

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NANOBEBE US INC.,
Petitioner

v.

MAYBORN (UK) LIMITED,
Patent Owner

Case IPR2023-00467
Patent 10,952,930

PATENT OWNER'S PRELIMINARY RESPONSE

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	THE '930 PATENT	2
III.	THE <i>GENERAL PLASTIC</i> FACTORS EXPOSE THE PETITION AS AN UNFAIR SERIAL ATTACK THAT SHOULD BE DENIED	7
A.	Petitioner Delayed in Filing Its Petition.....	7
B.	Petitioner, Through Its Delay, Gained Unfair Advantages Over Patent Owner	11
C.	The <i>General Plastic</i> Factors Compel Denial of Petitioner's Serial Petition.....	12
1.	Factor 1: whether the same petitioner previously filed a petition directed to the same claims of the same patent.....	12
2.	Factor 2: whether at the time of filing of the first petition the petitioner knew of the prior art asserted in the second petition or should have known of it	14
3.	Factor 3: whether at the time of filing of the second petition the petitioner already received the patent owner's preliminary response to the first petition or received the Board's decision on whether to institute review in the first petition.....	16
4.	Factor 4: the length of time that elapsed between the time the petitioner learned of the prior art asserted in the second petition and the filing of the second petition.....	17
5.	Factor 5: whether the petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent.....	18
6.	Factors 6 and 7: the finite resources of the Board; and the requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review	20

IV.	THE PETITION SHOULD BE DENIED BECAUSE PETITIONER CANNOT PREVAIL ON ANY CHALLENGED CLAIM	21
A.	Petitioner Fails to Make Its Case on the “Domed Configuration” Limitation of Element 14[E] (All Grounds).....	21
1.	The parties’ respective constructions of “domed configuration”	22
2.	Petitioner does not show that Meyers satisfies the parties’ constructions of “domed configuration” (Grounds 1 and 2)	24
3.	Petitioner does not show that Kurkjian satisfies the parties’ constructions of “domed configuration” (Ground 3).....	29
B.	Petitioner’s Motivation-to-Combine Analysis is Legally, Logically, and Factually Flawed (All Grounds).....	32
1.	Meyers-Sepehr (Grounds 1-2)	33
2.	Kurkjian-Sepehr (Ground 3).....	38
C.	Petitioner’s Analysis on Kurkjian and the “Sloping Portion” Limitation of Element 14[C] Flouts the Law and Lacks Evidentiary Support (Ground 3)	41
V.	CONCLUSION.....	45

EXHIBITS

EX2001	U.S. Patent No. 6,645,228
EX2002	U.S. Patent No. 6,745,912
EX2003	GROWTH IS FED BY INNOVATION FOR MAKER OF BABY PRODUCTS, <i>Simon Whiteside</i> , The Journal, Manufacturers' League (Thursday, February 19, 2015)
EX2004	Reserved
EX2005	Petitioner's '930 Patent Invalidation Contentions, <i>Nanobebe US Inc. v. Mayborn (UK) Limited et al.</i> , Case No. 1:21-cv-08444 (S.D.N.Y.)
EX2006	Reserved
EX2007	Complaint, <i>Mayborn (UK) Limited, et al. v. Comotomo Inc. et al.</i> , Case No. 1:22-cv-00694 (S.D.N.Y.)
EX2008	Markman Order, <i>Nanobebe US Inc. v. Mayborn (UK) Limited et al.</i> , Case No. 1:21-cv-08444 (S.D.N.Y.)
EX2009	First Amended Case Management Plan and Scheduling Order, <i>Nanobebe US Inc. v. Mayborn (UK) Limited et al.</i> , Case No. 1:21-cv-08444 (S.D.N.Y.)

I. INTRODUCTION

Petitioner launched an unfair serial attack on the '930 Patent that the Board should not endorse. *See infra*, § III. With no explanation at all, Petitioner delayed its Petition for nine months, electing to file on the last permissible day. It can hardly be deemed a coincidence that Petitioner sought to initiate this *inter partes* review only after Patent Owner revealed its defense strategy in a preliminary response against a petition filed by a different infringer. In effect, the prior petition was a test case that offered key insights for Petitioner to leverage here in this proceeding.

Even with Petitioner's unfair advantages, its Petition still does not make the grade. First, despite acknowledging the parties' dueling district court constructions of a key claim term, Petitioner's prior art discussion fails to address them with anything more than terse, declarative statements. *See infra*, § IV.A. Without more, simply stating that the prior art meets a claim limitation does not carry Petitioner's burden of proof. In any event, more analysis would not have helped because the prior art does not disclose anything resembling the parties' constructions. Given the prior art's deficiencies, it is no surprise that Petitioner has little to say.

Second, Petitioner misses the mark on motivation to combine. *See infra*, § IV.B. The law requires cogent reasoning bolstered by supporting evidence to sustain a combination of prior art references. What's more, the proffered reasoning and evidence must explain why a person of skill in the art would have been prompted

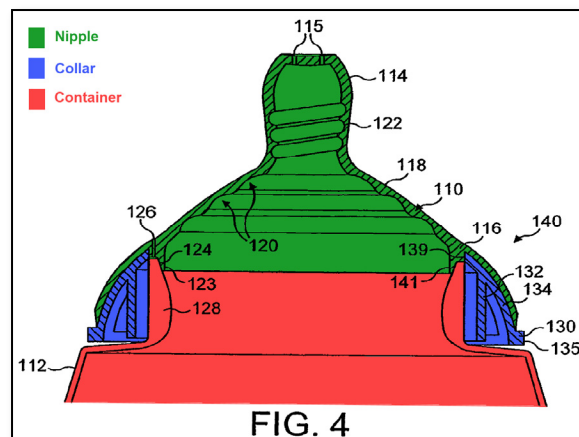
to combine the specific references at issue in the way the claimed invention does. Petitioner comes up short in this regard. Instead of cogent reasoning, Petitioner provides terse generalizations. Instead of credible supporting evidence, Petitioner provides conclusory expert testimony that defies common sense.

Third, Petitioner relies on its own manufactured drawing—not the prior art—to make its obviousness case in Ground 3. *See infra*, § IV.C. Worse yet, the suspect drawing and Petitioner’s conclusions from it, are not even endorsed by Petitioner’s expert. Petitioner’s case-in-chief is attorney argument, and nothing more.

The above-identified flaws in the Petition, each detailed further below, are fatal to Petitioner's case. Institution is not warranted, deserved, or even tenable.

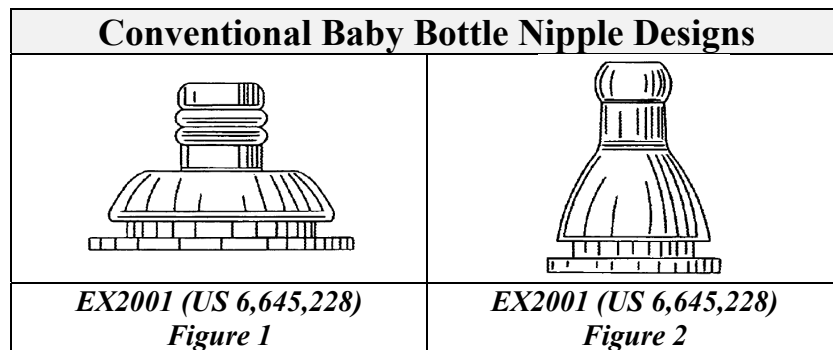
II. THE '930 PATENT

The '930 Patent presents innovative designs for feeding bottles comprised of a vessel and a nipple secured to the open top of the vessel by a collar. These designs are commonly implemented as baby bottles.



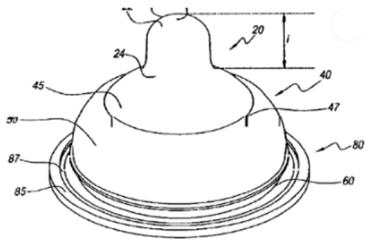
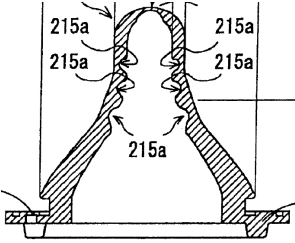
EX1001 ('930 Patent), Figure 4—Annotated by Patent Owner

The concept of using an artificial nipple to facilitate feeding infants from a vessel dates back as far as 1841 when Charles Windship obtained U.S. Patent No. 1,985, entitled “Method of Constructing Lacteal or Artificial Breasts.” In the wake of Mr. Windship’s patent, skilled artisans sought to improve the structure and function of baby-bottle nipples. By the year 2000, baby-bottle nipples were ubiquitous, and many design challenges relating to sanitation, safety, and resilience had been solved. But, as shown below, prevailing nipple designs at that time bore little resemblance to the human body. *See* EX2001, 1:14-18.



As time went on, market participants learned that the unauthentic shape of conventional baby bottle nipples was problematic. EX2001, 1:14-18 (“Due to the significant differences in the shape and function between a woman’s breast and conventional baby bottle nipples, babies experience difficulty in transition from breast-feeding to bottle-feeding.”). They sought new designs focused on “mimic[ing] the human breast in operation.” EX1001, 1:25-28. The ’930 Patent’s inventors acknowledged these new breast-like nipple designs (see below) and set out

to improve them. EX1001, 1:25-2:5.

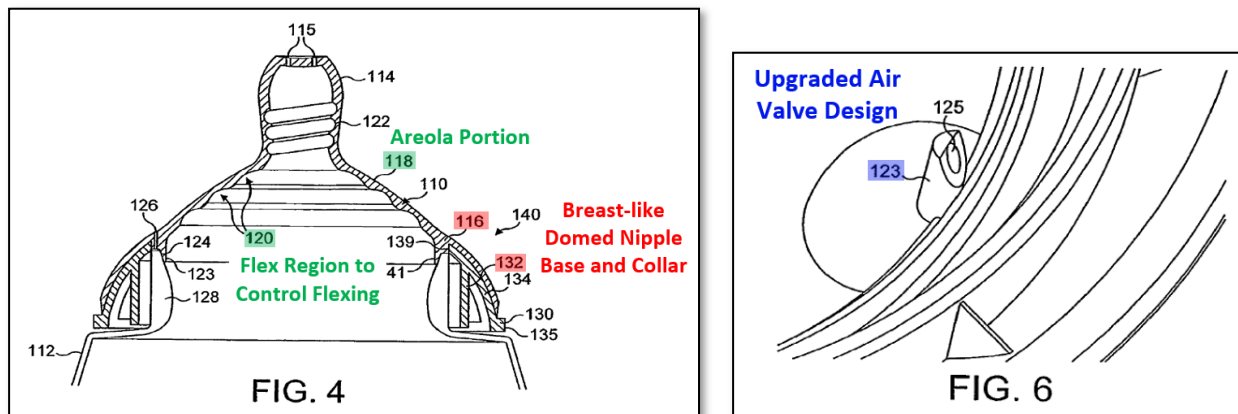
New Breast-Like Baby Bottle Nipple Designs	
	
<i>EX2001 (US 6,645,228) Figure 4 Playtex Design</i>	<i>EX2002 (US 6,745,912) Figure 4 Pigeon Design</i>

Specifically, the inventors observed that there are “[v]arious problems” with the Playtex Design (above, left), which includes a “progressively thinning wall” in its base that “acts as a spring element” when the infant sucks on the teat. EX1001, 1:27-41. The movement induced by the spring element “does not closely mimic the movement of the human breast during sucking,” and “the amount of flexing and the point at which flexing takes place is undefined and unpredictable.” *Ibid.* As for the Pigeon Design (above, right), the inventors noted that its “parallel annular grooves” tend to “allow[] stretching of the nipple but only in a constrained direction, and with the risk of flow blockage if the nipple collapses.” *Id.*, 1:42-46. These insights led the inventors to pursue an innovative design where a “flex region is provided in the areola portion allowing the teat portion and/or the areola portion to move towards and away from one another [in] a more natural feeding action.” *Id.*, 2:9-15.

