

APPENDIX

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Appendix A

Filed September 28, 2018

**UNITED STATES COURT OF APPEALS
FEDERAL CIRCUIT**

BENNETT REGULATOR GUARDS, INC.,
Appellant

v.

ATLANTA GAS LIGHT CO.,
Cross-Appellant

2017-1555

2017-1626

Decided: September 28, 2018

Before LOURIE, CLEVINGER, and STOLL,
Circuit Judges.

Opinion

STOLL, Circuit Judge.

Years after Bennett Regulator Guards, Inc. first sued Atlanta Gas Light Co. for infringing its U.S. Patent No. 5,810,029, the Patent Trial and Appeal Board instituted Atlanta Gas's inter partes review (IPR), held all challenged claims of Bennett's '029 patent unpatentable, and then sanctioned Atlanta Gas. Bennett appeals, arguing that 35 U.S.C. § 315(b) barred institution, that its claims should have

survived, and that the Board should have imposed greater sanctions. Atlanta Gas cross-appeals, seeking to overturn the sanctions.

Because the Board exceeded its authority and contravened § 315(b)'s time bar when it instituted Atlanta Gas's petition, we vacate its final written decision. And because the Board has not yet quantified its sanction, we decline to consider the nonfinal sanctions order and instead remand to the Board.

BACKGROUND

Bennett, the assignee of the '029 patent, served Atlanta Gas with a complaint alleging infringement on July 18, 2012. Atlanta Gas moved to dismiss. Ultimately, the district court granted that motion and dismissed Bennett's complaint without prejudice. *See Bennett Regulator Guards, Inc. v. MRC Glob. Inc.*, No. 4:12-cv-1040, 2013 WL 3365193, at *5 (N.D. Ohio July 3, 2013).

On February 27, 2015, Atlanta Gas filed the IPR that underlies this appeal. Bennett protested, arguing that § 315(b), which prohibits institution "if the petition re-requesting the proceeding is filed more than 1 year after the date on which the petitioner ... is served with a complaint alleging infringement of the patent," barred the Board from instituting review. The Board disagreed. It acknowledged that Bennett had served a complaint alleging infringement on Atlanta Gas, but it held that the district court's without-prejudice dismissal of that complaint nullified service. *Atlanta Gas Light Co. v. Bennett Regulator Guards, Inc.*, IPR2015-00826, 2015 WL 5159438, at *5, *7-8 (P.T.A.B. Sept. 1, 2015). Having found that § 315(b)

permitted it to proceed, the Board instituted review of all claims. *Id.* at *15–16. Bennett defended the '029 patent, but in its final written decision the Board confirmed that § 315(b) did not bar the petition and held every claim of the '029 patent unpatentable. *Atlanta Gas Light Co. v. Bennett Regulator Guards, Inc.*, IPR2015-00826, 2016 WL 8969209, at *1, *6 (P.T.A.B. Aug. 19, 2016) (“*Final Written Decision*”); see J.A. 85–86 (denying subsequent motion for reconsideration).

In an unusual turn of events, an additional issue emerged after the Board issued its decision. The America Invents Act requires petitioners to identify all real parties in interest in their petitions, see 35 U.S.C. § 312(a)(2), and Board regulations require petitioners to update that information within 21 days of any change, see 37 C.F.R. § 42.8(a)(3). Late in the IPR, but before the Board’s final written decision, Atlanta Gas’s parent company, AGL Resources Inc., merged with another company and then changed its name. See J.A. 86–88. Though Atlanta Gas had listed AGL Resources as a real party in interest in its petition, Atlanta Gas did not notify the Board of the merger or the name change, and the Board did not know of the changes when it issued its final decision. See J.A. 88–94. Shortly after receiving the final written decision, Bennett notified the Board of Atlanta Gas’s changed corporate parentage and sought sanctions for Atlanta Gas’s nondisclosure. See J.A. 81–83, 88–94.

The merger created new Board conflicts, and one member of the three-judge panel recused himself after learning of it. See J.A. 85 n.1, 93. A reconstituted panel

then considered Bennett's sanctions motion. Though it declined to terminate the IPR as Bennett requested, the Board authorized Bennett to move for the "costs and fees" it had incurred between the date of the final written decision and the Board's grant of sanctions. *See* J.A. 88–93. The Board has not ruled on Bennett's motion for costs and fees, and the parties continue to dispute the exact amount Atlanta Gas owes.

Bennett appeals. It contends that § 315(b) barred this IPR, and that even if the Board possessed the power to consider Atlanta Gas's petition, the Board substantively erred in its claim construction and unpatentability findings. Bennett also argues that the Board abused its discretion by awarding only monetary sanctions for Atlanta Gas's failure to update its real-party-in-interest information. In its cross-appeal, Atlanta Gas counters that the Board erred by awarding any sanction at all.

DISCUSSION

A party dissatisfied with the Board's final written decision may appeal to this court. *See* 35 U.S.C. § 319; *see also* 28 U.S.C. § 1295(a)(4)(A). Though statute immunizes the Board's preliminary decision to institute IPR from review, *see* 35 U.S.C. § 314(d), we review the Board's jurisdiction, and we have authority to review its compliance with § 315(b). *See Wi-Fi One, LLC v. Broadcom Corp.*, 878 F.3d 1364, 1374 (Fed. Cir. 2018) (en banc) (“[Section] 315 ... is not subject to § 314(d)'s bar on judicial review.”).

We review the Board's legal conclusions de novo and its fact findings for substantial evidence. *See, e.g., PPC Broadband, Inc. v. Corning Optical Commc'ns*

RF, LLC, 815 F.3d 734, 739 (Fed. Cir. 2016). We review the Board’s award of sanctions for abuse of discretion. *Cf. Midwestern Pet Foods, Inc. v. Societe des Produits Nestle S.A.*, 685 F.3d 1046, 1051 (Fed. Cir. 2012) (applying abuse of discretion standard to Trademark Trial and Appeal Board’s sanctions); *Woods v. Tsuchiya*, 754 F.2d 1571, 1582 (Fed. Cir. 1985) (noting that award of sanctions falls within Board of Interference’s discretion).

