

Petitioner Luxottica of America Inc.'s Demonstratives For Oral Argument

October 6, 2025

Luxottica of America Inc. v. e-Vision Optics, LLC

IPR2024-01071 (Patent 8,905,541)

Luxottica v. e-Vision
IPR2024-01071
Luxottica Ex. 1020

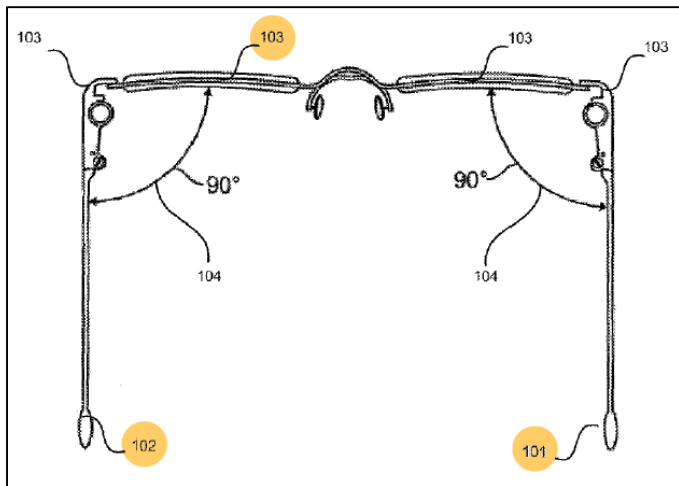
Patent No. 8,905,541

components. For instance, an **electronics module** may comprise a power source (such as a battery), a sensing mechanism (such as a capacitance switch, which may activate or deactivate the electronics) and/or a controller (such as a microprocessor).

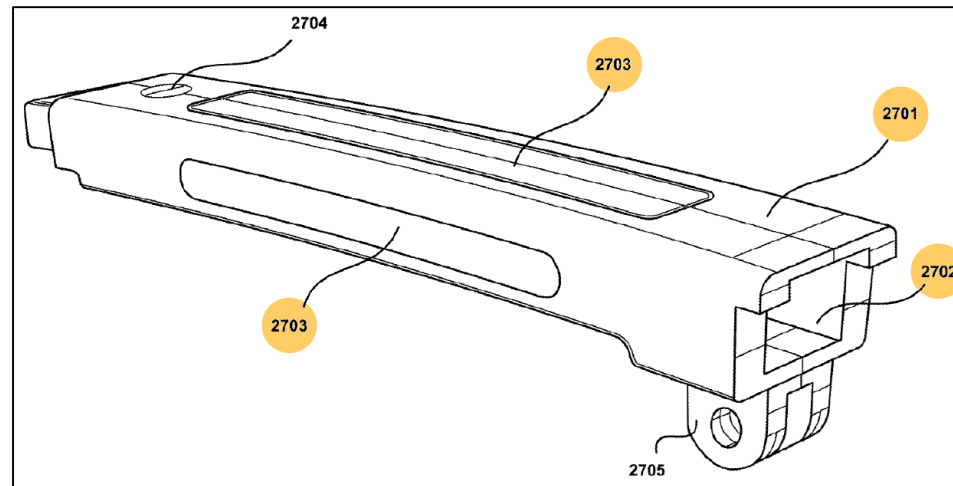
Ex. 1001, 7:47-51 (highlighting added)

In some embodiments, in the first device as described above, an **insulating layer** may be disposed between one or more electronic components located within the electronics module and the frame of the first device. In some embodi-

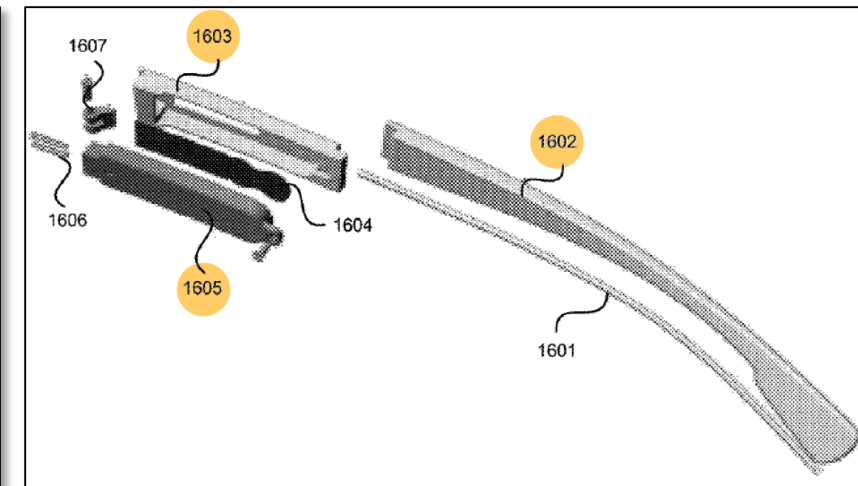
Ex. 1001, 2:6-9 (highlighting added)



Ex. 1001, Fig. 1 (annotated)



Ex. 1001, Fig. 16 (annotated)



Ex. 1001, Fig. 27 (annotated)

Claim 1

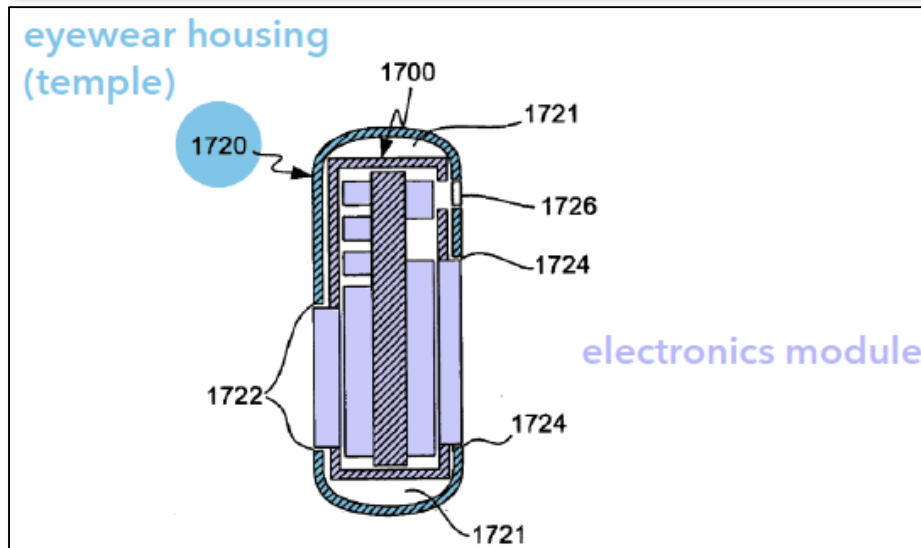
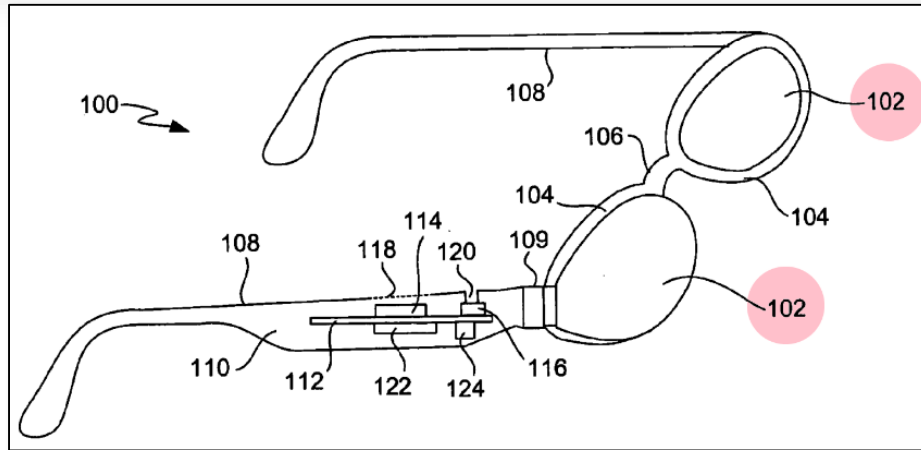
Independent Claim 1 Of The '541 Patent

1. A first device, comprising:
a frame comprising a first temple and a second temple,
wherein the frame comprises a housing module coupled
to a structural member;
a first lens and a second lens coupled to the frame; and
an electronics module, wherein the electronics module is
located within the housing module;
wherein the electronics module comprises at least any two
of: a power source; a controller; and a sensing mecha-
nism; and
wherein an insulating layer is disposed between one or
more electronic components located within the electron-
ics module and the frame of the first device.

Ex. 1001, claim 1 (highlight added)

Ground 1

Howell-596 and Howell-158 Render Claim 1 Obvious



Ex. 1004, Figs. 1, 17B (annotated)

1. A first device, comprising:

a frame comprising a first temple and a second temple, wherein the frame comprises a housing module coupled to a structural member;

a first lens and a second lens coupled to the frame; and

an electronics module, wherein the electronics module is located within the housing module;

wherein the electronics module comprises at least any two of: a power source; a controller; and a sensing mechanism; and

wherein an insulating layer is disposed between one or more electronic components located within the electronics module and the frame of the first device.

Ex. 1001, claim 1

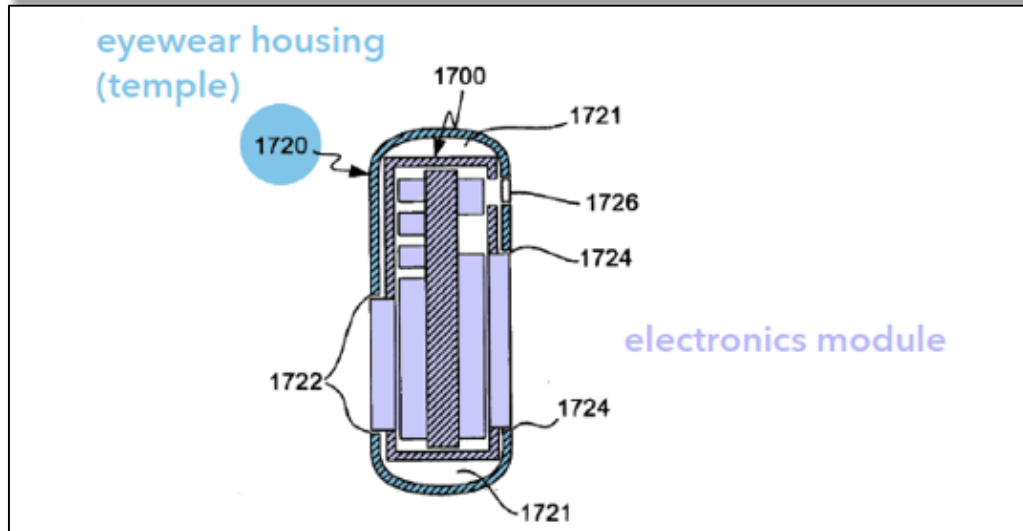
Howell-596 and Howell-158 Render Claim 1 Obvious

(19) **United States**
(12) **Patent Application Publication** (10) Pub. No.: US 2006/0023158 A1
Howell et al. (43) Pub. Date: Feb. 2, 2006

[0053] For glasses with metallic frames, to prevent circuits from being shorted or to reduce leakage current, one embodiment provides an insulating layer between the electrical components or circuit board and the metallic frames.

Ex. 1006, [0053] (highlighting added)

(19) **United States**
(12) **Patent Application Publication** (10) Pub. No.: US 2005/0230596 A1
Howell et al. (43) Pub. Date: Oct. 20, 2005



Ex. 1004, Fig. 17B (annotated)

1. A first device, comprising:

a frame comprising a first temple and a second temple, wherein the frame comprises a housing module coupled to a structural member;

a first lens and a second lens coupled to the frame; and an electronics module, wherein the electronics module is located within the housing module;

wherein the electronics module comprises at least any two of: a power source; a controller; and a sensing mechanism; and

wherein an insulating layer is disposed between one or more electronic components located within the electronics module and the frame of the first device.

Ex. 1001, claim 1

Howell-596 and Howell-158 Render Claim 1 Obvious

“Howell-158 incorporates by reference Howell-596[.]”

