

Samsung Electronics Co., Ltd.;
Samsung Electronics America, Inc.,

v.

Ouraring, Inc.,

Petitioner's Presentation For IPR2025-00147

U.S. Patent Nos. 11,188,124

May 13, 2026

Overview

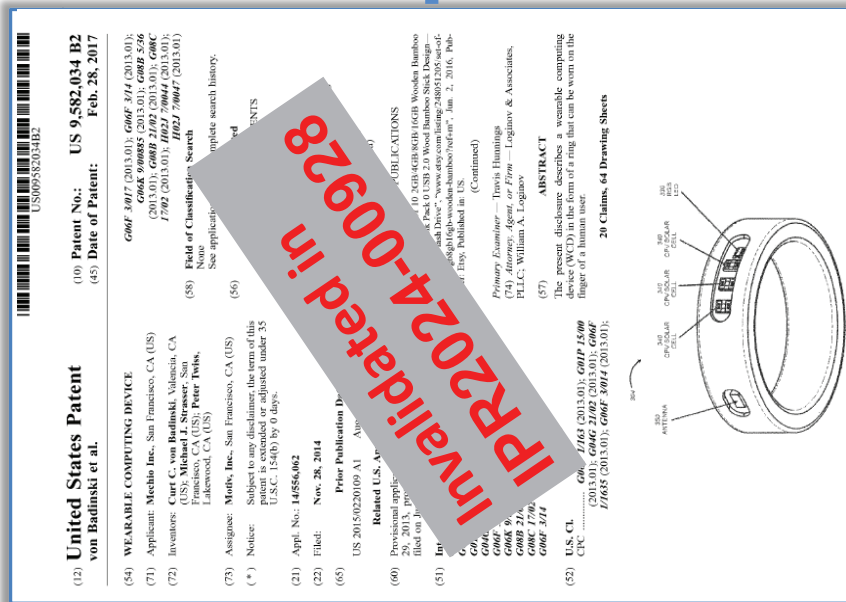
- Alleged invention
- Overview of the prior art
- Mestas-based Grounds
- Yuen -based Grounds
- Secondary Considerations

Overview

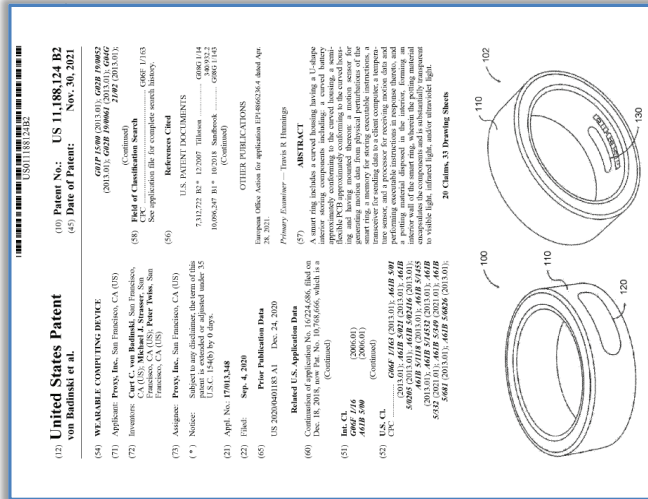
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124 patent is a continuation of the now-invalidated 034 patent and shares a common specification

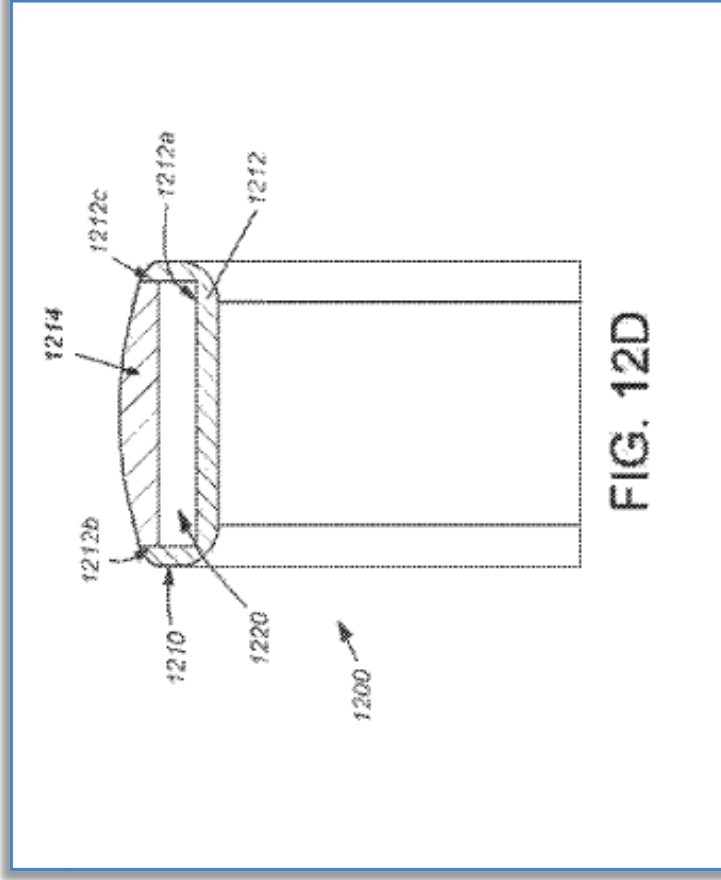
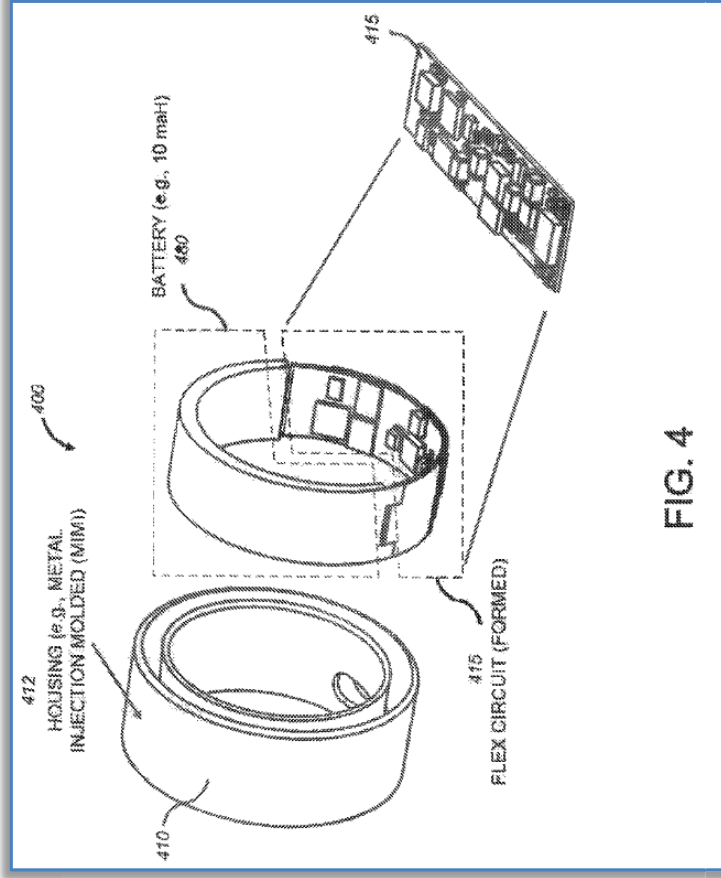
034 Patent



124 Patent



Challenged patents focus on internal packaging in a wearable form factor



**Challenged patents are about packaging,
not miniaturization of internal components**

Demonstrative Exhibit Not Evidence

E.g., Ex-1001, Figs. 4, 12D, Reply (Paper 25) at 12-13

Challenged patents do not include battery implementations details

PO Expert, Dr. Mercier:

2 The '178 patent, you know, has a lot of
3 descriptive drawings of, you know, the ring geometries, the
4 batteries, the arrangements, and packaging and so on. So
5 the '178 patent gives a lot of technical details and
6 blueprints about how a POSITA, you know, might go about
7 designing one of these smart rings. Does it offer or teach
8 on how to do battery manufacturing? No, it does not.