I

Bennett launches a multi-front attack on the Board’s final written decision. It challenges the Board’s jurisdiction to institute review, at least ten of the Board’s claim constructions, the Board’s findings regarding the teachings of the prior art and Atlanta Gas’s anticipation ground, and the Board’s consideration of the *Graham* factors in its obviousness determination. Because we agree that 35 U.S.C. § 315(b) barred the Board’s review in this case, we vacate the Board’s final written decision and remand with instructions to dismiss this IPR without reaching Bennett’s additional arguments.

Section 315(b) prohibits the Board from instituting an IPR based on a petition “filed more than 1 year after the date on which the petitioner ... is served with a complaint alleging infringement.” § 315(b). We recently held that serving a complaint alleging infringement—an act unchanged by the complaint’s subsequent success or failure—unambiguously implicates § 315(b)’s time bar. *See Click-to-Call Techs., LP v. Ingenio, Inc.*, 899 F.3d 1321, 1329–32 (Fed. Cir. 2018). The statute endorses no exceptions for dismissed complaints, and we

therefore held that the Board exceeded its authority when it instituted IPR over a year after service of a complaint later voluntarily dismissed without prejudice. *Id.* at 1328 n.3 (en banc).

This case differs from *Click-to-Call* only in that Bennett's complaint was *involuntarily* dismissed without prejudice. We identify no reason to distinguish *Click-to-Call* on that basis.¹ The statutory language clearly expresses that *service* of a complaint starts § 315(b)'s clock. *See id.* at 1330–31, 1336. Just as the statute includes no exception for a voluntarily dismissed complaint, it includes no exception for an involuntarily dismissed complaint.

Bennett undisputedly served Atlanta Gas with a complaint asserting the '029 patent on July 18, 2012. *See* Appellant's Br. 57–58; Cross-Appellant's Br. 9. Section 315 permits a petitioner to seek IPR for a year after such service, but Atlanta Gas filed its IPR petition on February 27, 2015, J.A. 118, more than eighteen months after the statutory time limit. The Board lacked authority to institute review. Accordingly, we vacate the Board's final written decision, and we remand for the Board to dismiss the IPR.

II

We next address the parties' challenges to the Board's sanctions order. Bennett asserts that the Board properly awarded monetary sanctions but erred by failing to terminate the IPR, *see* Appellant's Br. 27–

¹ Indeed, the Board relied on its now-overturned decision in *Click-to-Call* to decide Bennett's time-bar challenge. *See Final Written Decision*, 2016 WL 8969209, at *5.

35, while Atlanta Gas urges that the Board erred by awarding sanctions at all, *see* Cross-Appellant’s Br. 70–86. Although the Board lacked authority to institute the IPR, its sanction award might nevertheless stand. *Cf. Willy v. Coastal Corp.*, 503 U.S. 131, 132, 112 S. Ct. 1076, 117 L.Ed.2d 280 (1992) (holding federal district courts may impose Rule 11 sanctions even “in a case in which the district court is later determined to be without subject-matter jurisdiction”). We do not resolve that question, however, because we lack jurisdiction to review the Board’s unquantified, and thus non-final, order.

We have exclusive jurisdiction to review the Board’s final decisions. *See* 28 U.S.C. § 1295(a)(4)(A). But our jurisdiction extends only to *final* decisions. *See In re Arunachalam*, 824 F.3d 987, 988 (Fed. Cir. 2016) (reading § 1295(a)(4) “to incorporate a finality requirement” (quoting *Loughlin v. Ling*, 684 F.3d 1289, 1292 (Fed. Cir. 2012))). Because the Board has not yet quantified its sanctions award, the award remains nonfinal and unappealable. *See Special Devices, Inc. v. OEA, Inc.*, 269 F.3d 1340, 1343 (Fed. Cir. 2001) (holding unquantified award of attorney fees is not a final decision); *View Eng’g, Inc. v. Robotic Vision Sys., Inc.*, 115 F.3d 962, 964 (Fed. Cir. 1997) (“[A] district court decision imposing Rule 11 sanctions is not final, and hence not appealable, until the amount of the sanction has been decided ...”).

In rare cases, we exercise pendent jurisdiction to decide an issue not otherwise subject to review. We extend pendent jurisdiction only reluctantly, and only to issues “inextricably intertwined” with or necessary to resolution of issues already before the court. *See*

Swint v. Chambers Cty. Comm'n, 514 U.S. 35, 51, 115 S. Ct. 1203, 131 L.Ed.2d 60 (1995) (providing standard for exercise of pendent jurisdiction). “[T]he circuits, including this one, are in general agreement that an unquantified award ... does not usually warrant the exercise of pendent jurisdiction,” and we hold the exercise of pendent jurisdiction is not warranted here. *Orenshteyn v. Citrix Sys., Inc.*, 691 F.3d 1356, 1360 (Fed. Cir. 2012). The parties’ time-bar and merits disputes ask whether § 315(b) prohibits this IPR and whether the art identified by Atlanta Gas anticipates or renders obvious Bennett’s properly construed claims. In contrast, the parties’ challenges to the Board’s sanctions order implicate the Board’s power to issue sanctions and to accept late filings, 37 C.F.R. §§ 42.5, 42.12, and ask us to examine whether the Board erred by identifying Atlanta Gas’s parent company as a real party in interest under 35 U.S.C. § 312(a)(2) and 37 C.F.R. § 42.8(b)(1). As in *Orenshteyn*, “the finding of invalidity and the sanctions in the present case have different legal bases requiring different legal analyses.” 691 F.3d at 1360.

Atlanta Gas suggested at oral argument that the Board’s denial of Bennett’s requested remedy—termination—was a final decision subject to appeal, and that we should exercise pendent jurisdiction over the Board’s related decision to award a monetary sanction, even though the amount of that sanction remains undetermined. *See* Oral Arg. at 15:20–16:55, <http://oralarguments.cafc.uscourts.gov/default.aspx?fl=2017-1555.mp3>. We disagree. Atlanta Gas’s formulation requires us to arbitrarily divide the Board’s sanctions order into two decisions—one relating to termination and one relating to a monetary

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award. We instead treat the Board's order as a single decision addressing Bennett's entire motion for sanctions, which requested both termination and compensatory sanctions. *See* J.A. 318. This comports with the Board's discussion, *see* J.A. 92–93, and preserves judicial resources by confining all sanctions issues to a single appeal.