“[T]o ‘prevent circuits from being shorted’ and ‘reduce leakage current’”

“[A] 2003 Generic Standard on Printed Board Design instructed that metal-cased components shall be ‘insulated from adjacent electrically conductive elements.’”

“[S]ince long before the priority date, it had been standard practice to insulate electric components.”

Petition, 22-23

1. A first device, comprising:

a frame comprising a first temple and a second temple, wherein the frame comprises a housing module coupled to a structural member;

a first lens and a second lens coupled to the frame; and an electronics module, wherein the electronics module is located within the housing module;

wherein the electronics module comprises at least any two of: a power source; a controller; and a sensing mechanism; and

wherein an insulating layer is disposed between one or more electronic components located within the electronics module and the frame of the first device.

Ex. 1001, claim 1

Petitioner Specified Where Howell-158's Insulating Layer Would Be Applied

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

A common theme in Petitioner's Grounds 1-6 is that Petitioner engages in hindsight to handwave these deficiencies away and circumvent its burden of proof. Rather than properly assessing whether a POSITA would have had any reason to make the proposed combinations, Petitioner works backwards, stitching together disparate features from the prior art and ignoring multiple ways those features conflict with one another.

Accordingly, the Board should find the challenged claims patentable.

II. GROUND 1: THERE WAS NO MOTIVATION TO COMBINE HOWELL-596 WITH HOWELL-158

A. Claim 1

As Patent Owner noted previously, Petitioner offers two main arguments to support its assertion that a POSITA would have combined the teachings of Howell-158 and Howell-596: (1) that Howell 158 allegedly suggests Petitioner's combination (Petition, 22); and (2) that it would have been obvious to construct Howell-596's eyeglass frames from metal, only after which would it have been obvious to insulate Howell-596's electrical components (Petition, 22-24). (POR, 17). Patent Owner explained in its response why neither argument is persuasive. (*Id.*, 17-23). As explained below, Petitioner's reply arguments fare no better.

First, Petitioner fails to meaningfully respond to Patent Owner's argument that Petitioner failed to specify where in Howell-596's glasses a POSITA would

that Petitioner failed to specify where in Howell-596's glasses a POSITA would have inserted an insulating layer. In particular, Patent Owner noted that the petition does not specify whether, in Petitioner's proposed combination, Howell-158's double-sided electrical tape would be inserted between Howell-596's circuit board and module, between the module and the housing, or between the housing and the frames. (POR, 16.) Petitioner dodged that question in its reply, merely (1) repeating

Sur-Reply, 2-3

Patent Owner Demands More Than The Claims Require

(12) United States Patent Blum et al.	(10) Patent No.: US 8,905,541 B2 (45) Date of Patent: Dec. 9, 2014
---	---

1. A first device, comprising:
a frame comprising a first temple and a second temple,
wherein the frame comprises a housing module coupled
to a structural member;
a first lens and a second lens coupled to the frame; and
an electronics module, wherein the electronics module is
located within the housing module;
wherein the electronics module comprises at least any two
of: a power source; a controller; and a sensing mecha-
nism; and
wherein an insulating layer is disposed between one or
more electronic components located within the electron-
ics module and the frame of the first device.

Ex. 1001, claim 1 (highlighting added)

(19) United States (12) Patent Application Publication Howell et al.	(10) Pub. No.: US 2006/0023158 A1 (43) Pub. Date: Feb. 2, 2006
--	---

[0053] For glasses with metallic frames, to prevent circuits from being shorted or to reduce leakage current, one embodiment provides an insulating layer between the electrical components or circuit board and the metallic frames.

Ex. 1006, [0053] (highlighting added)

Petitioner Specified Where Howell-158's Insulating Layer Would Be Applied

IPR Petition – Patent 8,905,541
Luxottica of America Inc. v. e-Vision Optics, LLC

Howell-158 incorporates by reference Howell-596 and expressly instructs the POSITA to consider their “related” disclosures. *Id.* ¶3 (incorporating Howell-596’s U.S. patent app. no. 11/078,857). Howell-158 further instructs the POSITA that its disclosed eyeglasses should be used with a radiation detection system such as the UV radiation detection system disclosed by Howell-596. *Id.* ¶¶3, 18, 167.

Howell-158 further discloses an “insulating layer between the electrical components or circuit board and the metallic frames.” *Id.* ¶53. The glasses include this insulation to “prevent circuits from being shorted” and to “reduce leakage current” in glasses with metallic frames. *Id.* “One example of an insul[ati]ng layer is a tape to encapsulate the electrical components.” *Id.* “The tape is non-conducting so as to provide insulation” *Id.* The “insulator material (e.g., dielectric tape) can cover the top and the bottom surfaces of the circuit board,” which “is then sandwiched between the faces” of the temple piece. *Id.* The “dielectric tape can be double-sided sticky tape, with one side sticking to the circuit board, and the other side sticking to the temple.” *Id.*

A POSITA would have been motivated to apply Howell-158’s insulating layer between the electronics and other components located within Howell-596’s electronics module and its frame for several reasons. Ex. 1002 ¶66. First, Howell-158 incorporates by reference Howell-596, so it expressly instructs the POSITA to combine the disclosures of the two references. Second, a POSITA would have been

22

A POSITA would have been motivated to apply Howell-158’s insulating layer

between the electronics and other components located within Howell-596’s electronics module and its frame for several reasons. Ex. 1002 ¶66. First, Howell-

Ex. 1011. Howell-158 identifies several ways to incorporate such well-known insulating layers between a circuit board and eyewear frames in glasses similar to those in Howell-596. Ex. 1006 ¶53. Thus, a POSITA would have had a reasonable

Petition, 22-23 (highlighting added)

69. Applying Howell-158’s insulating layer represents nothing more than the simple addition of one known element (insulating layer) to another known element (temple containing electronics) to obtain predictable results (electrically insulating the electronics from the temple “to prevent circuits from being shorted or to reduce leakage current”). Ex. 1006 ¶53. Similarly, the combination represents

Ex. 1002, ¶169 (highlighting added)

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LUXOTTICA OF AMERICA INC.,
Petitioner,

v.

E-VISION OPTICS, LLC,
Patent Owner.

Case IPR2024-01071
Patent 8,905,541

DECLARATION OF JOHN FELAND
IN SUPPORT OF PETITION FOR INTER PARTES REVIEW
OF U.S. PATENT NO. 8,905,541

Luxottica Ex. 1002
IPR Petition USP 8,905,541

Patent Owner's Argument Regarding How To Apply The Insulating Layer Fails

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

(noting that the Federal Circuit rejects “obviousness determinations based on conclusory and unsupported expert testimony” and has “repeatedly expressed concerns that crediting such testimony risks allowing the challenger to use the challenged patent as a roadmap to reconstruct the claimed invention using disparate elements from the prior art—i.e., the impermissible ex post reasoning and hindsight bias that KSR warned against”); *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016) (noting that the Board does not have the authority to “raise, address, and decide unpatentability theories never presented by the petitioner and not supported by record evidence”).

Simply asserting that Howell-158 discloses what the claim language requires—as Petitioner does here—is insufficient to show how a POSITA would have incorporated Howell-158's insulating layer into Howell-596's more complex eyeglass structure, which includes both a module and a housing in addition to electrical components and frames. *See TQ Delta*, 942 F.3d at 1359. Petitioner's lack of specificity is especially important here, where different possible locations for Howell-158's tape create different problems in Petitioner's combination. {See POR, 16-17, 22.)

Second, Petitioner incorrectly alleges that Patent Owner “misunderstand[s] the law” by attaching probative weight to the fact that, despite Howell-158's

Simply asserting that Howell-158 discloses what the claim language requires—as Petitioner does here—is insufficient to show how a POSITA would have incorporated Howell-158's insulating layer into Howell-596's more complex eyeglass structure, which includes both a module and a housing in addition to electrical components and frames. *See TQ Delta*, 942 F.3d at 1359. Petitioner's lack of specificity is especially important here, where different possible locations for Howell-158's tape create different problems in Petitioner's combination. {See POR,

Sur-Reply, 4

Patent Owner Does Not Dispute That Howell-158 Teaches An Insulating Layer

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LUXOTTICA OF AMERICA INC.,

Petitioner
v.

E-VISION OPTICS, LLC

Patent Owner

Case No. IPR2024-01071
Patent No. 8,905,541

PATENT OWNER'S RESPONSE TO PETITION

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

To account for potential interference between metal frames and electrical components, Howell-158 discloses “an insulating layer” between the metal frames and those electrical components. *Id.*; EX-1006, ¶[0053]. Howell-158 discloses that

POR, 11

A POSA Would Have Known How To Apply The Insulating Layer

PO does not identify anything in the '541 patent teaching application of the claimed insulating layer. Thus, one skilled in the art would have known how to apply the insulating layer.



explaining that the patent demonstrates that alleged invention was within scope of the ordinary skill in the art, “and it does so not by what [the patent] discloses but by what it **does not** disclose.”

Abbott Labs. v. Andrx Pharms., Inc., 452 F.3d 1331, 1341 (Fed. Cir. 2006)
(emphasis in original)



“[T]he Board's observation that appellant did not provide the type of detail in his specification that he now argues is necessary in prior art references supports the Board's finding that one skilled in the art would have known how to implement the features of the references and would have concluded that the reference disclosures would have been enabling.”

In re Epstein, 32 F.3d 1559, 1568 (Fed. Cir. 1994)

Howell-158 Includes An Example Of How To Apply An Insulating Layer

(19) **United States**

(12) **Patent Application Publication** (10) Pub. No.: US 2006/0023158 A1
Howell et al. (43) Pub. Date: Feb. 2, 2006

[0053] For glasses with metallic frames, to prevent circuits from being shorted or to reduce leakage current, one embodiment provides an insulating layer between the electrical components or circuit board and the metallic frames. One example of an insulating layer is a **tape to encapsulate the electrical components**. The tape is non-conducting so as to provide insulation and, to a certain degree, can also provide mechanical stiffness. One way to make such temples is to have two sheets of the metal die-stamped to form the two halves, or the two faces of the temple piece. A circuit board is made to fit into the space between the faces. Then, two die-cut pieces of **insulator material (e.g., dielectric tape) can cover the top and the bottom surfaces of the circuit board**. The board is then sandwiched between the faces to form the temple. In one example, the dielectric tape can be **double-sided sticky tape, with one side sticking to the circuit board, and the other side sticking to the temple**. An adhesive can be used to glue the two faces of the temple piece together.

Ex. 1006, [0053] (highlighting added)

DECLARATION OF JOHN FELAND IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 8,905,541

67. A POSITA would have had a reasonable expectation of success in applying Howell-158's teachings to Howell-596. As discussed above, **insulating layers had been widely used** to insulate electrical materials since long before the priority date. Moreover, **Howell-158 identifies several ways to incorporate such well-known insulating layers** between a circuit board and eyewear frames in glasses similar to those in Howell-596. Ex. 1006 ¶53.

Ex. 1002, ¶67 (highlighting added)

A POSA Would Have Known How To Apply The Insulating Layer



"The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference Rather, the test is what the combined teachings of those references would have suggested to those of ordinary skill in the art."

In re Keller, 642 F.2d 413, 425 (CCPA 1981)

Claim 1 Is Broadly Directed To Eyewear With A Frame

Patent Owner's Response to
Petition for Inter Partes Review
Patent No. 8,905,541

frames and double-sided tape in Howell-596's particular eyewear. *See generally* EX-1006; EX-2014 ¶52.

In fact, that Howell-158 incorporates by reference Howell-596 raises the question—since both of these references were available to the named inventors on Howell-596 and Howell-158, why does neither reference describe Petitioner's combination, and why is there no cited reference among the plethora of prior art references within the patent family of Howell-158 and Howell-596 that teaches and describes Petitioner's combination? EX-2014 ¶52.

The answer is that these references did not teach Petitioner's proposed combination, because (1) Petitioner invents an insulation problem where none exists; and (2) Howell-158's use of double-sided tape is incompatible with Howell-596's UV detection module. EX-2014 ¶¶52-53.

