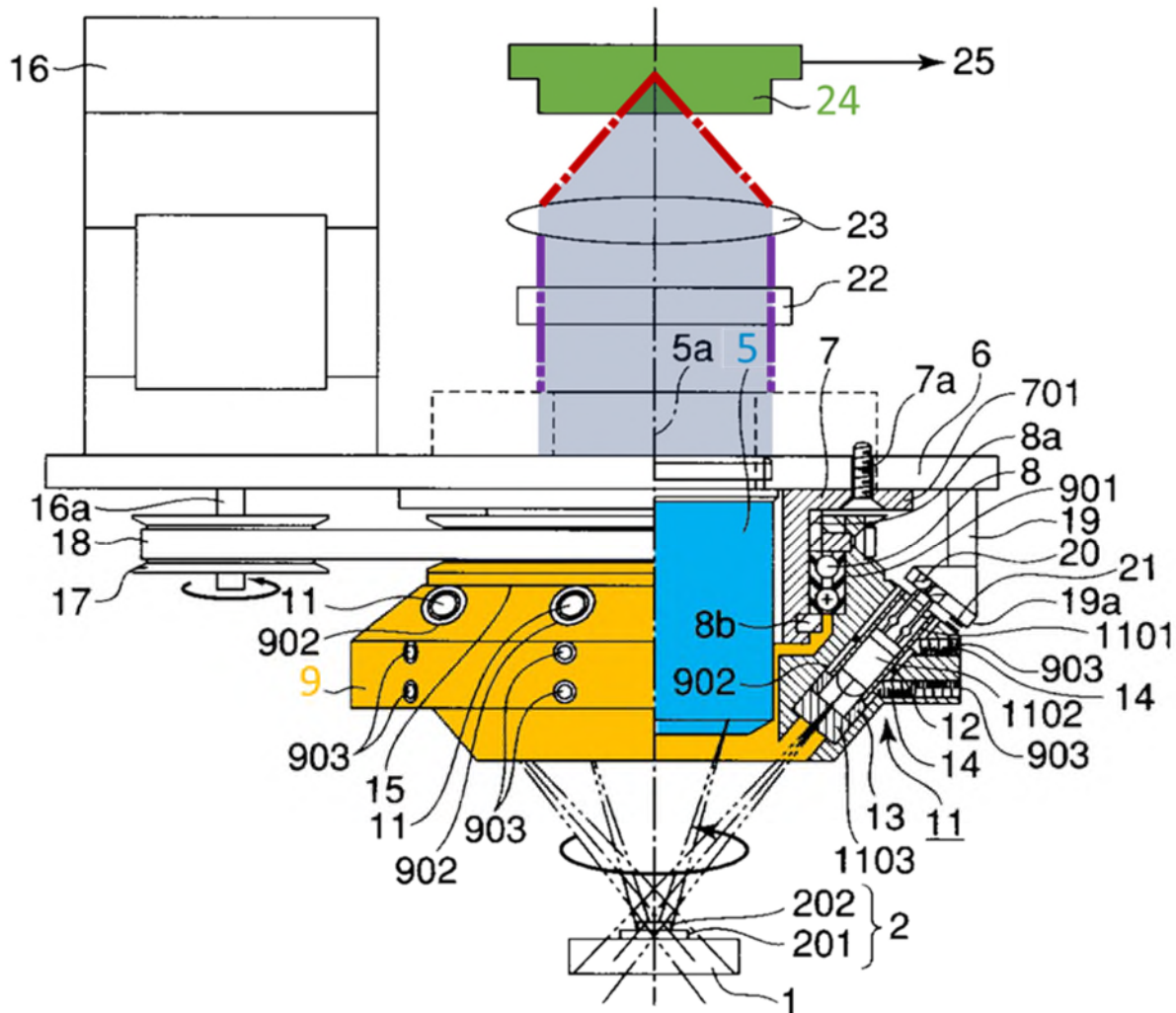


Olympus, Figure 1 (Annotated)

Merely stating that certain components are *aligned* along **axis 5a**, however, does nothing to identify or explain that the camera field of view is unobstructed by said housing—let alone what the field of view of the camera is.

