UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SRAM, LLC,

Petitioner,

v.

FOX Factory, Inc.,

Patent Owner.

U.S. Patent No. 8,550,223 B2
Filing Date: May 11, 2009
Issue Date: October 8, 2013

Title: METHODS AND APPARATUS FOR POSITION SENSITIVE SUSPENSION DAMPENING

Case No. IPR2024-00216

PETITIONER'S REPLY

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I. INTRODUCTION

As shown in the Petition and the Board's Institution Decision, the '223 patent discloses only well-known devices. Particularly, the '223 patent only discloses and claims a combination of well-known damper features as part of a common shock absorber.

Patent Owner's Response (Paper 15) (the "Response") seeks to reimagine the basic facts about the '223 patent, and the cited prior art, buoyed only by conclusory opinions from its proffered expert and an attempted narrowing of the claims around prior art without a real basis in fact or reason. But claim terms are not construed to carve out prior art for the benefit of a patentee—claim terms have their plain and ordinary meaning, absent an express definition or a clear disavowal of claim scope. Notably, Patent Owner and its expert have taken positions before the Board that starkly contradict the positions they have taken in the related underlying District Court proceedings. In short, Patent Owner ignores the plain language of the claims, the evidence about the prior art, and even its own prior positions in litigation. Ignoring the facts does not change the truth about the clear invalidity of the challenged claims of the '223 patent.

II. ARGUMENT

A. Patent Owner's Proposed Claim Constructions Are Wrong, Contradicted, and Not Supported by the Facts.

Patent Owner's Response regarding claim construction is particularly telling. First, Patent Owner provides different constructions for different grounds. Second, Patent Owner's latest construction for "bottom out cup" attempts to rewrite the term by inserting unclaimed limitations from the specification in a tacit effort to narrow the scope, after allowance, to avoid anticipatory prior art, *e.g.*, in *Gartner*. Third, Patent Owner's construction of "fluid communication from the cup to the compression portion of the chamber" in claim 1 is contrary to the plain meaning of the term, and the previous statements by Patent Owner's own proffered expert.

1. Different claim constructions for different grounds.

Of course, claim terms have only one true meaning that does not change based on the asserted prior art, and expert testimony that is materially different from the Court's construction should be disregarded. *See, e.g.*, *Treehouse Avatar LLC v. Valve Corp.*, 54 F.4th 709, 715 (Fed. Cir. 2022) (citing similar cases). Here, Patent Owner states that it applies different claim constructions in its Response, one for Grounds I–IV, and one for Ground V (*Gartner*). Response, 8–11. Accordingly, depending on the Board's final construction for the term, "bottom out cup," at least some of Patent Owner's arguments directed to the "bottom out cup" should be

wholly rejected. For example, should the Board to conclude that its preliminary construction for "bottom out cup" is correct, Patent Owner's arguments regarding Ground V (*Gartner*) must be wholly rejected for relying on a materially different construction.

2. Patent Owner's proposed construction of "bottom out cup" is incorrect.

As the Board stated in the Institution Decision, the plain language of the term does not require the recited "bottom out cup" to be "at the end of a compression chamber," let alone "for providing dampening only at the end portion of a compression stroke," as now argued by Patent Owner. Paper 11, 11; Response, 8; *see also* Ex. 1019 (Second Wang Dec.), ¶7. Regardless, Patent Owner continues its transparent attempt to narrow its claims to get around anticipatory prior art, *Gartner* (Exhibit 1010).

Independent claim 1 merely states that the "bottom out cup [is] formed at ***an*** end of the compression portion[,]" but it does not require the bottom out cup to be formed on the lower end, nor does it require the bottom out cup to ***only*** provide damping at the end of a compression stroke. *See* Paper 11, 11. Independent claims 11 and 19 have absolutely ***no*** restriction on the location of the bottom out cup. In other words, the '223 patent claims sometimes require a location for the

bottom out cup (claim 1) and sometimes do not (claims 11 and 19), but they clearly ***never*** limit the specific location where the bottom out cup provides damping. *See* Paper 11, 11; Ex. 1019, ¶9.

Additionally, the '223 patent's written description does not limit the "bottom out cup" to "providing dampening only at the end portion of a compression stroke." Instead, nearly every embodiment[1] provides some amount of damping whenever the shock absorber **100** is compressing, with no specific limitation as to only providing damping at the end portion of the compression stroke, as Patent Owner now proposes. In fact, independent claim 17 (which is not challenged) identifies "a second piston formed at an end of the shaft for moving into sealing engagement with a bottom out cup ***at an end of a compression stroke of the shock absorber***[.]" Ex. 1001, 8:47–49 (emphasis added). This clear claim differentiation shows that Patent Owner knew how to claim damping at a particular timing position of the stroke, which it did in claim 17 but did not in any of the challenged claims. Patent

[1] The '223 patent discloses an embodiment where the bottom out cup is at the upper end of the rebound chamber. Ex. 1019, ¶9 (citing Ex. 1001, 6:51–7:1).

Owner import such a limitation into claim 1, 11, and 19, now, in contrast to the plain meaning of "bottom out cup." *See, e.g.*, *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005) ("Differences among claims can also be a useful guide in understanding the meaning of particular claim terms.").

Patent Owner used broad claim language in the challenged claims and specifically chose not to include any limiting structure forcing damping to only occur in a specific position or at the end of a compression stroke. Ex. 1019, ¶¶9–10, 14. Claim construction is not a tool for patentees to remake their claims, and overbreadth is not a problem to be "fixed" via claim construction. *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (no narrowing "unless the patentee has demonstrated a clear intention to limit the claim scope using 'words or expressions of manifest exclusion or restriction'"); *Fox Factory, Inc. v. SRAM, LLC*, No. 16-cv-03716, 2017 WL 4877140, at *14 (N.D. Cal. Oct. 30, 2017) (Court refusing to adopt Fox Factory's proposed limitations to narrow the disputed claim term to "bicycles" because the claim terms "are necessarily much broader" and the patent in question is "not limited to bicycles").