Petitioner contends that incorporating Howell-158's double-sided tape into Howell-596's eyewear may “prevent circuits from being shorted” and “reduce leakage current.” Petition, 22-23 (citing EX-1006 ¶53; EX-1002 ¶66). But Howell-596 does not have this problem unless a POSITA first implements Petitioner's proposal of implementing Howell-596's system in metal frames, because Howell-596 does not teach use of metal frames. *See generally* EX-1004; EX-2014 ¶55.

18

Petitioner contends that incorporating Howell-158's double-sided tape into Howell-596's eyewear may “prevent circuits from being shorted” and “reduce leakage current.” Petition, 22-23 (citing EX-1006 ¶53; EX-1002 ¶66). But Howell-596 does not have this problem unless a POSITA first implements Petitioner's proposal of implementing Howell-596's system in metal frames, because Howell-596 does not teach use of metal frames. *See generally* EX-1004; EX-2014 ¶55.

POR, 18

Claim 1 Is Broadly Directed To Eyewear With A Frame

(12) **United States Patent**
Blum et al.

(10) **Patent No.:** US 8,905,541 B2
(45) **Date of Patent:** Dec. 9, 2014

1. A first device, comprising:
a frame comprising a first temple and a second temple,
wherein the frame comprises a housing module coupled
to a structural member;
a first lens and a second lens coupled to the frame; and
an electronics module, wherein the electronics module is
located within the housing module;
wherein the electronics module comprises at least any two
of: a power source; a controller; and a sensing mecha-
nism; and
wherein an insulating layer is disposed between one or
more electronic components located within the electron-
ics module and the frame of the first device.

Ex. 1001, claim 1 (highlighting added)

REMOTELY CONDUCTED VIDEOTAPED DEPOSITION OF
JAMES OLIVER PHD

Q Prior to 2006, what different materials
for the frame would a POSITA have considered?

A Plastic, metal, various flavors of
plastic. Could even be fiberglass if it was

Ex. 1019, 45:4-7 (highlighting added)

The Insulating Layer Need Not Cover The Electronics

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

158's insulating layer to Howell-596's circuit board (Petition, 27), which, according to Howell-596 itself, must be exposed to sunlight (EX-1006, ¶[0075]).

Petitioner's second argument also fails. Although Petitioner argues that Howell-158's dielectric tape need not be "bodily incorporated" into Howell-596 (Reply, 8)—, Petitioner was still required to articulate how a POSITA allegedly would have been incorporated Howell-158's insulating layer into Howell-596's UV detection system, or otherwise combined their teachings to construct an operable device. *See ActiveVideo Networks, Inc.*, 694 F.3d at 1328. And while the Board correctly noted in its institution decision that Petitioner was not required to limit its proposed combination to dielectric tape—the only insulating layer Howell-158 discloses (*see* EX-1004, ¶[0053])—Petitioner was required to explain how a POSITA would have modified Howell-158's teachings (if at all) and apply them to Howell-596's UV detection system. *See ActiveVideo Networks, Inc.*, 694 F.3d at 1328.

Petitioner's final incompatibility-rebuttal argument dismisses Patent Owner's evidence of negative weight, design, and aesthetics impacts as "merely unsupported conjecture." (Reply, 8-9.) To the contrary, Patent Owner's argument is amply supported by evidence, including Howell-596 and more than three pages of expert testimony—which in turn relies on both ground 1 references and five additional

10

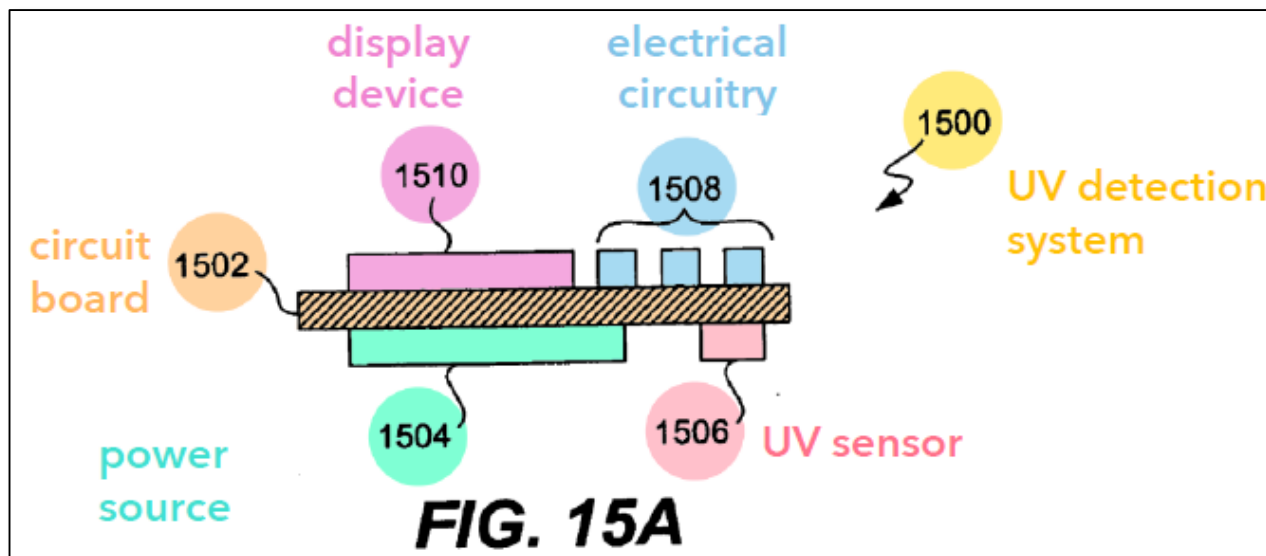
cover *all* electronic components" (Reply, 7), Petitioner proposes applying Howell-158's insulating layer to Howell-596's circuit board (Petition, 27), which, according to Howell-596 itself, must be exposed to sunlight (EX-1006, ¶[0075]).

Sur-Reply, 9-10

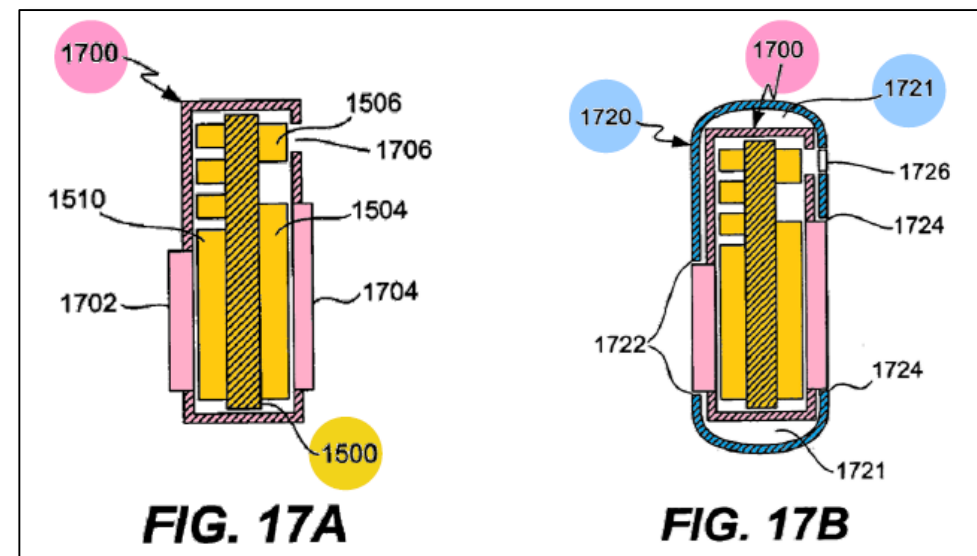
The Insulating Layer Need Not Cover The Electronics

First, claim 1 requires merely that the insulating layer be “disposed between *one or more*” electronic components. Ex.1001, 89:1-6. There is no requirement that an insulating layer must be applied to and cover *all* electronic components.

Reply, 7



Ex. 1004, Figs. 15A (annotated)



Ex. 1004, Figs. 17A-17B (annotated)

The Insulating Layer Would Not Impede Functionality

Sur-Reply, 1 (highlighting added)

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

I. INTRODUCTION

Petitioner has not met its burden to prove, by a preponderance of the evidence, that claims 1-18 of the '541 patent are unpatentable.

In its reply, Petitioner repeatedly posits that a POSITA is "not an automaton." (Reply, 4, 8.) While relying so heavily on that language, Petitioner reduces the POSITA into an automaton possessed by the retrospective and biased desires of a Petitioner seeking to challenge a patent, ignoring what was known in the art to apply a convoluted, self-defeating combination of prior art teachings that would have created more problems than it might have solved.

Petitioner's combinations all depend on a POSITA's using metal eyeglass frames in a way that would have been detrimental, both aesthetically and functionally. Petitioner then argues that it would have been obvious to a POSITA to resolve these problems--which Petitioner has created--by inserting an insulating layer, further impeding aesthetics and functionality. Petitioner purports to rely on a POSITA's ordinary creativity to overcome problems that would not have existed but for Petitioner's proposed combinations. The opposite is true: a POSITA would exercise common sense, logic, and creativity to avoid those problems in the first place.

1

functionally. Petitioner then argues that it would have been obvious to a POSITA to resolve these problems--which Petitioner has created--by inserting an insulating layer, further impeding aesthetics and functionality. Petitioner purports to rely on a

system work. Adding metal frames to the eyeglasses of Howell-596 when doing so is not necessary, and then applying an insulating layer to that metal frame to account for the associated drawbacks, would result in a heavier, more complicated, and potentially less aesthetically pleasing pair of eyeglasses. In light of the sheer magnitude of electronic components that would need to be implemented in the device disclosed by Howell-158, as well as the need for eyewear to be comfortably worn by a user, a POSITA would actually aim to minimize the weight and number of components added to the eyewear, rather than adding to the weight and number of components, as suggested by Petitioner. In fact, Howell-158 aims for its UV detection system to have a minimal impact on design of the end product and no tedious wiring is required." EX-1004, ¶¶[0183]-[0184].

Ex. 2014, ¶155 (highlighting added)

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LUXOTTICA OF AMERICA INC.,
Petitioner

v.

E-VISION OPTICS, LLC
Patent Owner

Case No. IPR2024-01071
Patent No. 8,905,541

DECLARATION OF JAMES H. OLIVER, PHD IN SUPPORT OF PATENT
OWNER'S RESPONSE TO PETITION

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

IPR2024-01071
E-Vision Optics, LLC EX-2014

Patent Owner's "Alternatives" Are Irrelevant

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

exhibits. (POR, 21; EX-2014, ¶¶53-55.) As just one example, Howell-158 references titanium as lightweight *relative to other metals*, a concern would have dissuaded a POSITA from incorporating metal frames into Howell-596. (See EX-1006, ¶[0052]; EX-2014, ¶¶54-55.) Petitioner's reliance on *Ericsson* is therefore misplaced.

Seventh (and lastly), Petitioner disputes Patent Owner's contention that Howell-596 has no need for an insulating layer because it discloses multiple other ways to prevent contact between conductive portions of its UV detection system. (Reply, 9-10.) Contrary to Petitioner's suggestion, these features of Howell-596 are not merely more preferred or more desirable than Petitioner's proposed solution of metal frames and insulation, as was the case in *Fulton*. Rather, Howell-596's fixed positions and air gaps eliminate the problem underlying Petitioner's proposed solution (see POR, 21-23), significantly undercutting—if not disproving—Petitioner's alleged motivation to combine. See *Arctic Cat Inc.*, 694 F.3d at 1328.

Finally, Petitioner asserts for the first time in its reply that Howell-596 itself discloses an insulating layer. (Reply, 9 ("In any case, Howell-596 discloses an insulating layer.") The Board should reject this argument as waived. See *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d at 1381. But even if the Board elects to consider it, Petitioner's characterization of adhesives disclosed by Howell-596 as

11

Howell-596 has no need for an insulating layer because it discloses multiple other ways to prevent contact between conductive portions of its UV detection system.

