

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FITBIT, INC.,
Petitioner,

v.

ALIPHCOM, INC. D/B/A JAWBONE,
Patent Owner.

Case No. IPR2016-00607
Patent No. 8,529,811

**PATENT OWNER'S RESPONSE
PURSUANT TO 37 C.F.R. § 42.120**

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I. STATEMENT OF PRECISE RELIEF REQUESTED

Petitioner Fitbit, Inc. (“Petitioner”) filed a petition (“Pet.,” PN 2) for *inter partes* review (“IPR”) of claims 1-26 of U.S. Patent No. 8,529,811 (“’811 patent,” Ex. 1001). The Board instituted trial (“Decision,” PN 14) only on whether claims 16-19, 23, and 26 are anticipated and claims 20-22 and 24-25 are obvious.

Petitioner requested rehearing (“Reg. Reh’g,” PN 16) of the Board’s denial of institution on whether claims 1-15 are obvious, which the Board denied (“Decision Reh’g,” PN 18). Patent Owner AliphCom, Inc. d/b/a Jawbone (“Jawbone”) requests that the Board dismiss the IPR or confirm claims 16-26 of the ’811 patent.

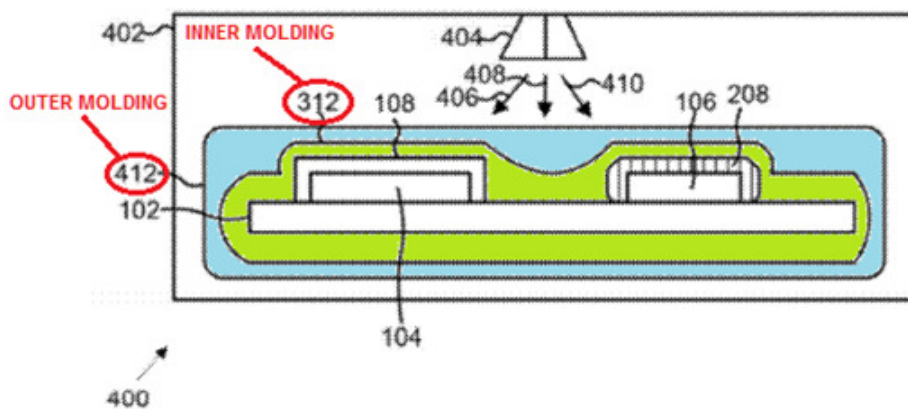
II. INTRODUCTION

All instituted grounds fail because Petitioner’s allegedly anticipatory reference, U.S. Patent Pub. No. 2006/0264756 (“Lo,” Ex. 1001), lacks key limitations of independent claim 16, from which claims 17-26 depend.

A person of ordinary skill in the art (“POSITA”) would not understand Lo’s transmission medium to provide “forming an outer molding of the wearable device that covers all or substantially all of the one or more inner moldings . . . ,” as recited in claim 16—as Petitioner alleges. Despite the requirement to meet its burden, Petitioner never provided any claim construction or any other sufficient explanation to support the claim mapping exercise provided in the petition materials. When the claims are properly construed and the ’811 patent

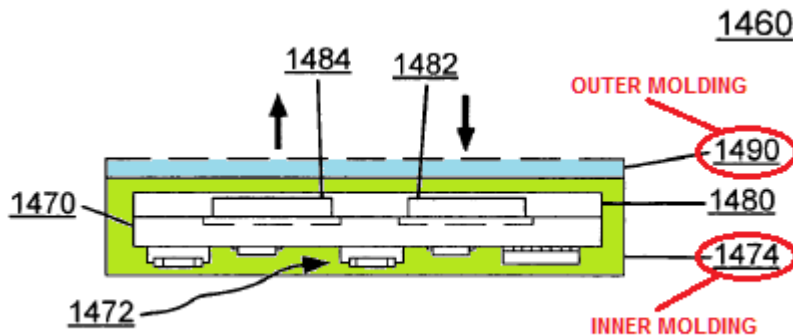
specification description and technical context are properly taken into consideration, there is simply no reasonable basis to support Petitioner's anticipation assertions. Lo simply fails to anticipate the challenged claims, and this is true either under a proper broadest reasonable interpretation or under the so-called "implied construction" discussed in the Board's Decision. *See infra* Section IV.A.

The claimed "outer molding" could not reasonably be viewed as including the transmission layer of Lo that merely sits on top of only one side of an underlying layer, as such an interpretation would be unreasonably broad and without support in the claim language, guidance provided in the '811 patent specification, or any other legally appropriate approach to construing the challenged claims. As demonstrated in annotated Fig. 4 of the '811 patent (like all other guidance in the specification), the '811 patent's outer molding 412 (colored blue) does not merely sit on top of one side of the inner molding 312, but surrounds inner molding 312 (colored green):



'811 patent Fig. 4 (annotated)

In contrast, as illustrated in annotated Fig. 14C of Lo, transmission medium 1490 (colored blue), which Petitioner equates to outer molding 412, at best covers only one of six sides of plastic housing 1474 (colored green), which Petitioner equates to inner molding 312:



Lo Fig. 14C (annotated)

A POSITA would not understand Lo’s transmission medium 1490 to be an “outer molding” as in the challenged claims—or really in any capacity. *See infra* Section IV.B. Just because the cited reference uses the buzzword “over-molded” does not equate the very different transition medium with the claimed “outer molding.” *See* Pet. at 23. When the purpose and function of Lo’s transmission medium are compared to the “outer molding” described in the ’811 patent, fundamental differences become apparent. The ’811 patent’s claimed outer molding is not only “molded” (rather than a layer simply coated on one surface) but protects the underlying inner molding and other components. *See* Ex. 1001 at 6:29-34, 6:44-47. In contrast, transmission medium 1490 of Lo does not protect plastic housing 1474 and, as shown above, leaves most of plastic housing 1474

uncovered and susceptible to damage. *See id.* at Fig. 14C, ¶ 115 (differentiating between protective layer and transmission medium). Instead of protecting the plastic housing, the transmission medium of Lo only transmits ultrasonic signals. *See* Ex. 1003 at ¶ 58. The '811 patent's claimed outer molding also serves a decorative purpose, and "a surface texture, design, or pattern may be imprinted contoured, or otherwise formed" on it. *See* Ex. 1001 at 6:6-24. In contrast, the transmission medium of Lo must lack such ornamentation to have "good conformability . . . to the skin" since "air in the media or between the monitor and the subject's skin make ultrasonic energy transmission unreliable." *See* Ex. 1003 at ¶¶ 17, 104. Further, ornamentation would be pointless since the transmission medium is not even visible, sandwiched between the monitor and a user's wrist. *See id.* at ¶ 112.