The '930 Patent's inventors also sought to improve “valved feeding bottles” that “allow air ingress to the teat” to “reduce[] the risk of colic which can otherwise

occur as a result of negative pressure building up in the feeding bottle.”¹ EX1001, 1:47-51. Finding that prior valve designs were “frail and difficult to machine,” resulted in “varied levels of valving between uses[,]” and/or “increase[d] material costs[,]” (*id.*, 1:47-2:5), the inventors developed a new approach where “a natural, robust and resilient valve assembly is provided” (*id.*, 6:15-24).

Simply put, the '930 Patent's nipple-and-collar arrangement more closely mimics the human breast, better controls and defines nipple flexing, and reduces the risk of colic more reliably with an upgraded air valve design.



EX1001 ('930 Patent), Figures 4 and 6—Annotated by Patent Owner

Patent Owner Mayborn's Closer to Nature baby bottle products also reflect the innovations of the '930 Patent and embody its claims. Since their launch in 2006, the Closer to Nature products have enjoyed immense commercial success, received constant industry praise, and been imitated by competitors. *E.g.*, EX2003

¹ The term “colic” is used to describe discomfort and excessive crying by infants.

(“[Mayborn’s] revolutionary closer to nature feeding bottle, which is designed to replicate the feel of a mother’s breast to help babies make the transition to bottle feeding, has been inundated with awards since its launch in 2006.”).²



Mayborn’s Closer to Nature Products

² All emphasis added.

III. THE *GENERAL PLASTIC* FACTORS EXPOSE THE PETITION AS AN UNFAIR SERIAL ATTACK THAT SHOULD BE DENIED

“Multiple, staggered petitions challenging the same patent and same claims raise the potential for abuse.” *General Plastic Industrial Co., Ltd. v. Canon Kabushiki Kaisha*, IPR2016-01357, Paper 19 at 18 (PTAB Sept. 6, 2017) (precedential). And “abuse” of the *inter partes* review process is exactly what happened here. Petitioner abused the process by lying in wait while gaining insight from Patent Owner’s defense of the ’930 Patent against an earlier petition filed by a different infringer, Comotomo Inc. and Comotomo Corp. (“Comotomo”), in Case No. IPR2022-01325. *See* EX1014. Despite sharing similar infringement risk contemporaneously with Comotomo, Petitioner was more than five months slower to file its Petition, which challenges far fewer claims than Comotomo’s. It is telling that Petitioner sought to file only after Patent Owner revealed its defense strategy and exposed the weaknesses in Comotomo’s petition.

The Comotomo petition was a test case for Petitioner, and Petitioner’s Petition is an unfair serial attack on the ’930 Patent that should be denied.

A. Petitioner Delayed in Filing Its Petition

As detailed below, Petitioner was on notice regarding its infringement of the ’930 Patent for 17 months and in possession of the asserted art for 9 months before filing its Petition. Petitioner waited (and waited) until, at last, it was forced to file

on the final day of the statutory deadline. The Petition is unquestionably delayed.

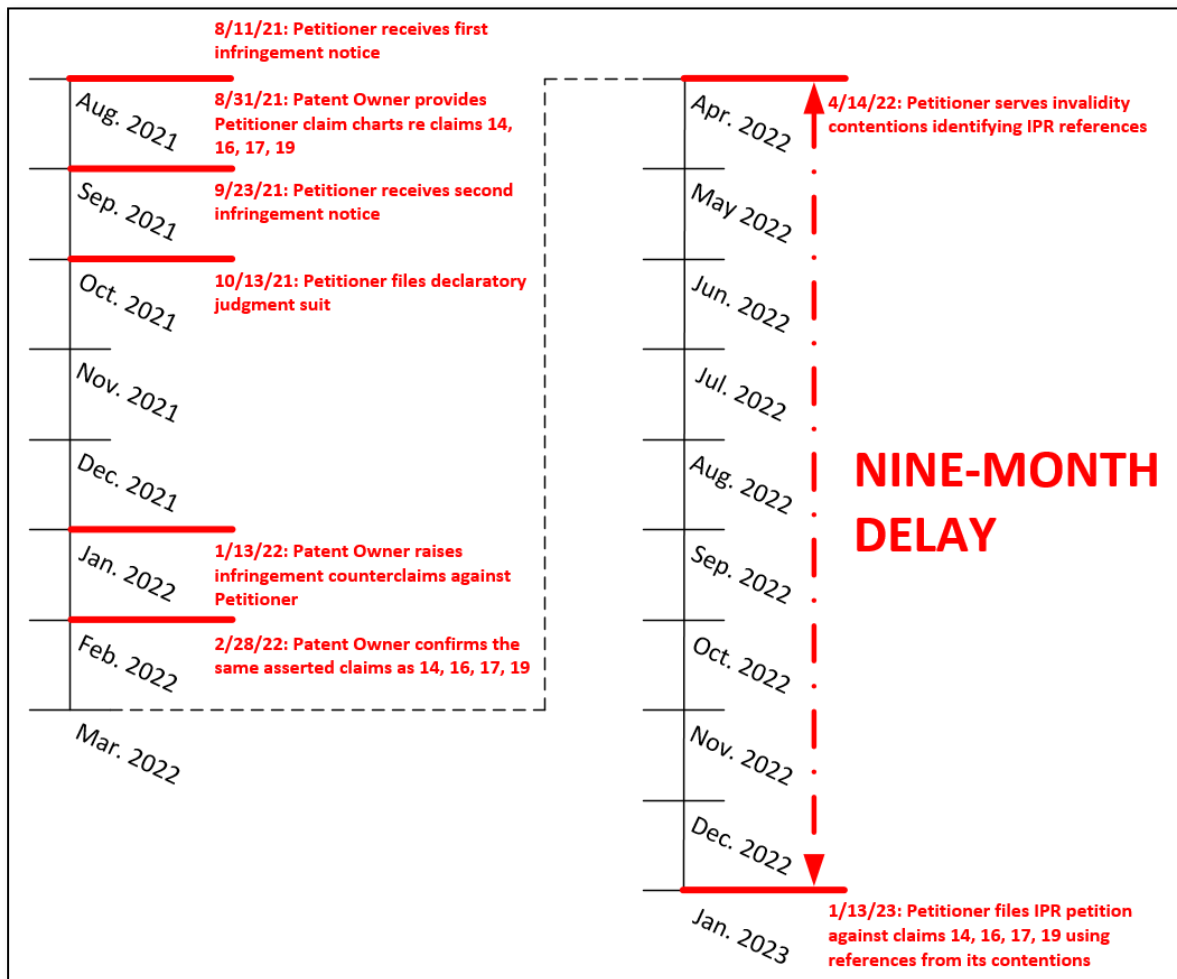
On August 11, 2021, Petitioner received a notice from Amazon regarding its infringement of the '930 Patent. EX1011, p. 3 (§15). After Petitioner acknowledged the notice on August 30, 2021, (*id.*, pp. 3-4 (§17)), Patent Owner furnished claim charts detailing Petitioner's infringement of the '930 Patent's claims 14, 16, 17, and 19 on August 31, 2021, (*id.*, p. 4 (§8)).

On September 23, 2021, Petitioner received another infringement notice from Amazon. EX1011, pp. 5-6 (§§21-25). This time, Amazon required action on Petitioner's part to resolve Patent Owner's infringement claims regarding the '930 Patent. Petitioner responded on October 13, 2021 by filing suit for a declaratory judgment of non-infringement at the District Court for the Southern District of New York ("the District Court"). *See generally* EX1011. Three months later, on January 13, 2022, Patent Owner raised counterclaims of infringement based on the '930 Patent and its descendant, U.S. Patent 11,207,244. EX1012, p. 11.

Per the District Court's case management plan, on February 28, 2022, Patent Owner identified claims 14, 16, 17, and 19 as being asserted and infringed. EX1016, p.5. These are the same claims addressed in Patent Owner's claim charts from August 2021 and the same claims presently challenged.

Petitioner served invalidity contentions against the '930 Patent on April 14, 2022. *See generally* EX2005. Notably, Petitioner's invalidity contentions include

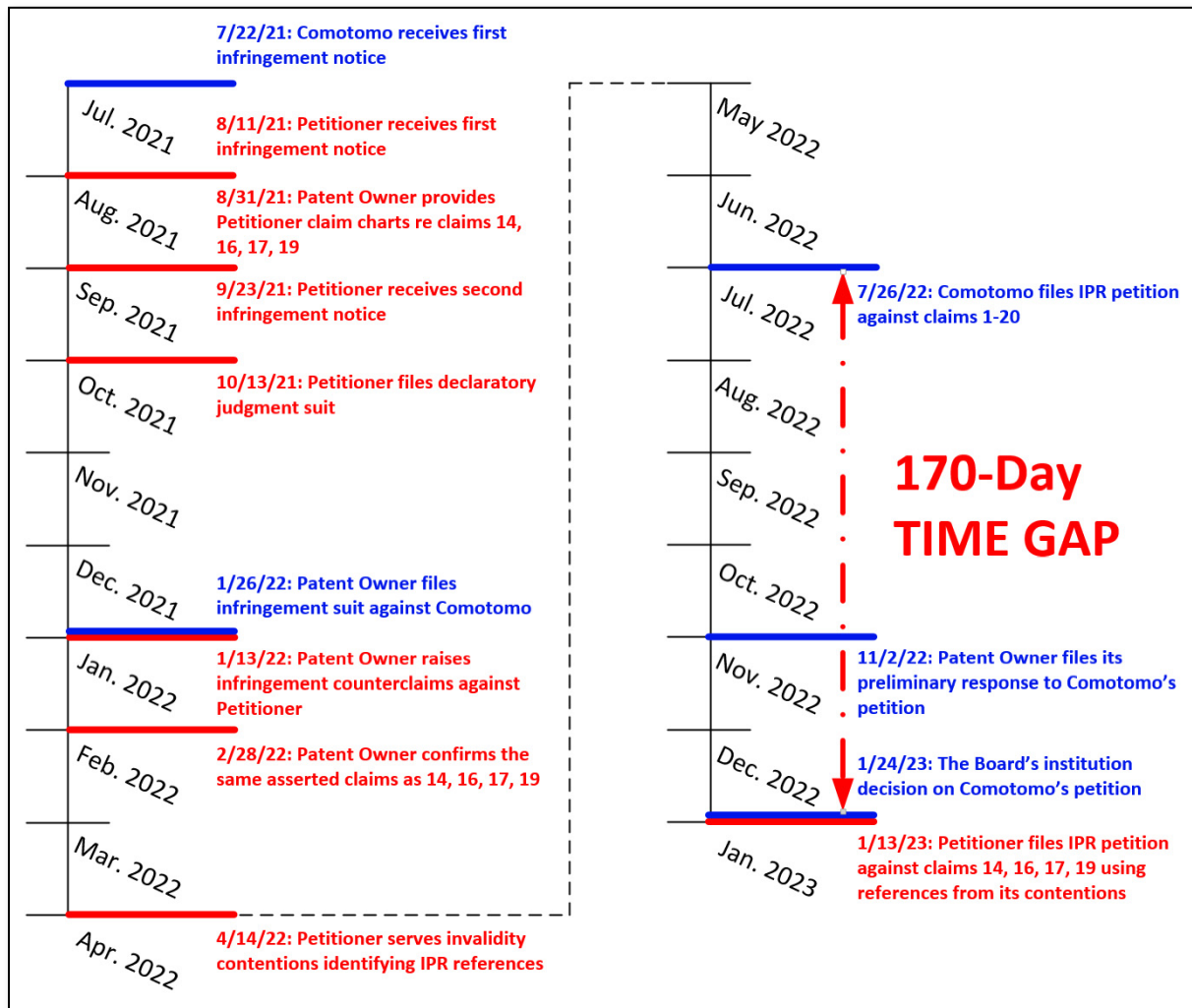
the four references asserted in the Petition (i.e., Meyers, Sepehr, Ishimaru, and Kurkjian). *Id.*, pp., 10-12, And yet, Petitioner did not file its Petition until nine months later, on January 13, 2023. These events are summarized below:



While Petitioner was idle, another infringer, Comotomo, acted with reasonable diligence. Despite facing infringement risk around the same time, Comotomo filed its petition 170 days (more than five months) before Petitioner.