Sur-Reply, 11 (highlighting added)

56. Another reason that a POSITA would not have been motivated to incorporate metal frames and an insulating layer into Howell-596 because Howell-596 already discloses an **alternative** to an insulating layer — **air gaps**. In fact, the air

would be beneficial to its structure. See, e.g., *id.* at ¶¶[0067]-[0072]. As another example, Howell-596 describes placing its electrical components in **fixed positions**, **minimizing the risk of conductive portions colliding** during use in a way that would cause those conductive portions to short circuit one another. EX-1004, ¶[0184]. As

Ex. 2014, ¶56 (highlighting added)

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LUXOTTICA OF AMERICA INC.,

Petitioner

v.

E-VISION OPTICS, LLC

Patent Owner

Case No. IPR2024-01071
Patent No. 8,905,541

DECLARATION OF JAMES H. OLIVER, PHD IN SUPPORT OF PATENT
OWNER'S RESPONSE TO PETITION

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

IPR2024-01071
E-Vision Optics, LLC EX-2014

Patent Owner's "Alternatives" Are Irrelevant



"[T]he 'mere disclosure of **alternative designs does not teach away.**' *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004). This court has further explained that just because better alternatives exist in the prior art does not mean that an inferior combination is inapt for obviousness purposes. *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994).

In re Mouttet, 686 F.3d 1322, 1334 (Fed. Cir. 2012).

Patent Owner's "Alternatives" Are Irrelevant

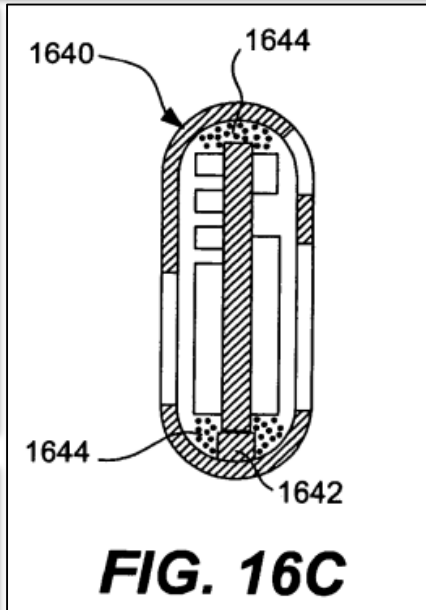
(19) **United States**

(12) **Patent Application Publication** (10) Pub. No.: US 2005/0230596 A1
Howell et al. (43) Pub. Date: Oct. 20, 2005

1620 illustrated in FIG. 16B. However, FIG. 16C illustrates one way to secure the UV detection system within the portion of the temple region of the eyewear housing 1640. In particular, the eyewear housing 1640 include a stand 1642 and an adhesive material 1644. When assembled, the UV detection system can be placed within the temple region of the eyewear housing 1640 and positioned against the stand 1642, then the adhesive 1644 can be provided within the temple region to secure the UV detection system in position. The adhesive can vary widely, such as glue, double-stick tape, silicone rubber, epoxy, etc.

proximate to the UV sensor 1506). The module housing 1700 can, for example, be held in position with respect to the eyewear housing 1720 by an adhesive or by an interference fit.

Ex. 1004, [0190], [0196] (highlighting added)



Ex. 1004, Fig. 16C

(19) **United States**

(12) **Patent Application Publication** (10) Pub. No.: US 2006/0023158 A1
Howell et al. (43) Pub. Date: Feb. 2, 2006

One example of an insulting layer is a tape to encapsulate the electrical components. The tape is non-conducting so as to temple. In one example, the dielectric tape can be double-sided sticky tape, with one side sticking to the circuit board, and the other side sticking to the temple. An adhesive can be

Ex. 1006, [0053] (highlighting added)

Silicone Is Insulative

**DECLARATION OF JOHN FELAND
IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 8,905,541**

162. Long before the priority date, a POSITA would have known that silicone is an insulative material. A POSITA would understand that when the

Ex. 1002, ¶162 (highlighting added)

**DECLARATION OF JAMES H. OLIVER, PHD IN SUPPORT OF PATENT
OWNER'S RESPONSE TO PETITION**

flaws as that of Howell-158. First, Kokonaski-166 does not disclose an insulating layer merely because it includes silicone for water resistance. Second, a POSITA

81. Petitioner's reliance on Kokonaski-166 as disclosing a silicone "insulating layer" is also flawed. For instance, Petitioner's allegation is belied by Kokonaski-166 itself, which explains that the silicone used therein is merely a seal (not a layer) in a system intended to allow a device to be water resistant while still

Ex. 2014, ¶¶79, 81 (highlighting added)

Claim 12

Dependent Claim 12 Of The '541 Patent

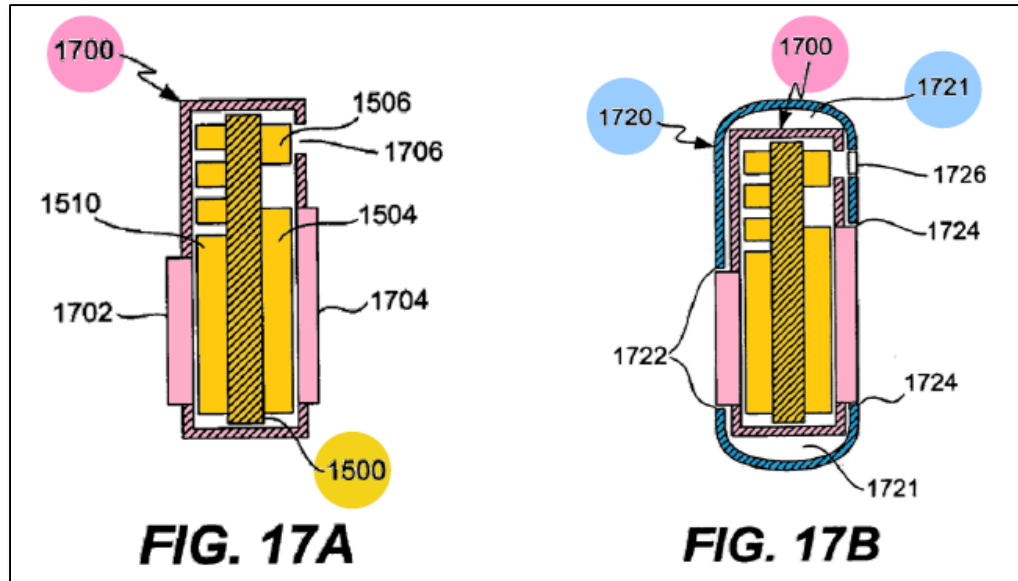
1. A first device, comprising:
a frame comprising a first temple and a second temple,
wherein the frame comprises a **housing module** coupled
to a **structural member**;
a first lens and a second lens coupled to the frame; and
an **electronics module**, wherein the electronics module is
located within the housing module;
wherein the electronics module comprises at least any two
of: a power source; a controller; and a sensing mechanism; and
wherein an **insulating layer** is disposed between one or
more electronic components located within the electronics module and the frame of the first device.

12. The first device of claim 1, wherein the structural member comprises a cavity in the first temple; and wherein the **housing module is configured to be selectively placed within the cavity.**

Ex. 1001, claims 1, 12 (highlight added)

Howell-596 And Howell-158 Render Dependent Claim 12 Obvious

Howell-596



Ex. 1004, Figs. 17A, 17B (annotated)

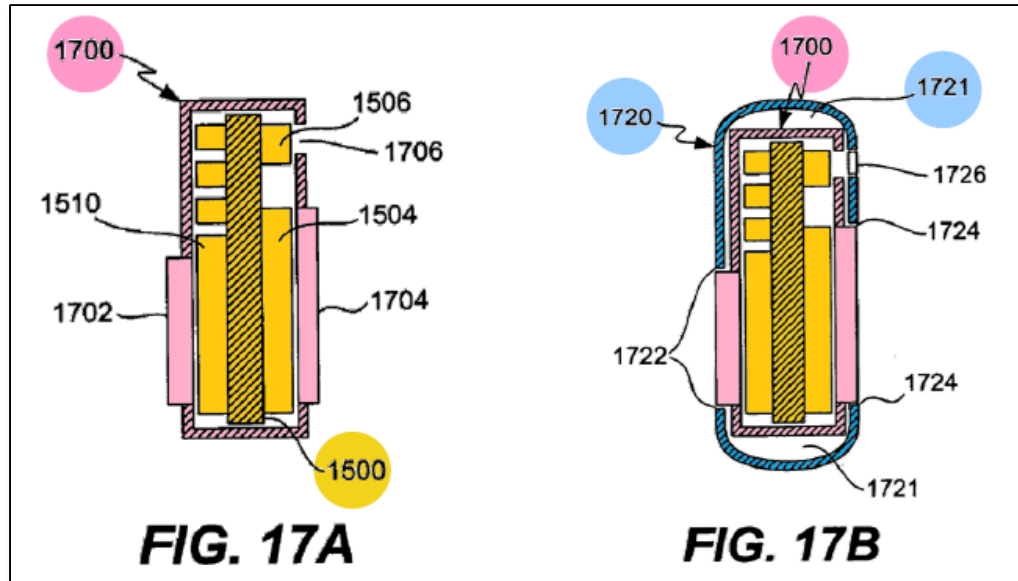
1. A first device, comprising:
a frame comprising a first temple and a second temple,
wherein the frame comprises a **housing module** coupled
to a **structural member**;
a first lens and a second lens coupled to the frame; and
an electronics module, wherein the electronics module is
located within the housing module;
wherein the electronics module comprises at least any two
of: a power source; a controller; and a sensing mecha-
nism; and
wherein an insulating layer is disposed between one or
more electronic components located within the electron-
ics module and the frame of the first device.

12. The first device of claim 1, wherein the structural mem-
ber comprises a cavity in the first temple; and wherein the
**housing module is configured to be selectively placed within
the cavity.**

Ex. 1001, claims 1, 12 (highlight added)

Howell-596 And Howell-158 Render Dependent Claim 12 Obvious

Howell-596, Figs. 17A, 17B (annotated)



(19) **United States**

(12) **Patent Application Publication** (10) Pub. No.: US 2006/0023158 A1
Howell et al. (43) Pub. Date: Feb. 2, 2006

[0053] For glasses with metallic frames, to prevent circuits from being shorted or to reduce leakage current, one embodiment provides an insulating layer between the electrical components or circuit board and the metallic frames.

Ex. 1006, [0053] (highlighting added)

1. A first device, comprising:
a frame comprising a first temple and a second temple, wherein the frame comprises a housing module coupled to a structural member;
a first lens and a second lens coupled to the frame; and
an electronics module, wherein the electronics module is located within the housing module;
wherein the electronics module comprises at least any two of: a power source; a controller; and a sensing mechanism; and
wherein an insulating layer is disposed between one or more electronic components located within the electronics module and the frame of the first device.

12. The first device of claim 1, wherein the structural member comprises a cavity in the first temple; and wherein the housing module is configured to be selectively placed within the cavity.

Ex. 1001, claims 1, 12 (highlight added)

Howell-596 And Howell-158 Render Dependent Claim 12 Obvious

(19) **United States**
(12) **Patent Application Publication** (10) Pub. No.: US 2006/0023158 A1
Howell et al. (43) Pub. Date: Feb. 2, 2006

[0053] For glasses with metallic frames, to prevent circuits from being shorted or to reduce leakage current, one embodiment provides an insulating layer between the electrical components or circuit board and the metallic frames. One example of an insulating layer is a tape to encapsulate the electrical components. The tape is non-conducting so as to provide insulation and, to a certain degree, can also provide mechanical stiffness. One way to make such temples is to

Ex. 1006, [0053] (highlighting added)

(12) **United States Patent** (10) Patent No.: US 8,905,541 B2
Blum et al. (45) Date of Patent: Dec. 9, 2014

As used herein, an “electronics module” may refer to a housing or container that comprises a plurality of electrical components. For instance, an electronics module may com-

Ex. 1001, 7:45-47 (highlighting added)

1. A first device, comprising:
a frame comprising a first temple and a second temple, wherein the frame comprises a housing module coupled to a structural member;
a first lens and a second lens coupled to the frame; and
an electronics module, wherein the electronics module is located within the housing module;
wherein the electronics module comprises at least any two of: a power source; a controller; and a sensing mechanism; and
wherein an insulating layer is disposed between one or more electronic components located within the electronics module and the frame of the first device.