Petitioner's grounds suffer from additional problems. With respect to claims 16-19, 23, and 26, Petitioner's argument is legally flawed in that it cites to multiple different embodiments in the context of asserting an anticipation ground. *See infra* Section IV.C. When the petition does allege obviousness, with respect to claims 20-22 and 24-25, Petitioner fails to provide a sound basis for combining the prior art references. *See infra* Section V.B.

Accordingly, the Petitioner has failed to meet its burden and the claims should be found *not unpatentable*.

III. CLAIM CONSTRUCTION

A claim in an unexpired patent subject to IPR shall be given its broadest reasonable interpretation *in light of the specification* of the patent in which it appears (“BRI”). *See Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2136 (2016); 37 C.F.R. § 42.100(b). This does not mean, however, that the claims may be construed “so broadly that its constructions are *unreasonable* under general claim construction principles.” *Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1298 (Fed. Cir. 2015) (emphasis in original).

In *PPC Broadband, Inc. v. Corning Optical Commc’ns RF, LLC*, 815 F.3d 747 (Fed. Cir. 2016), the Federal Circuit reversed the Board’s determination of obviousness in an IPR because it had adopted an unreasonable construction based on select entries from a generalist dictionary. *Id.* at 752, 757. The Federal Circuit cautioned that “the broadest reasonable interpretation must be *reasonable* in light of the claims and specification.” *Id.* at 755 (emphasis in original). The Board’s “construction by referencing the dictionaries cited by the parties and simply selecting the broadest definition therein . . . fails to account for how the claims themselves and the specification inform the ordinarily skilled artisan as to precisely which ordinary definition the patentee was using.” *Id.* at 752. “The fact that [a term] has multiple dictionary meanings does not mean that all of these meanings are reasonable interpretations in light of th[e] specification.” *Id.*

As such, claim terminology must be considered in the proper context, and not viewed in isolation such that inapposite dictionary entries are selected for their “broadness.” Any interpretation of the claim must be reasonable and viewed in light of the specification. The “Board’s construction cannot be divorced from the specification and the record evidence.” *See Microsoft Corp.*, 789 F.3d at 1298 (quotation marks and citation omitted).

A. “forming an outer molding of the wearable device that covers all or substantially all of the one or more inner moldings . . .”

Although the burden is on Petitioner to “identify . . . how the challenged claim is to be construed,” Petitioner never proposed any construction for this claim language. *See* 37 C.F.R. § 42.104(b)(3); Pet. at 18.

While Petitioner never met its burden as moving party in this regard, the Board’s Institution Decision (PN 14) discusses a potential “implied construction” of the claim 16 term “covers all or substantially all.”¹ *See* Decision at 9-10. The

¹ While the Decision specifically addresses the limited phrase “covers all or substantially all,” the more complete relevant claim language is “forming an outer molding of the wearable device that covers all or substantially all of the one or more inner moldings...” The Decision at FN10 further indicates that a construction of the “forming...a molding” was not necessary. As explained in further detail here, the more complete relevant claim language need be considered,

“implied construction” is stated in the Decision as providing “a layer that is only on top of the underlying layer.” *See id.* The so-called “implied construction” is supported by general dictionary definitions entered into the record by the Board, which include some entries supporting the “implied construction” and other entries that do not support that construction. The Federal Circuit has recently cautioned against selecting the broadest entries in general purpose dictionaries to construe claims broadly without considering the reasonableness of such an approach in view of the guidance provided in the patent specification. *See PPC Broadband, Inc.*, 815 F.3d at 752; *Microsoft Corp.*, 789 F.3d at 1298.

Here, as explained in the declaration of Dr. Darrin Young, the “implied construction” is simply an unreasonable one in view of the claim language, the relevant technological context, and the guidance provided in the specification. *See* Ex. 2001 at ¶¶ 23-38. For example, although “on top of” might be listed as the broadest one of many definitions in a general purpose dictionary, it is not a ***reasonable*** interpretation because it fails to take into account the claims’ use of the term in context, the specification’s disclosures, and the prosecution history of the

whereas consideration of only the limited phrase “covers all or substantially all” ignores relevant claim language and context so as to contribute to an unreasonable interpretation of the claim.

'811 patent. *See id.* Jawbone does not bear the burden of proving patentability where Petitioner has failed to adequately explain a basis for their unpatentability allegations, as is the case here. As such, the current claims can be, and should be, found not unpatentable upon rejection of the unreasonably broad “implied construction” identified in the institution decision. Regardless, based on the term’s use in the context of the claims, the specification, and the prosecution history, Jawbone asserts that a POSITA would more reasonably understand the “outer molding of the wearable device that covers all or substantially all of the one or more inner moldings,” as recited in claim 16, as enclosing or encasing the inner moldings. *See Id.* As discussed in further detail below, such a construction plainly excludes the cited subject matter of Lo.

1. Intrinsic evidence supports Jawbone’s construction

Claim 16 discusses the outer molding in the context of a wearable device. *See* Ex. 1001 at cl. 16; Ex. 2001 at ¶ 26. A POSITA would understand a wearable device as including fitness or monitoring-type devices having electronics and hardware components, and those components would benefit from protective aspects of an encasing molding. *See id.* at ¶ 26. Moreover, the more complete relevant language of claim 16 recites “forming an outer molding of the wearable device that covers all or substantially all of the one or more inner moldings...” Any assessment of claim scope focusing solely on the language “covers all or

substantially all” would be incomplete and invites error, as it would ignore (1) what is doing the covering (molding); (2) what is being covered (inner moldings); and (3) the context of the covering (wearable electronic device). *See id.* at ¶ 36. As explained by Dr. Young, in proper context, a POSITA would not expect the claimed outer molding to merely include a layer (i.e., Lo’s transmission layer) simply covering only one top surface of another layer. *See id.* at ¶ 26.

Dr. Young further explains that the ’811 patent specification confirms that an outer molding would not include a layer simply covering one top surface of another layer. The ’811 patent specification describes the outer molding as enclosing or encasing the inner molding, and that such a configuration confers protective features for the underlying components of the wearable device. *See id.* at 7:29-32; Ex. 2001 at ¶ 26. In contrast, the ’811 patent never identifies an outer molding as including as a layer that simply sits atop one of six sides of an inner molding.