Comotomo was notified of its infringement through Amazon on July 22, 2021, weeks before Petitioner. EX2007, p.7. Patent Owner initiated an infringement suit

against Comotomo on January 26, 2022, around the same time as its infringement counterclaims against Petitioner. *Id.*, pp. 2, 26. Six months later, on July 26, 2022, Comotomo filed its petition for *inter partes* review. *See* IPR2022-01325, Paper 2. Patent Owner filed its preliminary response to Comotomo's petition on November 2, 2022, and the Board rendered an institution decision on January 24, 2023. *Id.*, Papers 6 and 7. These Comotomo events (**blue**) are compared to the above-discussed Nanobebe events (**red**) below:



B. Petitioner, Through Its Delay, Gained Unfair Advantages Over Patent Owner

There is no legitimate excuse for Petitioner sitting on its hands with prior art for 9 months and moving slower than Comotomo by 170 days. And there is no question that Petitioner gained unfair tactical advantages over Patent Owner because of its delay. For months, Petitioner was able to evaluate Comotomo's prior art and obviousness grounds in view of Patent Owner's rebuttal. This information, and the time to digest it, was a windfall for Petitioner in at least three important ways.

First, Petitioner could account for the exposed flaws in the Comotomo petition and assess its low likelihood of success. As a result, Petitioner knew or should have known that a second attack could improve the odds of invalidating the '930 Patent at the PTAB by fixing the mistakes Comotomo made. Second, Petitioner's April 2022 invalidity contentions show that it evaluated the same references as Comotomo and, in effect, was able to test out those references through Comotomo's petition. *Compare* EX1014, pp. 10, 13, *with* EX2005, pp. 10, 16.³ Then, after learning from

³ Petitioner's contentions list the initial publication (JP2000271193) of the Kobayashi reference (JP Pat. No. 3209271) in Comotomo's petition. Likewise, Petitioner's contentions list the U.S. counterpart (U.S. 2007/0221604) of the Hakim reference (WO 2004/013001) cited in Comotomo's petition.

Patent Owner that the references were deficient, Petitioner was able to strategically select different prior art for its own Petition. Third, Petitioner was able to account for Patent Owner's defense strategy against the Comotomo petition when crafting its own element analysis and motivation discussions. As revealed below in Section IV, Petitioner's grounds are still deficient, but they would likely be even worse without insight into Patent Owner's defense.

C. The *General Plastic* Factors Compel Denial of Petitioner's Serial Petition

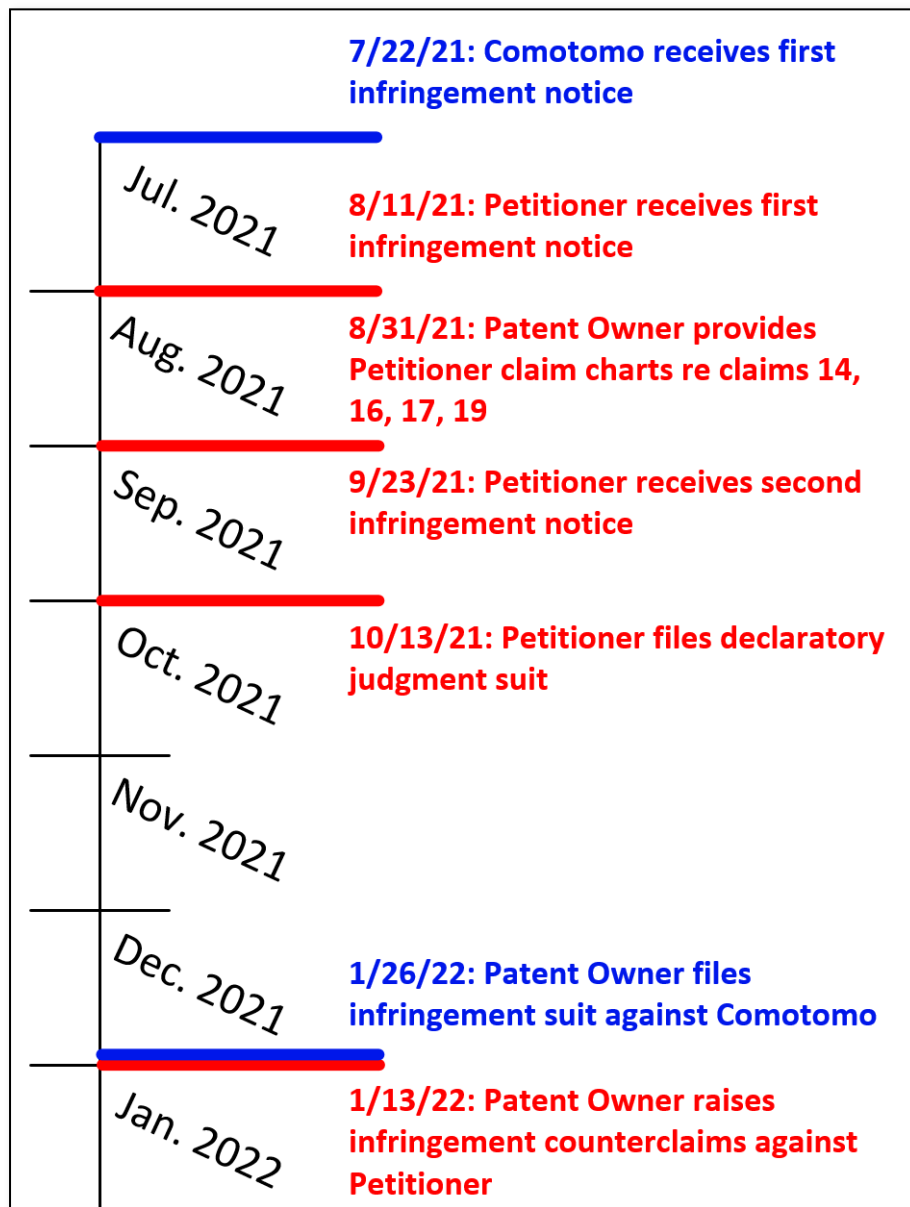
It is clear from the discussion above that Petitioner's Petition is a serial attack on the '930 Patent that used the earlier Comotomo petition as a test case. The Board formulated the *General Plastic* factors to expose—and prevent—this kind of unfair litigation tactic. Thus, unsurprisingly, the factors weigh heavily toward denial when applied to the operative facts here.

1. Factor 1: whether the same petitioner previously filed a petition directed to the same claims of the same patent

Comotomo previously filed a petition against claims 1-20 of the '930 Patent, and Petitioner's Petition challenges the subset of claims 14, 16, 17, and 19. It is beyond dispute that the same claims of the same patent are under a serial attack.

It is likewise beyond dispute that Petitioner and Comotomo are similarly-situated defendants that faced similar infringement risk under the '930 Patent at around the same time. As discussed in Section III.A, Comotomo received an

infringement notification through Amazon on July 22, 2021, and Petitioner received the same just weeks later on August 11, 2021. Patent Owner brought its infringement claims against Petitioner on January 13, 2022 and against Comotomo just weeks later on January 26, 2022.



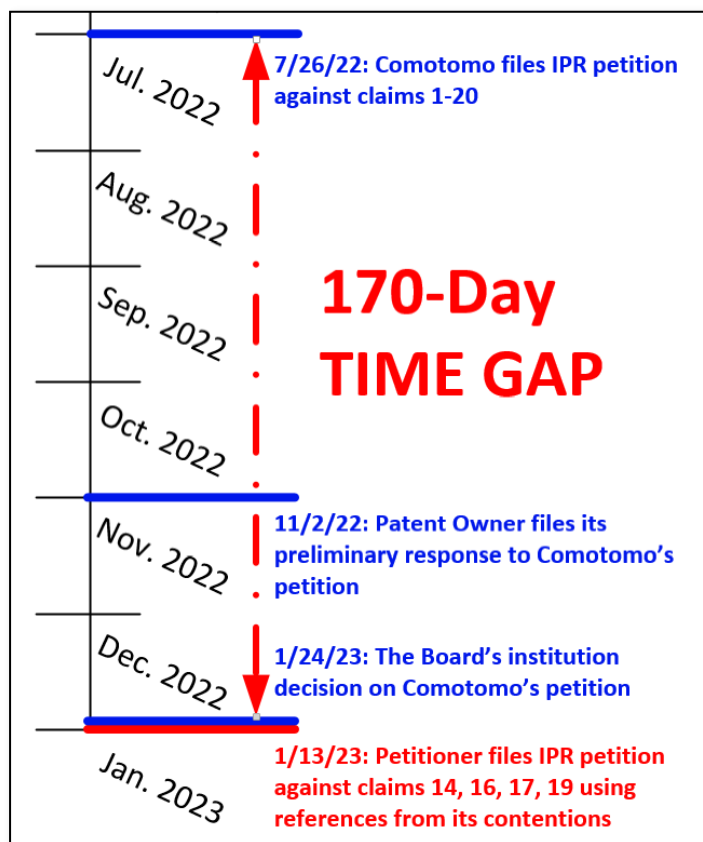
While Comotomo and Petitioner are separate entities, any weight this fact carries under Factor 1 is neutralized by the countervailing facts that Comotomo and Petitioner lodged overlapping challenges and share common circumstances on infringement. Additionally, the considerations supporting denial under Factor 1 are buttressed by those under Factors 2-5, which show that Petitioner's unjustified delay in pursuing *inter partes* review was strategic and abusive. Whether the staggered petitions were filed by the same petitioner or two different petitioners, the Board has historically denied institution under similar circumstances. *E.g.*, *Shenzhen Silver Star Intelligent Tech. Co., Ltd. v. iRobot Corp.*, IPR2018-00761, Paper 15 (PTAB Sep. 5, 2018); (denying institution under *General Plastic* when two different petitioners filed serial petitions); *NetApp, Inc. v. Realtime Data LLC*, IPR2017-01195, Paper 9 (PTAB Oct. 12, 2017) (same); *accord Consolidated Trial Practice Guide* at 58; *Unified Patents Inc. v. Finjan, Inc.*, IPR2019-01611, Paper 18 (PTAB Apr. 13, 2020) (same).

2. Factor 2: whether at the time of filing of the first petition the petitioner knew of the prior art asserted in the second petition or should have known of it

Comotomo filed a first petition for *inter partes* review of the '930 Patent on July 26, 2022. More than three months beforehand, on April 14, 2022, Petitioner served invalidity contentions identifying the prior art (i.e., Meyers, Sepehr, Ishimaru, Kurkjian) from Grounds 1-3 of its Petition. *See* EX2005, pp., 10-12. Even though

it could not have added these references to Comotomo's petition, given the shared circumstances of the two defendants, Petitioner could have filed its Petition around the same time as Comotomo. *Valve Corp. v. Elec. Scripting Prods. Inc.*, IPR2019-00062, Paper 11 at 14 (PTAB April 2, 2019) (precedential) ("Valve could have filed its Petition at or around the same time as HTC."). But Petitioner did not do so.