In short, Patent Owner does not provide evidence or a viable argument that the recited "bottom out cup" should be narrowed beyond its plain meaning.

3. Patent Owner's proposed construction of "fluid communication from the cup to the compression portion of the chamber" is also incorrect.

Patent Owner's Response includes a construction of the above-referenced limitation, wherein this term would require directionality of a flow during a compression stroke. *See, e.g.*, Response, 11–12. This construction is also wrong.

Independent claim 1 merely requires a fluid communication "bridge" extending between a bottom out cup and a compression portion. Ex. 1002 (First Wang Dec.), ¶¶44, 93. Petition, 16–17, 32 fn.2. This is similar to a statement that a communication wire extends "from one building to the next." Such a wire would have two-way communication available, but the physical wire may be described as extending "from Building A to Building B" or "from Building B to Building A." There must merely be a path, but the path does not require or specify which direction the communication ***must*** flow. Ex. 1002, ¶123.

In contrast (and another example of claim differentiation), independent claim 19 specifically identifies the direction of fluid flow: "in a compression stroke of the damper, the fluid flows from the bottom out cup to the compression chamber[.]" The language of claim 19 shows that Patent Owner knew how to claim a directionality component, but did not to do so in claim 1. Specifically, claim 19 states that the fluid ***actually flows*** from the bottom out cup to the compression

chamber, whereas claim 1 merely requires fluid communication. Indeed, Patent Owner's proffered expert admitted before the District Court that "fluid communication is made regardless of the direction of the fluid flow." Ex. 1022 (Slocum Infringement Report), ¶143. Thus, the "fluid communication" in claim 1 does not dictate that fluid actually flows in any direction. Instead, there is simply a communication link between the bottom out cup and the compression portion. Ex. 1002, ¶123; Ex. 1019, ¶18.

B. *Nakaya*-Based Ground I

1. *Nakaya* is a damper.

Nakaya is a shock absorber that includes a damper. *See, e.g.*, Ex. 1002, ¶52–57, 89–90. *Nakaya* is a damper because it has damping elements, and damping is required for a prosthetic knee. Ex. 1019, ¶¶20, 28. In particular, *Nakaya's* damping elements use air as a working fluid. The air produces damping when forced through *Nakaya's* various restrictions, including the throttle passage **823** and constant throttle valve **140** in Figures 7 to 9 ("*Nakaya's* First Embodiment"), and the two paths around *Nakaya's* throttle valves **4824a**, **4824b** in Figures 17 to 19 ("*Nakaya's* Fourth Embodiment"). Ex. 1019, ¶¶20–21. During his deposition, Patent Owner's proffered expert admitted that forcing fluid through a restriction causes damping. Ex. 1020, 44:17–45:11. In fact, Patent Owner concedes that *Nakaya* produces

"damping due to the use of metered orifices for air flow." Response, 15. Similarly, Patent Owner's proffered expert explains that "throttling of the air [in *Nakaya*] will inherently produce some minimal damping, which is required to prevent unwanted oscillations of the prosthetic limb[.]" Ex. 2010 (Slocum), ¶43; *see also* Ex. 1020, 92:1–107:8 (*Nakaya* forces fluid though a restriction, which causes damping). Neither Patent Owner nor its expert provides any evidence, analysis, or convincing explanation as to why *Nakaya's* damping amount is "minimal" or why it does not qualify as a "damper." Ex. 1019, ¶21. Such an unsupported and conclusory statement, without any substantive analysis or express indication of a minimum required damping amount in the '223 patent's claims, is entirely insufficient to disqualify *Nakaya* as anticipatory prior art. *See, e.g., Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 (August 24, 2022) (precedential) (declaration entitled to little weight when it restates the petition's unsupported, conclusory assertions without supporting evidence or reasoning).

Despite repeatedly arguing that *Nakaya* does not "disclose" damping (Response, 24–26), Patent Owner and its expert both expressly admit that *Nakaya*, in fact, provides damping. Response, 15; Ex. 2010, ¶58; Ex. 1020, 92:1–94:8 (*Nakaya* damps by forcing fluid though a restriction); Ex. 1019, ¶21. In fact, a POSITA would understand ***at a mere glance*** that *Nakaya's* throttle valves/passages

140, **832**, **4824a**, and **4824b** provide damping. Ex. 1019, ¶20. Indeed, Patent Owner's expert referred to *Nakaya* as a "damper" during his deposition: "If you look on Figure 20 [of *Nakaya*], for example, you have torque versus knee angle. Torque would be the force in ***this damper*** acting over a distance." Ex. 1020, 95:5–9 (emphasis added); *see also id.*, 93:25–95:10. It is simply beyond any real dispute that *Nakaya* discloses a damper. Ex. 1019, ¶21.

The fact that *Nakaya* also produces an air spring effect does not change the fact it has a damper. Many shock absorbers include air springs along with dampers. For example, U.S. Patent No. 5,775,677 ("*Englund*") discloses a shock absorber for a bicycle that includes both an air spring and an air damper. Ex. 1018, Abstract ("An air or gas sprung and dampened shock absorber for a bicycle is set forth …"). *Englund* shows that a POSITA would be well-versed with "an air or gas sprung shock absorber which utilizes a pressurized gas for damping the compression and rebound stroke[.]" *Id.*, 1:11–17; Ex. 1019, ¶22.