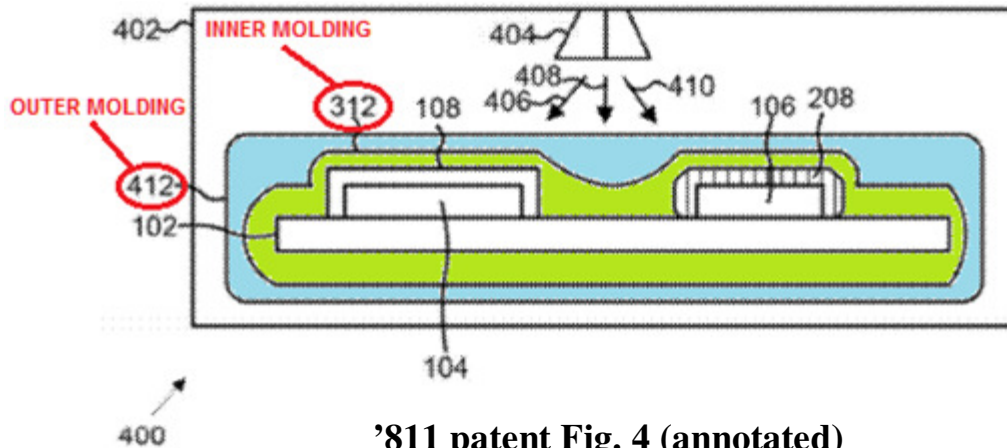
The Board’s Decision cites to the ’811 patent at 7:27-29 but the quote is an introductory sentence addressing not just the outer molding but different layers/moldings collectively. *See* Decision at 9; Ex. 2001 at ¶ 28. The full quoted language states: “In some examples, the protective layer, inner molding, and outer molding may be selectively, partially, or completely applied to a given item.” *See* Ex. 1001 at 7:27-29; Ex. 2001 at ¶ 28. With specific regard to the outer molding,

the very next sentence of the specification goes on to explain that “an outer molding may also be configured to completely enclose or encase an underlying item in order to protect the inner molding, the protective layer, and any elements from damage.” *See* Ex. 1001 at 7:29-32; Ex. 2001 at ¶ 28. The ’811 patent consistently illustrates the outer molding as so enclosing or encasing the underlying item in this manner.

Moreover, as Dr. Young confirms, there is no description and no example in the ’811 patent specification describing an outer molding as merely including a layer covering only one top surface of another layer. *See* Ex. 2001 at ¶ 29; *see also generally* Ex. 1001. Instead, the ’811 patent specification describes the outer molding in each instance as enclosing or encasing the inner molding. *See* Ex. 2001 at ¶ 29.

Fig. 4 illustrates an outer molding applied to completely encase the inner molding. *See id.* at ¶ 30. Fig. 4 illustrates a cross-sectional view of a strapband with outer molding 412. *See* Ex. 1001 at Fig. 4, 5:47-49; Ex. 2001 at ¶ 30. As shown in annotated Fig. 4 below, outer molding 412 (colored blue) completely envelops inner molding 312 (colored green) to provide protection. Indeed, the specification explains that the “outer molding is formed *over* the inner molding and protective layer” and that a final test is performed to determine, “e.g., did the outer

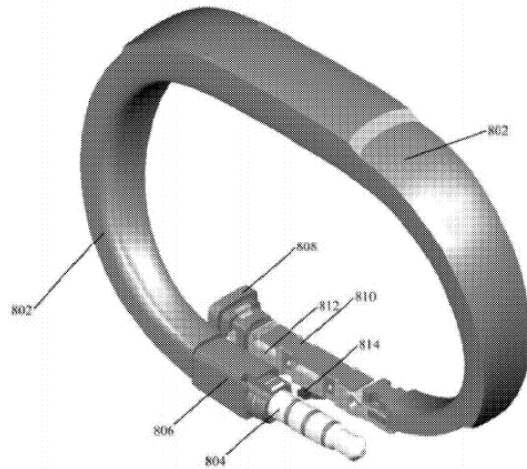
molding *fully coat* an item.” See Ex. 1001 at 7:23-26, 7:35-39, 8:32-34; Ex. 2001 at ¶ 30.



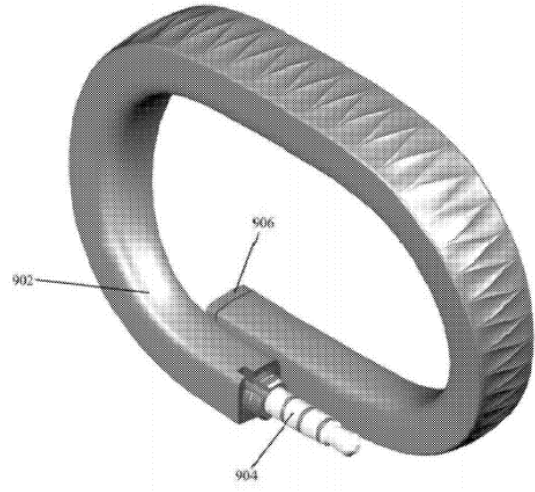
'811 patent Fig. 4 (annotated)

Fig. 8 and 9 illustrate an outer molding selectively or partially applied “to a given item,” but the outer molding nonetheless wholly encircles the inner molding. See Ex. 1001 at Fig. 8, Fig. 9; Ex. 2001 at ¶ 31. Fig. 8 shows a band with a first molding 802, i.e., the claimed inner molding. See Ex. 1001 at Fig. 8; Ex. 2001 at ¶ 31.

“FIG. 9 illustrates a view of an exemplary data-capable strapband having a second molding,” i.e., an outer molding. *Id.* at 11:39-40. As shown in Fig. 9 below, second molding 902 completely encloses or encases first molding 802, i.e., the inner molding, which is depicted in Fig. 8. See Ex. 1001 at Fig. 8, Fig. 9; Ex. 2001 at ¶ 32.



'811 patent Fig. 8



'811 patent Fig. 9

The '811 patent specification shows that the only portions that are left uncovered are the ends of the band 900—plug 904 and button 906—such that the outer molding is “selectively, partially, or completely applied to [the strapband].” *See* Ex. 1001 at 7:27-29, Fig. 9; Ex. 2001 at ¶ 33. In fact, second molding 902 not only covers first molding 802, second molding 902 even extends past first molding 802 to also cover at least plug housing 806, framework 810, and control housing 812, which are not covered by the first molding. *See* Ex. 1001 at Fig. 8, Fig. 9; Ex. 2001 at ¶ 33.