To the contrary, it is entirely possible that the field of view of the camera is obstructed by the housing, even if the housing is *aligned* along the same optical axis with the camera. EX2001 (Piston Decl.), ¶¶ 31–32. For example, according to Dr. Piston, the **purple dashed lines** of annotated Figure 1 below appear to represent the

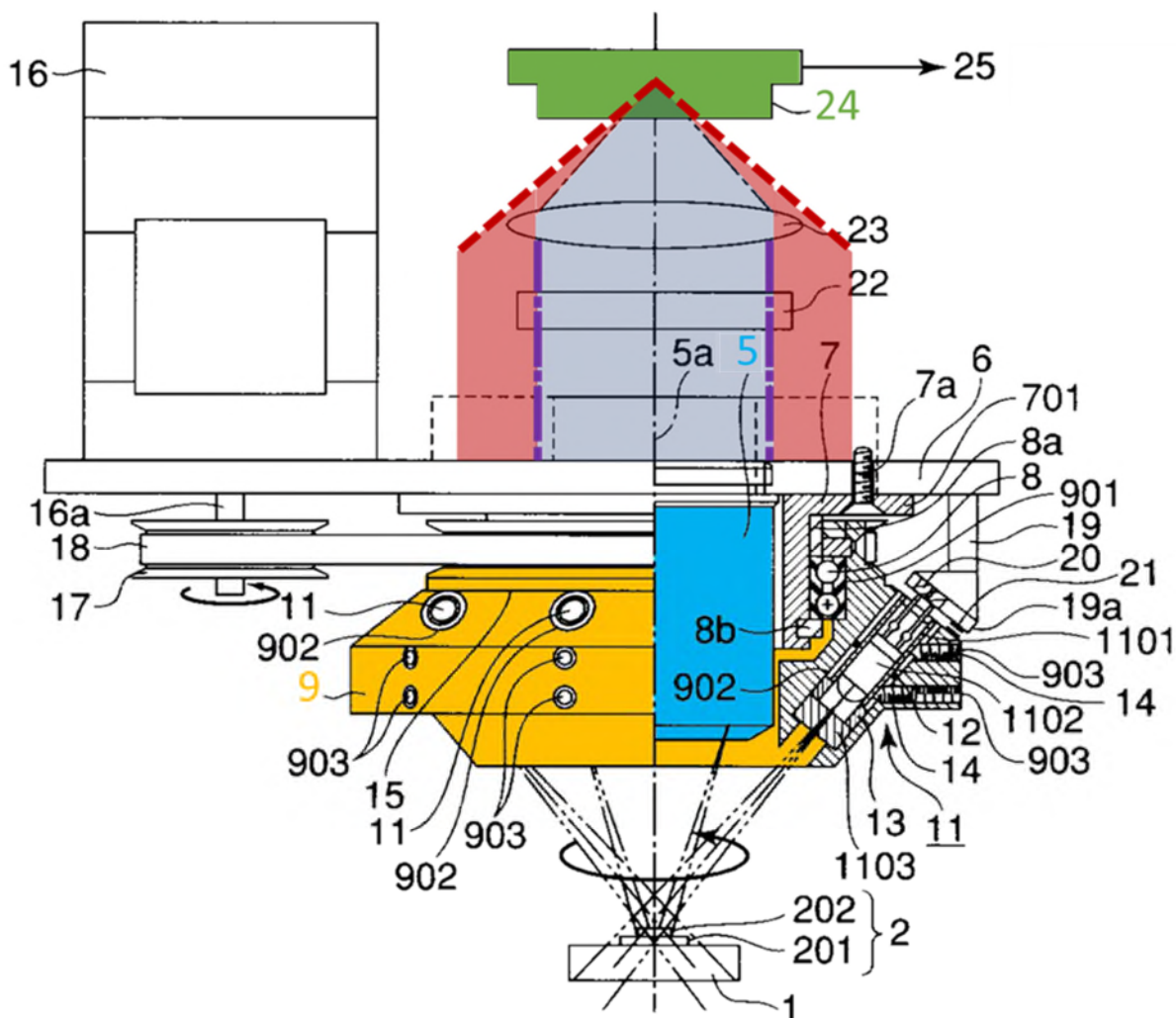
width of the image coming through **objective lens 5** that is captured by **photodetector 24**, and the **red dashed lines** would appear to a POSITA to represent the portion of the **photodetector 24**'s field of view corresponding to that image (**shaded blue**) .