Moreover, *Englund* cuts against Patent Owner's conclusory, unsupported assertion that an air-based damper is not sufficient for bicycles. Response, 25–26. POSITAs have used a number of different air-based damper systems for vehicles, including bicycles. *See, e.g.*, Ex. 1019, ¶23; Ex. 1021 (U.S. Patent No. 5,163,697 to *Kastan*, titled "Bicycle Shock Absorbing and Energy Damping Apparatus"), 3:44–

46 (describing an embodiment of a bicycle shock absorber providing damping with a fluid **70** that may be a gas); Ex. 1018, Abstract; *id.*, 2:1–18 (discussing *Kastan* and noting that "there is a need for a dampening system which utilizes a medium that does not loose [sic] viscosity or substantially change pressure under extreme heat. These disadvantages can be avoid by using highly pressurized air or gas, such as nitrogen, in the range of 60 to 350 psi as the dampening medium. Highly pressurized gases do not loose [sic] viscosity under extreme heat, and these gases retain the same dampening characteristics over ambient temperature changes."). In fact, Patent Owner's own expert acknowledges the existence and use of air-based dampers. Ex. 1020, 117:3–5; *id.*, 125:15–20; Ex. 1019, ¶23.

Patent Owner falsely asserts that *Nakaya* purportedly would not work in a prosthetic knee as a damper because it would feel as if the user was "walking or running in loose sand." Response, 25. In fact, a POSITA would recognize *Nakaya's* damping is useful to prevent unwanted top/bottom out events and overly-springy movements. Ex. 1019, ¶¶28–29. In other words, *Nakaya* includes damping to prevent these known problems. Thus, *Nakaya's* damping is intentional and helpful to a bicycle, as well as a prosthetic knee user. *Id.*

2. Patent Owner's implicit attempt to limit "damper" to oil-based dampers or minimum levels of damping has no basis in the claims or specification.

Claim terms are construed to have their "ordinary and customary meaning" to a POSITA, unless the specification provides a special definition or clear disavowal of scope. *Phillips*, 415 F.3d at 1313, 1316–17. Although the specification may inform claim construction, limitations from the specification must not be imported into the claims. *Id*. at 1323–1324; *see also Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1117 (Fed. Cir. 2004); *White v. Dunbar*, 119 U.S. 47, 51–52 (1886).

Patent Owner does not allege that the terms "damper" and "shock absorber" have special definitions contrary to their ordinary meaning or a clear disavowal of scope in the '223 patent's specification. *See* Response, 7–12 (Claim Construction Section); *id*., 22–26 (*Nakaya* Section). Here, nothing in the '223 patent specification narrows or defines the scope of "damper" or "shock absorber" beyond their plain meanings, and nothing restricts these claim terms to any particular application or just to oil-based damping systems. Ex. 1019, ¶¶24–27. The '223 patent's specification does not limit or specify how much damping must be provided for a device to be considered a damper.

Likewise, the claims themselves do not narrow "damper" and "shock absorber" in any way beyond their plain and ordinary meanings. The claims do not recite any particular application or minimum level of damping provided by the damper, as conceded by Patent Owner's expert. Ex. 1019, ¶¶24–27; *see also* Ex. 1020, 107:9–14. The claims do not require any particular use or associate the damper with any specific vehicle or other application, so all applications are available regardless of the level of damping required. Perhaps most telling, Patent Owner does not discuss or explain the basis for any asserted "minimum" amount of damping for the claims or specification. Ex. 1019, ¶¶24–27; Ex. 1020, 106:7–111:11. Instead, Patent Owner wholly relies on its expert's conclusory statement that *Nakaya* is not a damper, all the while simultaneously admitting elsewhere that *Nakaya* necessarily provides damping and is, in fact, a damper. *See* Response, 13, 15; Ex. 1020, 90:22–91:13; 93:25–95:10; 105:9–106:2; *see also, e.g., Xerox Corp.*, IPR2022-00624, Paper 9 (precedential).

The plain and ordinary meaning of a "damper" controls and is most accurately described as being a device that provides damping. Similarly, a shock absorber provides both damping and energy storage (typically in the form of a spring), as acknowledged by Patent Owner's expert. Ex. 1020, 97:13–98:4. Thus, a damper of a shock absorber in the context of the '223 patent's claims is a device that provides

damping in a system that has both damping and energy storage. *Nakaya* clearly meets this common understanding of what a damper of a shock absorber is. Ex. 1019, ¶¶24–27.

3. *Nakaya* discloses fluid communication from the bottom out cup to the compression portion during a compression stroke of the damper.

As discussed above in Section II(A)(3), claim 1 does not require a specific direction of flow.

As stated in the Petition, *Nakaya's* First Embodiment discloses that the air in the bottom out cup moves into the compression portion during a compression stroke of the damper, thereby increasing the pressure in the compression portion. Petition, 31–32. There is no dispute that air moves from regions of higher pressure to regions of lower pressure. Ex. 1002, ¶¶56–57; Ex. 2010, ¶91. A POSITA would understand that *Nakaya* could be built to either allow air to move from the bottom out cup to the compression chamber, or vice versa, "depend[ing] on which region is reducing in volume faster." Ex. 1002, ¶¶56–57. But, for the specific construction disclosed in *Nakaya's* First Embodiment, Dr. Wang explains that *Nakaya* states that the bottom out cup **1125, 1127** increases in pressure at a faster rate than the compression portion **82/821**, and as a result, air will move from the bottom out cup **1125, 1127** to the

compression portion **82/821** during a compression stroke of the damper. *Id*.; Ex. 1019, ¶32.

Relying solely on its expert, Patent Owner conclusorily asserts the opposite. *See* Response, 28–29. But Patent Owner's expert provides no explanation, support or rationale as to why his interpretation is allegedly correct. *See* Ex. 2010, ¶66. Rather, Patent Owner's expert provides no factual support or explanation for his conclusory statements about asserted fluid flow and the associated figures on page 28 of the Response. In contrast, Dr. Wang has provided a measured explanation that, during a compression stroke of the damper, air will travel from higher pressure to lower pressure and that the valve **824** is making higher pressure by forcing air into the compression portion **82/821**. Ex. 1002, ¶¶56, 117; Ex. 1019, ¶33.