4 Q. You would agree that the specific steps required
5 from going from a larger curved battery to a ring-sized
6 curved battery are not taught by the '178 patent, right?
7 ATTORNEY PLUTIA: Object to form. Relevance.
8 THE WITNESS: I mean, yeah. The '178 patent is
9 not -- is not a manufacturing recipe for batteries. So,
10 no, that's not disclosed.

Challenged patents are about packaging,
not miniaturization of internal components

Demonstrative Exhibit Not Evidence

Ex-1081, 134:2-8, 135:4-10;

7

Challenged patents do not include battery implementations details

PO Expert, Dr. Mercier:

Q: Battery miniaturization details are not included in the -124 patent. Claim 1 of the -124 patent requires a finger-sized curved battery.

You agree that manufacturing or otherwise acquiring a -- a finger-sized curved battery is outside the agreed-upon level of skill in the art.

So the question is:

How would one of skill in the art implement an invention claimed by Claim 1?

THE WITNESS:- Well, like I said, you know, the inventors took a path that would not be obvious to the ordinary artisan.

They ended up acquiring a battery manufacturing facility and -- and worked with them to -- to make the engineering happen that -- that they needed.

None of these required steps “that would not be obvious” to implement the claimed invention are disclosed in the patent

Demonstrative Exhibit Not Evidence

Those of skill in the art knew how to implement appropriately sized batteries

178, 702



“A patent need not teach, and preferably omits, what is well known in the art.”

Visual Memory v. NVIDIA, 867 F.3d 1253, 1261 (Fed. Cir. 2017)

**If PO's expert is correct, the 124 patent
does not comply with Section 112**

Demonstrative Exhibit Not Evidence

Reply (Paper 25) at 3

9

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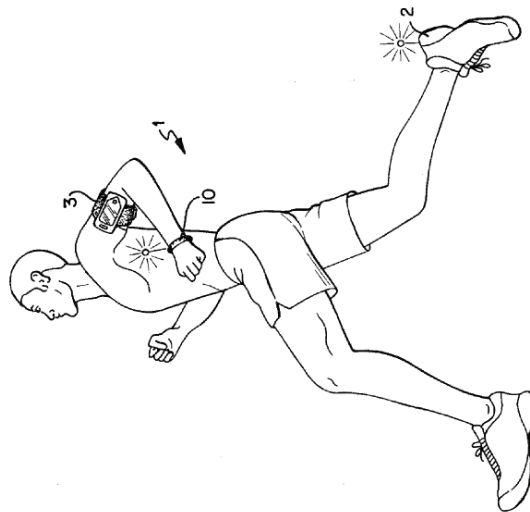
Mestas (Grounds 1 and 2)

(19) **United States**
(12) **Patent Application Publication** (10) Pub. No.: US 2014/0244009 A1
(43) Pub. Date: Aug. 28, 2014
(57) Mestas

(54) **ACTIVITY MONITORING, TRACKING AND SYNCHRONIZATION**
(71) Applicant: NIKE, INC., Beaverton, OR (US)
(72) Inventor: Alex Mestas, Portland, OR (US)
(73) Assignee: NIKE, INC., Beaverton, OR (US)
(21) Appl. No.: 14/786,425
(22) Filed: Feb. 21, 2014
(60) Provisional application No. 61/768,279, filed on Feb. 22, 2013.

Publication Classification
(51) Int. Cl. A61B 24/00 (2006.01)
(52) U.S. Cl. CPC A61B 24/0062 (2013.01)
(57) USPC 700/91

ABSTRACT
A physical activity monitoring method and system may include a competition component requiring users to compete based on various metrics. The challenge may be device-specific, activity type-specific, user-type specific and the like. In some examples, the users' performance might only affect the status of the competition if the user synchronizes the information to an activity monitoring system.

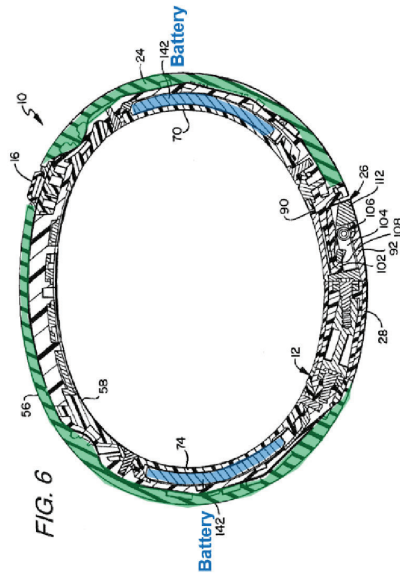


Demonstrative Exhibit Not Evidence

(57)

ABSTRACT

A physical activity monitoring method and system may include a competition component requiring users to compete based on various metrics. The challenge may be device-specific, activity type-specific, user-type specific and the like. In some examples, the users' performance might only affect the status of the competition if the user synchronizes the information to an activity monitoring system.



Ex-1010 at Cover, Fig. 6 (annotated)

Yuen (Ground 3)

United States Patent Yuen et al.

(12) Patent No.: US 8,954,135 B2
(45) Date of Patent: Feb. 10, 2015

(54) PORTABLE BIOMETRIC MONITORING DEVICES AND METHODS OF OPERATING SAME

(71) Applicant: Fitbit, Inc., San Francisco, CA (US)

(72) Inventors: Shih-Wei Gao, Yuen, Berkeley, CA (US); James Park, San Francisco, CA (US); Andrew Cole, Oakland, CA (US); Eric Nathan Friedman, San Francisco, CA (US); James Park, Berkeley, CA (US)

(73) Assignee: Fitbit, Inc., San Francisco, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: 13/924,784

(22) Filed: Jun. 24, 2013

(65) Prior Publication Data US 2014/0107493 A1 Apr. 17, 2014

Related U.S. Application Data

(60) Provisional application No. 61/662,961, filed on Jun. 22, 2012, provisional application No. 61/752,826, filed on Jun. 15, 2013.

(51) Int. Cl. A61B 5/00 (2006.01); A61B 5/024 (2006.01)

(52) U.S. Cl. CPC A61B 5/0002 (2013.01); A61B 5/02427 (2013.01); A61B 5/02438 (2013.01); A61B 5/02439 (2013.01); A61B 5/02416 (2013.01); A61B 5/0113 (2013.01); A61B 5/0112 (2013.01); A61B 5/0113 (2013.01); A61B 5/0112 (2013.01); A61B 5/0113 (2013.01); A61B 5/0112 (2013.01)

(53) U.S. Cl. CPC A61B 5/0002 (2013.01); A61B 5/02427 (2013.01); A61B 5/02438 (2013.01); A61B 5/02439 (2013.01); A61B 5/02416 (2013.01); A61B 5/0113 (2013.01); A61B 5/0112 (2013.01); A61B 5/0113 (2013.01); A61B 5/0112 (2013.01)

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(53) U.S. Cl. CPC A61B 5/0002 (2013.01); A61B 5/02427 (2013.01); A61B 5/02438 (2013.01); A61B 5/02439 (2013.01); A61B 5/02416 (2013.01); A61B 5/0113 (2013.01); A61B 5/0112 (2013.01); A61B 5/0113 (2013.01); A61B 5/0112 (2013.01)

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ABSTRACT

The present inventions, in one aspect, are directed to portable biometric monitoring device including a housing having a physical size and shape that is adapted to couple to the user's body, at least one band to secure the monitoring device to the user, a physiological sensor, disposed in the housing, to generate data which is representative of a physiological condition of the user data. The physiological sensor may include a light source to generate and output light having at least a first wavelength, and a photodetector to detect scattered light (e.g., from the user). A light pipe is disposed in the housing and optically coupled to the light source directs/transmits light therefrom along a predetermined path to an outer surface of the housing. Processing circuitry calculates a heart rate of the user using data which is representative of the scattered light.