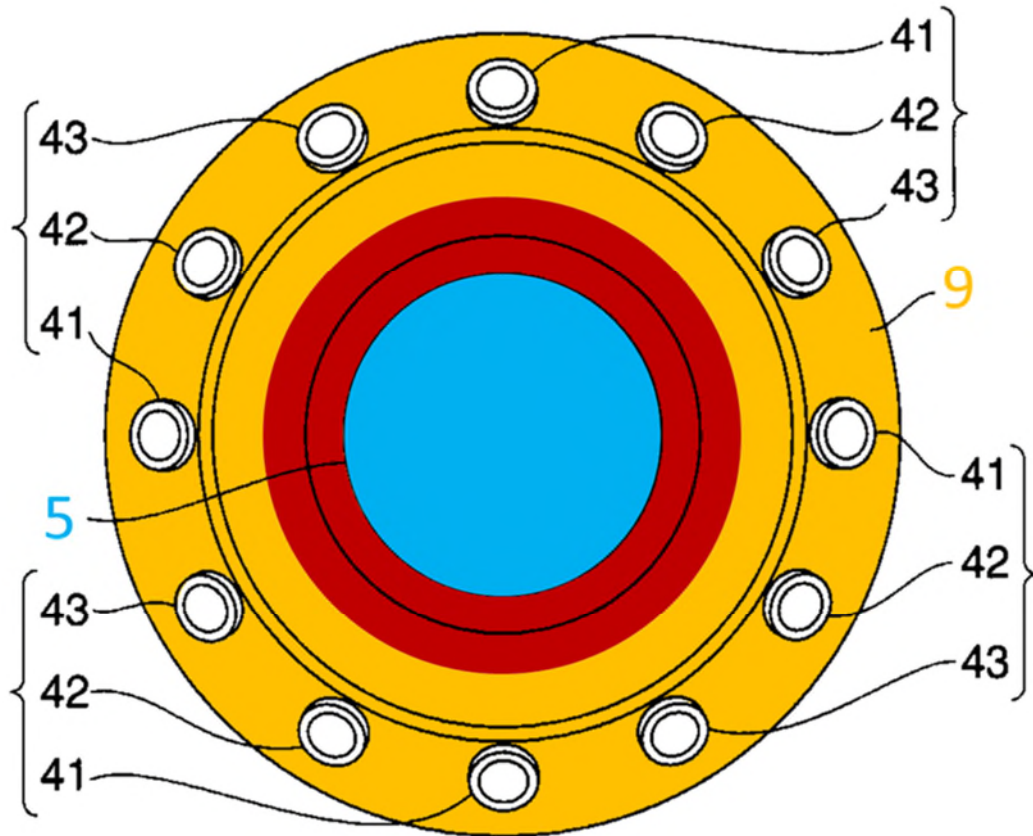
Olympus, Figure 1 (Annotated)

See EX2001 (Piston Decl.), ¶ 33. However, as explained by Dr. Piston, the field of view of **photodetector/camera 24** may (and likely would) be substantially wider than lens 5, resulting in a portion of that field of view being blocked as illustrated in the annotated versions of Figures 1 and 13 below. These annotated versions of Olympus'

Figures 1 and 13 below show a cross-sectional and top-down view, respectively, of the field of view of photodetector/camera 24, as represented by the red dashed lines in annotated Figure 1, to be obstructed (with the red shading representing the obstruction) by the housing 9 (shaded gold):



Olympus, Figure 1 (Annotated)



Olympus, Figure 13 (Annotated)

Olympus, Fig. 1 (annotated), Fig. 13 (annotated); EX2001 (Piston Decl.), ¶¶ 34–35.