Patent Owner's proffered expert also unsuccessfully attempts to explain away *Nakaya's* express statements that the pressure increases in the compression portion. The basic fact remains that air will flow from a region of greater pressure to a region of lesser pressure, regardless of whether the pressure in the region of lesser pressure is increasing or not. A POSITA would understand *Nakaya* to disclose, through its figures and its express written description, air flowing from the bottom out cup **1125, 1127** to the compression portion **82/821** during a compression stroke of the damper.

Ex. 1019, ¶34. Patent Owner's proffered expert's testimony cannot change *Nakaya's* disclosure.

4. *Nakaya* discloses multiple paths formed between the bottom out cup and the compression chamber.

As stated in the Petition, Petitioner applies the meaning Patent Owner used for claim 13 in the related District Court proceeding. *See* Petition, 16 (stating the same and citing Exhibits 1012 and 1013).[2]

As can be seen in Exhibits 1012 and 1013, Patent Owner argued that the fluid flow path of claim 13 is the ***same*** fluid flow path in claims 1 and 2. *Id*. Patent Owner attempts to explain away this issue in a footnote in its Response, but its infringement

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[2] In the District Court litigation, Petitioner maintains that claim 13 is invalid for indefiniteness because, *inter alia*, it is not possible to determine if "the fluid flow path" in the phrase "wherein the capacity of the fluid flow path is adjustable" refers to the fluid flow path of claim 11 or the fluid flow path recited earlier in claim 13. Ex. 1024. Since this issue cannot be raised in the context of this *inter partes* review proceeding, Petitioner reserves its right to continue to raise this issue before the District Court.

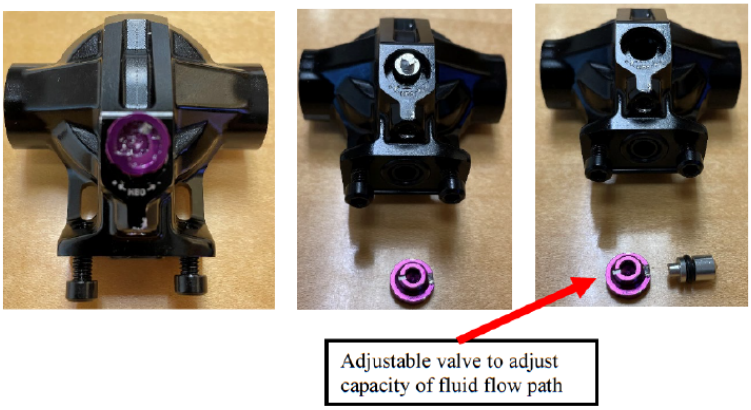
contentions unambiguously show that Patent Owner has accused the exact same structure to allege infringement of claims 1, 2, 11, and 13. Below is Patent Owner's alleged infringement analysis for claim 13 referencing its contentions for claim 2:

Claim	U.S. Patent No. 8,850,223	RockShox Super Deluxe Coil Ultimate
13	The damper of claim 12, further including a fluid flow path formed between the cup and the primary compression chamber; wherein the capacity of the fluid flow path is adjustable.	The RockShox Super Deluxe Coil Ultimate has the damper of claim 12, which further includes a fluid flow path formed between the cup and the primary compression chamber, and wherein the capacity of the fluid flow path is adjustable. *See supra* claim 2.

Ex. 1013, 35; Ex. 1019, ¶37. Below is Patent Owner's alleged infringement analysis for claim 2 referencing its contentions for claim 1:

Claim	U.S. Patent No. 8,850,223	RockShox Super Deluxe Coil Ultimate
2	The damper of claim 1, wherein the capacity of the flow path is adjustable with an adjustable valve, the valve restricting the fluid flow.	The RockShox Super Deluxe Coil Ultimate has the damper of claim 1, wherein the capacity of the flow path is adjustable with an adjustable valve, with the valve restricting the fluid flow. *See supra* claim element 1[d].

Ex. 1013, 20; Ex. 1019, ¶38. Claim element 1[d] depicts only a single flow path:

Claim	U.S. Patent No. 8,850,223	RockShox Super Deluxe Coil Ultimate
1[d]	wherein the capacity of the fluid flow path is adjustable.	In the RockShox Super Deluxe Coil Ultimate, the capacity of the fluid flow path is adjustable. 

Ex. 1013, 19; Ex. 1019, ¶39.

Finally, claim element 11[d] also refers to claim element 1[d]:

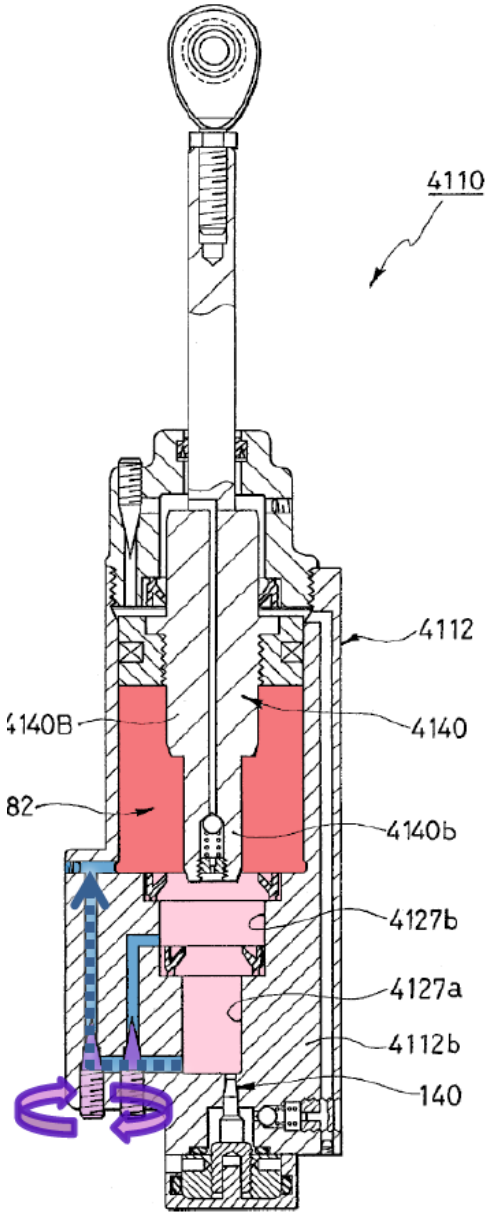
Claim	U.S. Patent No. 8,850,223	RockShox Super Deluxe Coil Ultimate
11[d]	an adjustable fluid flow path formed in the cup, the flow path providing fluid communication between the cup and the primary compression chamber in a compression stroke of the damper.	The RockShox Super Deluxe Coil Ultimate has an adjustable fluid flow path formed in the cup, wherein the flow path provides fluid communication between the cup and the primary compression chamber in a compression stroke of the damper. *See supra* claim elements 1[c], 1[d].