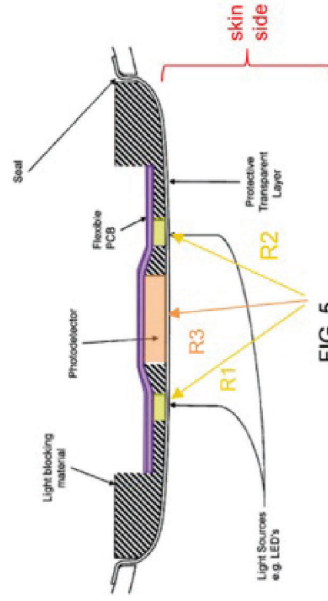
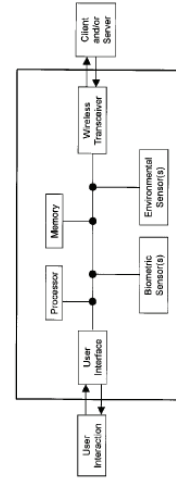


FIG. 5

29 Claims, 30 Drawing Sheets



Demonstrative Exhibit Not Evidence

Ex-1006 at Cover, Fig. 5 (annotated)

Instituted Grounds

Claim(s) Challenged	35 U.S.C. § ³	Reference(s)/Basis
1, 2, 4, 5, 8–11, 14, 16, 18, 19	103	Mestas ⁴ , Schröder ⁵
3, 6, 12, 13, 15, 17, 20	103	Mestas, Schröder, Yuen ⁶
1–6, 8–20	103	Yuen, Schröder, Mestas

Prior art and grounds high-level summary

- Mestas
 - Wearable health monitor that includes curved batteries
 - Teaches reducing “circumferential size” of wearable ring device
- Yuen
 - Wearable health monitor that teaches small form factors, such as an “earring” or “toe band”
- Schröder
 - Finger ring prior art asserted as a primary reference against all challenged patents

Motivations to combine Mestas, Schröder, and Yuen: all references relate to small form factor electronic devices

● Mestas

- “wearable athletic device ... worn in a variety of locations on a user’s body including on a user’s chest..., around a user’s wrist, around a user’s arm, on a user’s head, on a user’s ankle or thigh, and the like”
- “may be varied in circumferential size”

● Yuen

- “biometric monitoring device which may be secured to the user through the use of a band”
- “The biometric monitoring device of the present inventions may also be integrated and worn in a necklace, chest band, bra, patch, glasses, earring, or toe band. The device ... can be worn in any number of ways including, but not limited to, those listed above.”

● Schröder

- “finger-ring is worn by a user, e.g., permanently on the finger”

Motivations to combine Mestas, Schröder, and Yuen: general trend to miniaturize electronic components

859,953

PO's Expert Dr. Mercier:

Q. Okay. But you would agree that there was kind of a general pressure in the industry around 2013 to attempt to miniaturize batteries, correct?

A. I do....

Q. And you would agree that between 2003 and 2017 when this paper was published, the components that Professor Asada was working with got substantially smaller than they were in 2003, right?

A. I'm not certain if the exact components did. In general, electronic miniaturization happened between 2003 and 2017.
Yes.

Demonstrative Exhibit Not Evidence

Ex-1081, 148:24-149:16; Ex-1082, 236:14-20

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Motivations to combine Mestas, Schröder, and Yuen: similar subject matter (sensors) in all references

859,953

- Mestas
 - “sensor assembly 146 may comprise a plurality of different sensors”
 - “When worn by the user, the device 10 can track activity of the user... including sensing of activity by a user”
- Yuen
 - “a biometric monitoring device ... to collect ... physiological and/or environmental data from embedded or resident sensors”
- Schröder
 - “finger-ring ... can have integrated therein at least one biometric sensor”
 - “infrared diode and the infrared sensor” capture “vein image of the ring finger”

Overview

- Alleged invention
- Overview of the prior art
- Mestas-based Grounds
- Yuen -based Grounds
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PO's "teaching away" arguments fail

Patent Owner Response:

Schröder's primary embodiment features an externally accessible, replaceable chip module 10 (EX1007, Fig. 3, 9:1-3), prioritizing modularity for its security functions. This teaches away from integrating Mestas's extensive internal components (large battery, complex PCB for physiological monitoring) in a sealed, compact ring. Mestas emphasizes the need for larger form factors to

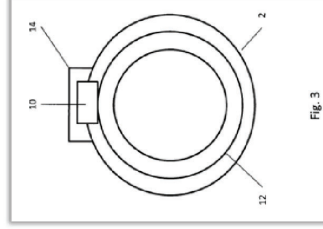
TEACHES AWAY

Dr. Mercier's testimony

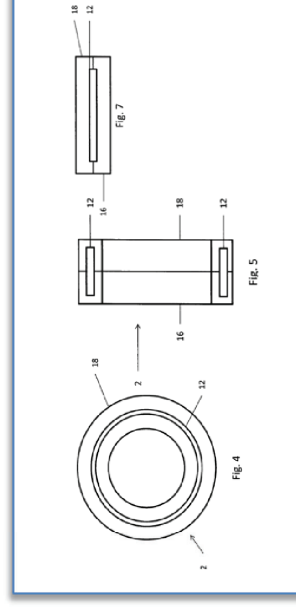
Q: And so would you agree that the figure 4 embodiment is a different embodiment from the figure 3 embodiment?

A: Yeah. It would -- it would have to be.

Petitioner relies on a different embodiment:



≠



Demonstrative Exhibit Not Evidence

PO's "teaching away" arguments fail

Patent Owner Response:

Petitioner argues that Mestas's teaching that slippage is problematic teaches towards a combination with Schröder's smaller form factor in order to ensure a more secure fit. Pet., 20-21. Mestas actually teaches away from the combination. Mestas already provides a POSITA with a solution to slippage using ribbing, and POSITA would not need to look outside of Mestas to solve this problem. EX1010,

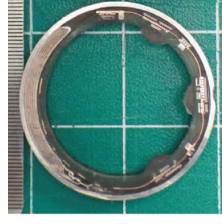
EXHIBIT

Mestas teaches to prevent slippage on "other body parts":

nism 26. In one or more arrangements, an outward or exterior facing side of housing 12 of the wearable device assembly 10 may include a smooth texture while an interior facing side (e.g., contacting the wearer's body) may include frictional features. In one example, the interior facing side of the wearable device assembly 10 may be ribbed to improve traction and prevent slippage around a user's wrist or other body part.

PO's Expert Dr. Mercier:

Q. Do these internal bumps and ridges make the Oura ring device unusable as a finger ring?
A. No. There's millions of customers who've used it with those bumps.