The Board’s Decision also cites to 8:65. *See* Decision at 9; Ex. 2001 at ¶ 34. Dr. Young explains that reliance on this citation in interpreting the claimed outer molding would be misplaced, the outer molding aspect is not being addressed here but is instead addressed elsewhere in the specification. *See id.* The entire sentence spans 8:62-9:3 and addresses only the first stage (i.e., applying a “securing

coating”) of the 2-stage process of Fig. 6C. *See* Ex. 1001 at 8:62-9:3, Fig. 6C; Ex. 2001 at ¶ 34. The second stage of the 2-stage process includes application of another molding (e.g., outer molding) following applying a securing coating, and is addressed later at 9:36-57. *See* Ex. 1001 at 9:36-57; Ex. 2001 at ¶ 34. There, the ’811 patent provides “the application of one or more moldings may be performed to both secure and protect underlying items (components or elements) of a finished product for various conditions such as use, weather, shock, temperature, or other environmental conditions to which finished products (e.g., band) may be subjected.” *See* Ex. 1001 at 9:36-57; Ex. 2001 at ¶ 34. Nothing in the discussion of the second stage describes an outer molding as including a layer positioned only on one top surface of the underlying layer. *See id.* In fact, a POSITA would understand that if the outer molding was merely positioned on top of one side of the underlying layer, then the outer molding would fail to fulfill its protective purpose as described in the specification. *See id.*

2. Extrinsic evidence supports Jawbone’s construction

Neither Petitioner nor Petitioners’s expert Dr. Cairns provide any argument/testimony regarding the construction of “forming an outer molding...covers all or substantially all”—or of any claim term. *See* Ex. 1002 at ¶¶ 41-44. Instead, Dr. Cairns conclusorily applies Lo to claim 16 without explaining the underlying facts or rationale for doing so. *See* Ex. 1002 at 30-31;

see also Decision Reh’g (PN18) at 9. As a result, Dr. Cairns’ testimony should be given little, if any, weight. *See Panasonic Corp. v. Optical Devices LLC*, IPR2014-00302, Paper No. 9 at 15 (PTAB July 11, 2014) (giving little weight to expert’s conclusory statements regarding prior art’s alleged disclosure of claim limitation due to lack of underlying facts or data).

In contrast, Jawbone’s expert Dr. Young confirms that that a POSITA would not view the “implied construction” as a reasonably one, but would understand the “outer molding of the wearable device that covers all or substantially all of the one or more inner moldings,” as recited in claim 16, as enclosing or encasing the inner moldings. *See* Ex. 2001 at ¶¶ 23-38.

a. Relevant dictionary definitions confirm Jawbone’s construction

Although consulting dictionaries is unnecessary here since the intrinsic evidence is clear as to how a POSITA would interpret the term “covers all or substantially all,” **relevant** dictionary definitions support Jawbone’s construction. *See PPC Broadband, Inc.*, 815 F.3d at 752 (explaining that not all definitions are reasonable).

The Board’s Decision cites to two general purpose dictionaries for definitions of the term “cover.” *See* Decision at 8-9; Ex. 2001 at ¶ 35. As Dr. Young explains, however, a POSITA would not view these dictionary entries as

contributing to a reasonable interpretation of the relevant claim terminology, relevant context, and '811 patent specification for several reasons. *See id.*

Dr. Young explains that viewing the broad definitions of the term “cover” in isolation would be inconsistent with the more complete claim language as well as conventional understanding in the relevant context and the description of the outer molding provided in the '811 patent specification. *See id.* at ¶ 36. This is particularly true with regard to the Dictionary.com definition (Ex. 3001), which provides entries including “place something over or upon” and “provide with a covering or top.” *See* Ex. 2001 at ¶ 36. Dr. Young explains that such a definition might make sense in certain other contexts, but would not make sense in the context of a molding in a wearable device providing protection of electronic and hardware components. *See id.* Moreover, as explained in further detail above, nothing in the specification describes an outer molding as simply providing a covering or a top—instead, the specification describes an outer molding as enclosing or encasing the inner molding. *See, e.g.,* Ex. 1001 at Fig. 4, Fig. 9; Ex. 2001 at ¶ 36. The cited Merriam-Webster definition (Ex. 3002) provides similar entries, such as “put something over, on top of, or in front of,” that similarly would not make sense in the relevant context of the '811 patent claims and specification. *See PPC Broadband, Inc.*, 815 F.3d at 755; Ex. 2001 at ¶ 36.

Dr. Young testifies that, if one were to look to dictionary definitions, it would be more reasonable to do so in the proper context and in conjunction with the guidance provided in the '811 patent claims and specification. *See* Ex. 2001 at ¶ 37. This is particularly true where dictionaries provide multiple different definitions, some of which are inapplicable in the relevant context—as noted above. *See PPC Broadband, Inc.*, 815 F.3d at 752; Ex. 2001 at ¶ 37. Notably, the Merriam-Webster also defines “cover” as “to be over much or all of the surface of (something).” *See* Ex. 2005 at 1; Ex. 2001 at ¶ 37. Dr. Young explains that a POSITA would view this as a more reasonable definition that comports with the relevant context and description of an outer molding provided by the '811 patent claims and specification. *See* Ex. 1001 at 6:29-34, 7:23-26, 7:29-32; Ex. 2001 at ¶ 37. An outer molding that encloses or encases an inner molding would cover “much or all of the surface” of the inner molding. *See id.* In contrast, a layer that is only on one side (e.g., top) of an underlying layer with multiple sides forming the entire surface would **not** be viewed as covering “much or all of the surface.” *See id.* As a result, “on top of” is not “reasonable in light of the claims and specification.” *See PPC Broadband, Inc.*, 815 F.3d at 755 (emphasis in original).

Accordingly, a POSITA would understand the “outer molding of the wearable device that covers all or substantially all of the one or more inner moldings,” as recited in claim 16, as enclosing or encasing the inner moldings.

When viewed in light of the specification, a POSITA would not read the outer molding as including a layer simply covering one top surface of another layer.

IV. PETITIONER FAILS TO ESTABLISH THAT LO TEACHES ALL ASPECTS OF CLAIMS 16-19, 23, AND 26

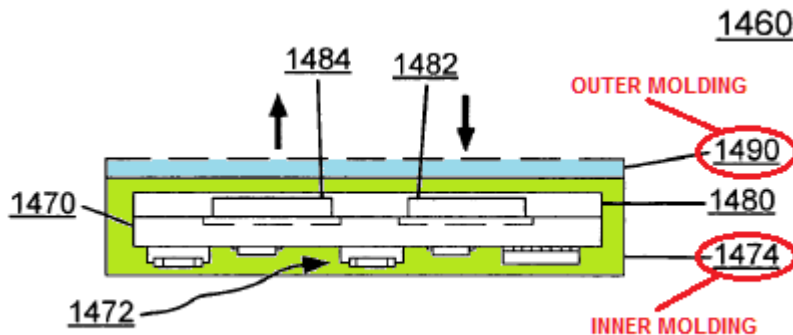
A. The transmission medium of Lo does not constitute “an outer molding of the wearable device that covers all or substantially all of the one or more inner moldings . . .”