Ex. 1013, 33; Ex. 1019, ¶40.

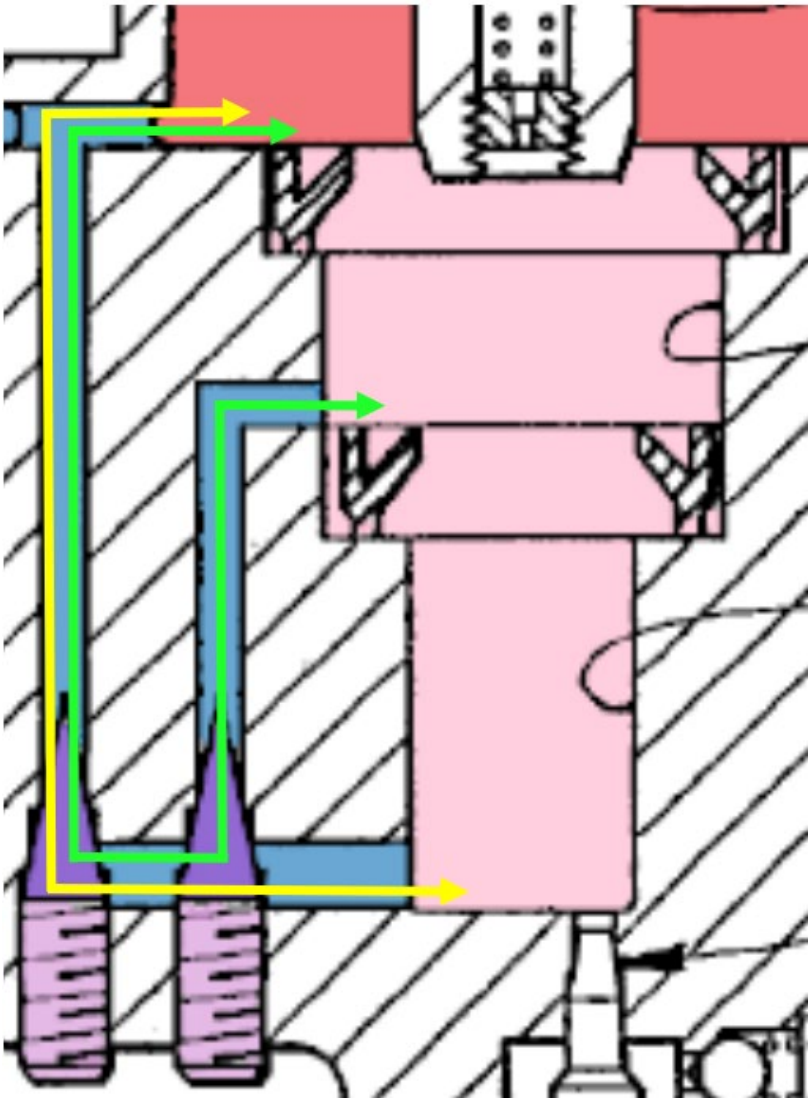
The same is true in Exhibit 1012 at pages 34, 19, 18, and 32, respectively. Ex. 1019, ¶41. Accordingly, Petitioner's reading of claim 13 simply tracks Patent

Owner's current position in the District Court proceeding. Patent Owner has now made an entirely different factual statement regarding its construction for this *inter partes* review, which the Board should disregard entirely. *See, e.g.*, *Music Choice v. Stingray Digit. Grp. Inc.*, 2:16-CV-00586-JRG-RSP, 2019 WL 8110069, at *3–*4 (E.D. Tex. Nov. 19, 2019) (party's previous arguments before the PTAB that a prior art reference disclosed the claimed phrase at issue "contradicts the current construction proposed by [the party], and allowing [the party] to argue one position during PTAB proceedings for issues of invalidity and then argue a contradictory position in this Court for issues of infringement would be unfair to [the other party]").

Even if the Board were to consider Patent Owner's wholly new factual statements about claim 13, the Petition also shows that *Nakaya's* Fourth Embodiment includes two fluid flow paths (blue) extending from the bottom out cup (the volume within **4127b** and **4127a**) (pink) to the primary compression chamber **82** (light red), as shown in the following annotated version of *Nakaya's* Figure 17:



Petition, 49; *see also* Ex. 1019, ¶42. As can be seen in the magnified and annotated image below, there are two fluid flow paths, one shown with a green arrow, and another shown with a yellow arrow:



Ex. 1019, ¶43. The fluid flow path following the yellow arrow is different than the fluid flow path following the green arrow. Although these paths clearly share some portions, they are different paths. *Id.*, ¶44. Accordingly, the Petition clearly shows that *Nakaya* has two fluid flow paths from the bottom out cup to *Nakaya's* compression portion **82**. *Id.*

Patent Owner argues that these two paths are not two paths because they share some extent. Response, 39–40. Yet, Patent Owner provides no basis to narrow the claims to exclude different paths that might partially overlap. A POSITA would understand that two paths may cross or share a portion and remain two separate paths. Even the two paths in the '223 patent share the same headspace above the bottom out cup. In any event, the plain and ordinary understanding of two paths would allow for some overlap. Ex. 1019, ¶45.