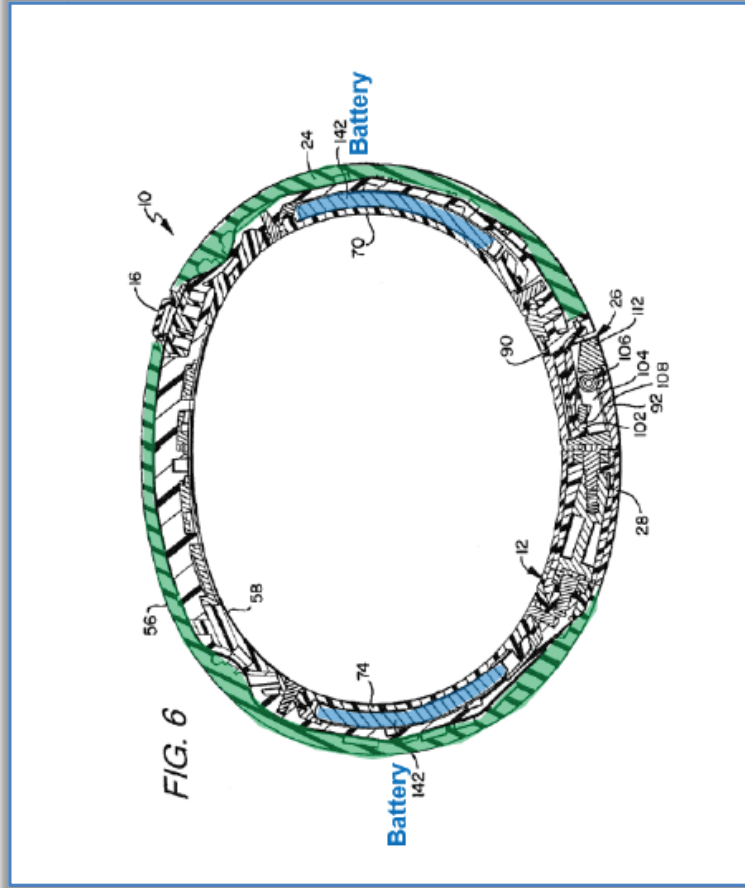


Demonstrative Exhibit Not Evidence

POR (Paper 20) at 32; Reply (Paper 25) at 2; Ex-1010, ¶1152; Ex-1368, 67:5-68:8

21

1[b]/14[b] – Curved Battery



[0168] As discussed, the controller 14 includes the power supply 142 in the form of batteries 142. It is understood that a single battery 142 could be utilized in the design. Such a design may allow for a flexible circuit member having additional areas to support additional components associated with the device 10. In an exemplary embodiment, however, the power supply 142 utilizes a pair of batteries 142. As can be appreciated from FIGS. 6 and 20, the batteries 142 have a curvilinear or curved configuration and are generally rigid members. The batteries 142 define curved planar surfaces. In an exemplary embodiment, the device 10 utilizes the pair of batteries 142. The first battery 142 is positioned in the first recessed compartment 50 of the spine member 22, and the second battery 142 is positioned in the second recessed compartment 52 of the spine member 22. The batteries 142 have a thickness that generally corresponds to a depth of the recesses 50, 52. The batteries 142 are generally flush with the

Mestas teaches to use a curved battery with a thickness that corresponds to the depth of a recess in the wearable device

1[b]/14[b] – Curved Battery



Rechargeable Curved



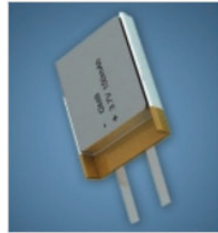
Curved LiPo201030



Tiny LiPo Battery



Thin LiPo GMB042541



Non-Magnetic Lithium Polymer Battery



Curved Lithium Polymer Battery

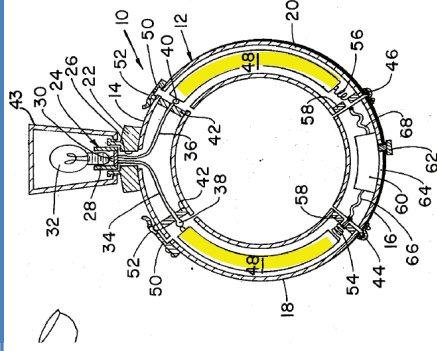


FIG. 2

The batteries 48 are essentially identical to AA size 1.5 volt cylindrical flashlight batteries except they are manufactured specially to be elongated along a curve to enable the batteries to fit inside the sectors 18 and 20. The rear ends of sectors 18 and 20 respectively

Finger-sized curved batteries were known

Demonstrative Exhibit Not Evidence

Reply (Paper 25) at 3-4; Ex-1002, ¶¶96; Ex-2021, 12-13; Ex-1061 Fig 2, 25-30

1[b]/14[b] – Curved Battery



Rechargeable Curved



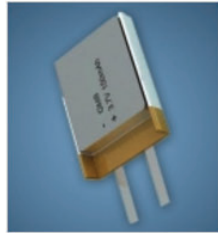
Curved LiPo201030



Tiny LiPo Battery



Thin LiPo GMB042541



Non-Magnetic Lithium Polymer Battery



Curved Lithium Polymer Battery

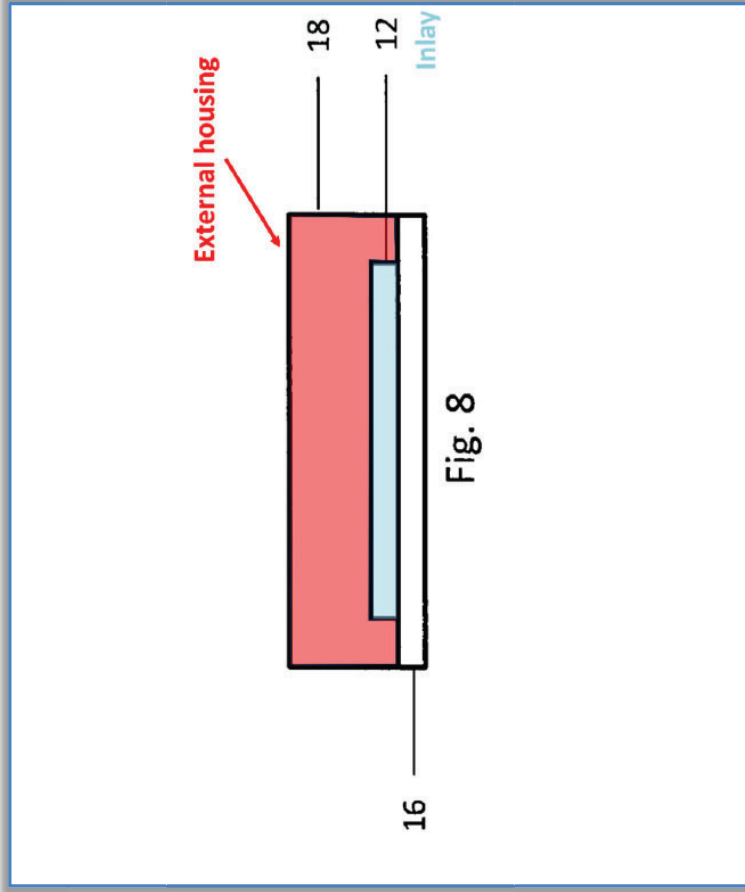
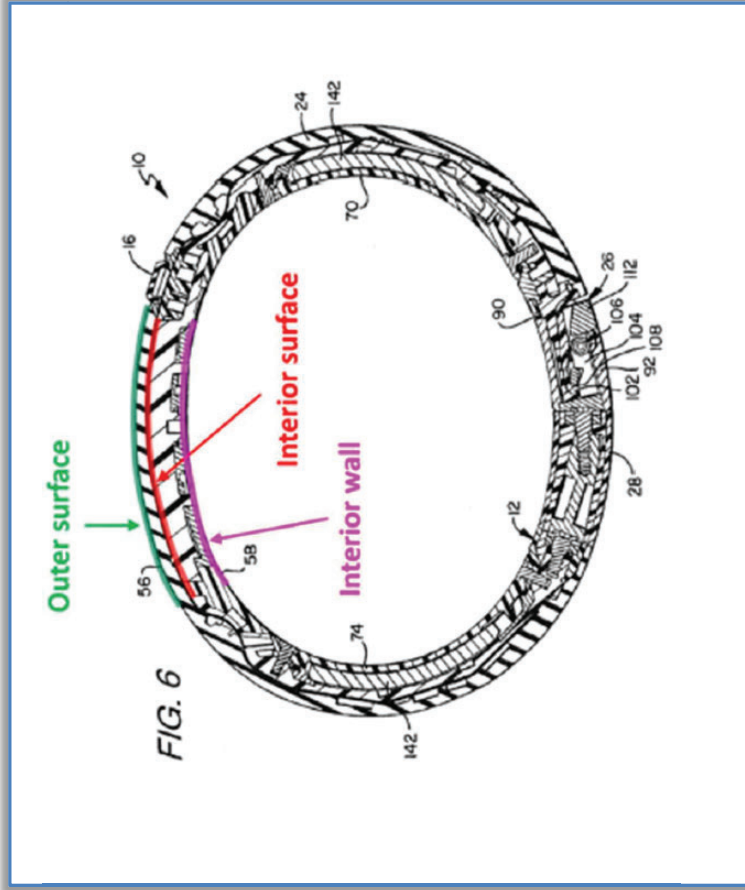
9. As I explained in my declaration, the batteries listed on this website included “Li-Po batteries,” which I explained earlier have “high energy density provided sufficient power for devices with multiple sensors, wireless communication modules, and microcontrollers, even in miniaturized applications like finger rings.” Ex-1002, ¶¶ 94, 96.