Accordingly, we decline to exercise pendent jurisdiction over the Board's sanctions order, and we remand to the Board. On remand, the Board may, at its discretion, further consider its order given the outcome of this appeal. But until the Board quantifies any sanctions, we will not review its decision granting them.

CONCLUSION

For the foregoing reasons, we vacate the Board's final written decision, and we remand for the Board to quantify any sanctions and dismiss this IPR.

VACATED AND REMANDED

No costs.

All Citations

905 F.3d 1311, 128 U.S.P.Q.2d 1183

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Appendix B
Filed August 19, 2016

**UNITED STATES PATENT
AND TRADEMARK OFFICE**

**BEFORE THE PATENT TRIAL
AND APPEAL BOARD**

ATLANTA GAS LIGHT COMPANY,
Petitioner,

v.

BENNETT REGULATOR GUARDS, INC.,
Patent Owner.

Case IPR2015-00826
Patent 5,810,029

Before JENNIFER S. BISK, JAMES B. ARPIN, and
PATRICK M. BOUCHER, *Administrative Patent
Judges*.

BOUCHER, *Administrative Patent Judge*.

FINAL WRITTEN DECISION

35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

A. Background

Atlanta Gas Light Company (“Petitioner”) filed a Petition (Paper 1, “Pet.”) to institute an *inter partes* review of claims 1–8 of U.S. Patent No. 5,810,029 (Ex. 1001, “the ’029 patent”). After consideration of a Preliminary Response (Paper 6) filed by Bennett Regulator Guards, Inc. (“Patent Owner”), the Board instituted review of claims 1–8. Paper 12 (“Institution Decision” or “Dec.”). During the trial, Patent Owner filed a Patent Owner Response (Paper 16, “PO Resp.”), and Petitioner filed a Reply to the Patent Owner Response (Paper 21, “Reply”). An oral hearing was held on June 23, 2016, and a transcript of that hearing has been entered in the record. Paper 30 (“Tr.”). We have jurisdiction under 35 U.S.C. § 6(c). This Decision is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability of the claims on which we instituted trial. Based on the record before us, Petitioner has shown, by a preponderance of the evidence, that claims 1–8 of the ’029 patent are unpatentable.

B. The ’029 Patent

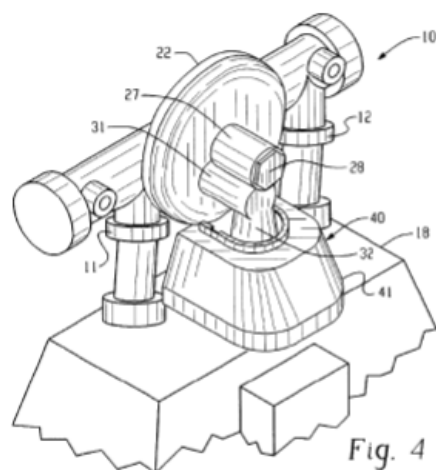
1. Overview

The ’029 patent, titled “Anti-Icing Device for a Gas Pressure Regulators,” issued on September 22, 1998, based on Application No. 08/491,273. The ’029 patent “relates to natural gas distribution and especially to problems associated with the pressure regulator valve used to reduce gas pressure from the relatively high level used in a distribution system to the relatively low pressure level used in a customer’s

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building or residence.” Ex. 1001, col. 1, ll. 5–9. Typically, the pressure regulator includes a flexible diaphragm that divides the interior space of a surrounding diaphragm housing into low-pressure and atmospheric-pressure chambers, with an opening provided to vent the atmospheric-pressure chamber to the atmosphere. *Id.* at col. 1, ll. 37–44. Because the pressure regulator commonly is mounted on the outside of a building, where it is exposed to prevailing weather conditions, the vent typically is protected with a vent tube having a downward orientation that prevents precipitation from entering the vent tube. *Id.* at col. 1, ll. 51–60. A metal screen over an outlet end of the vent tube further protects against intrusion by insects. *Id.* at col. 1, ll. 56–60. As the '029 patent explains, these precautions do not prevent problems associated with icing, which can manifest by the formation of an icicle or by splashing of freezing rain, either of which eventually may block the vent tube. *Id.* at col. 1, ll. 61–67.

Figure 4 of the '029 patent is reproduced below:



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Figure 4 of the '029 patent illustrates a flared skirt assembly 40 connected to vent tube 31. The skirt assembly “prevents the formation of an icicle over the end 32 of the vent tube by enclosing the space around the vent tube and providing a substantially expanded passage.” *Id.* at col. 3, ll. 47–49. In addition, “because the skirt assembly is flared out substantially from the center line of the exit passage, rain or freezing rain is deflected away from an area where it could splash upwardly back into the vent tube.” *Id.* at col. 3, ll. 50–53).

Figure 6 of the '029 patent, reproduced below, illustrates a further feature of the skirt assembly:

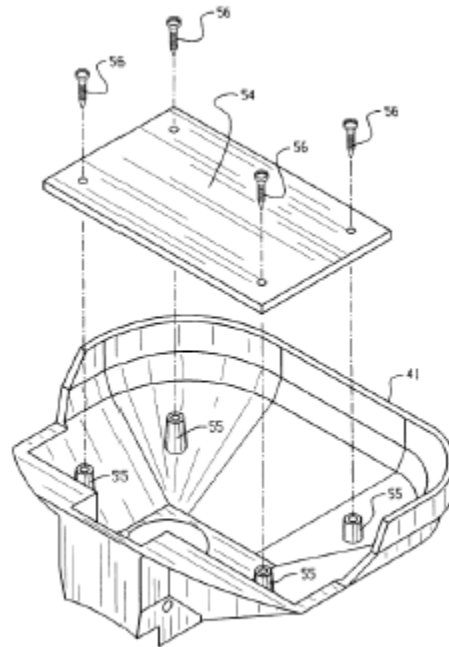


Fig. 6

Figure 6 of the '029 patent provides an exploded perspective view of the bottom of the skirt assembly, showing baffle plate 54 having edges that “are sufficiently spaced from the interior walls of the skirt that substantial space is provided for the venting of gas and or air through the skirt.” *Id.* at col. 4, ll. 6–8. A screen may be mounted at the lower end of the skirt to prevent insect intrusion. *Id.* at col. 4, ll. 8–9.