In fact, Patent Owner's expert accused the exact same path in his Expert Report on Infringement in the District Court. Specifically, Patent Owner's expert accused the same physical path, but proposes that this same path could be two paths and suggests that the path is a first path during compression and a second path during extension. Ex. 1022, ¶¶141–143. No matter how it is characterized, Patent Owner's expert directly accuses the ***same structure*** of being the ***same path***. *Id*. Because it is the same path, Patent Owner's "two" asserted infringement paths overlap completely. Ex. 1019, ¶46.

Patent Owner's cited caselaw trying to explain away its inconsistencies is inapposite. In *Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249 (Fed. Cir. 2010), the Federal Circuit predicated its decision on the fact that "the [patent] specification cautions that it is undesirable" to have the separately recited

elements be the same part. *Id*. at 1255. Here, with respect to the '223 patent, there is no such caution against overlapping paths. Ex. 1019, ¶45. The *Becton* Court also found the claims "nonsensical" if the two separately recited elements were the same because the elements were expressly recited as being connected. *Id*.; *see also Apple, Inc. v. Samsung Elecs. Co.*, No. 12-CV-00630-LHK, 2014 WL 252045, at *8 (N.D. Cal. Jan. 21, 2014) (discussing limitations of *Becton*); *Apple Inc. v. Kilbourne*, No. IPR2019-00233, 2020 WL 1488395, at *13 (PTAB Mar. 25, 2020) ("The claim, instead, simply lists the three elements, without specifying any inter-relationship(s) between the elements that would suggest they must be separate and distinct structures."); *Ex Parte David Urb. & Ross Gilson*, No. APPEAL 2023-000366, 2024 WL 357911, at *4 (PTAB Jan. 29, 2024) (emphasizing the "nonsensical" finding in *Becton*). Here, for the '223 patent, Patent Owner has not shown that the separately recited fluid flow paths would result in any nonsensical understanding if they were overlapping paths. Ex. 1019, ¶45. To the contrary, Patent Owner accused the very same path in its infringement contentions (*i.e.*, complete overlap) and, therefore, cannot now contend that partial overlap in *Nakaya* would be nonsensical. Ex. 1012, 18–19, 34; Ex. 1013, 19–20, 35; Ex. 1019, ¶¶37–41.

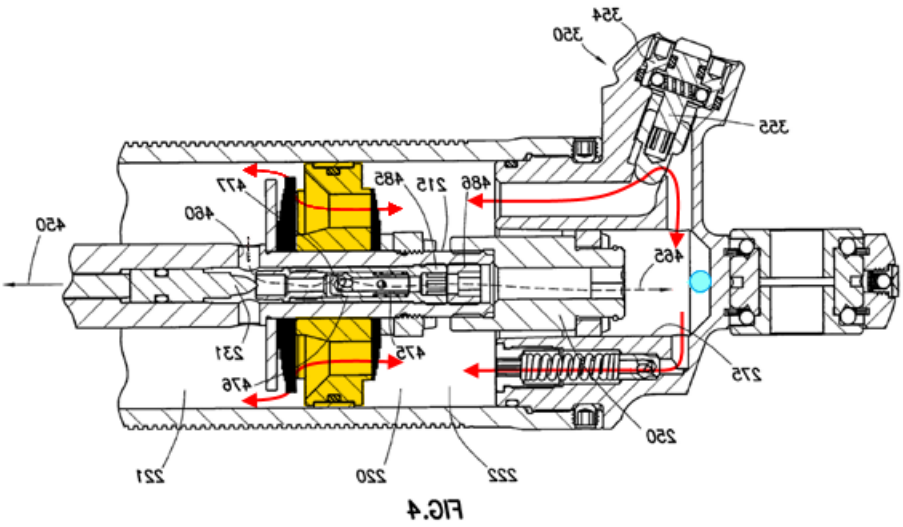
Finally, nothing in the '223 patent's specification would prohibit overlapping of different paths. The claim language "places no constraint" on the extent of the

fluid flow paths, and accordingly these paths should be given their "full scope of [their] plain and ordinary meaning[s] unless the patentee explicitly redefines the term[s] or disavows [their] scope." *Google LLC v. EcoFactor, Inc.*, 92 F.4th 1049, 1058 (Fed. Cir. 2024). Patent Owner has made no such redefinition or disavowal in the '223 patent and its file history. Moreover, "[t]he specification contains no restrictive language and does not explicitly require that the [fluid flow paths] be separate." *Id.*; *see also* Ex. 1019, ¶45. Accordingly, the fluid flow paths may overlap, such that *Nakaya* clearly anticipates claim 13.

C. *Chen*-Based Grounds II to IV

"[A] prior art reference may anticipate or render obvious an apparatus claim … if the reference discloses an apparatus that is reasonably capable of operating so as to meet the claim limitations, even if it does not meet the claim limitations in all modes of operation." *ParkerVision, Inc. v. Qualcomm Inc.*, 903 F.3d 1354, 1361 (Fed. Cir. 2018). This is true for functional limitations because "[a]pparatus claims cover what a device *is*, not what a device *does*." *Id.* (italics in original). Here, *Chen* (Exhibit 1007) in view of *Deferme* (Exhibit 1008), and *Fox '751* (Exhibit 1009) in view of *Chen*, each discloses the same structure recited in the '223 patent's claims, and as a result of having this same structure, each combination would perform the same function. Ex. 1019, ¶49.

Specifically, Figure 4 shows that the '223 patent's overall damper includes the following flow paths shown in red arrows and a path to reservoir **125** at the light blue circle:



Ex. 1001, FIG. 4 (annotated and flipped to compare to *Chen's* Figure 4); Ex. 1019, ¶50; Ex. 1020, 87:9–89:2.