Finger-sized curved batteries were known

Demonstrative Exhibit Not Evidence

Reply (Paper 25) at 3-4Ex-1002, ¶¶ 96, Ex-2021, 12-13; Ex-1369, ¶ 9

1[a]/14[a] (External Housing)



Both Mestas and Schröder teach an outer surface, an inner surface, and an interior space between them that houses all of the components

Demonstrative Exhibit Not Evidence

Reply (Paper 25) at 3-4; Ex-1010, Fig. 6 (annotated); Ex-1007, Fig 8 (annotated)

1[i]/14[i] – Potting Material

Patent Owner
Sur-reply:

at 61-62. Mestas at ¶¶ 172-173 provides for the deposition of potting to form the spine member (before components are added) as a first step, for the deposition of potting from the spine member to the inner portion of Mestas as a second step, and for the deposition of potting from the spine member to the outer portion as a third step. It does not provide for the deposition of potting between the components and

Shroder:

For this purpose, the chip module 10 and the antenna coil 8 and any further electronic devices are arranged on a carrier foil, as described above. The individual ring blanks can be singled out of the carrier foil in different lengths, in order e.g. to roll up the ring blanks in a ring shape. Subsequently, a rolled or non-rolled ring blank can be inserted into an injection mold to overmold the ring blank with a suitable injection-molding material. The material employed for this purpose is e.g. a plastic or a resin. After overmolding there is obtained a ring-shaped body in whose interior the chip module 10 and the antenna coil 8 and any further electronic devices are arranged.

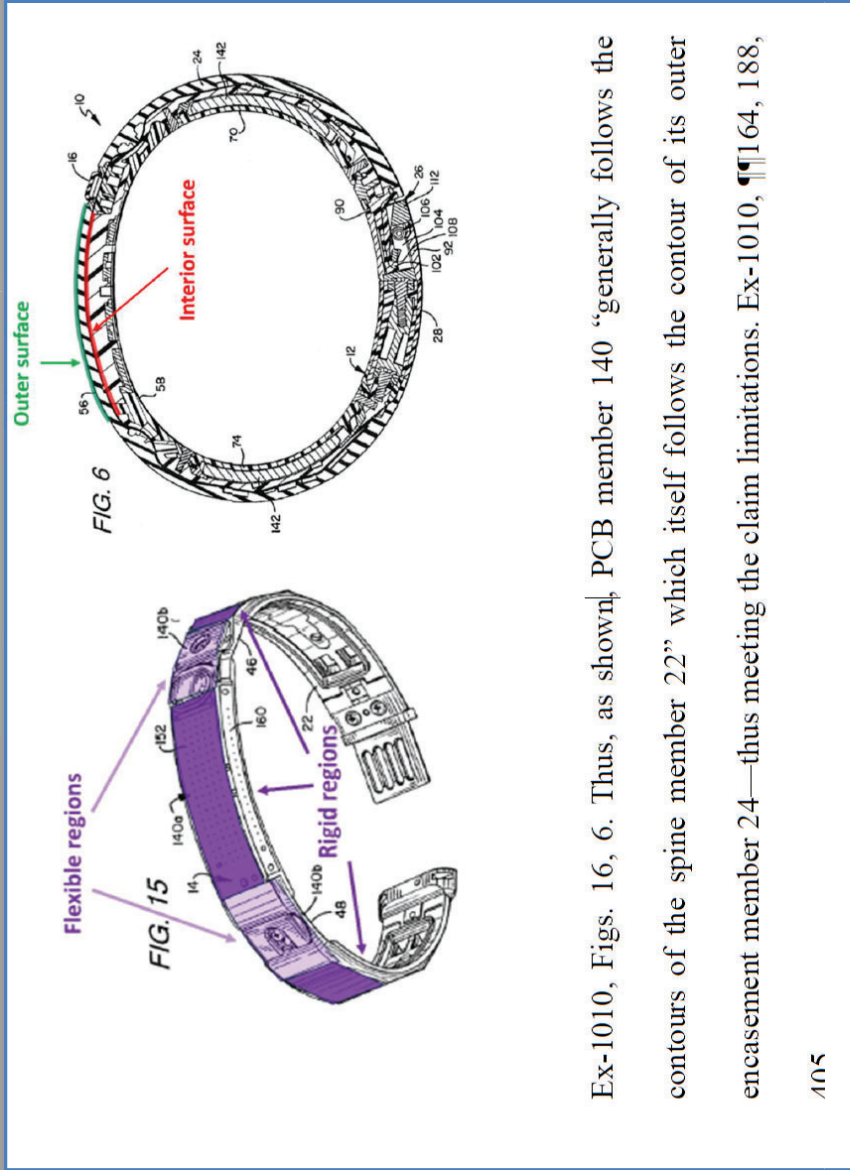
There is no dispute that Mestas uses potting and that Schröder teaches an internal surface that may be made of standard potting materials

Demonstrative Exhibit Not Evidence

PO Sur-reply (Paper 28) at 6; Ex-1007, 14:38-49

26

1[c]/14[c] – Printed Circuit Board



Ex-1010, Figs. 16, 6. Thus, as shown, PCB member 140 “generally follows the contours of the spine member 22” which itself follows the contour of its outer encasement member 24—thus meeting the claim limitations. Ex-1010, ¶¶164, 188,

Ans

There can be no dispute that Mestas and Schröder’s internal components conform to an outer arc of the wearable device

Demonstrative Exhibit Not Evidence

Reply (Paper 25) at 10; Ex-1007, 14:38-49

Overview

- Alleged invention
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- Mestas-based Grounds
- Yuen -based Grounds
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1[a]/14[a] (External Housing)

Patent Owner Response:

like material).” EX1006, 24:17-20. Claim elements 1[a]/14[a] requires an interior space defined by an interior surface and sidewalls. Yuen’s interior space is defined by two additional surfaces not present in the ’124 Patent’s claimed structure.

Reply:

EX1006, Fig. 12 (annotated in POR at 81). First, claim elements 1[a]/14[a] do not require that the interior space be defined *only* by the interior surface and sidewalls. PO’s argument that Yuen has an “interior space” that is *also* defined by other surfaces thus, in effect, concedes that Yuen satisfies element 1[a]/14[a]. POR, 81.

**PO concedes that Yuen has an interior space,
and the patent’s claims do not preclude *additional* surfaces**

1[a]/14[a] (External Housing)

Patent Owner Response:

like material).” EX1006, 24:17-20. Claim elements 1[a]/14[a] requires an interior space defined by an interior surface and sidewalls. Yuen’s interior space is defined by two additional surfaces not present in the ’124 Patent’s claimed structure.

Reply:

1007, Figs. 3, 4. A POSITA implementing Yuen’s biometric monitoring features into Schröder’s ring form (or even Yuen’s own small “toe band” form) would retain Schröder’s seamless construction to “create a more compact, non-intrusive, and easily wearable device.” Ex-1002, ¶307. There is no additional attachment band needed when the devices are packaged into a ring as taught by Schröder.