12. The first device of claim 1, wherein the structural member comprises a cavity in the first temple; and wherein the housing module is configured to be selectively placed within the cavity.

Ex. 1001, claims 1, 12 (highlight added)

A POSA Would Have Been Motivated To Combine Howell-158 And Howell-596

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

Petitioner next criticizes Patent Owner for a supposedly "overly narrow interpretation of Howell-158," which, according to Petitioner, "is not limited to using double-sided electrical tape and allows for other types of insulating layers." (Reply, 14.) But Howell-158's single-paragraph disclosure concerning an insulating layer does not disclose or suggest any exemplary embodiments other than tape. Even if it did, Howell-158 describes only that exemplary tape embodiment—and not insulating layers generally—as having the "certain degree" of "mechanical stiffness" Petitioner suggests is necessary for an insulating layer to constitute the claimed electronics module. (*See* Reply 10; EX-1004, ¶53.) And in any event, Petitioner cites no evidence, in Howell-158 or elsewhere, indicating that some other undisclosed insulating layer could have been used to construct an electronics module.

Finally, Petitioner largely ignores Patent Owner's argument that Petitioner failed to establish any motivation to incorporate Howell-158's insulating layer into Howell-596 *as an electronics module*, particularly given that Howell-158's tape would not only impair the functionality of Howell-596's UV sensor, but also provide less mechanical stiffness than Howell-596's own module. (*See* POR, 28-30; Reply, 14.) And confusingly, while Petitioner asserts that "the Petition's rationale for combining the references does not depend on Howell-158's insulating layer encapsulating the sensor" (Reply, 14), that is exactly the rationale set forth in the

15

Finally, Petitioner largely ignores Patent Owner's argument that Petitioner failed to establish any motivation to incorporate Howell-158's insulating layer into Howell-596 *as an electronics module*, particularly given that Howell-158's tape would not only impair the functionality of Howell-596's UV sensor, but also provide less mechanical stiffness than Howell-596's own module. (*See* POR, 28-30; Reply,

Sur-Reply, 15

The Insulating Layer May Comprise The Electronics Module

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

and even ignoring Petitioner's inconsistent mappings to the same claim limitations, Petitioner's argument fails for multiple reasons.

As an initial matter, Petitioner mischaracterizes Howell-158 in its reply, arguing that the reference "*confirms* that its insulating layer can function as a *housing* or *container* by providing encapsulation, insulation, and mechanical stiffness." (Reply, 13 (emphases added).) But Howell-158 mentions an insulating layer in only a single paragraph, which neither discloses nor suggests that an insulating layer can "function as a housing or container." (EX-1004, ¶53.) In fact, contrary to Petitioner's assertion, a POSITA would have understood that Howell-158's insulating layer *cannot* function as a housing or container.

Howell-158 discloses only one example of an insulating layer: "a tape to encapsulate the electrical components," which, "to a certain degree, can . . . provide mechanical stiffness." (EX-1004, ¶53.) Petitioner argues that, merely because Howell-158 discloses that its tape embodiment has those two properties—(1) encapsulation of electronics and (2) a certain degree of mechanical stiffness—Howell-158's tape satisfies the "electronics module" limitation of claim 12 of the '541 patent. But neither Howell-158 nor Petitioner addresses what degree of mechanical stiffness might be necessary for an electronics module. And Petitioner does not assert—much less prove—that a POSITA would have understood tape—

13

stiffness." (Reply, 13 (emphases added).) But Howell-158 mentions an insulating layer in only a single paragraph, which neither discloses nor suggests that an insulating layer can "function as a housing or container." (EX-1004, ¶53.) In fact, contrary to Petitioner's assertion, a POSITA would have understood that Howell-158's insulating layer *cannot* function as a housing or container.

Sur-Reply, 13

The Insulating Layer May Comprise The Electronics Module

(12) **United States Patent**
Blum et al.

(10) **Patent No.:** **US 8,905,541 B2**
(45) **Date of Patent:** **Dec. 9, 2014**

In some embodiments, in the first device as describe above that comprises an insulating layer, the insulating layer may comprise a portion of the electronics module. In some

preferably be less than 2 mm thick. In some embodiments, as was described in detail above, the insulating layer may comprise a part of the electronics module. That is, for instance, in some embodiments the insulating layer may comprise the exterior wall of the electronics module, or some other internal

environment. Thus, as used herein, in some embodiments where an electronics module comprises an exterior wall (e.g. an outer wall, container, shell, etc.) that is made of, or includes, an insulating material, the exterior wall may be considered as the insulating layer disposed between the electronic components (that are disposed within the electronics module) and the frame. For example, in some embodiments,

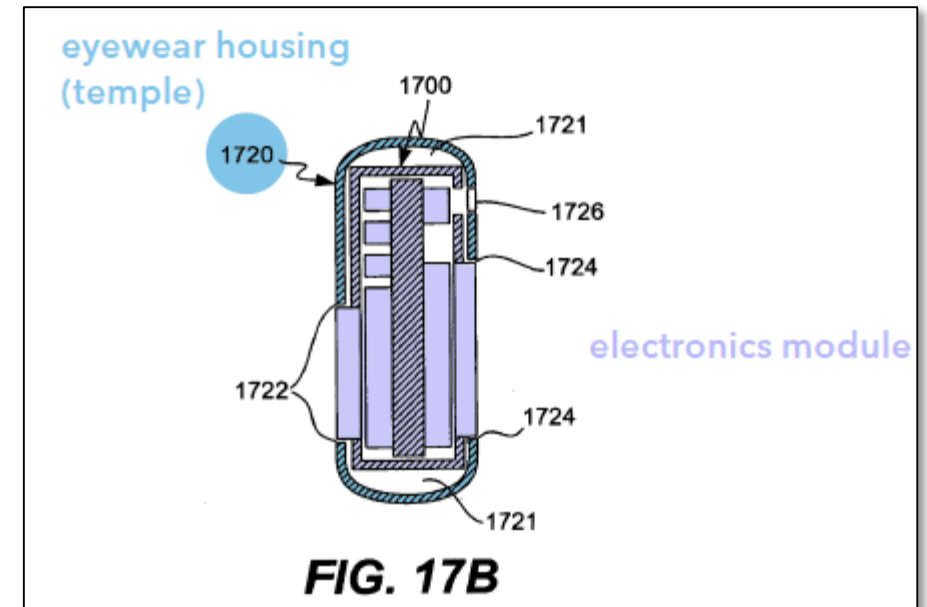
Ex. 1001, 2:20-21, 59:18-19, 58:50-55 (highlighting added)

Claim 18

Dependent Claim 18 Of The '541 Patent

18. The first device of claim 1, wherein the housing module has a thickness that is less than or equal to approximately 0.7 mm.

Ex. 1001, claim 18



Ex. 1004, Fig. 17B (annotated)

A POSA Would Be Motivated To Maintain Proportions Of Traditional Eyewear

Patent Owner's Response to
Petition for Inter Partes Review
Patent No. 8,905,541

18. Claim 18: "The first device of claim 1, wherein the housing module has a thickness that is less than or equal to approximately 0.7 mm."

Claim 18 depends from claim 1, and therefore incorporates all of the limitations of claim 1 in addition to the limitations recited therein. Accordingly, for the same reason claim 1 is patentable over Howell-596 in view of Howell-158, claim 18 is also patentable over that combination.

In addition, Petitioner's challenge to claim 18 fails because it points to nowhere in Howell-596 or Howell-158 in which the limitation "wherein the housing module has a thickness that is less than or equal to approximately 0.7 mm" exists. Rather, Petitioner simply disparages the value of such a limitation. This has no merit in an obviousness analysis, and Petitioner provides no evidence that a POSITA would have been motivated to combine or modify Howell-596 or Howell-158 as recited in claim 18. In fact, the Federal Circuit has "never before applied the presumption of obviousness for overlapping ranges in a case in which the prior art does not contain an express disclosure of a range." *ModernaTx, Inc. v. Arbutus Biopharma Corp.*, 18 F.4th 1364, 1373 (Fed. Cir. 2021). Petitioner does not argue that Howell-596 or Howell-158 discloses the claimed range.

The little evidence that Petitioner provides does not even relate to electronic eyewear. In fact, Petitioner argues that "multiple references," neither of which are

32

in an obviousness analysis, and Petitioner provides no evidence that a POSITA would have been motivated to combine or modify Howell-596 or Howell-158 as recited in claim 18. In fact, the Federal Circuit has "never before applied the

POR, 32

A POSA Would Be Motivated To Maintain Proportions Of Traditional Eyewear

124. In addition, before the priority date, a POSITA would have been well aware of the demands of design aesthetics of electronic eyewear. These demands would have included maintaining the proportions of the components of the electronic eyewear similar to those of traditional eyewear. These demands would have also included maintaining the weight of traditional eyewear; should the frame be made of metal, housings thicker than 0.7 mm would be heavy and uncomfortable to wear for the user. A POSITA would also understand that reducing the thickness of the housing module would help offset any bulkiness from addition of the electronic module into the housing module (and temple) of the eyewear.

Ex. 1002, ¶124 (highlighting added)

Claim 18 adds nothing to claim 1 other than a range for the thickness of a side of the housing module. That range is the result of routine optimization, not invention. Ex. 1002 ¶122. A POSITA would have been motivated to have the thickness of the housing module be as thin as possible because space within eyewear is limited by ergonomic and aesthetic considerations. “[W]here the general

Petition, 41 (highlighting added)

125. Prior art would provide a POSITA with further motivation to minimize housing module thickness to maintain design ergonomics and aesthetics of the electronic eyewear. For example, Howell-596 discloses integrating components within eyewear such that “disturbance to design features of the eyewear can be reduced.” Ex. 1004 ¶¶ 7, 68. Similarly, Kokonaski-166 emphasizes integrating electronic components into an electro-active frame in a “cosmetically pleasing manner.” Ex. 1008, Abstract. Kokonaski-166 further explains “it is becoming important to find ways to incorporate electronics into eyewear without harming the aesthetics and functionality of the eyewear. The challenge is to not limit the fashion design of the eyeglass frame or limit the materials which the eyeglass frame can be made of” *Id.* ¶7. To that end, Kokonaski-166 “desires to avoid . . . a thick temple or frame housing electronics that distracts from the aesthetic appearance of the eyeglass frames.” *Id.* ¶6.

Ex. 1002, ¶125 (highlighting added)

A POSA Would Know How To Maintain Proportions Of Traditional Eyewear

Sur-Reply, 16-17

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

petition: "The insulating layer qualifies as the claimed electronics module including because it 'encapsulate[s] the electrical components' to provide both insulation and 'mechanical stiffness.'" (Petition, 34.)

Petitioner's inconsistent and shifting positions underscore Petitioner's failure to carry its burden of proof. The Board should find claim 12 patentable.

C. Claim 18: Petitioner's Reliance On Non-Electronic Eyeglasses Illustrates Petitioner's Failure To Identify A Motivation To Combine

Petitioner asserts that a POSITA would have arrived at the thickness requirement of claim 18 through routine optimization (Reply, 14), again circumventing its burden rather than articulating how a POSITA would have combined prior art teachings to arrive at the claimed invention. See *ActiveVideo*, 694 F.3d at 1328. The non-electronic eyeglass frames of Dudli and Della, which have no internal electronic components, do not address how to incorporate internal electronic components, do not address how to incorporate electronics into eyeglasses at all, and would not have motivated a POSITA to implement the dimensions recited in claim 18. Petitioner does not dispute this (Reply, 15-16). Instead, Petitioner argues that its expert relied on Dudli and Della merely to explain that a POSITA would have been motivated to maintain the proportions of electronic eyewear similar to traditional eyewear. (*Id.*) Petitioner's expert does not explain how a POSITA

16

in claim 18. Petitioner does not dispute this (Reply, 15-16). Instead, Petitioner argues that its expert relied on Dudli and Della merely to explain that a POSITA would have been motivated to maintain the proportions of electronic eyewear similar to traditional eyewear. (*Id.*) Petitioner's expert does not explain how a POSITA would have managed to accomplish this. (*Id.*) Dr. Feland's oversimplification that

Alternatively, POSITAs would have been long aware that Howell-596's eyewear housing 1720 or Howell-158's temple (housing module) could have a thickness that is less than or equal to approximately 0.7 mm. This would have been part of a POSITA's background knowledge because, before the priority date, multiple references disclosed temples whose entire widths were less than approximately 0.7 mm thick. Ex. 1002 ¶123. For example, in 2007, Dudli explicitly disclosed a temple for spectacles "preferably with a thickness of 0.2 to 0.5 mm." Ex. 1012, Claim 2; *id.*, 1 (publication date May 16, 2007). As another example, in 2002, Della explicitly disclosed temples with a forward portion 13a having a thickness of "around 0.7 mm." Ex. 1013, p.9, Figs. 1-3; *id.*, p.1 (publication date November 22,

IPR Petition – Patent 8,905,541
Luxottica of America Inc. v. e-Vision Optics, LLC

Kennedy Contracting Corp. v. Concrete Mixing & Conveying Co., 282 U.S. 175, 184-85 (1930). Accordingly, Howell-596 and Howell-158 render claim 18 obvious for the reasons discussed for claim 1. *Supra* §VII.A.