2. Prosecution History

The '029 patent issued on a first-action allowance, and underwent an *ex parte* reexamination initiated by Patent Owner. *See* Ex. 1010. During the reexamination, Patent Owner argued that claims 1–8 are not anticipated by Canadian Meter Company Inc., *Quality Communiqué: Domestic Regulator Approval* (April 1992) (Ex. 1007), a reference cited to support certain challenges in the Petition on which we did not institute. Pet. 39–50; *see* Dec. 27. The Office confirmed claims 1–8. Ex. 1010, 12–14.

C. Illustrative Claim

Claim 1 is illustrative of the claims at issue:

1. A skirt assembly for reducing ice formation at an outlet vent tube from the atmospheric pressure chamber of a diaphragm-type gas pressure regulator, comprising:

a skirt receiver adapted to be operatively connected to said vent tube;

a skirt member defining an interior space and having an upper end opening connecting said vent tube to said interior space and an outwardly flared lower end with an area substantially

greater than the area of said upper end opening, said skirt member being operatively connected to said skirt receiver means; and

baffle means located in said interior space to underlie said upper end opening and being spaced from the interior walls of said skirt to permit gas flow therearound;

whereby ice formation tending to block said vent tube is inhibited.

Ex. 1010, col. 4, ll. 41–57.

D. References Relied Upon

Petitioner relies on the following references. Pet. 6–7.

Peterson '087	US 2,620,087	Dec. 2, 1952	Ex. 1002
Peterson '573	US 3,012,573	Dec. 12, 1961	Ex. 1004
Ferguson	US 3,985,157	Oct. 12, 1976	Ex. 1005
Ohmae	US 4,957,660	Sept. 18, 1990	Ex. 1006

Prior art described at column 1, lines 13–50 of the '029 patent (Ex. 1001).

E. Instituted Grounds of Unpatentability

We instituted trial on the following grounds of unpatentability. Dec. 31.¹

¹ Prior art described in a patent challenged in an *inter partes* review proceeding is within the scope of prior art that may be considered under 35 U.S.C. § 311(b). See, e.g., *Intri-Plex Technologies, Inc. v. Saint-Gobain Performance Plastics Rencol Ltd.*, Case IPR2014-00309, slip op. at 21–22 & n.8 (PTAB March 23, 2014) (Paper 83). For each asserted ground in which Petitioner relies

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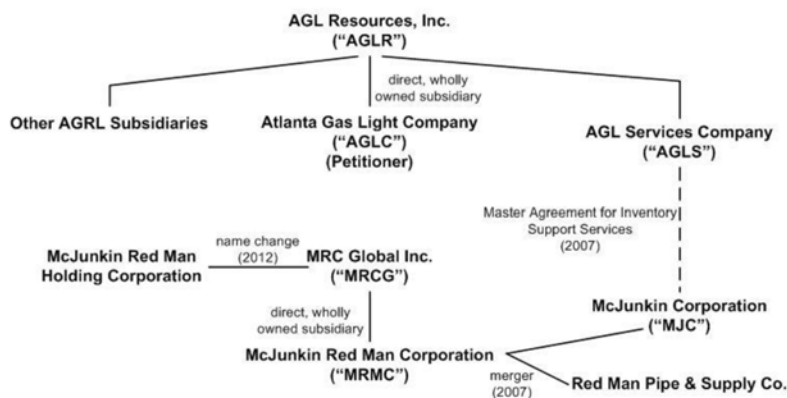
Reference(s)	Basis	Claims Challenged
Peterson '087	§ 102(b)	1 and 5
Peterson '087 and Peterson '573	§ 103(a)	1 and 5
Peterson '087 and Ferguson	§ 103(a)	2, 4, 6, and 8
Peterson '087, Ferguson, and Peterson '573	§ 103(a)	2, 4, 6, and 8
Peterson '087, Ferguson, and Ohmae	§ 103(a)	3 and 7
Peterson '087, Ferguson, Ohmae, and Peterson '573	§ 103(a)	3 and 7
Peterson '087 and prior art described in the '029 patent	§ 103(a)	1 and 5
Peterson '087, Ferguson, and prior	§ 103(a)	2, 4, 6, and 8

on prior art described in the '029 patent, Petitioner also asserts that it relies on the “knowledge of a person of ordinary skill in the art.” Such knowledge may be relevant to a determination “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR Intern. Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). In certain instances, it may also be relevant to determination of the scope of the prior art. See *Arendi SARL v. Apple Inc.*, 2016 WL 4205964 (Fed Cir. Aug 10, 2016).

art described in the '029 patent		
Peterson '087, Ferguson, Ohmae, and prior art described in the '029 patent	§ 103(a)	3 and 7

F. Related Proceedings

The issues presented to us involve a number of parties. The Board’s diagram below summarizes the relationships among those parties.



The summary of relationships provided by the above diagram is relevant to, *inter alia*, Patent Owner’s argument that a privy of Petitioner—namely, McJunkin Red Man Corporation (“MRMC”)—was served with a complaint alleging infringement of the ’029 patent more than a year before the Petition was filed. *See* PO Resp. 11–12, 55–57.

Petitioner is a distributor of natural gas in Georgia. Ex. 2006, 4. It is a direct, wholly owned,

subsidiary of AGL Resources, Inc. (“AGLR”), which has a number of other subsidiaries. *Id.* One of those other subsidiaries is AGL Services Company (“AGLS”). *Id.* at 5.

MRMC is a distributor of pipe, valve, and fitting products to the energy and industrial markets. Ex. 2010. It is a direct, wholly owned, subsidiary of MRC Global Inc. (“MRCG”), which was known as McJunkin Red Man Holding Corporation before it amended its certificate of incorporation and bylaws to effect a name change on January 12, 2012. *Atlanta Gas Light Co. v. Bennett Regulator Guards*, IPR2013-00453, Ex. 1028 ¶ 4. MRMC itself was formed in 2007 from the merger of McJunkin Corporation (“MJC”) and Red Man Pipe & Supply Co. Ex. 2010.