Thus, the Petition fails to allege that the field of view of the camera is unobstructed by the housing for any of the independent claims, let alone cite any evidence that establishes the disclosure of this limitation in Olympus as required to support its anticipation challenge.

C. Conclusion With Respect to Ground 1

The Petition's failure to establish that either of the two limitations are disclosed by Olympus is fatal to the challenge in Ground 1. The Board may not

rewrite the Petition to change the Petition's allegation of actual disclosure to an obviousness allegation. *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018) (“Nothing suggests the Director enjoys a license to depart from the petition and institute a different inter partes review of his own design.”). Thus, Ground 1 fails because the Petition does not establish that Olympus anticipates any claim of the '516 patent for two separate and independent reasons.

VI. GROUND 6: CLAIMS 1–23 AND 25–27 ARE NOT OBVIOUS IN VIEW OF GBOX AND OLYMPUS

For Ground 6, the Petition asserts that independent claims 1, 14 and 25 are obvious over the combination of GBox and Olympus. Petition at 75. However, the fatal defects of claims 1, 14 and 25 in reference to Olympus alone are not cured by combination with GBox.

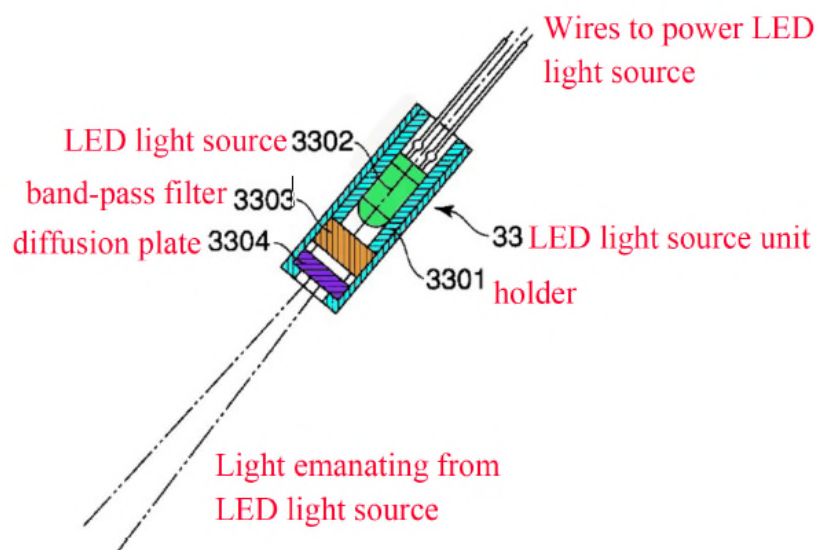
In particular, the Petition asserts that GBox and Olympus would be combined by putting Olympus' circular light source housing member and Olympus' LED light source units in GBox's "light tight darkroom" aligned with GBox's camera, and using GBox's computer to control the Olympus LED light sources for advanced fluorescence applications, as follows:

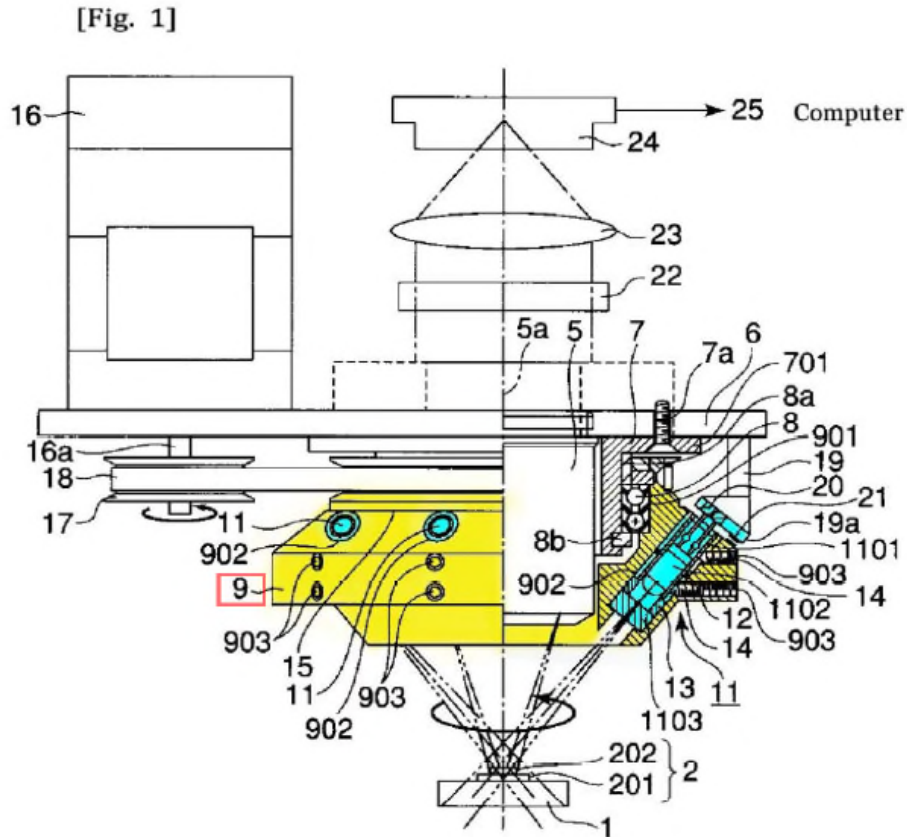
2. Motivation to Combine Olympus and GBox