Instead, Petitioner withheld its Petition for another 170 days until it had time to receive and digest feedback on Comotomo's petition via Patent Owner's preliminary response. Petitioner should not be allowed to use Comotomo's petition as a "test case." *See Shenzhen Silver Star* at 18 (Saindon concurring) ("if two or more co-defendants are sued around the same time, they should, within reason, file their petitions around the same time; it is generally unfair for one defendant to wait for a 'test case' to go through the inter partes review process by another defendant before filing their own petition").



Factor 2 strongly favors denial.

3. Factor 3: whether at the time of filing of the second petition the petitioner already received the patent owner's preliminary response to the first petition or received the Board's decision on whether to institute review in the first petition

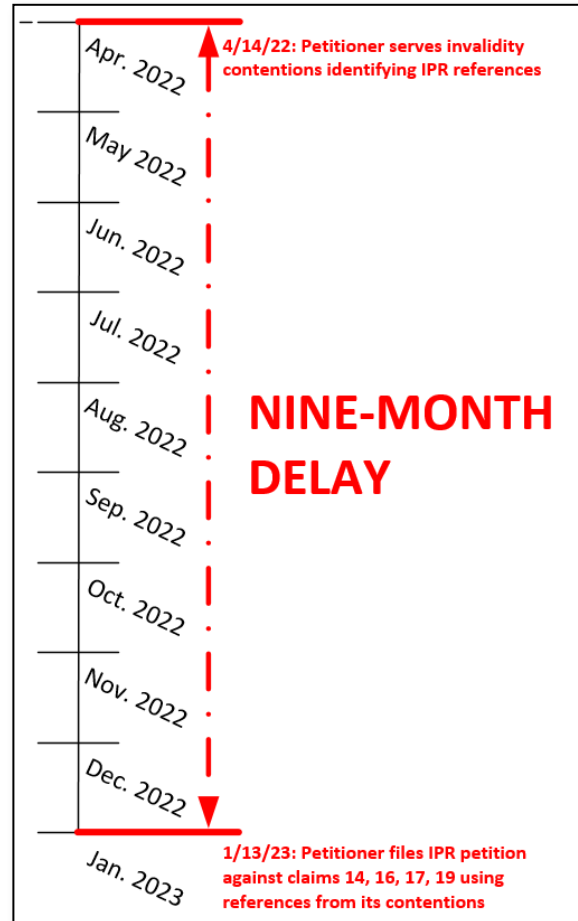
Patent Owner filed its preliminary response to Comotomo's first-in-time petition on November 2, 2022. Petitioner, who does not deny knowledge of the Comotomo proceeding, would have received Patent Owner's filing on the public record around that time. More than two months later, on January 13, 2023, Petitioner filed its second-in-time petition.

As discussed in Section III.B, studying Patent Owner's preliminary response for two months afforded Petitioner at least three tactical advantages: (1) insight into the likelihood of success on Comotomo's petition before determining whether, and to what extent, an additional challenge would improve the odds of invalidating the '930 Patent; (2) insight into the deficiencies of Comotomo's prior art; and (3) insight into Patent Owner's defense strategy for *inter partes* review. These advantages are the "undue inequities and prejudices to Patent Owner" that the Board sought to expose and excise in *General Plastic*. See *General Plastic* at 17 ("Petitioner's potential benefit from receiving and having the opportunity to study Patent Owner's Preliminary Response.").

Factor 3 strongly favors denial.

4. Factor 4: the length of time that elapsed between the time the petitioner learned of the prior art asserted in the second petition and the filing of the second petition

While it likely learned of the asserted references earlier, Petitioner cannot dispute that it was aware of them by April 14, 2022 when it served invalidity contentions in District Court. As discussed, all four references asserted in the Petition are also identified in Petitioner's contentions. Still, despite possessing the pertinent art and knowing which claims it infringed, Petitioner did not file its Petition for another nine months.



The Board denied institution based on significantly smaller delay periods in the precedential *Valve* case and various other cases. *See Valve* at 14 (“The fact that Valve waited five months after HTC’s petition to file the Petition in this case favors denying institution.”); *Shenzhen Silver Star* at 13 (“Thus, Petitioner knew of the majority of the asserted art for at least five and a half months before filing this Petition.”); *Mitek Sys., Inc. v. United Servs. Auto. Assoc.*, IPR2020-01101, Paper 29 at 33 (PTAB Jan. 26, 2021) (“Petitioner still waited more than seven months to file

its Petition”); *Fresenius Kabi USA, LLC v. Amgen Inc.*, IPR2019-00971, Paper 13 at 10 (PTAB Oct. 16, 2019) (“The Petition was filed . . . over six months after” a prior petition asserting the same art.”).

Factor 4 strongly favors denial.

5. Factor 5: whether the petitioner provides adequate explanation for the time elapsed between the filings of multiple petitions directed to the same claims of the same patent

The Board’s precedent on serial petitions is well known, and Petitioner acknowledged Comotomo’s earlier-filed petition against the ’930 Patent. *See* Pet., 2 (citing EX1014). Petitioner knew that its Petition was a serial filing and, thus, knew or should have known that the *General Plastic* factors are highly relevant in this proceeding. Just as Petitioner addressed other aspects of the Board’s precedent on discretionary denial, it also could have addressed *General Plastic*. *See id.*, 6-10 (Petitioner addressing § 325(d) and the *Fintiv* factors). But Petitioner neglected to do so. And because Petitioner offers no explanation at all regarding its nine-month delay in pursuing *inter partes* review, Factor 5 favors denial. *See Apple Inc. v. Uniloc 2017 LLC*, IPR2020-00854, Paper 9 at 11 (PTAB Oct. 28, 2020) (precedential) (given the petitioner’s “lack of explanation, we conclude that this fifth *General Plastic* factor also weighs in favor of denying institution”).

Regardless, Factor 5 would favor denial even if Petitioner had tried to explain away its nine-month delay. In the precedential *Valve* case, the Board weighed this

factor toward denial even though the second-in-time petitioner's five-month delay was caused by a confluence of events that included its dismissal from the co-pending district court litigation and a change in law regarding the § 315(b) statutory time bar. *See Valve* at 13-14 (“The *Click-to-Call* decision may have prompted Valve to file the Petition before the deadline under § 315(b), but it does not excuse the five-month delay between the filing of HTC’s petition and Valve’s Petition.”). If the Board did not “excuse” a five-month delay under the extreme circumstances in *Valve*, Petitioner could not expect such a result here regarding its nine-month delay.

Unlike the petitioner in *Valve*, the circumstances involving Petitioner’s infringement risk have not shifted. Patent Owner asserted the ’930 and ’244 Patents against Petitioner in January 2022, and the asserted patents have not changed. Petitioner’s asserted art references were disclosed in April 2022 and have not changed. The parties disclosed their claim construction positions in May 2022, and settlement discussions have not progressed. What’s more, Petitioner could not plausibly complain that activity in the District Court somehow slowed progress on its Petition because Petitioner hired different law firms to conduct the respective proceedings. The simple truth is this: Petitioner was fully capable of filing its Petition much earlier, such as around the same time as Comotomo’s petition, but it chose not to.

6. Factors 6 and 7: the finite resources of the Board; and the requirement under 35 U.S.C. § 316(a)(11) to issue a final determination not later than 1 year after the date on which the Director notices institution of review

“[M]ultiple, staggered petition filings, such as those here, are an inefficient use of the *inter partes* review process and the Board’s resources.” *General Plastic* at 21. The Board’s resources are especially not well spent where, as here: (A) the merits of the Petition are not strong, (*see infra* Section IV); (B) two of the four asserted references were considered during prosecution, (*see* Pet., 6); and (C) an *inter partes* review proceeding would not serve its intended purpose as an efficient alternative to district court litigation.

Not only has Petitioner leveraged its unexplained delay to gain unfair tactical advantages over Patent Owner, it has also increased the likelihood that the District Court will resolve the same or substantially similar validity issues before the Board’s final written decision in July 2024. The parties have already briefed and argued their claim construction disputes, and the District Court resolved them in a detailed 30-page *Markman* order dated April 18, 2023. *See* EX1017, EX1018, EX2008. The close of fact discovery is July 14, 2023, around the same time as the Board’s projected institution decision. EX2009, p. 2. The complete close of discovery is 70 days later, on September 22, 2023, before even the first projected post-institution due date in this proceeding. *Id.* And, absent summary judgment motions, the

District Court's schedule instructs the parties to be prepared for trial by early November 2023, approximately eight months before the Board's July 2024 final written decision. *Id.*, p. 3.⁴ Even with discovery delays and pre-trial briefing, the District Court will likely reach a resolution on the '930 Patent before the Board.

Projected resolution dates aside, the litigation at the District Court is farther along than this proceeding, and Petitioner is the cause. *Inter partes* review is both unfair and inefficient because of Petitioner's delay. As a result, the Board should deny institution.

IV. THE PETITION SHOULD BE DENIED BECAUSE PETITIONER CANNOT PREVAIL ON ANY CHALLENGED CLAIM

A. Petitioner Fails to Make Its Case on the "Domed Configuration" Limitation of Element 14[E] (All Grounds)

The Petition does not establish that its prior art combinations teach, suggest, or otherwise render obvious "a base portion [of the nipple] having a domed configuration," as required by Element 14[E].

⁴ If no summary judgment motions are filed, the District Court will issue a Joint Pretrial Order by October 22, 2023, i.e., within 30 days of the close of discovery (September 22, 2023). The parties must be ready for trial within two weeks of the Joint Pretrial Order, i.e., no later than November 5, 2023.

The parties presented competing constructions of the term “domed configuration” to the District Court, and Petitioner tried but failed to satisfy them in the Petition. *See* Pet., 16-18, 41-44, 92-95. The Petition falls short because the prior art lacks any semblance of a “domed” nipple.

The following discussion identifies the pertinent constructions (§ IV.A.1) and explains the deficiencies of Petitioner’s prior art under each (§§ IV.A.2 and IV.A.3).