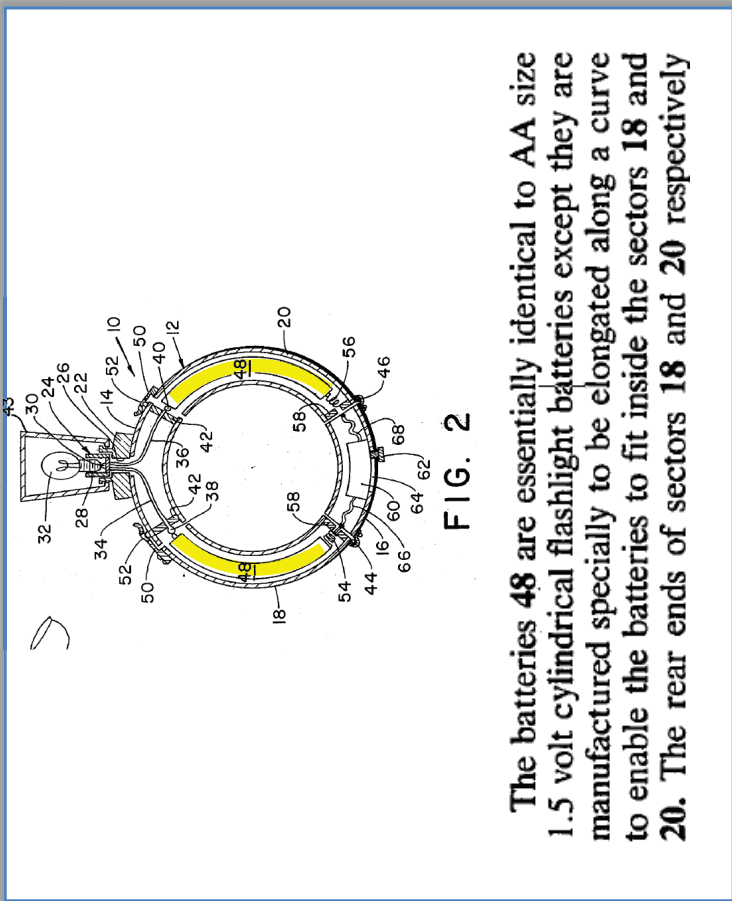
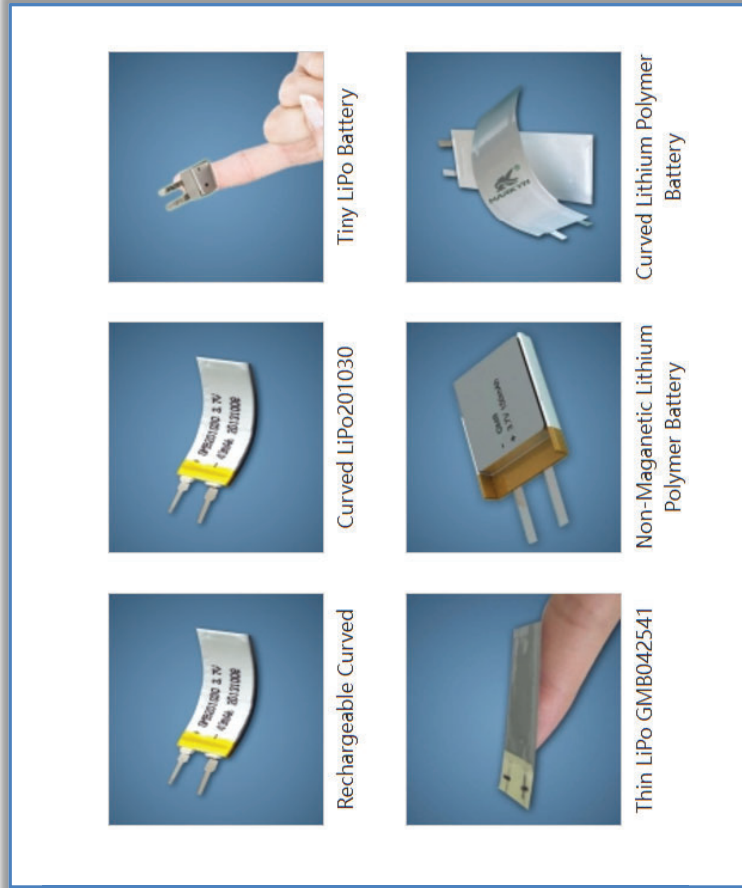
PO does not address that the small form factor of the Yuen-Schröder combination would not require an attachment band / two additional surfaces

Demonstrative Exhibit Not Evidence

POR (Paper 20) at 82; Reply (Paper 25) at 18

30

1[b]/14[b] – Curved Battery



Finger-sized curved batteries were known

Demonstrative Exhibit Not Evidence

Reply (Paper 25) at 3-4; Ex-1002, ¶96; Ex-2021, 12-13; Ex-1061 Fig. 2, 25-30

1[c]/14[c] – Printed Circuit Board

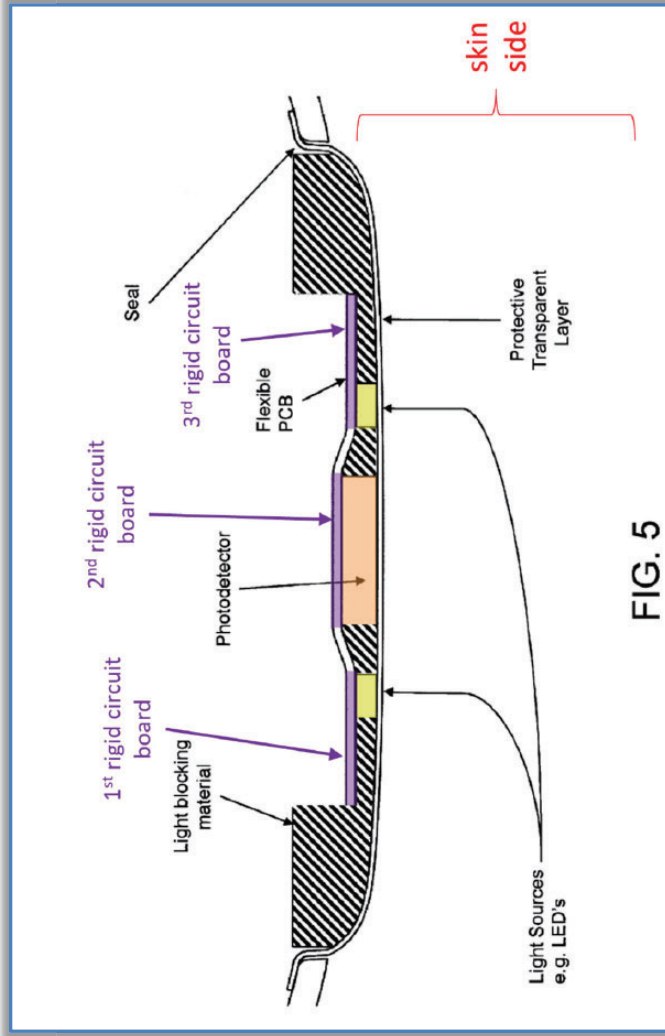


FIG. 5

Yuen expressly teaches flexible PCBs and toe band (or Yuen-Schroder) small form factor

In one embodiment, the components of the optical sensor are positioned on the skin side of the device and arranged or positioned to reduce or minimize the distance between (i) the light source(s) and/or associated detector(s) and (ii) the skin of the user. (See, for example, FIG. 5). Such a configuration may improve the efficiency of light flux coupling between the components of the optical sensor and the user's body. For example, in one embodiment, the light source(s) and/or associated detector(s) are disposed on a flexible or pliable substrate which facilitates the skin side of the device to conform to (for example, without additional processing) or be capable of being shaped (or compliant) to conform to the shape of the user's body part (for example, wrist, arm ankle and/or leg) to which the biometric monitoring device is coupled or attached during normal operation so that the light source(s) and/or associated detector(s) are/is close to the skin of the user (i.e., with little to no gap between the skin side of the device and the juxtaposed surface of the skin of the user). (See, FIG. 11). In one embodiment, the light source(s) and/or associated detector(s) are disposed on a Flat Flex Cable or "FFC" or flexible PCB. In this embodiment, the flexible or pliable substrate (for example, FFC or flexible PCB) could connect to a second substrate (for example, PCB) within the device having other components disposed thereon (for example, the data processing circuitry). Optical components of differing heights may be mounted to different "fingers" of flexible substrate and pressed or secured to the housing surface such that the optical components are flush to the housing surface. In one embodiment, the second substrate may be a relative inflexible or non-pliable substrate, fixed within the device, having other circuitry and components (passive and/or active) disposed thereon.