Alternatively, POSITAs would have been long aware that Howell-596's eyewear housing 1720 or Howell-158's temple (housing module) could have a thickness that is less than or equal to approximately 0.7 mm. This would have been part of a POSITA's background knowledge because, before the priority date, multiple references disclosed temples whose entire widths were less than approximately 0.7 mm thick. Ex. 1002 ¶123. For example, in 2007, Dudli explicitly disclosed a temple for spectacles "preferably with a thickness of 0.2 to 0.5 mm." Ex. 1012, Claim 2; *id.*, 1 (publication date May 16, 2007). As another example, in 2002, Della explicitly disclosed temples with a forward portion 13a having a thickness of "around 0.7 mm." Ex. 1013, p.9, Figs. 1-3; *id.*, p.1 (publication date November 22, 2002).

A POSITA would have been motivated to minimize housing module thickness to maintain design ergonomics and aesthetics of the electronic eyewear. Ex. 1002 ¶124. For example, Howell-596 discloses integrating components within eyewear such that "disturbance to design features of the eyewear can be reduced." Ex. 1004 ¶¶7, 68. Similarly, Kokonaski-166 emphasizes integrating electronic components into an electro-active frame in a "cosmetically pleasing manner." Ex. 1008,

42

Petition 42 (highlighting added)

Discovering Workable Ranges Is Not Inventive



"[I]t is not inventive to discover the optimum or workable ranges by routine experimentation."

In re Aller, 220 F.2d 454, 456 (C.C.P.A. 1955).



"[D]iscovery of an optimum value of a result effective variable ... is ordinarily within the skill of the art."

In re Applied Materials, Inc., 692 F.3d 1289, 1295 (Fed. Cir. 2012) (citing *In re Boesch*, 617 F.2d 272, 276 (CCPA 1980)).

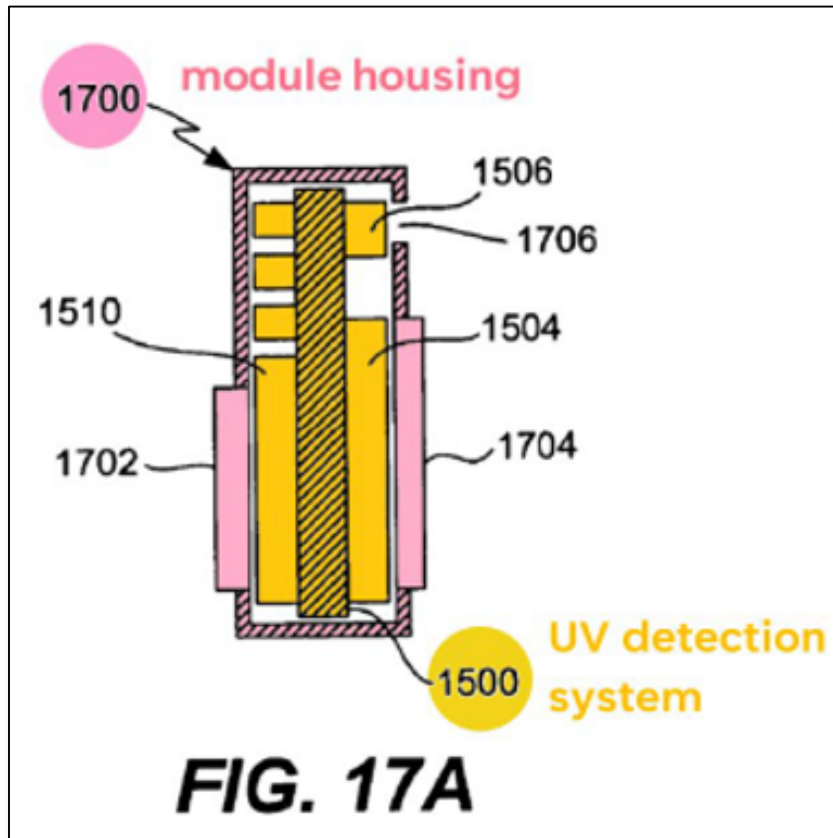


"[T]he Board's observation that appellant did not provide the type of detail in his specification that he now argues is necessary in prior art references supports the Board's finding that one skilled in the art would have known how to implement the features of the references and would have concluded that the reference disclosures would have been enabling."

In re Epstein, 32 F.3d 1559, 1568 (Fed. Cir. 1994).

Ground 3

Howell-596 Renders Claim 1 Obvious



Ex. 1004, Fig. 17A (annotated)

1. A first device, comprising:
a frame comprising a first temple and a second temple,
wherein the frame comprises a housing module coupled
to a structural member;
a first lens and a second lens coupled to the frame; and
an electronics module, wherein the electronics module is
located within the housing module;
wherein the electronics module comprises at least any two
of: a power source; a controller; and a sensing mecha-
nism; and
wherein an **insulating layer** is disposed between one or
more electronic components located within the electron-
ics module and the frame of the first device.

Ex. 1001, claim 1 (highlighting added)

Howell-596 Renders Claim 1 Obvious

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

disregards the fact that this very distinction was made during prosecution of the '541 Patent, and was a reason for why the application was allowed over the prior art. (EX-1003, 37, 60-68.). Additionally, Petitioner misunderstands Patent Owner's argument, which noted the petition's failure to explain why a POSITA would have been motivated to incorporate an insulating layer into the eyewear of Howell-596. (Reply, 19.)

Petitioner's assertion that a POSITA would have selected an insulating material for the exterior wall of Howell-596's electronics module misses the point. (Reply, 18.) Petitioner merely argues that Howell-596 teaches that a housing of an electronics module may be formed of a material that is not electrically conductive. (*Id.*) Howell-596's exterior wall does not insulate anything because there is no electrically conductive material in the eyewear housing to insulate the UV detection system from. (EX-2014, ¶74.) And as Patent Owner explained, a non-conductive material is not an "insulating layer" if there is no conductive material to insulate the electrical components from. (POR, 36.)

Petitioner's argument assumes the use of metal frames in Howell-596's eyeglasses (Reply, 18-19)—contrary to Patent Owner's arguments and expert testimony. (*See, e.g.*, POR 34-35; EX-2014 ¶74.) Petitioner does not dispute that ground 3 is predicated on Howell-596's incorporating metal frames, nor does

(*Id.*) Howell-596's exterior wall does not insulate anything because there is no electrically conductive material in the eyewear housing to insulate the UV detection system from. (EX-2014, ¶74.) And as Patent Owner explained, a non-conductive

Sur-Reply, 19

Howell-596 Renders Claim 1 Obvious

(12) **United States Patent**
Blum et al.

(10) **Patent No.:** **US 8,905,541 B2**
(45) **Date of Patent:** **Dec. 9, 2014**

environment. Thus, as used herein, in some embodiments where an electronics module comprises an exterior wall (e.g. an outer wall, container, shell, etc.) that is made of, or includes, an insulating material, the exterior wall may be considered as the insulating layer disposed between the electronic components (that are disposed within the electronics module) and the frame. For example, in some embodiments,

Ex. 1001, 58:50-55 (highlighting added)

It would have been obvious for a POSITA to select an insulating material for module housing 1700. Ex. 1002 ¶143. Howell-596 instructs that “module housing 1700 protects the module” including UV detection system 1500. Ex. 1004 ¶195. A POSITA would have understood that protecting the UV detection system’s “printed circuit board” having “integrated circuits” would advantageously include insulating those electric components. Ex. 1002 ¶143. For example, a 2003 Generic Standard on Printed Board Design instructed that metal-cased components shall be “insulated from adjacent electrically conductive elements.” Ex. 1011, 57. The standard further instructed that “[f]iber or plastic insulators should be incorporated where adequate clearance from circuitry cannot be provided.” *Id.*, 64.

Petition, 48 (highlighting added)

Patent Owner's Disclaimer Argument Fails

Patent Owner's Response to
Petition for Inter Partes Review
Patent No. 8,905,541

layer of Howell-158) and argues that Howell-596 alone would have rendered the Challenged Claims obvious. Petition, 47-49.

Petitioner relies on an embodiment described in the specification of the '541 patent that states that the housing of an electronics module may constitute the insulating layer in order to argue that it would have been obvious for a POSITA "to select an insulating material for module housing 1700." Petition, 48. Petitioner also reiterates its prior arguments set forth in Ground 1, such as the general existence of insulation in electrical circuits (Petition, 48) and Howell-158's general teaching that plastic may be used for insulation of electrical components (Petition, 49).

First, Petitioner effectively makes a claim construction argument that is inconsistent with many of the arguments included in the petition—i.e., that the claimed "electronics module" and claimed "insulating layer" may be one and the same. Petition, 47. However, Patent Owner disclaimed this embodiment during prosecution when it noted that the prior art cited by the Examiner—which was formed of a non-conductive material to prevent short circuit—did not disclose or require the claimed "insulating layer" element.

Specifically, during prosecution of the '541 patent, the Examiner found the pending claims unpatentable as anticipated by Kokanaski-166. EX-1003, 76-77 ("Regarding claim 49, Kokanaski et al discloses the insulating layer between the

35

First, Petitioner effectively makes a claim construction argument that is inconsistent with many of the arguments included in the petition—i.e., that the claimed "electronics module" and claimed "insulating layer" may be one and the same. Petition, 47. However, Patent Owner disclaimed this embodiment during prosecution when it noted that the prior art cited by the Examiner—which was formed of a non-conductive material to prevent short circuit—did not disclose or require the claimed "insulating layer" element.

POR, 35 (annotated)

Patent Owner's Disclaimer Argument Fails

Claims Rejection Under 35 USC - 102

Regarding claim 49, Kokonaski et al discloses the insulating layer between electronic components and frame implicitly states otherwise there would be short circuit, the wires can have insulating material.

Ex. 1003, 76

Amendment and Reply Under 37 C.F.R. § 1.111

Kokonaski does not disclose each and every feature recited by independent claim 48, as amended. The Office attempts to rely on the theory that the features are "implicitly" disclosed, suggesting that "the wires *can have* insulating material." So the Office acknowledges this is merely one "possibility", which is insufficient to satisfy the standard quoted above. The Office does not show that the missing feature is "necessarily present", as required. Indeed, there are other ways in which Kokonaski could prevent a short circuit. For example, if the frame is not electrically conductive, the components of the electronics module could contact the frame without creating a short circuit. Thus, Kokonaski does not require the claimed elements.

Ex. 1003, 66 (highlighting added)

Patent Owner's Disclaimer Argument Fails



“The party seeking to invoke prosecution history disclaimer bears the burden of proving the existence of a ‘**clear and unmistakable**’ disclaimer that would have been evident to one skilled in the art.”

Trivascular, Inc. v. Samuels, 812 F.3d 1056, 1064 (Fed. Cir. 2016) (internal citation omitted).

“[P]ermissive language does not limit the scope of the claim term.”

Profectus Tech. LLC v. Huawei Techs. Co., 2014 WL 1575719, at *6 (E.D. Tex. Apr. 17, 2014), *aff’d*, 823 F.3d 1375 (Fed. Cir. 2016).