1. The parties’ respective constructions of “domed configuration”

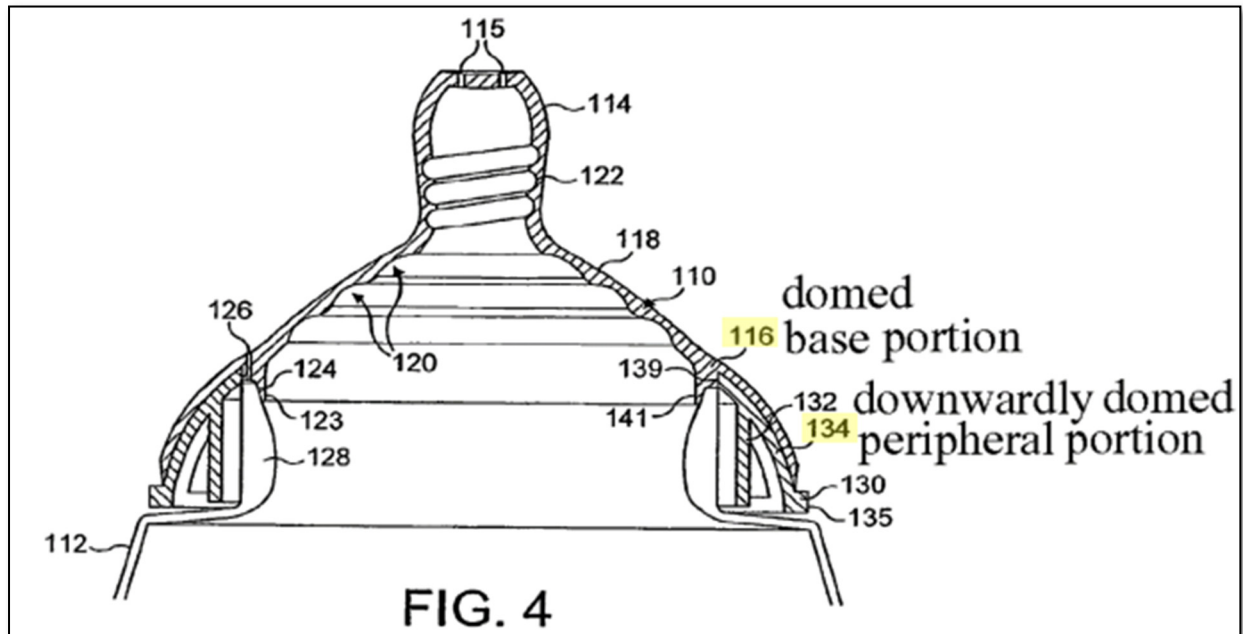
The District Court recently adjudicated the parties’ claim construction dispute on the term “domed configuration.” *See* EX2008, pp. 12-15. As summarized in the Court’s *Markman* order, the parties’ proposed constructions are:

Term	Claim	Mayborn	Nanobebe
“domed configuration”/ “a base portion having a domed configuration” /“domed shape”	Claim 14 in ‘930 Patent; Claim 21 in ‘244 Patent	“wide circular base with an arc-shaped cross-sectional profile” Alternatively: “wide circular base with a convex cross- sectional profile”	“having a rounded shape in profile”

EX2008, p.12.

Patent Owner’s construction focuses on the ’930 Patent’s guidance that the base portion of the nipple is “shaped like a breast” and has “a wide, domed configuration.” EX1001, 4:1-3; EX1017 (Patent Owner’s Brief), p.22. The proposed construction requires a “wide” structure “with an arc-shaped cross-

sectional profile” because that is what a human breast looks like, and it is also what the ’930 Patent illustrates. *Id.*; see also EX1001, Figure 4 (annotated below).



EX1001 ('930 Patent), Figure 4—Annotated by Patent Owner

According to Petitioner, its construction of “domed configuration”—i.e., “having a rounded shape in profile”—means the nipple base is “hemispherical” and has “the shape of half of a sphere.” EX1018 (Petitioner’s Brief), p. 18; EX2008 (Markman Order), p. 13 (“At the *Markman* hearing, Nanobebe reiterated that the shape of the base portion is the ‘upper half of a sphere’ . . .”).

The District Court rejected Petitioner’s construction due to its overreliance on dictionary definitions and lack of “accord with the intrinsic evidence.” EX2008, pp. 13-14. By contrast, the District Court agreed with Patent Owner’s reliance on the ’930 Patent’s description of a nipple with a “wide” base portion that is “shaped like

a breast” and its illustration of an arc-shaped profile. *Id.*, 13-15 (citing, *inter alia*, EX1001, 4:1-3, Figure 4). Accordingly, the District Court adopted a construction substantially similar to Patent Owner’s: “wide circular bottom with an arc-shaped cross-sectional profile.” EX2008, p.15. The only deviation is that the District Court replaced Patent Owner’s word “base” with “bottom.”

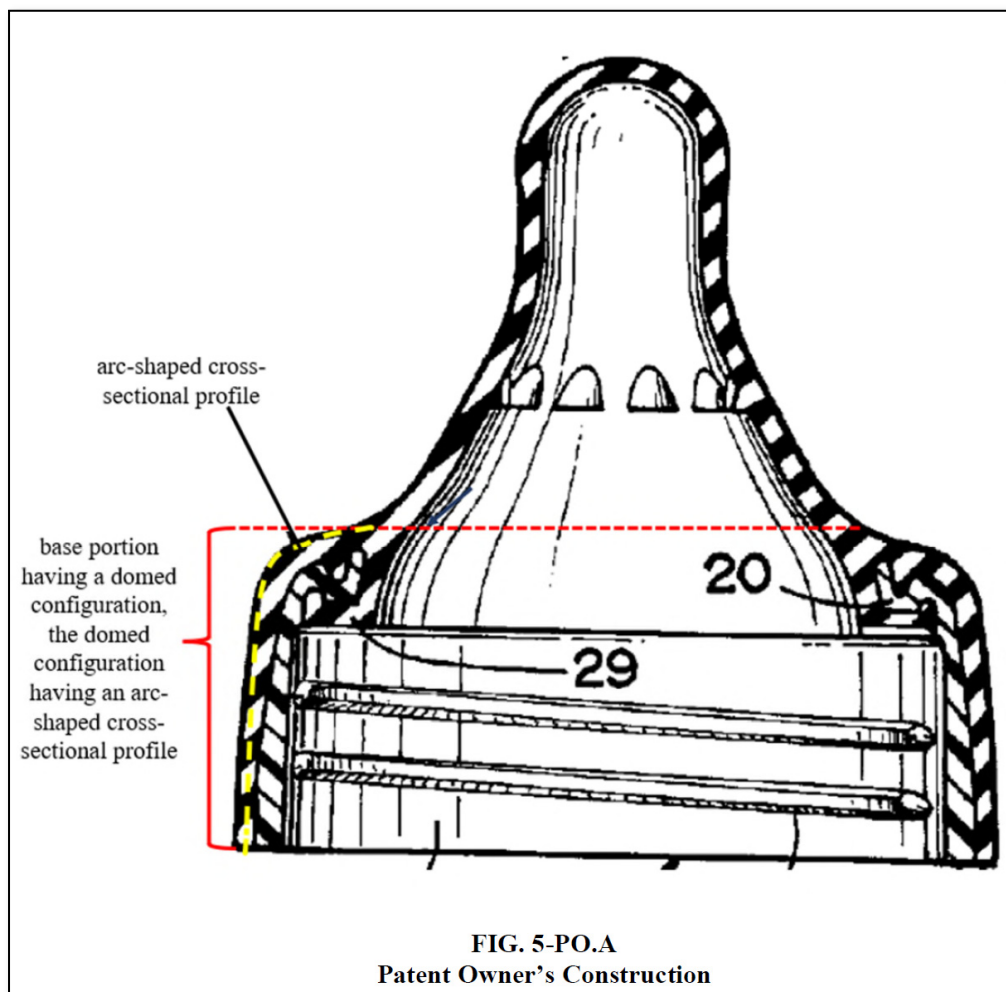
As the District Court held, Patent Owner’s correct construction comports with the intrinsic evidence and Petitioner’s incorrect construction does not. Regardless, as explained below, Petitioner’s prior art fails to satisfy either party’s construction.

2. Petitioner does not show that Meyers satisfies the parties’ constructions of “domed configuration” (Grounds 1 and 2)

Regarding the ’930 Patent’s “domed configuration,” Petitioner asserts that “Meyers discloses this limitation” for Ground 1, (Pet., 41-44), and Ground 2, (*id.*, 67). Specifically, Petitioner relies on the express disclosures of Meyers “as shown in” its figures. *Id.*, 41 (“as shown in annotated Fig. 5-PO.A”), 43 (“as shown in annotated Fig. 14-PET). Petitioner does not raise any alleged inherent disclosures, implied suggestions, or modifications based on other prior art or a POSITA’s common knowledge and ordinary creativity.

Under Patent Owner’s construction, Petitioner appears to contend through its annotations that the curved shoulder in Meyers’s nipple creates an arc-shaped cross-sectional profile. Pet., 41-42 (referencing FIG. 5-PO.A (below)). Petitioner fails to

allege, however, that this shoulder is “wide” in the manner of a human breast.



Pet., 42. Instead of explaining how or why Meyers’s curved shoulder is “wide” (which it is not), Petitioner states that the “wide” aspect of Patent Owner’s construction is met simply because “the base portion 26 [of Meyers’s nipple] as viewed from above and below in Figs. 11-13 is circular.” *Id.* But “circular” and “wide” are not the same thing, and Patent Owner’s construction requires the “domed configuration” to be both wide and circular.

Ultimately, Petitioner cannot show that base 26 of Myers is wide because it is not wide. The shoulder in Meyers's nipple has a small radius of curvature, meaning it is narrow and therefore antithetical to Patent Owner's construction. The contrast between Meyers's nipple with a narrow base and the '930 Patent's nipple with a wide base is striking.

Meyers's Narrow Nipple Base

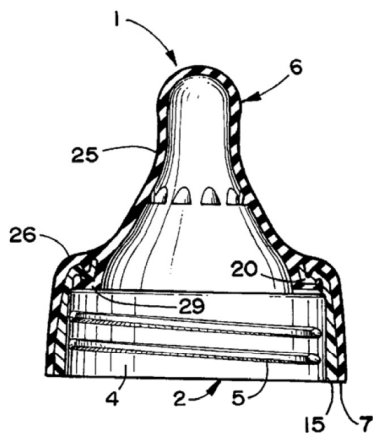


Fig. 5

EX1006, Figure 5

The '930 Patent's Wide Nipple Base

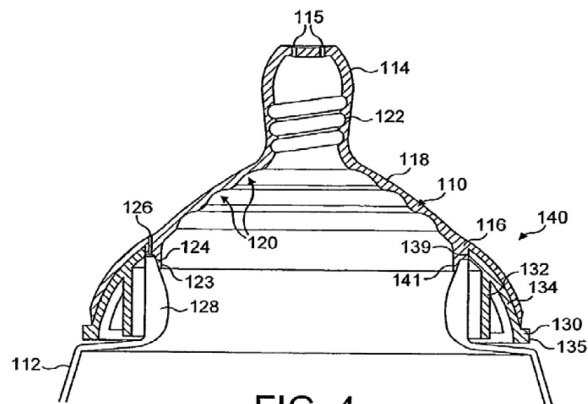
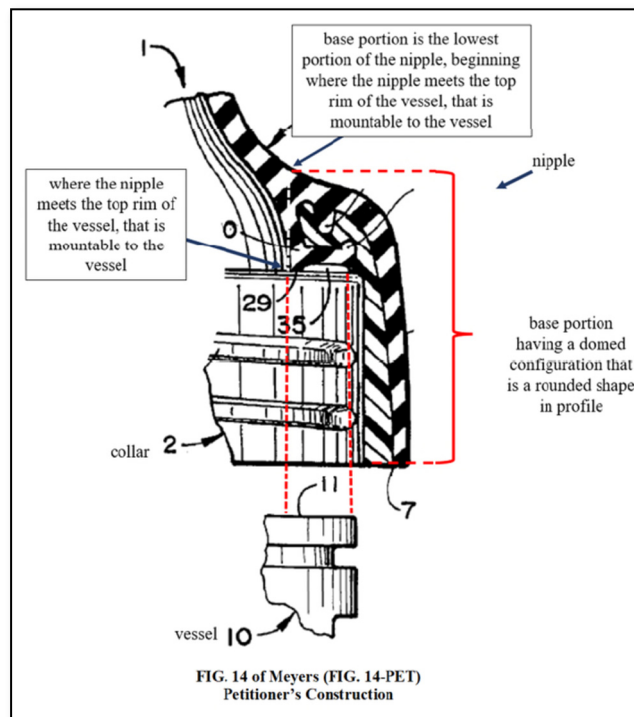