Demonstrative Exhibit Not Evidence

1[d]/14[d] – Sensor Module

Yuen's sensor protrusion is at least partially within the interior space of the device in Yuen, shown below. Ex-1006, Figs. 3–4.

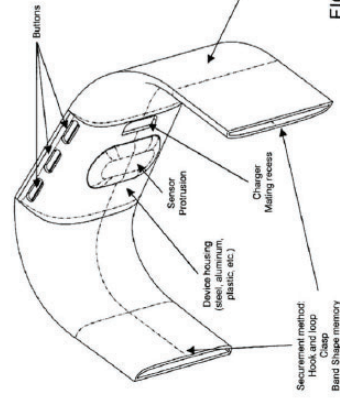


FIG. 3

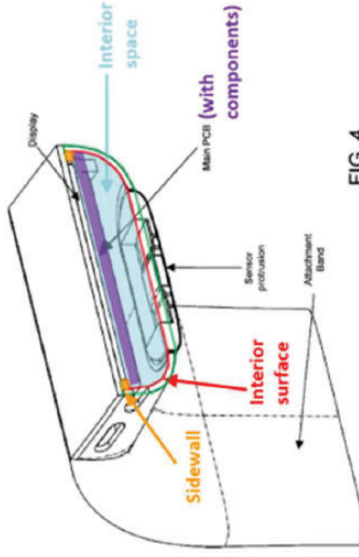


FIG. 4

Ex-1006, Figs. 3–4 (annotated). As Dr. Mercier acknowledged, the claims allow for components to extend beyond the interior space. Ex-1368,65:7–66:22. Thus, the claim elements are met.

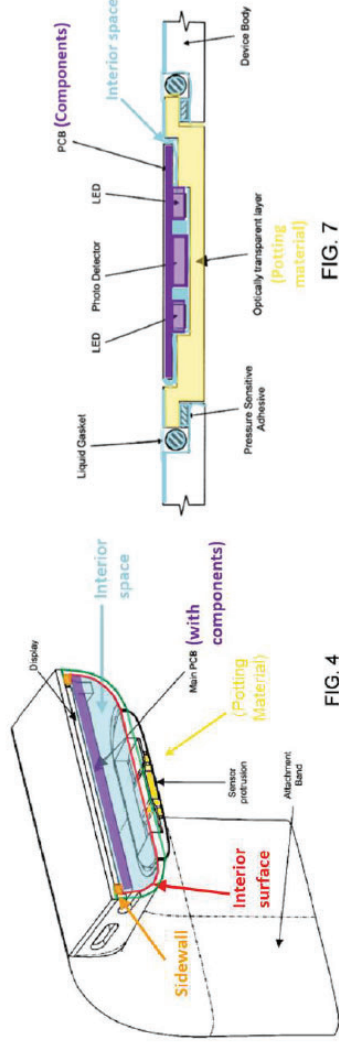
Q: And each of those other components, just like the battery, can extend beyond the interior space as defined in the first element of Claim 1, Right?

A: Yes.

Demonstrative Exhibit Not Evidence

1[i]/14[i] – Potting Material

housing's interior surface. Pet., 62, 71–72. As shown in the annotated figures below, the interior surface and the interior wall formed by potting material are adjacent but distinct structures. Ex-1006, Figs. 4, 7.



Yuen discloses a distinct “optically transparent layer”

Overview

- Alleged invention
- Overview of the prior art
- Mestas-based Grounds
- Yuen -based Grounds
- Secondary Considerations

Secondary Considerations

- No long-felt but unmet need
- No copying
- No presumption of nexus
- No commercial success

No long-felt but unmet need

PGR2024-00039, Final Written Decision, Paper 58 at 70-72

The anecdotal evidence that Dr. Asada and Dr. Mercier did not commercialize a wearable ring with a curved battery is not sufficient to establish long-felt need in the industry. Likewise, the assertion that Oura used a “Superbowl ring-type design” in its initial product offering is insufficient evidence, standing alone, to show that the industry was unable to design a different ring design.²³ Thus, Patent Owner’s evidence on long-felt need is entitled to little weight.

The Board has previously determined there was no long-felt need in view of identical evidence

Demonstrative Exhibit Not Evidence

No copying

ITC Determination, Ex-2122, at 112-13

While the evidence supports that respondents' accused products are similar to Oura's Gen. 3, and supports that respondents considered Oura's Gen. 3 when designing their products, the

evidence does not support that respondents' products are so overwhelmingly similar to Oura's Gen. 3 as to support a finding of copying. Each is shown below:



CX-0702 (Oura Ring Gen. 3)



CX-0538 (Ultrahuman)



CX-0843 (RingConn)

**The ITC has previously determined there was no copying,
based on a fuller evidentiary record**

Demonstrative Exhibit Not Evidence

PO's evidence is not due a presumption of nexus



“presuming nexus is appropriate ‘when the patentee shows that the asserted objective evidence is tied to a specific product and that product “embodies the claimed features, and is coextensive with them.”’ ... Conversely, ‘[w]hen the thing that is commercially successful is not coextensive with the patented invention—for example, if the patented invention is only a component of a commercially successful machine or process,’ the patentee is not entitled to a presumption of nexus.”

Fox Factory, Inc. v. SRAM, LLC, 944 F.3d 1366, 1373 (Fed. Cir. 2019)

PO is not entitled to a presumption of nexus:

PO has not shown that the product is coextensive with the claims

Demonstrative Exhibit Not Evidence

Reply (Paper 25), 22-24

39

PO itself identifies significant unclaimed features of its rings

178/702

“It is undisputed that the X-Sync chainrings include unclaimed features that the patentee describes as “critical” to the product’s ability to “better retain the chain under many conditions” and that go to the “heart” of another one of SRMA’s patents. See J.A. 5284, 5289. In light of the patentee’s own assertions about the significance of the unclaimed features, no reasonable fact finder could conclude that these features are insignificant. As an initial matter, the fact that SRAM obtained the ’250 patent covering the combination of wide and narrow teeth and >80% gap filling leads us to conclude that this combination of features amounts to more than an insignificant feature not claimed by the ’027 patent.”

Fox Factory, Inc. v. SRAM, LLC, 944 F.3d 1366, 1375 (Fed. Cir. 2019)

“A patent claim is not coextensive with a product that includes a “critical” unclaimed feature that is claimed by a different patent and that materially impacts the product’s functionality by ‘lead[ing] to a chainring that will retain a chain in even the worst conditions.’”

Fox Factory, Inc. v. SRAM, LLC, 944 F.3d 1366, 1375 (Fed. Cir. 2019)



Demonstrative Exhibit Not Evidence

Reply (Paper 25), 22-24

40

PO's expert identifies significant unclaimed required features: membership and apps

Mr. Clarke's Testimony

The Oura Ring works in conjunction with the Oura application, available for both Apple and Android mobile devices, enabling users to review measured data and gain insights into their health and wellness (EX-2064; EX-2065). All Oura Ring users have access to three daily scores—Sleep, Readiness, and Activity (EX-2051). However, access to more detailed performance metrics tracked by the Oura Ring requires an ongoing paid subscription with the Oura Membership (EX-2051; EX-2066). Oura introduced the Oura Membership, priced at either \$5.99 per month or \$69.99 per year for U.S. members, in 2021 in conjunction with the launch of the Oura Ring Gen 3 (EX-2024, at 95; EX-2067; EX-2051). The Oura Ring and Oura Membership work “hand-in-hand.”