A POSA would understand that Olympus is designed to produce even and efficient irradiation excitation light for “performing highly reliable fluorescence,” and for “uniformly irradiat[ing] over the entire surface of the sample” to receive “stable and reproducible fluorescence.”

EX1040, p.1(Abstract), ¶0116. *Olympus describes an LED light source unit 33 comprising an LED light source 3302 and a diffuser (diffusion plate 3304) in the housing holes 902 of light source holding member 9 to provide “almost uniform irradiation” over a sample.*
EX1040, ¶¶0113-0116, FIG. 11.

[Fig. 11]





A POSA would be motivated to combine the *uniform illumination advantages of Olympus' circular light source housing member and LED light source units* with the advanced fluorescence applications that GBox provides. A POSA would know that the *Olympus housing member would be mountable in alignment with the GBox camera to provide light on a sample below and allow for imaging*. A POSA would also know how to integrate the control functions of the Olympus housing so it would integrate with the advanced fluorescence imaging of the GBox. EX1004, ¶¶ 149–151.

Petition at 77–79 (emphasis added). Because Ground 6 of the Petition relies on the same disclosures in Olympus for each of the “camera also mounted to the support

structure” and “field of view of the camera is [substantially] unobstructed by said housing” limitations of independent claims 1, 14 and 25, Ground 6 does not establish unpatentability of any challenged claim of the '516 patent for each of the same separate and independent reasons that Ground 1 fails to do so.

VII. GROUNDS 2–5 AND 7

Grounds 2–5 and 7 pertain solely to dependent claims, each of which depends from either independent claim 1, 14, or 25. None of Grounds 2–5 or 7 cure either of the deficiencies identified above in Grounds 1 and 6 because none of them addresses either the limitation requiring the camera to be mounted to the same support structure as the housing, or the limitation requiring the field of view of the camera to be unobstructed by the housing. As a result, each of Grounds 2 to 5 and 7 suffers from the same fatal flaws as grounds 1 and 6.

VIII. CONCLUSION

For the reasons discussed above, Patent Owner respectfully requests that the Petition be rejected and institution of this IPR be denied.

Date: April 25, 2023

Respectfully submitted,

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Patent Owner's Preliminary Response
Patent No. 8,901,516

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CERTIFICATE OF SERVICE

I hereby certify, pursuant to 37 C.F.R. § 42.6, that on April 25, 2023, a complete copy of the foregoing document and Exhibits 2001-2010 were served upon the following, by ELECTRONIC MAIL:

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CERTIFICATE OF WORD COUNT

Under the provisions of 37 CFR § 42.24(d), the undersigned hereby certifies that the word count for the foregoing Patent Owner's Preliminary Response totals approximately 4,531, as calculated by Microsoft Word, which is fewer than the 14,000 allowed under 37 CFR § 42.24(b).

Date: April 25, 2023

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