FIG. 4

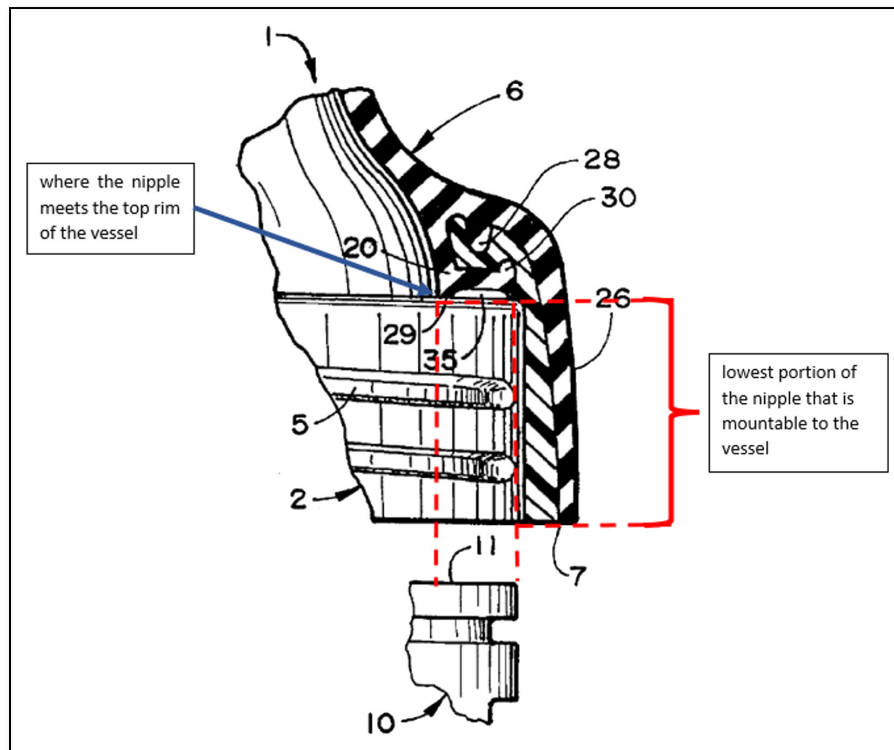
EX1001, Figure 4

It stands to reason that Meyers does not disclose a nipple base with a “domed configuration” under Patent Owner's construction. After all, Meyers did not set out to create a more breast-like nipple. Meyers was instead focused on something else entirely, i.e., “provid[ing] a one-piece nipple/collar which is more convenient to use, and is easier to clean.” EX1006, 1:64-66.

Meyers also fails to satisfy Petitioner’s flawed construction. As discussed (*see supra*, § IV.A.1), Petitioner represented to the District Court that its construction of the term “domed configuration” requires a “hemispherical” shape. EX1018, p. 21; EX2008, p. 13. Or, in other words, “the shape of a half of a sphere.” *Id.* But anyone can see that the “base portion” of the nipple Petitioner points to in Meyers looks nothing like half of a sphere, nor does Petitioner allege as much. Rather than attempting to explain its flawed position, Petitioner simply declares its construction satisfied using conclusory figure annotations. Pet., 44 (FIG. 14-PET)(below). Deficiencies on the merits aside, conclusory assertions do not warrant institution. *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016) (a petitioner cannot prove unpatentability through “mere conclusory statements”).



Yet another problem for Petitioner is that the Petition misidentifies the “base portion” of Myers under Petitioner’s own construction of that term. Petitioner construes “base portion” as “the lowest portion of the nipple, beginning where the nipple meets the top rim of the vessel, that is mountable to the vessel.” Pet., 17, 43. Correctly applying Petitioner’s “where the nipple meets the top rim of the vessel” language results in the following identification of Meyers’s “base portion”:



EX1006 (Meyers), Figure 14—Annotated by Patent Owner

This correctly identified “base portion” under Petitioner’s construction of the term excludes the curved shoulder and is, therefore, even less aptly described as hemispherical or shaped like a sphere.

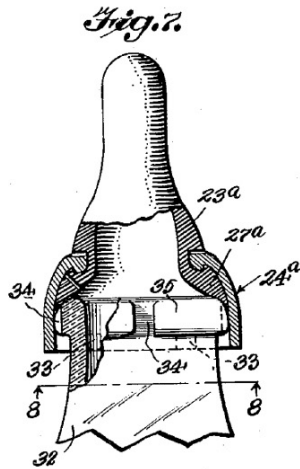
For all of the foregoing reasons, Petitioner has not, and cannot, demonstrate that Myers “discloses” a nipple base having a “domed configuration” under either of the parties’ constructions.

3. Petitioner does not show that Kurkjian satisfies the parties’ constructions of “domed configuration” (Ground 3)

In Ground 3, Petitioner asserts that “Kurkjian discloses this limitation.” Pet., 92-95. Specifically, Petitioner says that “Kurkjian’s domed configuration [is] shown in annotated Fig. I” and “Fig. J.” *Id.*, 92, 94. As a threshold matter, Petitioner’s analysis is not based on the native figures from Kurkjian. Instead, Petitioner annotates its self-servingly created “Fig. I” and “Fig. J,” which only roughly resemble Kurkjian’s figures. *Compare*, Pet., 93, *with* EX1009, Figures 6-7. Petitioner’s contentions based on figures of its own creation cannot legitimately show that “Kurkjian discloses” the ’930 Patent’s “domed configuration” limitation. For this reason alone, Petitioner’s Ground 3 fails.

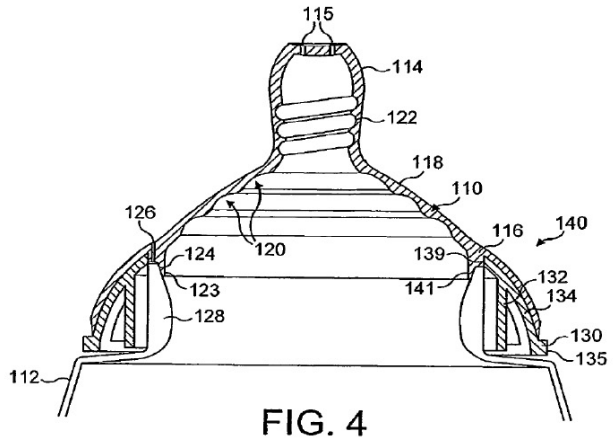
Additionally, in both Petitioner’s “Fig. I” and Kurkjian’s native figures, the entire nipple—including the short segment Petitioner identifies as the claimed “base portion”—is exceedingly narrow and therefore antithetical to Patent Owner’s construction. The comparison below illustrates the stark contrast between Kurkjian’s narrow nipple, and the “wide” breast-like nipple of the ’930 Patent.

Kurkjian's Narrow Nipple Base



EX1009, Figure 7

The '930 Patent's Wide Nipple Base



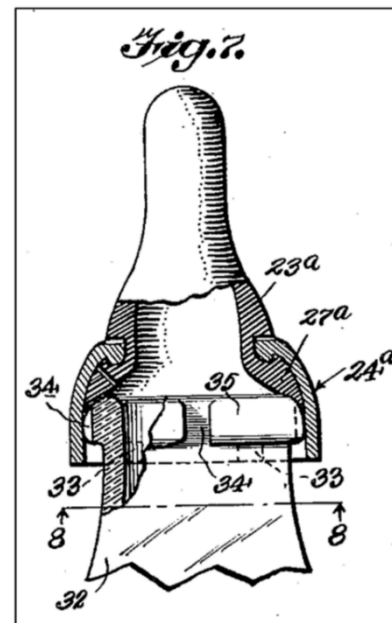
EX1001, Figure 4

Petitioner could not credibly assert that any part of Kurkjian's nipple is "wide" in the manner of a human breast. Unsurprisingly, Petitioner makes no such assertion. Mirroring its deficient analysis of Myers, Petitioner states that the "wide" aspect of Patent Owner's construction is met simply because "the base portion of [Kurkjian's] nipple 12 is circular as viewed from the top or bottom." Pet., 92. Here too, though, Petitioner has no basis to ignore two separate words in Patent Owner's construction and simply equate "circular" with "wide."

Kurkjian's lack of a base portion having a "domed configuration" is not surprising because Kurkjian is not at all concerned with creating a more breast-like nipple. Kurkjian is a patent from the 1930s that sought to solve a more rudimentary problem, i.e., how to secure a nipple to a bottle using a retaining cap (or "collar")

that allows air intake and prevents the nipple from collapsing during use:

This invention relates to nursing units, and has for one of its principal objects the production of a resilient flanged nipple which is so constructed as to permit the nipple to be secured to the mouth of a bottle by means of a retaining cap, and permit the entrance of air into the interior of the bottle, and also prevent the nipple from collapsing inwardly of the retaining cap.

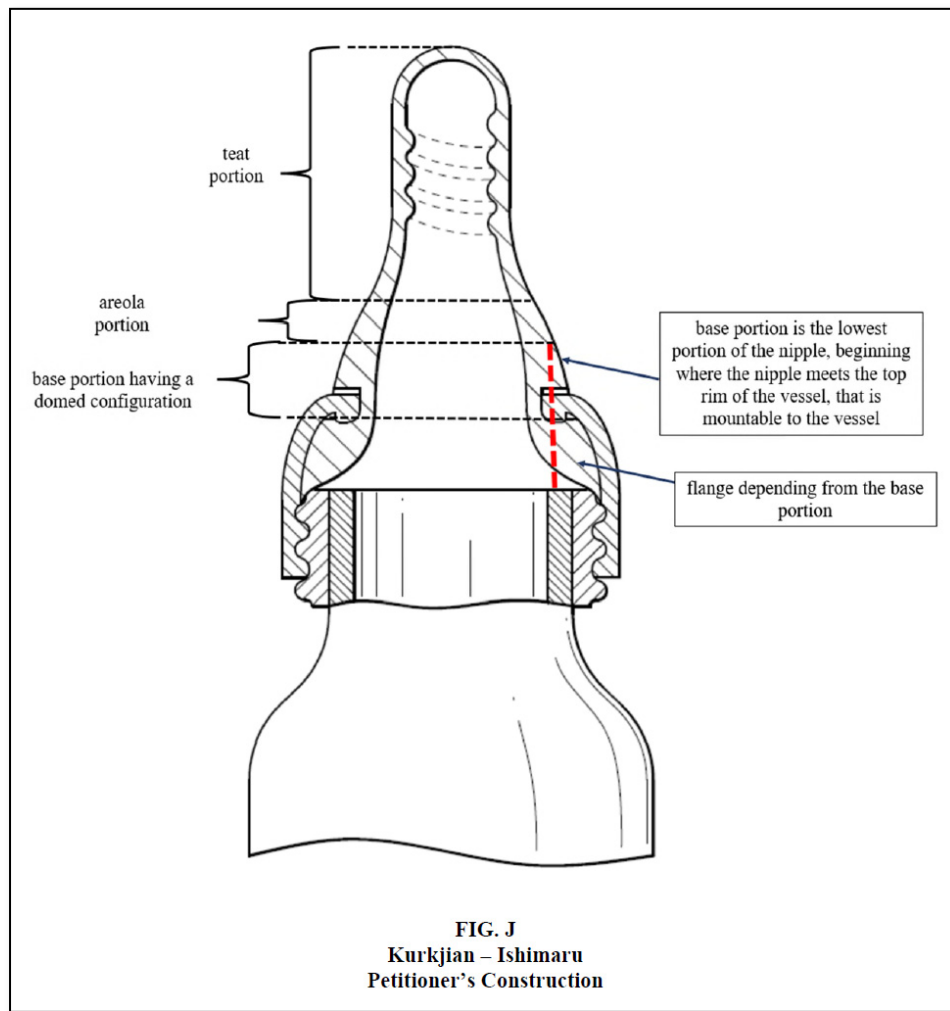


EX1009 (Kurkjian), Figure 7

EX1009, 1:1-15.