The combination of *Chen* and *Deferme* would have the same flow paths (red arrows, light blue circle), with *Deferme's* piston replacing *Chen's* piston (yellow highlights):

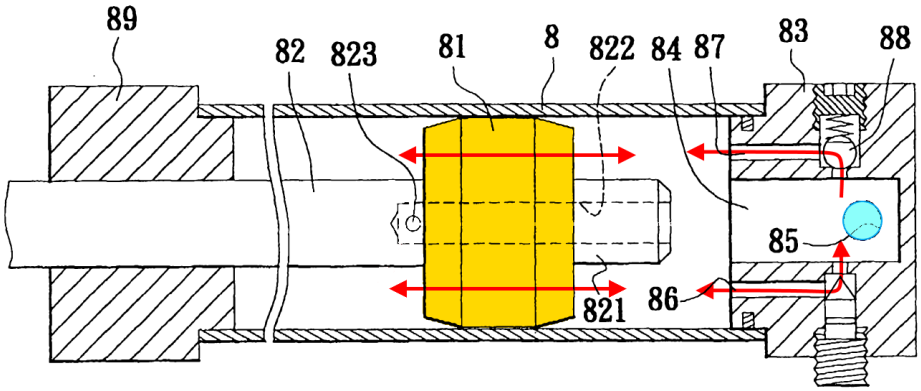


FIG. 4
PRIOR ART

Ex. 1019, ¶51. Similarly, the combination of *Fox '751* and *Chen* would have the same flow paths (red arrows, light blue circle), with *Fox '751's* piston replacing *Chen's* piston (yellow highlights):

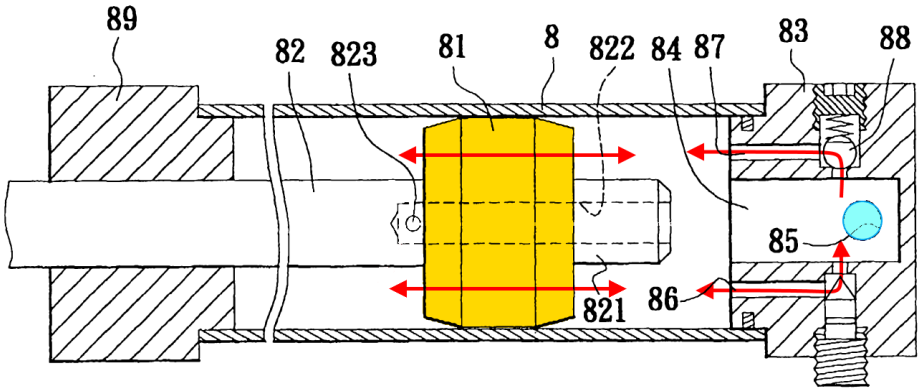


FIG. 4
PRIOR ART

Ex. 1019, ¶52.

Accordingly, each of these combinations is a device that has the same structure and flow paths as those shown in the '223 patent. This shared structure is solely responsible for the direction of flow through the paths during a compression stroke. Accordingly, each of the combinations shown in Grounds II to IV are devices that meet the functional limitations of a fluid flowing from the bottom out cup to the compression portion. Ex. 1019, ¶53. Moreover, as Dr. Wang explained in his first declaration, "whether or not the fluid flows into the compression portion from the bottom out cup **84**, or vice versa, depends on a design choice for the relative geometries of this region." Ex. 1002, ¶144; *see also* Petition, 75–76, 56–58. A POSITA would have been motivated to try different relative geometries to adjust the resultant bottom out resistance for different applications. Ex. 1002, ¶144. Thus, the combination of either *Chen* in view of *Deferme*, or *Fox '751* in view of *Chen*, would operate such that the fluid would flow from the bottom out cup to the compression portion during a compressions stroke of the damper, and a POSITA would have been motivated to make and try such a combination, all with predictable results. Ex. 1002, ¶144; *id.*, ¶¶80, 85, 87-88; Ex. 1019, ¶53; *see also* Petition, 75–76, 56–58.

Patent Owner also argues that *Chen's* bottom out piston **821** is not formed on the piston rod **82**. Response, 52–53. However, *Chen's* Figure 4 clearly shows that the bottom out piston **821** is formed on piston rod **82**. That bottom out piston **821** is

also connected to the piston rod **82** is not relevant. Nothing in the '223 patent narrows the phrase "formed on" in claim 11 to exclude indirect connections, or the bottom out piston being a part of the piston that is "formed on" the piston rod. Ex. 1019, ¶54. A POSITA would understand that "formed on" may include intervening structures or connections made through other parts. *Id*. This is merely another of Patent Owner's improper attempts to rewrite and narrow the broad claims of the '223 patent to avoid clearly invalidating prior art.

D. *Gartner*-Based Ground V

As discussed above in Section II(A)(2), Patent Owner and its expert attempt to have applied a new and unsupported construction to the term "bottom out cup" to *Gartner*. Response, 58–60. Thus, if the Board determines that the construction of this term does not include "only at the end of the stroke," Patent Owner's arguments are wholly inapplicable. Under the Board's construction, the bottom out cup **260**, **460** (pink) is a cup-shaped feature configured for providing damping. Ex. 1019, ¶¶57–58; *see also* Ex. 1010 (*Gartner*), Abstract, 1:15–33, 9:33–48; Ex. 1002 (Wang Dec.), ¶¶179–180, 188–190.