MRCG and MRMC share the same office space, have the same telephone number, have the same facsimile number, and, at relevant times, have had the same upper management. Exs. 2007, 2008, 2009, 2012, 2013. The Texas Secretary of State’s records show that MRMC is registered as a foreign corporation and that an agent for service of process has been designated. Exs. 2012, 2013. Patent Owner contends, and Petitioner does not dispute, that the Texas Secretary of State has no records for MRCG. Prelim. Resp. 15.

G. The Supply Agreements

On July 1, 2001, AGLR “and its present and future subsidiaries” entered into a Systems Contract Agreement with MJC (“the 2001 Agreement”) for materials at an agreed price schedule. Ex. 2017 ¶ 36. On January 1, 2007, the 2001 Agreement was

amended and expanded by way of a Master Agreement for Inventory Support Services (“the 2007 Agreement”). Ex. 2018. The entities covered by the 2007 Agreement include AGLS, “in its own behalf and/or on behalf of [AGLR] and one or more of the subsidiaries of [AGLR].” *Id.* The 2007 Agreement includes certain indemnification provisions, and AGLR and MRCG have disputed the scope of indemnification obligations as they relate to proceedings described below. *See, e.g.*, Exs. 2031–2033.

H. The Ohio Lawsuit

The ’029 patent is currently involved in *Bennett Regulator Guards, Inc. v. McJunkin Red Man Corp.*, Civil Action No. 5:12-cv-1040 (N.D. Ohio) (“the Ohio lawsuit”). Pet. 1–2.

The Ohio lawsuit arose from allegations by Patent Owner that Petitioner and MRMC developed and sold a product that infringes the ’029 patent. Prelim. Resp. 49. Patent Owner specifically contends that “MRMC has a direct, preexisting, substantive relationship with AGLR and its subsidiaries such as AGLC concerning the development, manufacture and sale of the product that has been accused of infringing the ’029 patent.” *Id.* Patent Owner further contends that “[t]hat relationship arises from MRMC and AGLR and its subsidiaries being parties to the 2001 and 2007 Agreements that govern the development and sale of the Accused Product.” *Id.*

Patent Owner filed a complaint (Ex. 2002) initiating the Ohio lawsuit on April 26, 2012. Paper 6, 13. The caption of the complaint identified Petitioner

and MRCG as defendants; the body of the complaint included assertions that “[u]pon information and belief, on or about January 10, 2012, McJunkin Redman Corporation . . . changed its name to MRC Global Inc.,” and that references to MRCG referred both to MRCG and to “McJunkin Redman.” Ex. 2002 ¶ 3. MRCG was served with the complaint on July 11, 2013. Ex. 2003. Petitioner was served with the complaint on July 18, 2013. Pet. 2; Ex. 2060, Dkt. #4.

The complaint’s assertion that MRMC changed its name to MRC Global Inc. proved incorrect. In fact, as noted above, MRCG amended its certificate of incorporation and bylaws on January 10, 2012, to reflect a name change of McJunkin Red Man Holding Corporation to MRCG. Subsequently, Patent Owner filed an amended complaint, naming Petitioner and MRMC as defendants, and deleting MRCG as a named defendant. Ex. 2004. Petitioner and MRMC consented to the filing of the amended complaint, with both Petitioner and MRMC agreeing that the amended complaint “relates back to the filing of the Complaint on April 26, 2012.” Ex. 2005; *see* Paper 6, 16.

On July 3, 2013, the district court dismissed Petitioner as a defendant for lack of personal jurisdiction. Exs. 1017, 2006. The parties agree that the dismissal was without prejudice. Pet. 2, Paper 6, 6.

I. The Related IPR

The ’029 patent was also the subject of IPR2013-00453 (“the related IPR”), which was terminated upon a finding that Petitioner failed to establish that it had identified all real parties-in-interest in its petition.

Atlanta Gas Light Co. v. Bennett Regulator Guards, Inc., IPR2013-00453, slip op. at 13 (PTAB Jan. 6, 2015) (Paper 88) (citing 35 U.S.C. § 312(a)(2)). We found in the related IPR that AGLR was a real party-in-interest. *Id.* at 13. Petitioner identifies AGLR as a real party-in-interest in this proceeding. Pet. 1.

Certain negotiations regarding the scope of indemnity required by the 2007 Agreement implicate the Ohio lawsuit and the related IPR, and, by logical extension, this proceeding. During the course of those negotiations, AGLR deferred resolution of the indemnification dispute until after resolution of the related IPR, and noted that “even in the absence of an indemnification agreement, AGL has taken steps to support MRC’s defense [in the Ohio lawsuit].” Ex. 2031. In the context of explaining such steps, AGLR asserted that “AGL has also filed a petition for *inter partes* review of Bennett’s U.S. Patent No. 5,810,029 by the U.S. Patent and Trademark Office – at AGL’s sole expense.” *Id.*

MRMC then indicated its willingness to “wait to be indemnified by AGL until the reexamination [*sic: inter partes* review] process has been completed.” Ex. 2032. MRMC also expressed its position on the scope of indemnification as explicitly contingent on the outcome of the related IPR, noting the potential impact of a decision in the related IPR on the Ohio lawsuit. *Id.* Approximately six weeks later, AGLR confirmed that discussions had taken place outlining a possible indemnification structure that depended on the outcome of the related IPR, but disputed that any agreement had been reached. Ex. 2033.

II. ANALYSIS

A. Identification of Real Parties-in-Interest and Time Bar Under 35 U.S.C. § 315(b)

Section 315(b) of Title 35 of the U.S. Code provides:

An inter partes review may not be instituted if the petition requesting the proceeding is filed more than 1 year after the date on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent.

Patent Owner contends that

[i]f MRMC or MRCG are real parties-in-interest or privies, the present Petition would be barred by either Section 312(a)(2) or the one-year filing requirement of 35 U.S.C. § 315(b). Similarly, if service of the complaint on AGLC in July, 2013 were to be deemed effective despite the subsequent dismissal of AGLC from the Ohio suit without prejudice, then the Petition would be time-barred by Section 315(b).