Petitioner asserts that “[a]s depicted in Figures 14C and 15A . . . , the transmission medium (*i.e.*, outer molding) covers substantially all of the plastic housing 1474 (*i.e.*, the inner molding).” Pet. at 24; *see also id.* at 23. This is incorrect, and Lo fails to anticipate the challenged claims. Lo at least fails to disclose “forming an outer molding of the wearable device that covers all or substantially all of the one or more inner moldings . . . ,” as recited in claim 16 of the ’811 patent and required by each of the challenged claims.

1. The transmission medium of Lo does not meet the claimed limitation

As explained by Dr. Young, a POSITA would not understand Lo’s transmission medium to constitute “an outer molding of the wearable device that covers all or substantially all” of an inner molding (or Lo’s plastic housing) as recited in claim 16 of the ’811 patent. *See* Ex. 2001 at ¶ 39; *supra* Section III.A. As demonstrated below in annotated Fig. 14C of Lo, transmission medium 1490 (colored blue) doesn’t touch a vast majority of the plastic housing 1474 (colored green)—it certainly does not enclose or encase the plastic housing 1474. *See* Ex.

2001 at ¶ 41. Rather, transmission medium 1490 only covers a small portion (at best, one of six sides) of plastic housing 1474 so does not “cover[] all or substantially all” of the plastic housing. *See id.* Not even half of plastic housing 1474 is covered. *See id.*

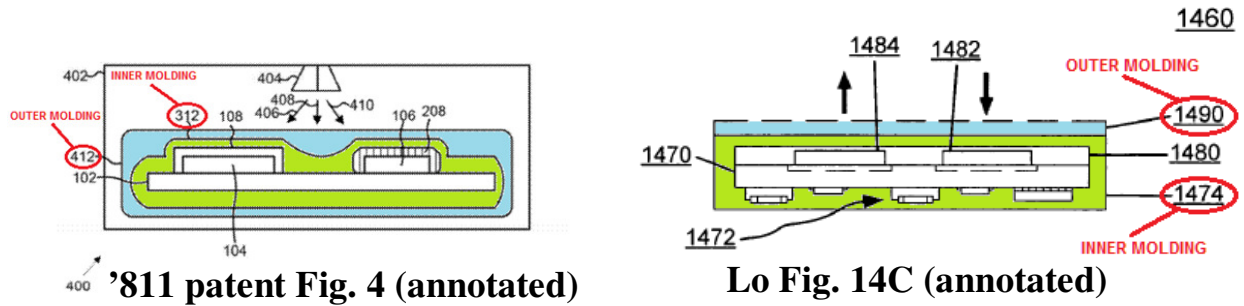


Lo Fig. 14C (annotated)

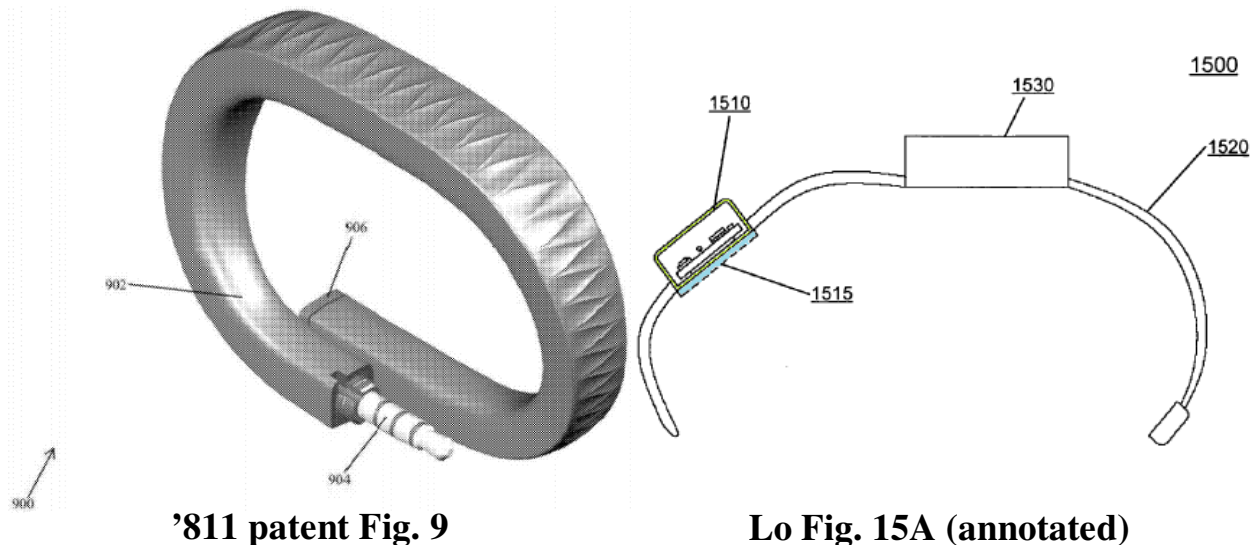
Indeed, Lo’s specification distinguishes between the manner in which plastic housing 1474 and transmission medium 1490 are applied. *See* Ex. 1003 at ¶ 125; Ex. 2001 at ¶ 42. “Plastic housing 1474 *encapsulates* the entire ultrasonic monitor, including protective layer 1480, PCB 1470 and circuitry 1472.” *See* Ex. 1003 at ¶ 125; Ex. 2001 at ¶ 42. In contrast, transmission medium 1490 is only “*in contact with a surface* of plastic housing 1474.” *See* Ex. 1003 at ¶ 125; Ex. 2001 at ¶ 42. Merely being in contact with a single surface rather than encapsulating all surfaces is not enclosing or encasing all substantially all of the plastic housing. *See id.* at ¶ 42.

By comparing the cross-sectional images of annotated Fig. 4 of the ’811 patent with annotated Fig. 14C of Lo, it is readily apparent that the transmission

medium (colored blue) does not surround the plastic housing (colored green) of Lo, unlike the outer molding (colored blue) of the '811 patent, which does surround the inner molding (colored green). *See id.* at ¶ 43.



A comparison of Fig. 9 of the '811 patent with annotated Fig. 15A of Lo shows the same difference since transmission medium 1515 does not surround ultrasonic monitor module 1510, whereas second molding 902 completely surrounds first molding 802. *See id.* at ¶ 44.



2. The transmission medium of Lo does not meet the claimed limitation even under the unreasonably broad “implied construction”

Lo fails to anticipate the challenged claims even in the event that the Board analyzes the Petition under an “implied construction.” In the Institution Decision, the so-called “implied construction” was stated as including an outer molding that “encompasses a layer that is only on top of the underlying layer.” *See* Decision at 10.