Critically, Kurkjian never discloses or suggests that its nipple is domed or arc-shaped. Kurkjian characterizes the disclosed configuration as “streamlined,” (*id.*, 1:16-20, 2:42-46), and Petitioner does not contend that being “streamlined” satisfies Patent Owner’s construction, (Pet., 92-93).

Petitioner also fails to squarely address its own construction of “domed configuration,” despite declaring that it is “shown in Fig. J” (below) by a small segment labeled “base portion.” Pet., 94. Here, like before, Petitioner fails to explain how the labeled “base portion” has “a rounded shape in profile” like “half of a sphere,” as Petitioner told the District Court its construction requires. EX1018, p. 21; EX2008, p. 13.



For all of the foregoing reasons, Petitioner has not, and cannot, demonstrate that Kurkjian “discloses” a nipple base having a “domed configuration” under either of the parties’ constructions.

B. Petitioner’s Motivation-to-Combine Analysis is Legally, Logically, and Factually Flawed (All Grounds)

Even if Meyers and Kurkjian disclosed, taught, or suggested a base portion having a “domed configuration,” which they do not, Petitioner fails to establish a valid reason why a POSITA would have been motivated to make Petitioner’s

proffered combinations with Sepehr. Petitioner's stated motivation rationales are legally flawed and buttressed only by speculative, conclusory statements that defy both common sense and the references themselves.

1. Meyers-Sepehr (Grounds 1-2)

Petitioner's opening argument regarding "analogous solutions" fails as a matter of law. Pet., 27. The fact that "[a] POSA would have considered Meyers and Sepehr in the same field of endeavor," (*id.*), relates to the threshold issue of analogousness, not motivation to combine. *See Johns Manville Corp. v. Knauf Insulation, Inc.*, IPR2018-00827, Paper 9 at 10–11 (PTAB Oct. 16, 2018) (informative) ("Demonstrating that a reference is analogous art or relevant to the field of endeavor of the challenged patent is not sufficient to establish that one of ordinary skill would have had reason to combine its teachings with other prior art in the manner set forth in the claim.").

It is well established that, to prevail on obviousness, the petitioner "needs to sufficiently explain why a person skilled in the art would have done that" which the claimed invention does. *IBM Corp. v. Rigetti & Co., Inc.*, IPR2020-00496, Paper 10 at 22 (PTAB Aug. 7, 2020). In other words, "obviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention." *Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (original

emphasis); *see also TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1066 (Fed. Cir. 2016) (it is necessary to explain “why the references would be combined”). Whether the references “both teach analogous solutions for, and describe the benefits of, nipples with air vents and collars,” (Pet., 27), does not answer the critical question of why a POSITA would have replaced the vent structure in Meyers with the valve design that Sepehr disclosed. Without answering the why question, Petitioner’s “analogous solutions” theory alleges nothing more than that a POSITA could have made the combination, which *Belden* expressly deems insufficient.

Illuminating this deficiency from a different perspective, the implication of Petitioner’s “analogous solutions” theory is that it would have been necessarily obvious to try every possible combination of references that disclose a nipple with a vent. *See, e.g.*, EX1005, ¶159 (Petitioner’s expert stating that the relevant analogous characteristic between Meyers and Sepehr is “providing an air vent in a location that will reliably vent the interior of the vessel to equalize the pressure between the vessel and the atmosphere”). The law says otherwise. Even an “obvious to try” rationale requires “some design need or market pressure or other motivation [that] would suggest to one of ordinary skill to pursue the claimed course.” *Rolls-Royce, PLC v. United Techs. Corp.*, 603 F.3d 1325, 1339 (Fed. Cir. 2010).

To preclude generic motivation rationales like Petitioner’s “analogous solutions” theory, the Federal Circuit has repeatedly emphasized the need for “specificity.” *In re Nuvasive, Inc.*, 842 F.3d 1376, 1381–82 (Fed. Cir. 2016); *see also ActiveVideo Networks, Inc. v. Verizon Communs., Inc.*, 694 F.3d 1312, 1328 (Fed. Cir. 2012) (rejecting a motivation analysis that “fails to explain why a person of ordinary skill in the art would have combined elements from [these] specific references”); *10X Genomics, Inc. v. Bio-Rad Labs., Inc.*, IPR2018-01206, Paper 7 at 18 (PTAB Dec. 10, 2018) (“a general similarity in structure or design between two devices is not a reason, in itself, to combine those devices”).

Petitioner next suggests that “[a] POSA would be motivated and find it obvious to modify the nipple design of Meyers such that the air valve is placed above the collar as taught by Sepehr because it would be an obvious design choice to place the vent there.” Pet., 30. This argument also fails to establish a motivation to combine Myers and Sepehr because “[m]erely stating that a particular [modification] is a design choice does not make it obvious. The [petitioner] must offer a reason for why a person of ordinary skill in the art would have made the specific design choice to [implement the modification].” *Cutsforth, Inc. v. Motivepower, Inc.*, 636 F. App’x 575, 578 (Fed. Cir. 2016). Petitioner does not provide the requisite factual underpinning to support a “design choice” theory.

Petitioner finally argues that a motivation to combine Myers with Sepehr is present because Sepehr's valve provides certain benefits over Meyers's vent—namely, improved airflow, reliability, and cleaning/maintenance. *See* Pet., 30-32. These alleged improvements, however, are not sufficiently supported. Instead, Petitioner relies on conclusory expert testimony that fails to conduct a comparative analysis between Meyers and Sepehr. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15 (PTAB Aug. 24, 2022) (precedential) (“Thus, the cited declaration testimony is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.”). Lack of supporting evidence aside, Petitioner's alleged improvements are flat-out debunked by common sense and the disclosures of Sepehr and Meyers.

Regarding the alleged air flow improvement from adding the vent of Sepehr to Myers, Petitioner states that “[a] one-way air vent communicating directly with the external environment as in Sepehr is more effective than pulling air through the threads as in Meyers.” Pet., 30. Petitioner's expert, Mr. Silver, says the same. EX1005, ¶162. But both the Petition and Mr. Silver fail to explain how and why “pulling air through the threads,” as in Meyers, is materially more arduous than building up a sufficient “pressure difference” to “cause[] the flow of air through the slit” in Sepehr's valve, (EX1007, 3:8-19).

Tellingly, Meyers gives no indication that its vent has an airflow problem, and Sepehr gives no indication that its valve is an improvement over other air-intake solutions. It is equally telling that other prior art references, such as Atkin (EX1010), employ vents that pull in air through the threads like Meyers. EX1010, 6:12-27, Figures 7A-7B. If this technique had some fundamental airflow problem, it stands to reason that other skilled artisans would not have used it.

Mr. Silver also contends that “changes in the material over time,” (EX1005, ¶162), would somehow prevent Meyers’s vent from functioning properly. Yet, he gives no explanation of this alleged phenomenon and provides no reason why material degradation would not equally impact Sepehr’s valve.

Mr. Silver further speculates that airflow performance “can vary” with Meyers’s vent if it is somehow impaired by “compressive force” when “the parts are secured together,” (EX1005, ¶162). Here too, Mr. Silver’s analysis is conclusory. He does not explain how or why Meyers’s vent would be subject to compressive forces so large as to hinder its operation. “In an obviousness determination, some evidentiary support must be offered beyond an expert's conclusory opinion.” *Rhone-Poulenc Agro, S.A. v. DeKalb Genetics Corp.*, 272 F.3d 1335, 1358 (Fed. Cir. 2001); *Alza Corp. v. Mylan Labs., Inc.*, 464 F.3d 1286, 1290 (Fed. Cir. 2006) (“[L]egal determinations of obviousness, as with such determinations generally, should be based on evidence rather than on mere speculation or conjecture.”).

Finally, in addition to the speculative and conclusory arguments described above, Petitioner and Mr. Silver ignore important aspects of the references and the prior art that weigh against making the proposed vent modification. For example, Myers expressly states that its one-piece nipple-collar design is “capable of a long operating life” and “economical to manufacture.” EX1006, 2: 3-5. Sepehr’s valve, on the other hand, is a slit valve, (EX1007, 3:8-14, Figure 1), and it was known in the art at the time of the ’930 Patent that “slit valves of various types” were “frail and difficult to machine,” (EX1001, 1:51-53). Sepehr’s valve is not an improvement over Meyers’s vent in this regard, and replacing the former with the latter would eviscerate two of Meyers’s stated objectives. Petitioner’s surface-level analysis does not address this dissonance between Meyers and Sepehr. In short, Petitioner fails to explain why a POSITA would be motivated to reduce the operating life and impair the manufacturing economies of Myers.

2. Kurkjian-Sepehr (Ground 3)

Petitioner’s motivation-to-combine analysis on Kurkjian-Sepehr is substantially similar to, and suffers from substantially similar flaws as, Petitioner’s analysis on the Myers-Sepehr combination. In some instances, the Kurkjian-Sepehr combination is even less defensible, as explained in the discussion below.

Petitioner opens by asserting that a POSITA would have considered Kurkjian and Sepehr to be “in the same field of endeavor” and to “teach analogous solutions.”

Pet., 70. As discussed (*see supra*, § IV.B.1), this argument fails legally because it does not establish why a POSITA would have made the proffered combination. *Belden*, 805 F.3d at 1073; *TriVascular*, 812 F.3d at 1066; *In re Nuvasive*, 842 at 1381–82. At best, but still not sufficient, Petitioner’s “analogous solutions” theory implies that it would have been “obvious to try” every possible combination of prior art references that disclose a nipple with a vent. *See, e.g.*, EX1005, ¶285 (Petitioner’s expert stating that the relevant analogous characteristic between Kurkjian and Sepehr is their description of “nipple designs with air vents and other means for equalizing the pressure between the interior of the vessel and the atmosphere.”). But, again, Petitioner’s pseudo “obvious to try” rationale fails because it does not establish “some design need or market pressure or other motivation [that] would suggest to one of ordinary skill to pursue the claimed course.” *Rolls-Royce*, 603 F.3d at 1339.

Petitioner further argues that there is a motivation to combine Kurkjian with Sepehr because Sepehr’s valve provides certain benefits over Kurkjian’s vent—namely, improved airflow and reliability. *See* Pet., 75. As with the prior combination involving Myers (*see supra*, §IV.B.1), Petitioner’s alleged improvements are supported only by conclusory expert testimony that fails to conduct a comparative analysis between Kurkjian and Sepehr and is entitled to only marginal (if any) weight. *Bytemark*, IPR2022-00624, Paper 9 at 15. Common sense

and the respective disclosures of Sepehr and Kurkjian further debunk Petitioner's speculative conclusions.

Regarding the alleged air flow improvement from adding the vent of Sepehr to Kurkjian, Petitioner states that “[a] one-way air vent communicating directly with the external environment in Sepehr is more effective at pulling air into the bottle, as compared to an air vent through the flange covered by the collar pulling in air through the threads as in Kurkjian.” Pet., 75. Petitioner's expert, Mr. Silver, says the same. EX1005, ¶285. But as with the Myers-Sepehr combination, both Petitioner and Mr. Silver fail to explain how and why “pulling air through the threads,” as in Kurkjian, is materially more arduous than building up a sufficient “pressure difference” to “cause[] the flow of air through the slit” in Sepehr's valve, (EX1007, 3:8-19).