PO Resp. 11. These statements are accurate. Patent Owner avers that it “presents additional arguments” in its Response, beyond those expressed in its Preliminary Response (Paper 6), and requests reconsideration of our determinations in the Institution Decision that (1) Petitioner is not deemed to have been “served with a complaint alleging infringement” of the ’029 patent within the meaning of 35 U.S.C. § 315(b); and (2) MRMC has not been established to be a privy of Petitioner within the

meaning of § 315(b). *Id.* at 12; *see* Dec. 12–17. We have considered these issues anew, based on the full record as developed during trial and in light of the additional arguments presented by Patent Owner in its Response. We conclude that the Petition is not time-barred and that Petitioner has not failed to identify all real parties-in-interest.

1. Service Upon Petitioner

When considering the statutory bar under § 315(b), the Board has consistently held that dismissal without prejudice of a party from district court litigation nullifies the effect of service on that party of the underlying complaint. *See Oracle Corp. v. Click-to-Call Techs. LP*, Case IPR2013-00312 slip op. at 15–18 (PTAB Oct. 30, 2013) (Paper 26) (precedential) (holding no bar based on voluntary dismissal without prejudice); *Macauto U.S.A. v. BOS GmbH*, Case IPR2012-00004, slip op. at 14–16 (PTAB Jan. 24, 2013) (Paper 18) (holding no bar based on voluntary dismissal without prejudice); *BAE Sys. Info. v. Cheetah Omni, LLC*, Case IPR2013-00175, slip op. at 3–4 (PTAB July 3, 2013) (Paper 15) (same); *Cyanotech Corp. v. Bd. of Trustees of the Univ. of Ill.*, Case IPR2013-00401, slip op. at 9–12 (PTAB Dec. 19, 2013) (Paper 17) (holding no bar based on dismissal without prejudice for failure to join indispensable party); *InVue Sec. Prods. v. Merch. Techs.*, Case IPR2013-00122, slip op. at 9–10 (PTAB June 27, 2013) (Paper 17) (holding no bar based on dismissal without prejudice for lack of subject-matter jurisdiction); *Nautique Boat Co. v. Malibu Boats, LLC*, Case IPR2014-01045, slip op. at 10 (PTAB Nov. 26, 2014) (Paper 13) (holding no bar based on involuntary

dismissal without prejudice); *Gordon * Howard Assocs. v. LunarEye, Inc.*, Case IPR2014-01213, slip op. at 10–15 (PTAB Feb. 3, 2015) (Paper 11) (holding no bar based on dismissal without prejudice for lack of personal jurisdiction). We agree with the reasoning behind the conclusions in these cases, and Patent Owner has not articulated sufficient argument and evidence that persuades us to depart from that reasoning.

Patent Owner argues that “Section 315(b) only requires service of a complaint for patent infringement” and that “[t]he statute is silent concerning whether or not service is retroactively ineffective if the complaint is subsequently dismissed.” PO Resp. 56. Patent Owner draws a distinction between voluntary and involuntary dismissals, contending that “[b]y holding that *all* non-preclusive dismissals nullify service of a patent infringement complaint, the Board effectively has amended the statute to expand the Board’s jurisdiction.” *Id.* at 57. We disagree.

The Federal Circuit has characterized the effect of dismissals without prejudice as “leaving the parties as though the action had never been brought,” thereby restoring the ability of parties to pursue courses of action available to them before the action had been brought. *Graves v. Principi*, 294 F.3d 1350, 1355–56 (Fed. Cir. 2002); see *Bonneville Assocs., Ltd. P’ship v. Barram*, 165 F.3d 1360, 1364 (Fed. Cir. 1999). The Board has held, in a precedential decision, that there is no bar after a voluntary dismissal without prejudice, and we see no compelling reason to treat involuntary dismissals differently. *Oracle* at 15–18.

Patent Owner identifies no precedent that limits the impact of a dismissal from district court litigation, as it relates to *inter partes* review proceedings, according to whether the dismissal was voluntary or involuntary. *See, e.g., Graves* at 1355–56 (“The most fundamental problem facing Mr. Graves, however is the fact that, as a matter of law, once his appeal was dismissed—for whatever purpose and whether with or without prejudice—it was as if the appeal had never been filed”) (emphasis added). Although the Board has not adopted the Federal Rules of Civil Procedure, their treatment of involuntary dismissals also informs our conclusion because the Ohio district court specifically dismissed Petitioner as a defendant for lack of personal jurisdiction. *See Fed. R. Civ. Proc. 41(b)* (“Unless the dismissal order states otherwise, a dismissal under this subdivision (b) and any dismissal not under this rule—except one for lack of jurisdiction, improper venue, or failure to join a party under Rule 19—operates as an adjudication on the merits” (emphasis added)).

Accordingly, we conclude that Petitioner is deemed not to have been “served with a complaint alleging infringement” of the ’029 patent within the meaning of 35 U.S.C. § 315(b). Consequently, the Petition is not barred on that basis.

2. Real Parties-in-Interest and Privies

The Office Trial Practice Guide (“Practice Guide”) provides guidance on the Board’s approach to identifying real parties-in-interest and privies, referring to common-law preclusion doctrines and citing the Supreme Court decision in *Taylor v. Sturgell*. 77 Fed. Reg. 48,756, 48,759 (Aug. 14, 2012)

(citing *Taylor v. Sturgell*, 553 U.S. 880 (2008)). Because nonparty preclusion risks binding those who have not had a full and fair opportunity to litigate, the Supreme Court has cautioned that there is a general rule against nonparty preclusion, subject only to limited exceptions. *See Taylor*, 553 U.S. at 892–93. In *Taylor*, while noting that it was not a “definitive taxonomy” (*id.* at 893 n.6), the Court set forth a list of six “categories” under which nonparty preclusion may be allowed. *Id.* at 893–95. These categories include: (1) whether the third party agrees to be bound by the determination of issues in the proceeding; (2) whether a pre-existing substantive legal relationship with the party named in the proceeding justifies binding the third party; (3) “in certain limited circumstances,” whether the third party is adequately represented by someone with the same interests; (4) whether the third party exercised or could have exercised control over the proceeding; (5) whether the third party is bound by a prior decision and is attempting to rehear the matter through a proxy; and (6) whether a statutory scheme forecloses successive hearing by third parties. *Id.*

Patent Owner contends that the relationship between AGLR and MRMC “goes far beyond the usual buyer-seller relationship that has been deemed inadequate to confer privity status in other cases.” PO Resp. 55. Patent Owner summarizes the facts that it argues support a finding of privity, contending that “[w]hen all of these facts are considered, the relationship between and among AGLR, MRMC and MRCG is sufficiently close to justify considering MRMC or MRCG to be a real party-in-interest or privity of AGLR and/or AGLC [i.e., Petitioner].” *Id.* Patent

Owner contends that these facts, which it characterizes in a manner favorable to its position, “satisfy at least the first and second ‘Taylor factors’ (third party agrees to be bound and third party had pre-existing substantive legal relationship with the party named in the proceeding).” *Id.* (citation to *Taylor* omitted). We disagree.