PO's expert explains that Oura Application and Membership are essential

Significant, “essential” features are claimed by other Aura patents

Mr. Clarke’s Testimony

The Aura Ring works in conjunction with the Aura application, available for both Apple and Android mobile devices, enabling users to review measured data and gain insights into their health and wellness (EX-2064; EX-2065). All

Aura Ring users have access to three daily scores—Sleep, Readiness, and Activity (EX-2051). However, access to more detailed performance metrics tracked by the Aura Ring requires an ongoing paid subscription with the Aura Membership (EX-2051; EX-2066). *Aura introduced the Aura Membership*

PO’s 429 Patent

(12)	United States Patent Kinnunen et al.	(10) Patent No.: US 10,842,429 B2 (45) Date of Patent: Nov. 24, 2020
(54)	METHOD AND SYSTEM FOR ASSESSING A READINESS SCORE OF A USER	(52) U.S. CL. CPC A61B 5/16 (2013.01); A61B 5/01 (2013.01); A61B 5/02405 (2013.01);
(71)	Applicant: Aura Health Oy, Oulu (FI)	(58) Field of Classification Search (Continued)

1. A method for assessing readiness of a user, the method comprising:
obtaining the user’s movements;
using the obtained user’s movements to determine a nature of the period, wherein the nature of the period is selected from an activity period and a rest period;
measuring at least one biosignal of the user during the rest period;
determining a rest summary for the rest period, based on the measured at least one biosignal and at least one biosignal of a previous rest period;
determining an activity summary for the activity period, based on the obtained movements of an activity period and obtained movements of at least one previous activity period;
determining a body response summary based on the rest summary and the activity summary;
calculating a readiness score based on the body response summary and a previous body response summary,
whereby the readiness score indicates a level of readiness of the user; and
using a user interface of the mobile communication device to show elements contributing to the readiness score and instructions related to physical activity and mental activity for improving the readiness score.

Significant, “essential” features are claimed by other Aura patents

Mr. Clarke’s Testimony

In October 2024, Aura launched the fourth-generation Aura Ring (“Aura Ring Gen 4”), “bringing battery life improvements, greater measurement accuracy, and an all-new circular titanium-based design” (EX-2058). In particular, the

PO’s 147 Patent

(12)	United States Patent von Badinski et al.	(10) Patent No.: US 11,599,147 B2 (45) Date of Patent: *Mar. 7, 2023
(54)	WEARABLE COMPUTING DEVICE	(58) Field of Classification Search CPC
(71)	Applicant: Proxy, Inc., San Francisco, CA (US)	See application file for complete search history.
(72)	Inventors: Curt C. von Badinski, San Francisco, CA; et al. <i>et al.</i>	References Cited

1. A wearable electronic device comprising:
a body part made of a material, having an inner surface and an outer surface, wherein a cavity is formed on the inner surface of the body part, the cavity extending from the inner surface of the body part towards the outer surface of the body part and having a depth arranged within the inner surface of the body part, an electronic part arranged in the cavity, wherein at least a portion of the electronic part has a thickness that is less than the depth of the cavity, and
a coating made of a potting material on the inner surface of the body part, covering the electronic part and the cavity.
2. The wearable electronic device according to claim 1, wherein the material is a titanium material.
3. The wearable electronic device according to claim 1, wherein the material is selected from a group consisting of: steel, platinum, gold, silver, aluminum, polymer, plastic, tungsten carbide and a metal alloy.

PO obtained the 147 Patent directed to titanium and other construction materials

Demonstrative Exhibit Not Evidence

PO's evidence is not due a presumption of nexus



“In evaluating whether the requisite nexus exists, the identified objective indicia must be directed to what was not known in the prior art—including patents and publications.”

Fox Factory, Inc. v. SRAM, LLC, 944 F.3d 1366, 1373 (Fed. Cir. 2019)

PO is not entitled to a presumption of nexus:
PO's identified significant features were known in the prior art

PO has not proven nexus



“To the contrary, the patent owner is still afforded an opportunity to prove nexus by showing that the evidence of secondary considerations is the ‘direct result of the unique characteristics of the claimed invention.’”

Fox Factory, Inc. v. SRAM, LLC, 944 F.3d 1366, 1373-1374 (Fed. Cir. 2019)

PO cannot show actual nexus:
Alleged secondary evidence is not a “direct result” of the claims

PO cannot show a “direct result” from any novelty in the claims



But there is a more fundamental requirement that must be met before secondary considerations can carry the day. “For objective evidence of secondary considerations to be accorded substantial weight, its proponent must establish a nexus between the evidence and the merits of the claimed invention.” *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1246 (Fed.Cir.2010) (quotation omitted). **Where the offered secondary consideration actually results from something other than what is both claimed and novel in the claim, there is no nexus to the merits of the claimed invention.** *Tokai Corp. v. Easton Enters., Inc.*, 632 F.3d 1358, 1369 (Fed.Cir.2011) (“If commercial success is due to an element in the prior art, no nexus exists.”); *Ornco Corp.*, 463 F.3d at 1312 (“[I]f the feature that creates the commercial success was known in the prior art, the success is not pertinent.”); *In re Woodruff*, 919 F.2d 1575, 1578 (Fed.Cir.1990) (“The law is replete with cases in which the difference between the claimed invention and the prior art is some range or other variable within the claims... [and] in such a situation, the applicant must show that the particular range is critical, generally by showing that the claimed range achieves unexpected results relative to the prior art range.” (citations omitted)).

In re Huai-Hung Kao, 639 F.3d 1057, 1068 (Fed. Cir. 2011)

Demonstrative Exhibit Not Evidence

Oura cannot prove a “direct result”: sales include models that PO does not allege practice the claims

Mr. Clarke’s Testimony

3 Q. You mentioned that there was a period of
4 time when a new product is released and there are
5 sales for the new product and for the old product
6 during that period. Do you recall mentioning that a
7 moment ago?

8 A. Generally speaking, yes. When a new
9 product launches, there are still versions of the
10 previous generation that are available for a short
11 period of time.

12 Q. What do you call that period of time?

13 A. I don't know the specific name associated
14 with that period of time.

18 Q. Okay. For the crossover period, how did
19 you assign sales figures to each of the two available
20 product generations?

21 A. So this is why the analysis that we see in
22 Appendix 7 is focused on the time period, the months
23 in which sales were available. So as I explained in
24 my declaration, the Gen 3 -- Oura Ring Gen 3 was
25 available starting in October 2021 through September

1 2024. I think there were a few months after that
2 that it's still been available. Page 105

3 For the purposes of my analysis, I didn't
4 seek to try to differentiate which sales during that
5 crossover period were of one product versus the
6 other. That wasn't -- that wasn't required to reach
7 the opinions that I made.

PO made no effort to differentiate products in its sales data

Demonstrative Exhibit Not Evidence

Ex-1083, 104:3-14, 104:18-105:7

47

Non-differentiated commercial evidence is “weakened”

PGR2024-00039, Final Written Decision, Paper 58 at 63

Despite the presumption of nexus and the fact that the sales and revenue figures appear to be attributable to sales of the patented Gen. 3 and Gen. 4 ring products, Patent Owner’s evidence of commercial success is weakened to some extent by the fact that Mr. Clarke apparently relies on *all* Gen. 3 product sales for commercial success, i.e., both the Gen. 3 Heritage and Gen. 3 Horizon product sales, yet Patent Owner shows coextensiveness only for the Gen. 3 Horizon product. Ex. 1080 ¶¶ 273–288; Ex. 2019 (Appendix 7); *see also* Ex. 2099, 3 (describing the Gen. 3 Heritage ring as

The Board has previously determined PO’s evidence is “weakened” because it mixes allegedly practicing and non-practicing products

Samsung Electronics Co., Ltd.;
Samsung Electronics America, Inc.,

v.

Ouraring, Inc.,

Petitioner's Presentation For IPR2025-00147

U.S. Patent Nos. 11,188,124

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