Such a construction is unreasonable and inapplicable for the reasons discussed above. Nevertheless, Dr. Young explains that even under this construction, a comprehensive analysis of the ’811 patent must address the entirety of the surface presented by the underlying layer rather than just one portion (or side) of the underlying layer. *See* Ex. 2001 at ¶ 46. In other words, in the context of the ’811 patent, if an underlying layer encapsulates an object so as to present multiple sides, the top of that underlying layer should include all surfaces and sides—not just one of the sides. *See id.* In the context of Lo, inner molding 1474 encapsulates the components shown in Fig. 14C (components 1470, 1472, 1480, 1482, 1484). *See id.* Dr. Young points out that the “top” of inner molding 1474 would presumably include the surface area presented by all sides of inner molding 1474, not just side of the inner molding 1474. *See id.* Thus, outer molding 1490 might be positioned on only side of inner molding 1474, but would not cover all or

substantially all of the top surface area, or all sides, of the underlying layer—inner layer 1474. *See id.*

Moreover, in the context of the '811 patent, Dr. Young explains that a POSITA would understand that the “top” of a layer must be from the perspective of the layer—not the perspective of a person viewing a cross section. *See id.* at ¶ 47. In other words, as it pertains to the '811 patent, because the inner molding encapsulates the framework, a POSITA would understand that the “top” of the inner molding is the surface of the inner molding, not just the side that happens to point up as the “top” when viewed in a cross-sectional image. *See id.*

In fact, as explained by Dr. Young, a POSITA could understand the “top” of plastic housing 1474 in Fig. 14C to be the opposite side or “bottom” of the actual device (as shown in Fig. 15A), since the side with transmission medium 1490 must be worn facing a user’s wrist. *See* Ex. 1003 at ¶ 112; Ex. 2001 at ¶ 48. Dr. Young explains that it would make little sense for transmission medium 1490 to be on all sides of plastic housing 1474 since transmission medium 1490 must be between the ultrasound transducer and the user’s wrist, and there would be no signals from sides that do not reside between the user’s wrist and the ultrasound transducer. *See* Ex. 1003 at ¶ 101; Ex. 2001 at ¶ 48.

Accordingly, because the transmission medium of Lo does not “cover all or substantially all” of the plastic housing, Lo does not anticipate claims 16-19, 23, and 26 of the ’811 patent, even under the “implied construction.”

B. The transmission medium of Lo is not an “outer molding”

Petitioner argues that the transmission medium of Lo is an outer molding because it “‘can be . . . *over-molded* onto . . . the plastic housing’ and that ‘[o]il-based transmission media having a fixed or balm-like consistency are well suited for *over-molding*.’” Pet. at 23.

However, Dr. Young testifies that just because Lo uses the term “over-molded” the transmission medium of Lo would not be considered an “outer molding” as claimed in the ’811 patent. *See* Ex. 2001 at ¶ 51. Dr. Young explains that the claims and specification of the ’811 patent describe an “outer molding” as having protective and ornamental features that would not be provided by Lo’s transition medium. *See id.* The specification explains that the outer molding is a “protective layer.” *See* Ex. 1001 at 6:29-34, 7:29-32; Ex. 2001 at ¶ 51. The specification also states that the outer molding can have “surface ornamentation,” such as “a surface texture, design, or pattern” that “may be imprinted contoured, or otherwise formed” on it. *See* Ex. 1001 at 6:6-24, 7:32-35; Ex. 2001 at ¶ 51. In addition, the patent claims the outer molding as providing certain protective and ornamental features. *See* Ex. 1001 at cl. 2-8; Ex. 2001 at ¶ 51. For example, claim

4 adds the limitation that the outer molding “protect[s] against ultraviolet radiation,” claim 6 adds the limitation that “the outer molding is configured to provide a waterproof seal over the plurality of elements,” and claim 7 adds the limitation that “a pattern is formed on the outer molding.” *See* Ex. 1001 at cl. 4, 6, 7; Ex. 2001 at ¶ 51.

Dr. Young points out that the transmission medium, in contrast, does nothing more than act as a means for transmitting ultrasonic signals. *See* Ex. 1003 at ¶ 58; Ex. 2001 at ¶ 52. Transmission medium 1490 of Lo does not protect plastic housing 1474, and actually leaves most of plastic housing 1474 uncovered and susceptible to damage. *See* Ex. 1003 at Fig. 14C; Ex. 2001 at ¶ 52. Lo even differentiates between an optional protective layer and the transmission medium, to which it ascribes no protective properties. *See* Ex. 1003 at ¶ 115; Ex. 2001 at ¶ 52.

Because the transmission medium lacks the structure and function of the claimed outer molding, a POSITA would not understand the transmission medium to be an “outer molding.” Thus, Petitioner fails to establish that claims 16-19, 23, and 26 of the ’811 patent are anticipated by Lo.

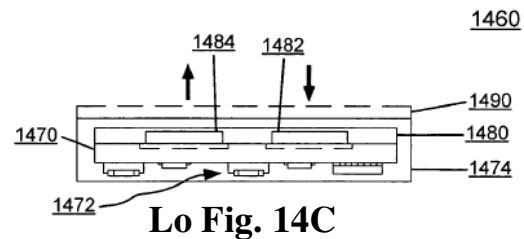
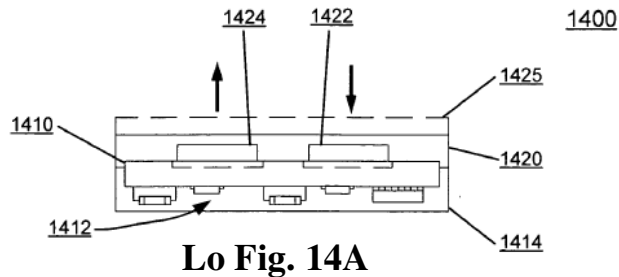
C. Petitioner inappropriately combines multiple embodiments in an anticipation ground

Petitioner does not offer an obviousness ground for claims 16-19, 23, and 26. *See generally* Pet. Instead, Petitioner only sets forth an anticipation ground based on Lo. *See id.* at 19-28. To the extent Petitioner combines various

disclosures from disparate embodiments within Lo, doing so is deficient as a matter of law. *See Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008) (reversing “because it was error for the district court to find anticipation by combining different parts of the . . . reference simply because they were found within the four corners of the document”); *see also Symantec Corp. v. RPost Commc’ns Ltd.*, IPR2014-00357, Paper 14 at 20 (PTAB July 15, 2014). “[T]he [prior art] reference must clearly and unequivocally disclose the claimed [invention] or direct those skilled in the art to the [invention] without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference.” *Id.* (quoting *In re Arkley*, 455 F.2d 586, 587 (C.C.P.A. 1972)).