“We find the passage does not support Samsung’s [disclaimer] argument. In the main, paragraphs 1 and 2 above are **descriptions of the asserted references**, as opposed to a description of . . . claim 1.”

N. Telecom Ltd. v. Samsung Elecs. Co., 215 F.3d 1281, 1294 (Fed. Cir. 2000).

Ground 5

Kokonaski-166 And Howell-158 Render Claim 1 Obvious

(19) **United States**

(12) **Patent Application Publication** (10) Pub. No.: US 2008/0273166 A1
Kokonaski et al. (43) Pub. Date: Nov. 6, 2008

[0084] FIG. 9A illustrates a top view of a electro-active spectacle lenses and rimmed frame. The rimmed frame can be made of zyle, metal, or any combination thereof. Both right

Ex. 1008, [0084] (highlighting added)

(19) **United States**

(12) **Patent Application Publication** (10) Pub. No.: US 2006/0023158 A1
Howell et al. (43) Pub. Date: Feb. 2, 2006

[0053] For glasses with metallic frames, to prevent circuits from being shorted or to reduce leakage current, one embodiment provides an insulating layer between the electrical components or circuit board and the metallic frames.

Ex. 1006, [0053] (highlighting added)

1. A first device, comprising:

a frame comprising a first temple and a second temple, wherein the frame comprises a housing module coupled to a structural member;

a first lens and a second lens coupled to the frame; and an electronics module, wherein the electronics module is located within the housing module;

wherein the electronics module comprises at least any two of: a power source; a controller; and a sensing mechanism; and

wherein an insulating layer is disposed between one or more electronic components located within the electronics module and the frame of the first device.

Ex. 1001, claim 1

Kokonaski-166 And Howell-158 Render Claim 1 Obvious

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 8,905,541

“[T]o ‘prevent circuits from being shorted’ and ‘reduce leakage current’”

“[A] 2003 Generic Standard on Printed Board Design instructed that metal-cased components shall be ‘insulated from adjacent electrically conductive elements.’”

“[S]ince long before the priority date, it had been standard practice to insulate electric components.”

Petition, 22-23

DECLARATION OF JAMES H. OLIVER, PHD IN SUPPORT OF PATENT OWNER'S RESPONSE TO PETITION

claimed elements [of an insulating layer].” EX-1003, 66. Accordingly, a POSITA would have understood from Kokonaski-166 not to use metal frames, or at the very least ensuring that any portion of the housing module that comes into contact with the electronics module is not made of metal. Indeed, as Petitioner has already noted,

Ex. 2014, ¶82 (highlighting added)

Kokonaski-166 And Howell-158 Render Claim 1 Obvious

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

burden. *ActiveVideo Networks, Inc.*, 694 F.3d at 1328 (citing *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. at 418).

Fourth, Petitioner's arguments regarding a POSITA's alleged motivation to implement Howell-158's teachings within Kokonaski-166 is rife with inaccuracies. (Reply, 21-22.) Kokonaski-166 expressly notes the importance of aesthetics as a design consideration, and adding unnecessary elements such as metal and insulation detract from those considerations. (POR, 40-42.) For example, Kokonaski-166 uses a large silicone seal for water resistance, and would not have been motivated to sacrifice wearability by using the bulky, water-resistant silicone seal as an insulating layer.¹ (EX-2014, ¶¶83-84.) Petitioner admits that its proposed motivation is not preferable, but in conclusory fashion argues that a POSITA would have somehow used Howell-158's "one example" of double-sided sticky tape as inspiration to modify Kokonaski-166's silicone seal. (Reply, 23.)

¹ Petitioner again mischaracterizes its position that silicone is insulative as unrebutted (Reply, 22), but as explained immediately above, it is neither unrebutted nor necessarily correct.

24

Fourth, Petitioner's arguments regarding a POSITA's alleged motivation to implement Howell-158's teachings within Kokonaski-166 is rife with inaccuracies. (Reply, 21-22.) Kokonaski-166 expressly notes the importance of aesthetics as a design consideration, and adding unnecessary elements such as metal and insulation detract from those considerations. (POR, 40-42.) For example, Kokonaski-166 uses

Sur-Reply, 24 (highlighting added)

Kokonaski-166 teaches the importance of aesthetic design, and admits that using fewer or lighter materials, rather than more, would further that aesthetic design. Petition at 43 (citing EX-1008, ¶6). I note that in addition to Petitioner's failure to

Ex. 2014, ¶82

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

LUXOTTICA OF AMERICA INC.,
Petitioner

v.
E-VISION OPTICS, LLC
Patent Owner

Case No. IPR2024-01071
Patent No. 8,905,541

DECLARATION OF JAMES H. OLIVER, PHD IN SUPPORT OF PATENT
OWNER'S RESPONSE TO PETITION

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

IPR2024-01071
E-Vision Optics, LLC EX-2014

Kokonaski-166 And Howell-158 Render Claim 1 Obvious

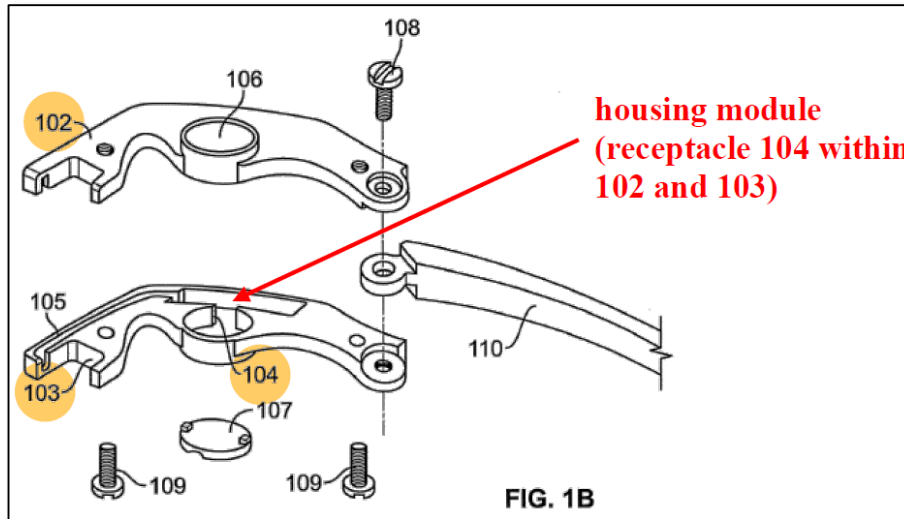
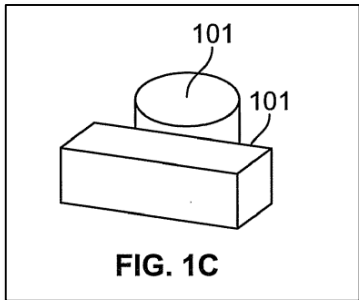


for the wearer. The Oakley Thump is a prime example of what the invention disclosed here desires to avoid. That being a thick temple or frame housing electronics that distracts from the aesthetic appearance of the eyeglass frames. PixelOp-

Ex. 1008, [0006] (highlighting added)

Patent Owner's contention that metal frames and/or an insulating layer would detract from aesthetic considerations is **subjective** and **speculative**.

Kokonaski-166 And Howell-158 Render Claim 1 Obvious



Ex. 1008, Figs. 1B, 1C (annotated)

(19) **United States**

(12) **Patent Application Publication**
Kokonaski et al.

(10) Pub. No.: US 2008/0273166 A1
(43) Pub. Date: Nov. 6, 2008

tronic module. A manual switch 1080 is attached to the top of the electronic module and is integrated with a sealing diaphragm 1090. This module is sealed with an epoxy, silicone, or similar water resistant material to prevent water from contacting the electronic components. This module is shaped to

Ex. 1008, [0087] (highlighting added)

1. A first device, comprising:

a frame comprising a first temple and a second temple, wherein the frame comprises a housing module coupled to a structural member;
a first lens and a second lens coupled to the frame; and
an electronics module, wherein the electronics module is located within the housing module;
wherein the electronics module comprises at least any two of: a power source; a controller; and a sensing mechanism; and
wherein an insulating layer is disposed between one or more electronic components located within the electronics module and the frame of the first device.

Ex. 1001, claim 1

Kokonaski-166 And Howell-158 Render Claim 1 Obvious

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

Regardless, Petitioner does not adequately address Patent Owner's arguments that a POSITA would have had any motivation to use Howell-158's teaching of double-sided sticky tape to modify Kokonaski-166 when doing so would also impede removability and ease of component replacement. (*Id.*; POR, 41-42.) While Petitioner claims that Howell-158's double-sided sticky tape provides for replaceability, that argument is absent in the Petition, is unsupported attorney argument, and mischaracterizes Howell-158. The portion of Howell-158 that Petitioner relies upon for this argument does not refer to the double-sided sticky tape, and it requires that the entire temple tip be removed from Howell-158's eyeglasses. (EX-1006, ¶[0171].) Further, that portion of Howell-158 does not describe replacement of certain electronics, but rather a small portion of the eyeglasses that Howell-158 admits is "not [even] considered as part of the temple." (*Id.*)

Additionally, as Kokonaski-166 does not disclose reliance on metal frames, there is no motivation to modify Kokonaski-166 to use its silicone material as an insulating layer, particularly given that there would be no insulation being provided by Kokonaski-166's silicone material for non-metal frames. (EX-2014, ¶¶83-84.)

B. Claims 2-9, 11, and 13-18

Claims 2-9, 11 and 13-18 all depend from claim 1. Petitioner provides no arguments or explanations that overcome the deficiencies laid out in Patent Owner's

25

Additionally, as Kokonaski-166 does not disclose reliance on metal frames, there is no motivation to modify Kokonaski-166 to use its silicone material as an insulating layer, particularly given that there would be no insulation being provided by Kokonaski-166's silicone material for non-metal frames. (EX-2014, ¶¶83-84.)

Sur-Reply, 25 (highlighting added)

[0084] FIG. 9A illustrates a top view of a electro-active spectacle lenses and rimmed frame. The rimmed frame can be made of zyle, metal, or any combination thereof. Both right

Ex. 1008, [0084] (highlighting added)



Kokonaski-166 And Howell-158 Render Claim 1 Obvious

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

provides no evidence that silicone is insulative, especially in eyeglasses lacking metal frames. And while Petitioner describes its expert's testimony as undisputed, Patent Owner's expert explained that Kokonaski-166's silicone seal is not an insulating layer. (EX-2014, ¶¶ 78-79.) Thus, Petitioner fails to meet its burden.

Second, Petitioner distracts from the main issue by characterizing an inherency analysis in the prosecution history as "inherent anticipation." (Reply, 21.) But analysis of whether a reference inherently discloses a limitation is the same—whether that reference stands alone or is part of an obviousness combination. Petitioner asserts that whether an insulating layer is "necessarily present" in Kokonaski-166 "is irrelevant to the petition's obviousness analysis." (Reply, 21.) But Petitioner *does not argue that an insulative layer would have been obvious*. (Petition, 56-57.) Rather, Petitioner relies on Kokonaski-166's purportedly express disclosure. (*Id.*) Accordingly, whether or not Kokonaski-166 discloses an insulative layer—inherently or expressly—is highly relevant to whether the petitioned grounds succeed. They do not.

The statements made during prosecution of the '541 patent make clear that Kokonaski-166 does not disclose an insulating layer. (POR, 38-39.) Moreover, the Examiner further found that an insulating layer would not have been obvious to a POSITA given that, absent metal frames or housings, there is no insulation being

22

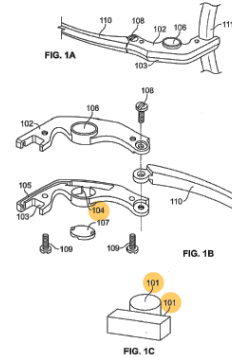
Petitioner asserts that whether an insulating layer is "necessarily present" in Kokonaski-166 "is irrelevant to the petition's obviousness analysis." (Reply, 21.) But Petitioner *does not argue that an insulative layer would have been obvious*. (Petition, 56-57.) Rather, Petitioner relies on Kokonaski-166's purportedly express disclosure. (*Id.*) Accordingly, whether or not Kokonaski-166 discloses an insulative

Sur-Reply, 22

component. *Id.* ¶¶ 76, 87. Referencing Figure 10, Kokonaski-166 discloses that its electronic module may be sealed with silicone, which is insulative. *Id.* ¶ 87; Ex. 1002 ¶¶ 161-162. It **would have been obvious to a POSITA** to apply that insulation to electronic module 101 in Figure 1. Ex. 1002 ¶ 161. For example, for both Figures 1

Petition 56-57 (highlighting added)

IPR Petition – Patent 8,905,541
Luxottica of America Inc. v. e-Vision Optics, LLC



Id., Figs. 1A-1C, ¶¶ 20-22, 74. The electronics module 101 is disposed in the housing module 104, as shown above. *Supra* §XIA.1. Thus, Kokonaski-166 discloses these limitations.