Further, *Gartner's* bottom out cup **260**, **460** (pink) is formed at the end of compression portion **26.4** (light red) and only provides ***a substantial increase*** to damping ***at the end of the compression stroke***:

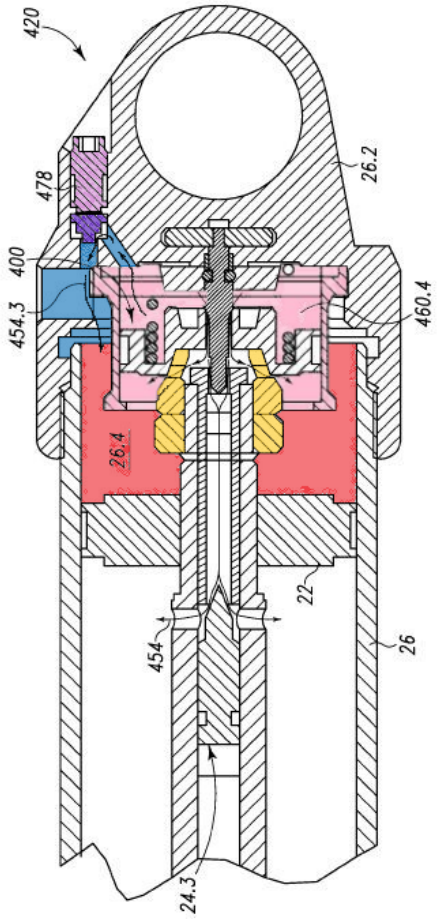


Fig. 12A

Ex. 1019, ¶58. However, like the '223 patent, the bottom out cup will provide ***some level of damping anytime fluid flows though it***, which will occur to some extent during the entire compression stroke because fluid will move into the reservoir on the left side of *Gartner's* Figure 12A. Thus, *Gartner* discloses a bottom out cup under both the Board's and Patent Owner's constructions. Ex. 1019, ¶59.

The compression region **460.4** for *Gartner's* bottom out cup **260**, **460** (pink, above) is exactly the same as the compression region of the bottom out cup in

Figure 4 of the '223 patent. Patent Owner's suggestion that the compression portion for the overall damper is element **460.4** is a misstatement of Petitioner's position and should be ignored.

Further, Patent Owner's argument regarding a rebound chamber of *Gartner's* second internal shock absorber **400** (Response, 59–60) is misplaced because the same structure exists in the '223 patent. During a rebound stroke, the area within the bottom out cup **275** around the bottom out piston **250** is a rebound chamber (red):

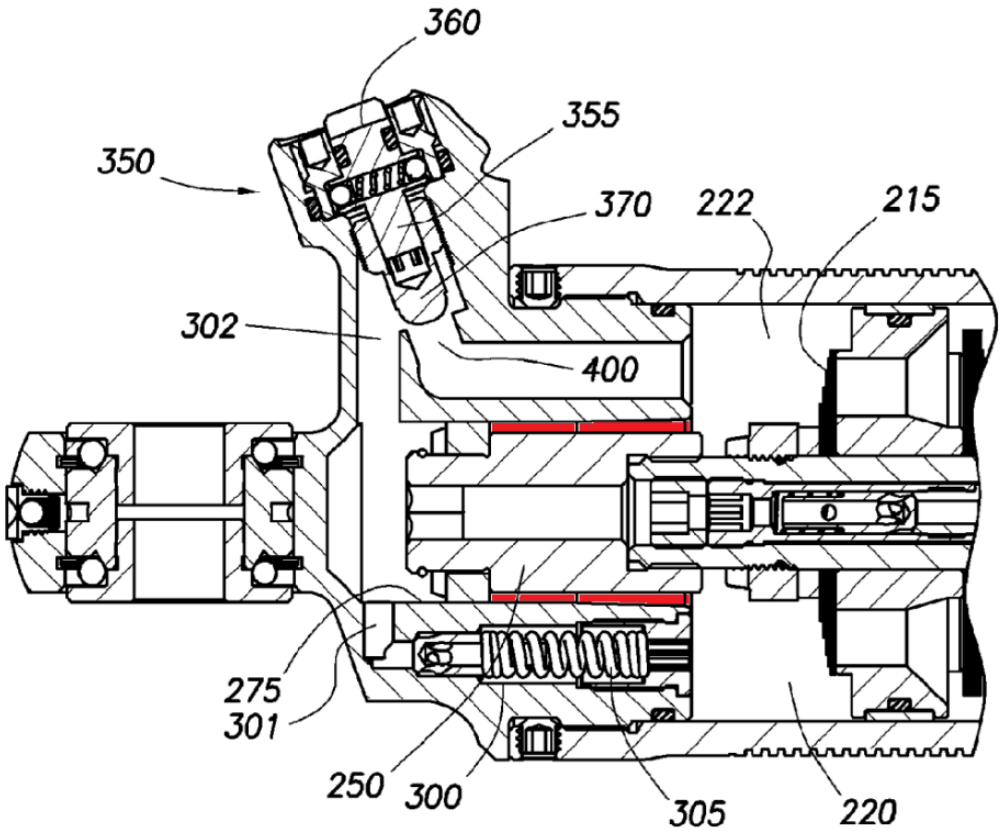


FIG.3B

Ex. 1001, Fig. 3B (annotated); Ex. 1019, ¶62. That *Gartner* does not use the exact

words "bottom out cup" is irrelevant, as *Gartner* shows the same structure and function as the '223 patent's bottom out cup. Finally, *Gartner's* bottom out cup **260**, **460** (pink, above) is activated when the end of *Gartner's* piston rod contacts *Gartner's* bottom out piston within *Gartner's* bottom out cup **260**, **460** (pink, above) at the end of a compression stroke. Thus, *Gartner* discloses a bottom out cup that activates at the end of the stroke for the damper, just like the '223 patent. Ex. 1019, ¶¶60–61.

III. CERTIFICATION UNDER 37 C.F.R. § 42.24(d)

Petitioner certifies that this Reply complies with 37 C.F.R. § 42.24(d). As calculated by the "Word Count" feature of Microsoft Word 2016, the Reply contains 5,379 words, excluding the words contained in the following: Table of Contents, Appendix of Exhibits, Certificate Under 37 C.F.R. § 42.24(d), and Certificate of Service.

IV. CONCLUSION

The evidence of record conclusively demonstrates that challenged claims 1-9, 11-15, and 19 are unpatentable. Petitioner respectfully requests a final written decision from the Board confirming the invalidity of the challenged claims.

Dated: November 21, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing Petitioner's Reply, and Exhibits 1017–1024 were served via email, at the following address of record for Counsel for Patent Owner on November 21, 2024:

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