In its analysis of claim 16B, Petitioner cites to disclosures related to Fig. 14A and Fig. 14C of Lo with no explanation why they should be viewed as one embodiment. *See* Pet. at 22-23, 26. Fig. 14A and Fig. 14C teach distinct, incompatible embodiments. *Compare* Ex. 1003 at Fig. 14A, ¶ 123 *with id.* at Fig. 14C, ¶ 125. Lo teaches that the embodiment disclosed in Fig. 14A has a “plastic (such as ABS plastic) housing 1414” that covers only half of ultrasonic monitor 1400. *See id.* at Fig. 14A, ¶ 123. In contrast, Lo teaches that the embodiment disclosed in Fig. 14C has a plastic housing 1474 that encapsulates all of ultrasonic

monitor 1474 and does not mention whether plastic housing 1474 may comprise ABS plastic. *See id.* at Fig. 14C, ¶ 125.



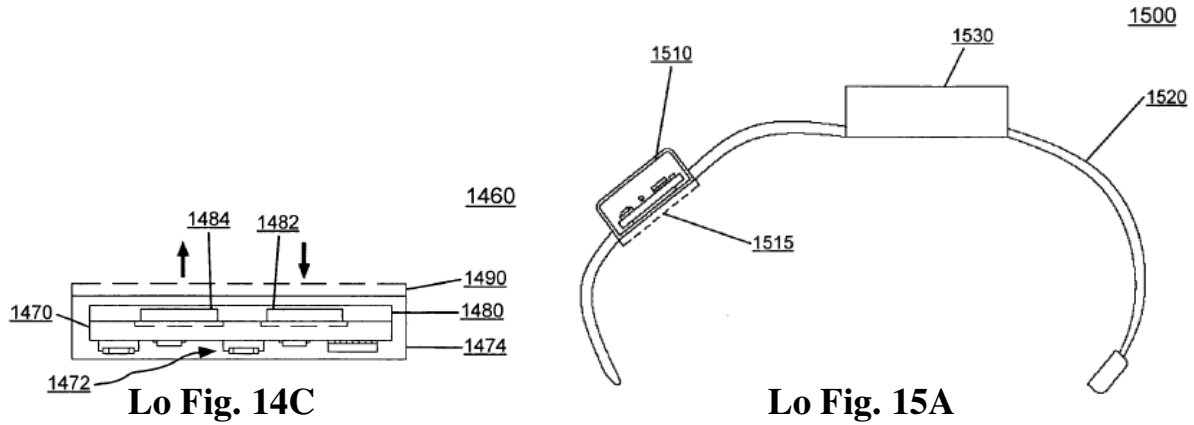
Petitioner cites to disparate disclosures to support an anticipation challenge and never alleges obviousness, much less conduct the requisite obviousness analysis. *See Pet.* at 22-23.

Citation to disparate teachings relating to Fig. 14A and Fig. 14C occurs in Petitioner's analysis of claims 18 and 19. *See id.* at 26. Here, too, Petitioner fails to show anticipation based on combining disclosures in this inappropriate manner. *See Net MoneyIN, Inc.*, 545 F.3d at 1371.

In its analysis of claim 16A, Petitioner also cites to disparate embodiments in Fig. 2A with those disclosed in Fig. 14A and Fig. 14C of Lo without adequate explanation. *See Pet.* at 21; *compare* Ex. 1003 at Fig. 2A *with id.* at Fig. 14A, Fig. 14C.

Petitioner's inappropriate combination of disparate teachings in the context of an anticipation challenge is also illustrated in its analysis of claim 16C in which Petitioner cites to both Fig. 14C and 15A. *See Pet.* at 24. As is apparent from the cross sections, the embodiment of module 1460 disclosed in Fig. 14C is not the

same embodiment as module 1510 disclosed in Fig. 15A. *Compare* Ex. 1003 at Fig. 14C, ¶ 125 *with id.* at Fig. 15A, ¶ 126.



Yet, again, Petitioner combines these disclosures without alleging obviousness or addressing a single *Graham* factor. *See* Pet. at 24.

Because Petitioner may not combine teachings in this fashion to establish an anticipation ground, Petitioner fails to meet its burden to show that claims 16-19, 23, and 26 are anticipated. *See Net MoneyIN, Inc.*, 545 F.3d at 1371.

V. PETITIONER FAILS TO ESTABLISH THAT CLAIMS 20-22 AND 24-25 ARE OBVIOUS OVER LO IN VIEW OF OTHER REFERENCES

A. Claims 20-22 and 24-25 depend on claim 16 and are not obvious for the same reasons that claim 16 is not anticipated

Because claims 20-22 and 24-25 all depend directly from independent claim 16, they include the same limitation requiring “forming an outer molding . . . that covers all or substantially all of the one or more inner moldings.” Petitioner offers no evidence that the other references upon which it relies make up for this deficiency, nor can it. As such, Petitioner has failed to demonstrate that claims 20-

22 and 24-25 are unpatentable for the same reasons as set forth in *supra* Section IV. *See Hartness Int’l, Inc. v. Simplimatic Eng’g Co.*, 819 F.2d 1100, 1108 (Fed. Cir. 1987) (holding that where independent claim is novel and nonobvious, dependent claim is also novel and nonobvious due to containing all limitations of independent claim plus further limitations).

B. Petitioner has not met its burden to demonstrate that a person of ordinary skill in the art would have combined Lo with other references to render obvious claims 20-22 and 24-25

Petitioner argues that claims 20-22 are obvious over Lo in view of U.S. Patent Pub. No. 2006/0110537 (“Huang,” Ex. 1007), that claim 24 is obvious over Lo in view of Jiri G. Drobny, *Handbook of Thermoplastic Elastomers* (1st ed. 2007) (“Handbook of Thermoplastic Elastomers,” Ex. 1006), and that claim 25 is obvious over Lo in view of U.S. Patent Pub. No. 2010/0178834 (“Toyoda,” Ex. 1008). For each claim, Petitioner offers a short paragraph regarding the combination. *See* Pet. at 29-30 (claim 20), 31-32 (claim 21), 33 (claim 22), 34-35 (claim 24), 36-37 (claim 25).