First, Patent Owner’s characterization of the facts improperly elevates negotiation discussions of a *potential* agreement to the status of an *actual* agreement in advancing its argument with respect to the *Taylor* “third party agrees to be bound” category. The full language cited by the Supreme Court in *Taylor* leaves no doubt that the Court was referring to the *actual* binding of parties by agreement, not merely to *offers* to be bound that might have been made as part of failed negotiations: “[A] person who agrees to be bound by the determination of issues in an action between others is bound *in accordance with the terms of his agreement.*” *Taylor* at 893 (quoting 1 Restatement (Second) of Judgments (“Restatement”) § 40, p. 390 (1980) (emphasis added)). The record includes insufficient evidence of an actual agreement to be bound to support Patent Owner’s position. Indeed, the record includes an explicit response that no agreement was reached between Petitioner and MRMC or MRCG. *See* Ex. 2033.

Second, Patent Owner places too much weight on the second *Taylor* category (pre-existing substantive legal relationship). “Qualifying relationships include, but are not limited to, preceding and succeeding owners of property, bailee and bailor, and assignee and assignor.” *Id.* (citing 2 Restatement §§ 43–44, 52,

55. Although the Supreme Court acknowledges relationships other than those it specifically identifies may qualify, the relationship between Petitioner and MRMC or MRCG is not as close as those examples, and Patent Owner provides insufficient reasoning to support the extension it implicitly proposes. Patent Owner draws no analogy to any of the other “substantive legal relationships resulting in preclusion” set forth in 2 Restatement §§ 43–61 to support its position or for us to consider.

Accordingly, neither MRMC nor MRCG has been established to be a real party-in-interest in this proceeding, nor have they been established to be privies of Petitioner within the meaning of § 315(b). Whether MRMC was served more than one year before the instant Petition was filed, thus, is irrelevant to the applicability of the statutory bar to Petitioner. Therefore, we conclude that Petitioner neither has failed to identify all real parties-in-interest as required by § 312(a)(2) nor is barred by § 315(b).

B. Person of Ordinary Skill in the Art

Petitioner contends that a person of ordinary skill in the art of gas pressure regulators and vent protectors “would generally have at least a few years of experience with designing, maintaining, or otherwise working with the functional aspects of gas pressure regulators,” and supports its contention with testimony by its expert, James Petersen. Pet. 17 (citing Ex. 1016 ¶ 6). Patent Owner disputes Petitioner’s contention, countering that “[o]ne would need to also have experience with vent protectors themselves and how they interact with gas pressure regulators in order to have ordinary skill in the art of

designing vent protectors.” PO Resp. 27. Patent Owner contends instead that the level of ordinary skill in the art “encompasses someone with at least a high school education who has studied gas regulators and their operation, who has studied gas regulator vent protectors and their operation, and who has had personal experience in manufacturing, testing and using gas regulator vent protectors.” *Id.* at 27–28. Patent Owner further contends that “[a]ny person of ordinary skill in the art would have to have studied and worked with gas regulators and gas regulator vent protectors for at least three years.” *Id.* at 28. Patent Owner supports its contentions with testimony by Mr. Bennett.² Ex. 2087 ¶¶ 12–14.

The significance of the level of ordinary skill in the art is the role it plays in an obviousness analysis. *See Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966); *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (“[T]he level of skill in the art is a prism or lens through which a judge, jury, or the Board views the prior art and the claimed invention”); *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991) (“The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry”). The differences between the parties regarding the level of ordinary skill in the art are not as great as they might first appear, and the

² Petitioner contends that the testimony of Mr. Bennett is unreliable because he is a named inventor on the '029 patent and because he has a significant financial interest in preserving the validity of the '029 patent. Reply 2–3 (citing *Bell & Howell Document Mgmt. Prod. Co. v. Altek Sys.*, 132 F.3d 701, 706 (Fed. Cir. 1997); Ex. 1031, 8:14–17, 9:7–19). These factors affect the weight to be accorded to Mr. Bennett’s testimony.

deposition testimony of Mr. Petersen is edifying. Mr. Petersen testified that (1) there is nothing unique about designers of natural gas regulator vent protectors that would distinguish them from those who design natural gas regulators or fuel gas regulators (Ex. 2089, 52:7–17); (2) there was no intent to omit vent protector designers or manufacturers from the definition of one of ordinary skill because “[i]nasmuch as a vent protector is an accessory . . . to a gas regulator, it would encompass that as well” (*id.*, 53:3–21); and (3) one of skill in the art could have a technician level of engineering education and need not have a degree level of education (*id.*, 55:11–21). We credit this testimony.

In light of these clarifications, we conclude that one of ordinary skill in the art would have at least a technician level of engineering education, and experience with designing, maintaining, or otherwise working with gas pressure regulators and vent protectors.³

C. Claim Construction

The '029 patent expired on June 16, 2015. *See* PO Resp. 20; Reply 8. The Board construes claims of an

³ Patent Owner contends that “Mr. Petersen may be knowledgeable about how gas regulators work, . . . but he does not possess ordinary skill in the art of designing vent protectors for gas regulators.” PO Resp. 28. In light of our determination regarding the level of ordinary skill in the art, we disagree. We note also that Mr. Petersen need not be a person of ordinary skill in the art to testify as an expert under Federal Rule of Evidence 702. *See Sundance, Inc. v. DeMonte Fabricating Ltd.*, 550 F.3d 1356, 1363–64 (Fed. Cir. 2008). Nor must Mr. Petersen’s qualifications perfectly match the patent at issue. *See SEB S.A. v. Montgomery Ward & Co. Inc.*, 594 F.3d 1360, 1373 (Fed. Cir. 2010).

expired patent under principles similar to those used during a district court's review, according claim terms their ordinary and customary meaning, as would be understood by a person of ordinary skill in the art at the time of the invention. *See In re CSB-System Int'l*, Case 2015-1832, slip op. *8 (Fed. Cir. Aug. 9, 2016) ("When a patent expires during a reexamination proceeding, the PTO should thereafter apply the *Phillips* standard for claim construction."); *Cisco Systems, Inc. v. AIP Acquisition, LLC*, Case IPR2014-00247, slip op. at 2 (PTAB July 10, 2014) (Paper 20) (citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313–1317 (Fed. Cir. 2005) (en banc)). "In determining the meaning of the disputed claim limitation, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence." *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17). There is a presumption, however, that a claim term carries its ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (internal citation omitted).