4. 1[e]: insulating layer between electronic component and frame
Kokonaski discloses an electronic module in both Figures 1 and 10. Ex. 1008 ¶¶ 76, 87, Figs. 10-11. For each, Kokonaski-166 discloses using a seal to "to prevent water from contacting the electronic" components while within a universal frame component. *Id.* ¶¶ 76, 87. Referencing Figure 10, Kokonaski-166 discloses that its

56

Kokonaski-166 And Howell-158 Render Claim 1 Obvious

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

V. GROUND 4: CLAIMS 16-17 ARE NOT OBVIOUS

Claims 16 and 17 depend from claim 1. Like Ground 2, Petitioner does not address the deficiencies in the Petition except to incorporate by reference its prior arguments pertaining to Ground 3. Accordingly, for the reasons set forth above and in Patent Owner's Response, claims 16-17 are patentable.

VI. GROUND 5: KOKONASKI-166 DOES NOT DISCLOSE AN INSULATING LAYER, AND THERE WAS NO MOTIVATION TO COMBINE WITH HOWELL-158

A. Claim 1

Petitioner's reply arguments either repeat the same mistakes made in the petition or attempt to sidestep Patent Owner's critical points.

First, Petitioner merely doubles down on its insufficient showing in the petition that Kokonaski-166 discloses an insulative layer. (Reply, 20.) Petitioner again relies on nothing more than its expert's unsupported opinion, which cannot form the basis for a missing limitation. 37 C.F.R. § 42.104(b)(4); 35 U.S.C. § 312(a)(4). Petitioner passively seeks to shift the burden of proof regarding whether silicone is insulative. But it is Petitioner who must prove, by a preponderance of the evidence, that each and every element of the challenged claims is present in the prior art. *ActiveVideo Networks, Inc.*, 694 F.3d at 1328 (citation omitted). Aside from unsupported statements from Petitioner and its expert's speculation, Petitioner

21

art. *ActiveVideo Networks, Inc.*, 694 F.3d at 1328 (citation omitted). Aside from unsupported statements from Petitioner and its expert's speculation, Petitioner provides no evidence that silicone is insulative, especially in eyeglasses lacking metal frames. And while Petitioner describes its expert's testimony as undisputed,

Sur-Reply, 21-22 (highlighting added)

frame component. *Id.* ¶¶ 76, 87. Referencing Figure 10, Kokonaski-166 discloses that its electronic module may be sealed with silicone, which is insulative. *Id.* ¶87.

162. Long before the priority date, a POSITA would have known that silicone is an insulative material. A POSITA would understand that when the electronic module is disposed within the housing module, the insulating layer of silicone would be disposed between the electronic module and the housing module.

Ex. 1002, ¶¶ 161-162 (highlighting added)

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LUXOTTICA OF AMERICA INC.,
Petitioner,

v.

E-VISION OPTICS, LLC,
Patent Owner.

Case IPR2024-01071
Patent 8,905,541

DECLARATION OF JOHN FELAND
IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW
OF U.S. PATENT NO. 8,905,541

Luxottica Ex. 1002
IPR, Petition USP 8,905,541

Patent Owner's Disclaimer Argument Fails

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

provides no evidence that silicone is insulative, especially in eyeglasses lacking metal frames. And while Petitioner describes its expert's testimony as undisputed, Patent Owner's expert explained that Kokonaski-166's silicone seal is not an insulating layer. (EX-2014, ¶¶ 78-79.) Thus, Petitioner fails to meet its burden.

Second, Petitioner distracts from the main issue by characterizing an inherency analysis in the prosecution history as "inherent anticipation." (Reply, 21.) But analysis of whether a reference inherently discloses a limitation is the same—whether that reference stands alone or is part of an obviousness combination. Petitioner asserts that whether an insulating layer is "necessarily present" in Kokonaski-166 "is irrelevant to the petition's obviousness analysis." (Reply, 21.) But Petitioner *does not argue that an insulative layer would have been obvious*. (Petition, 56-57.) Rather, Petitioner relies on Kokonaski-166's purportedly express disclosure. (*Id.*) Accordingly, whether or not Kokonaski-166 discloses an insulative layer—inherently or expressly—is highly relevant to whether the petitioned grounds succeed. They do not.

The statements made during prosecution of the '541 patent make clear that Kokonaski-166 does not disclose an insulating layer. (POR, 38-39.) Moreover, the Examiner further found that an insulating layer would not have been obvious to a POSITA given that, absent metal frames or housings, there is no insulation being

22

The statements made during prosecution of the '541 patent make clear that Kokonaski-166 does not disclose an insulating layer. (POR, 38-39.) Moreover, the Examiner further found that an insulating layer would not have been obvious to a POSITA given that, absent metal frames or housings, there is no insulation being provided by any non-conductive material within Kokonaski-166. (*See id.*, 37, 65-

Sur-Reply, 22-23

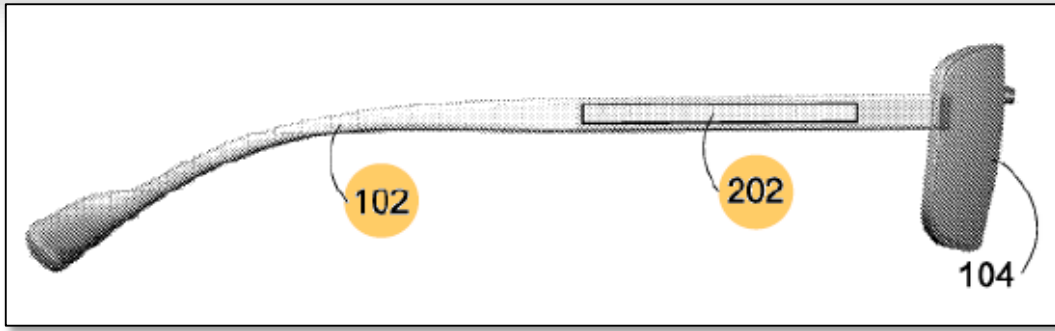
"The party seeking to invoke prosecution history disclaimer bears the burden of proving the existence of a '**clear and unmistakable**' disclaimer that would have been evident to one skilled in the art."

Trivascular, Inc. v. Samuels, 812 F.3d 1056, 1064 (Fed. Cir. 2016) (internal citation omitted).



Ground 6

Kokonaski-999 And Howell-158 Render Claim 1 Obvious



Kokonaski-999 discloses frame 102 having “one or more conductive portions.” Ex. 1009 ¶32. Kokonaski-999 also discloses “conductive links embedded within any portion of the frame[.]” *Id.* ¶¶24, 32. This includes the temple, or any portion of the frame housing the electronic module 202. *Id.* ¶¶32-33.

Ex. 1009, Fig. 2 (annotated); Petition, 69 (highlighting added)

(19) **United States**
(12) **Patent Application Publication** (10) Pub. No.: US 2006/0023158 A1
Howell et al. (43) Pub. Date: Feb. 2, 2006

[0053] For glasses with metallic frames, to prevent circuits from being shorted or to reduce leakage current, one embodiment provides an insulating layer between the electrical components or circuit board and the metallic frames.

Ex. 1006, [0053] (highlighting added)

1. A first device, comprising:

a frame comprising a first temple and a second temple, wherein the frame comprises a housing module coupled to a structural member;
a first lens and a second lens coupled to the frame; and
an electronics module, wherein the electronics module is located within the housing module;
wherein the electronics module comprises at least any two of: a power source; a controller; and a sensing mechanism; and
wherein an insulating layer is disposed between one or more electronic components located within the electronics module and the frame of the first device.

Ex. 1001, claim 1

Kokonaski-999 Does Not Require Metal Frames To Facilitate Communication

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LUXOTTICA OF AMERICA INC.,

Petitioner

v.

E-VISION OPTICS, LLC

Patent Owner

Case No. IPR2024-01071

Patent No. 8,905,541

DECLARATION OF JAMES H. OLIVER, PHD IN SUPPORT OF PATENT
OWNER'S RESPONSE TO PETITION

Mail Stop PATENT BOARD
Patent Trial and Appeal Board
U.S. Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

IPR2024-01071
E-Vision Optics, LLC EX-2014

teachings of Kokonaski-999. Kokonaski-999 teaches against combining the eyeglasses disclosed therein with Howell-158 by specifically using the conductive portions of the frame to facilitate communication between electronic components, which would be impeded (if not destroyed) by placing an insulating layer therebetween. Other portions of the frame can be non-conductive to the extent

Ex. 2014, ¶89

Kokonaski-999 Does Not Require Metal Frames To Facilitate Communication

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)		
(19) World Intellectual Property Organization International Bureau		
(43) International Publication Date 15 July 2010 (15.07.2010)		(10) International Publication Number WO 2010/080999 A1

of both the first and second electro-active lenses 104 and 106. Alternatively, operation of the first electro-active lens 104 can be governed by a first electronic module and operation of the second electro-active lens 106 can be governed by a second electronic module. Under this scenario, the first and second electronic modules can communicate using one or more conductive wires (e.g., embedded within a portion of the frame 102), one or more conductive portions of the frame 102 (e.g., conductive metal layers or conductive cores encapsulated by non-conductive material), one or more conductive layers of the electro-active lenses 104 and 106, an optical link, and/or via a wireless communications link. Communication between the first

Ex. 1009, [0032] (annotated)

Patent Owner's "Alternatives" Are Irrelevant

Patent Owner's Sur-Reply to
Petitioner's Reply for *Inter Partes* Review
Patent No. 8,905,541

motivation to combine, and Petitioner does not articulate why an insulating layer would have otherwise been necessary. (EX-1009, ¶32; EX-2014, ¶89.)

Petitioner also attempts to mischaracterize Patent Owner's responsive arguments as relying on a "teaching away" and a misunderstanding of the law. (Reply, 24.) But in doing so, Petitioner fails to acknowledge the relevance of Kokonaski-999's teachings in showing a lack of motivation to modify Kokonaski-999, particularly where Petitioner's combination contradicts Kokonaski-999's teachings. (Pet., 43.) That is, Petitioner does not dispute Patent Owner's point that Kokonaski-999 teaches an alternative to the combination that Petitioner proposes, such that a POSITA would not have been motivated to combine Kokonaski-999 with Howell-158 as proposed by Petitioner. (POR, 44-45.)

There is no motivation to combine Kokonaski-999 and Howell-158, because doing as Petitioner suggests (1) would have defeated the stated purposes of the references; and (2) overlooks superior alternatives to Petitioner's proposed combinations. (POR, 43-45.) Kokonaski-999 expressly states that having conductive portions of a frame would *provide* electrical functionality to Kokonaski-999's eyeglasses. (POR, 44.) Petitioner suggests adding insulation, which would *impede* that very electrical functionality. (Petition, 69.) Petitioner does not dispute

27

There is no motivation to combine Kokonaski-999 and Howell-158, because doing as Petitioner suggests (1) would have defeated the stated purposes of the references; and (2) overlooks superior alternatives to Petitioner's proposed combinations. (POR, 43-45.) Kokonaski-999 expressly states that having

Sur-Reply, 27 (highlighting added)



"[T]he 'mere disclosure of **alternative designs does not teach away.**' *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004). This court has further explained that just because better alternatives exist in the prior art does not mean that an inferior combination is inapt for obviousness purposes. *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994).

In re Mouttet, 686 F.3d 1322, 1334 (Fed. Cir. 2012).