Petitioner bears the burden of articulating a *prima facie* case of obviousness. *See* 35 U.S.C. 316(e). “[T]he ultimate burden of persuasion of obviousness must remain on the patent challenger and ‘a fact finder must consider *all* evidence of obviousness and nonobviousness before reaching a determination.’” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1376 (Fed. Cir. 2016) (emphasis in

original). “[T]hat burden never shifts to the patentee.” *Id.* at 1375 (quotation marks and citation omitted). “[A]n obviousness inquiry requires examination of all four *Graham* factors and . . . an obviousness determination can be made only after consideration of each factor.” *Id.* at 1376 (quotation marks and citation omitted).

The *Graham* factors require analysis of: (1) the scope and content of the prior art, (2) differences between the prior art and the claims at issue, (3) the level of ordinary skill in the art, and (4) secondary considerations such as commercial success, long-felt need, failure of others, etc. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966). Moreover, “obviousness grounds . . . [must be supported by] some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *KSR Int’l. Co. v. Teleflex Inc.*, 550 U.S. 399, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Petitioner does not address the *Graham* factors, and has not met its burden to show that a person of ordinary skill in the relevant field had reason to combine the elements in the manner claimed. *See In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d at 1380 (reversing Board’s finding of obviousness because petitioner failed to provide more beyond “conclusory statements to find a motivation to combine”).

1. Claims 20-22 Are Not Obvious over Lo in View of Huang

Petitioner’s reasons for combining Lo and Huang lack sufficient analysis and are generic, conclusory statements detached from the art and the ’811 patent.

See In re Kahn, 441 F.3d at 988 (“[T]here must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”); Pet. 30-31, 33. Dr. Cairns’ declaration parrots Petitioner’s statements and suffers the same problems. *Compare* Pet. at 30-31, 33 *with* Ex. 1002 at ¶¶ 64–66.

In particular, Petitioner’s analysis fails to consider whether Lo would still be suitable for its intended purpose after being modified by Huang. *See In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984) (holding that there is no adequate basis to make proposed modification if it would render prior art invention unsatisfactory for intended purpose). Lo teaches that it is critical for the materials used in the monitor be suitable for transmitting ultrasonic waves because “ultrasonic signals are prone to diffraction and attenuation at the interface of two media of different densities.” *See* Ex. 1003 at ¶ 17. Yet, neither the Petition nor Dr. Cairns ever addresses whether Huang’s materials would be suitable substitutes for the materials taught by Lo such that they “retain good ultrasonic transmission properties.” *See id.* at ¶ 122. Without addressing this critical feature, Petitioner has failed to articulate an adequate basis for motivation to combine Lo and Huang.

Petitioner also argues that a POSITA would have modified Lo’s plastic housing with Huang’s materials because it would have been a “natural design choice” or an “obvious application of known techniques.” *See* Pet. at 30-31, 33. Yet, a “design choice” rationale is inapplicable where the change is not aesthetic or

a mere rearrangement of elements. *See In re Seid*, 161 F.2d 229, 231 (C.C.P.A. 1947).

Accordingly, Petitioner has failed to establish that claims 20-22 are obvious over Lo in view of Huang.

2. Claim 24 Is Not Obvious over Lo in View of Handbook of Thermoplastic Elastomers

Petitioner argues that a POSITA would have modified Lo's plastic housing to be made of a medical-grade thermoplastic elastomer taught in Handbook of Thermoplastic Elastomers. *See* Pet. at 34-35. Yet, as with claims 20-22, Petitioner's argument fails to articulate a rational basis as to why a person of ordinary skill in the art would have combined Lo and Handbook of Thermoplastic Elastomers and would have had a reasonable expectation of success to do so, such as addressing whether Handbook of Thermoplastic Elastomers' materials would "retain good ultrasonic transmission properties" and be suitable substitutes. *See* Ex. 1003 at ¶ 122; *supra* Section V.B.1. Again, Petitioner relies on the generic, conclusory statement that modifying Lo "would have been an obvious design choice to one skilled in the art that yielded predictable results," and fails to address the suitability of the proposed modification for Lo's intended purpose of providing an ultrasonic monitor. *See In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d at 1380; Pet. at 34-35.

Accordingly Petitioner has not met its burden to show that claim 24 is

obvious over Lo in view of Handbook of Thermoplastic Elastomers.

3. Claim 25 Is Not Obvious over Lo in View of Toyoda

Petitioner does no more than allege that the limitations of claim 25 were independently known in the prior art and that it therefore would have been obvious to combine them. *See* Pet. at 36-37. As with Petitioner's conclusory statements above, *see supra* Sections V.B.1 and V.B.2, this is legally insufficient. *See In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d at 1380. Accordingly Petitioner has not met its burden to show that claim 25 is obvious over Lo in view of Toyoda.

VI. CONCLUSION

The Board should terminate the trial or enter judgment against Petitioner in this IPR because Petitioner has failed to demonstrate that Lo anticipates every limitation of claims 16-19, 23, and 26 of the '811 patent, that Lo in combination with other references discloses every limitation of claims 20-22 and 24-25, and that the references can be combined. The Board cannot and should not substitute its own opinion for the evidence and analysis of record. Instead, the Board should confirm the validity of claims 16-25 of the '811 patent on this record.

Respectfully submitted,

Date: December 7, 2016

/ Michael T. Rosato /

Michael T. Rosato, Lead Counsel

Reg. No. 52,182

VII. APPENDIX

EXHIBIT NO.	DESCRIPTION
2001	Declaration of Darrin J. Young, Ph.D.
2002	Curriculum Vitae of Darrin J. Young, Ph.D.
2003	<i>Cover</i> , <u>Merriam-Webster</u> , http://www.merriam-webster.com/dictionary/cover (last visited Nov. 1, 2016)

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(a), the undersigned certifies that this paper contains no more than 14,000 words, not including the portions of the paper exempted by 37 CFR § 42.24(a). According to the word-processing system used to prepare this paper, the paper contains 6,893 words.

Dated: December 7, 2016

/ Michael T. Rosato /

Michael T. Rosato, Lead Counsel

Reg. No. 52,182

CERTIFICATE OF SERVICE

I certify that the foregoing Patent Owner's Preliminary Response Pursuant to 37 C.F.R. § 42.107 and Exhibits 2001 through 2003 were served on this 7th day of December, 2016, on the Petitioner at the correspondence address of the Petitioner as follows:

Naveen Modi
Yar R. Chaikovsky
Michael C. Hendershot
David T. Okano
PAUL HASTINGS LLP
875 15th St. N.W.
Washington, D.C., 20005
PH-Fitbit-Aliph-IPR@paulhastings.com

Respectfully submitted,

Date: December 7, 2016

/ Michael T. Rosato /
Michael T. Rosato, Lead Counsel
Reg. No. 52,182