Like Meyers, Kurkjian gives no indication that its nipple-collar system has an airflow problem. And further, Kurkjian even discloses its own solutions for providing sufficient airflow. For example, Kurkjian indicates that multiple “venting apertures” can be used, (EX1009, 1:45-2:4), and further explains that “proper entrance of air” can be “insured” by providing “scored channels” on the retaining cap, (*id.*, 3:1-17). Sepehr does not criticize or suggest that it improves over solutions that vent through the threads, and Petitioner give no reason at all for why Sepehr's valve would provide better airflow than the belt-and-suspenders approach that

Kurkjian disclosed. It is also telling that other prior art references, such as Atkin (EX1010), employ vents that pull in air through the threads like Kurkjian. EX1010, 6:12-27, Figures 7A-7B. Common sense dictates that if this technique had some fundamental airflow problem, other skilled artisans would not have used it.

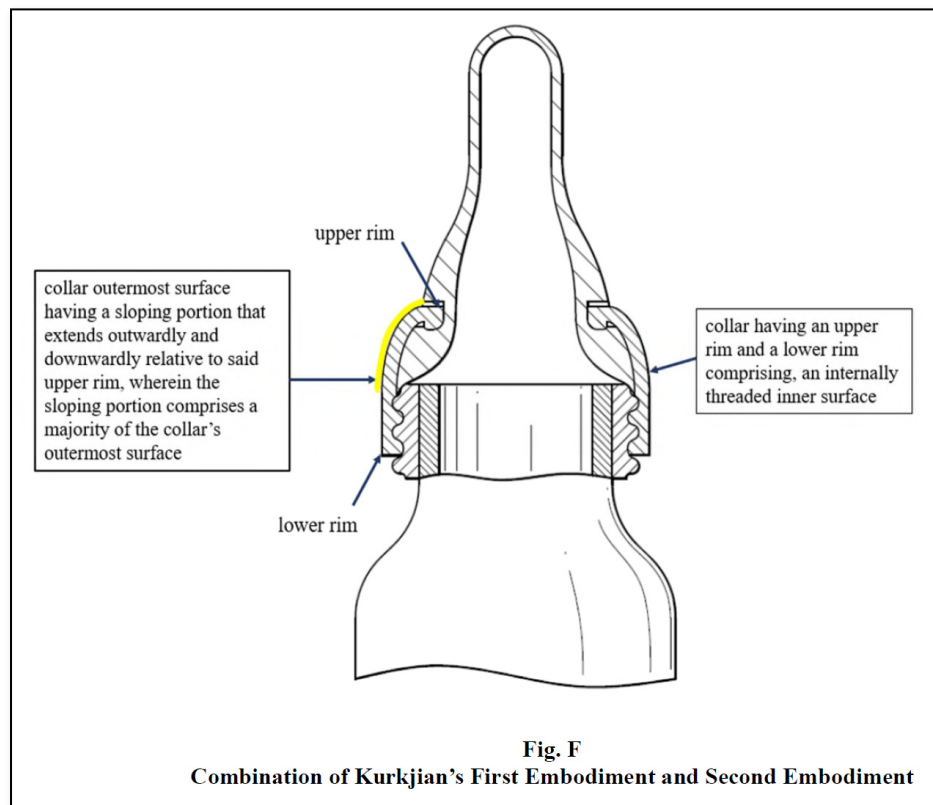
Mr. Silver next contends that “changes in the material over time,” (EX1005, ¶285), would somehow prevent Kurkjian’s vent from functioning properly. Yet, he gives no explanation of this alleged phenomenon and no reason why material degradation would not equally impact Sepehr’s valve. Mr. Silver further speculates that airflow performance “can vary” with Kurkjian’s vent if it is somehow impaired by “compressive force” when “the parts are secured together,” (EX1005, ¶285). Here too, though, Mr. Silver’s analysis is speculative and conclusory. He does not explain how or why Kurkjian’s vent would be subject to compressive forces so large as to hinder its operation. The speculation and conjecture by the Petitioner and Mr. Silver simply do not constitute sufficient evidence for purposes of proving obviousness. *Rhone-Poulenc*, 272 F.3d at 1358; *Alza Corp.*, 464 F.3d at 1290.

**C. Petitioner’s Analysis on Kurkjian and the “Sloping Portion”
Limitation of Element 14[C] Flouts the Law and Lacks Evidentiary
Support (Ground 3)**

Petitioner fails to establish that Kurkjian teaches or suggests a “sloping portion” that “comprises a majority of the collar’s outermost surface,” as required by Element 14[C]. Rather than citing to its expert on this claim element, Petitioner

presents bare attorney argument based on a misleading, self-created drawing that is not prior art. “Attorney argument is no substitute for evidence,” *Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 424 F.3d 1276, 1284 (Fed. Cir. 2005), and, without evidence, Petitioner cannot carry its burden of proof on obviousness. *E.g., Teoxane SA v. Allergan, plc*, IPR2017-01906, Paper 15 at 26 (PTAB Mar. 9, 2018) (“We are not persuaded that bare attorney argument . . . is sufficient to show that claim 22 would have been obvious[.]”). Thus, for the reasons detailed below, Ground 3 does not warrant institution.

In the Petition, Petitioner presents a “Figure F” (reproduced below) that purportedly “depict[s] the combination of Kurkjian’s embodiments.” Pet., 85.



Petitioner then further contends that its “Figure F” provides the claimed sloped collar with a “sloping portion [that] comprises a majority of the collar’s outermost surface as shown in yellow.” Pet., 85. One of multiple reasons the Board should reject Petitioner’s theory is that it attempts to extract more meaning from “Figure F” than the law permits.

For decades, the law has disfavored validity and patentability challenges that rely on measurements taken from patent figures that provide neither dimensions nor an intrinsic scale. *In re Wright*, 569 F.2d 1124, 1127 (C.C.P.A. 1977) (“Absent any written description . . . of quantitative values, arguments based on measurement of a drawing are of little value.”); *accord Krippelz v. Ford Motor Co.*, 667 F.3d 1261, 1268 (Fed. Cir. 2012) (“This court has repeatedly cautioned against overreliance on drawings that are neither expressly to scale nor linked to quantitative values in the specification.”). Kurkjian gives no indication that its drawings are to scale, nor does Petitioner contend as much. For this reason alone the Board should reject Petitioner’s analysis. But that is not the only reason to reject Petitioner’s analysis.

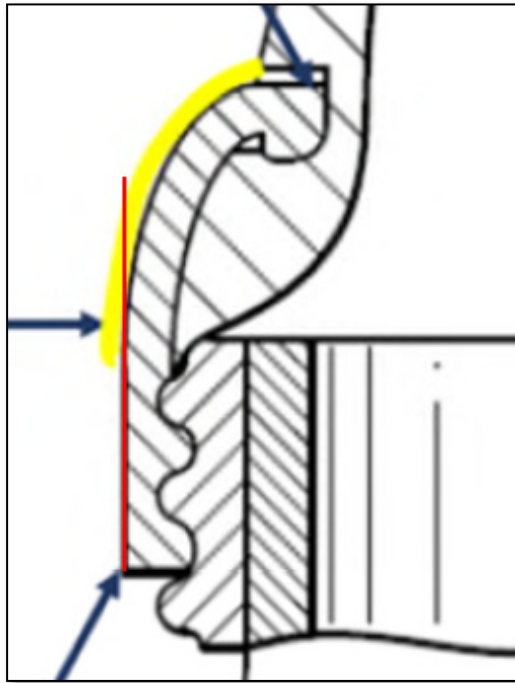
What Petitioner has done here is even worse than what the law already condemns. Petitioner is not relying on drawings from the prior art. Instead, Petitioner is characterizing a fictitious drawing of its own creation that only partially reflects what Kurkjian actually discloses. This approach is “arguably misleading and not in an inconsequential way.” *See Digital Biometrics, Inc. v. Identix, Inc.*, 149

F.3d 1335, 1339 n.1 (Fed. Cir. 1998) (discussing figures made from “a hybrid combination of drawings from the patent”).

It is bad enough that Petitioner is substituting its own drawing in place of the prior art, but it is even worse that the drawing represents nothing more than attorney argument. Petitioner’s “Figure F” is not reproduced or endorsed in the declaration of Petitioner’s expert. The analysis of Petitioner’s expert—which Petitioner does not cite in the Petition—focuses on Kurkjian’s Figures 6 and 7, not Petitioner’s “Figure F.” *Compare* EX1005, ¶¶304-306, *with* Pet., 85. Petitioner’s “Figure F” was manufactured by attorneys with knowledge of the ’930 Patent and a goal of invalidating its claims in this proceeding. It is the epitome of hindsight and does not prove obviousness from the perspective of a POSITA at the time of the ’930 Patent. *See KSR*, 550 U.S. at 421 (“A factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.”).

On top of all that, the Petition contends that the sloped portion in Petitioner’s self-created drawing represents the “majority” of the collar’s outer surface without bothering to present supporting measurements or any substantive analysis at all. Even still, any such measurements or analysis based on Petitioner’s annotated figure would not have been valid. The yellow highlighting that Petitioner says marks the sloping portion of the collar is drawn inaccurately. As exposed below by Patent

Owner's added vertical line in red, Petitioner's yellow highlighting extends much farther than where the sloping unquestionably stops. Petitioner's manufactured, unsupported, and misleading assertions do not prove obviousness.



Pet., 84 (Petitioner's Fig. F)
Red Line Added by Patent Owner

V. CONCLUSION

For all the foregoing reasons, the Petition is deficient and beyond repair. Going forward with a trial would serve only to grant Petitioner an unwarranted second bite at the apple and expend further resources highlighting what is already clear: Petitioner cannot satisfy its burden of proving unpatentability based on the arguments and evidence in the Petition. Patent Owner, therefore, respectfully requests that the Board decline to institute *inter partes* review.

Respectfully submitted,

Date: April 25, 2023

/Kenneth Wayne Darby Jr./

John S. Goetz, Reg. No. 54,867
Kenneth W. Darby, Reg. No. 65,068
Matthew A. Colvin, Reg. No. 66,843
Fish & Richardson P.C.
3200 RBC Plaza, 60 South Sixth Street
Minneapolis, MN 55402
T: 202-783-5070
F: 877-769-7945

Customer Number 26191

Fish & Richardson P.C.

Telephone: (612) 337-2508

Facsimile: (612) 288-9696

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

Under the provisions of 37 C.F.R. §42.24(d), the undersigned hereby certifies that the word count for the foregoing Patent Owner's Preliminary Response to Petition totals 8,836, which is less than the 14,000 allowed under C.F.R. §42.24(b)(1).

Respectfully submitted,

Date: April 25, 2023

/Kenneth Wayne Darby Jr./
John S. Goetz, Reg. No. 54,867
Kenneth W. Darby, Reg. No. 65,068
Matthew A. Colvin, Reg. No. 66,843
Attorneys for Patent Owner

Customer Number 26191
Fish & Richardson P.C.
Telephone: (612) 337-2508
Facsimile: (612) 288-9696

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §§42.6(e), the undersigned certifies that on April 25, 2023, a complete and entire copy of this Patent Owner's Preliminary Response and its supporting exhibits were provided via email to Petitioners by serving the correspondence email address of record as follows:

Eliot D. Williams
Matthew A. Engel
Brianna L. Potter
BAKER BOTTS L.L.P.
700 K Street, N.W.
Washington, D.C., 20001-5692

Email:

Eliot.Williams@BakerBotts.com
Matthew.Engel@BakerBotts.com
Brianna.Potter@BakerBotts.com

/Kristyn Waldhauser/
Kristyn Waldhauser
Fish & Richardson P.C.
60 South Sixth Street, Suite
3200
Minneapolis, MN 55402
(612) 638-5731