In the Institution Decision, we construed certain claim terms in accordance with their broadest reasonable interpretation. Dec. 17–19. In light of expiration of the '029 patent and development of the full record, we consider construction of the claims anew. Although the Petition appears to apply the broadest reasonable interpretation in advocating for certain constructions, Petitioner remarks that "many of the proposed constructions. . . are consistent with Patent Owner's claim construction positions and

infringement contentions asserted in the Ohio Lawsuit.” Pet. 12. Because the claim-construction standard we apply for expired patents is the same as the standard applied by district courts, Petitioner presumably understands at least those of its proposed constructions also to be consistent with the claim-construction standard we apply herein.

1. “*skirt receiver*”

Petitioner proposes that “skirt receiver,” recited in independent claim 1, be construed as “a structure that connects a skirt member or skirt to the vent tube of a gas pressure regulator.” *Id.* at 12–13. Petitioner represents that “[t]his construction is identical to Patent Owner’s proposed construction for the term during litigation.” *Id.* at 13. Although we are not bound by the constructions reached in the district court litigation, we do not disregard them in our determination of the proper construction of this term. *See Power Integrations, Inc. v. Lee*, 797 F.3d 1318, 1326–27 (Fed. Cir. 2015) (Although under certain circumstances the Board may be obligated to evaluate the district court’s construction and to determine whether that construction is consistent with the broadest reasonable construction, “[t]here is no dispute that the board is not generally bound by a prior judicial construction of a claim term.”). Patent Owner does not propose a different construction for the term in this proceeding.

We adopt Petitioner’s proposed construction.

2. “*skirt receiver means*”

Independent claims 1 and 5 recite a “skirt member” that is “operatively connected to said skirt

receiver means.” The “skirt receiver means” is recited positively in claim 5, but it lacks antecedent basis in claim 1, apparently referring to the positively recited “skirt receiver.”

“[U]se of the word ‘means’ creates a presumption that § 112, ¶ 6 applies,” but “[this] presumption[] can be rebutted if the evidence intrinsic to the patent and any relevant extrinsic evidence so warrant.” *Personalized Media Communications, LLC v. International Trade Com’n*, 161 F.3d 696, 703–04 (Fed. Cir. 1998).

Neither claim 1 nor claim 5 recites the “skirt receiver means” in functional terms, and construction without reference to § 112, ¶ 6, is warranted, particularly in light of the inconsistent use of “skirt receiver” and “skirt receiver means” in claim 1. The parties appear to agree that “skirt receiver means” should be construed identically with “skirt receiver,” and we adopt such a construction herein.

3. “skirt member”

Independent claim 1 recites “a skirt member defining an interior space and having an upper end opening connecting said vent tube to said interior space and an outwardly flared lower end with an area substantially greater than the area of said upper end opening, said skirt member being operatively connected to said skirt receiver means.” Independent claim 5 recites “a skirt member defining an interior space, an upper end with an opening adapted to communicate with said vent passage, and an outwardly flared lower end with an opening having an area substantially greater than the area of said upper

end opening, said skirt member being operatively connected to said skirt receiver means.” The limitations are similar in these independent claims, although claim 1 recites certain elements as components of the “skirt member,” while claim 5 recites them as separate elements. This distinction is not essential to our conclusions.

Petitioner proposes a construction that incorporates the separate elements recited in claim 5 as components of the “skirt member,” similar to the manner in which such elements are recited in claim 1, and represents that “Patent Owner contends that the term ‘skirt member’ should be construed as ‘structure that (a) defines an interior space, (b) has an upper end opening connecting a vent tube to the interior space or communicating with a vent passage, (c) has an outwardly flared lower end opening with an area substantially greater than the area of the upper end opening, and (d) is operatively connected to a skirt receiver means.” Pet. 14. Petitioner asserts that “the Board should adopt Patent Owner’s proposed construction.” *Id.* Patent Owner does not contest the construction. *See* PO Resp. 20.

We adopt this construction herein.

4. “baffle means”

Independent claim 1 recites “baffle means located in said interior space to underlie said upper end opening and being spaced from the interior walls of said skirt to permit gas flow therearound.” Independent claim 5 similarly recites “baffle means located in said interior space to underlie said vent passage and being spaced from the interior walls of

said skirt to permit gas flow therearound.” Petitioner contends that “baffle means” should be construed under 35 U.S.C. § 112, ¶ 6, as a means-plus-function limitation. *Id.* at 14–15. Patent Owner disagrees because “it is not in the conventional means-plus-function format and because it sets forth structural limitations, not merely functional limitations.” PO Resp. 23–24. Patent Owner advocates for a construction of “baffle means” as

(a) a baffle or baffle plate positioned in a generally horizontal plane within the interior space of a skirt, (b) the baffle or baffle plate underlying an upper end opening or vent passage in a manner that blocks the splash-back of rain or freezing rain upwardly toward the upper end opening or vent passage, and (c) substantial space being provided between the baffle or baffle plate and the skirt to permit high pressure gas to flow around the baffle or baffle plate and out of the skirt.

Id. at 24–25.

In advocating for a means-plus-function construction, Petitioner asserts that “[t]he recited function of the ‘baffle means’ is to underlie the upper end opening or vent passage and permit gas to flow around the baffle.” Pet. 15. We agree with Patent Owner that these geometrical requirements are structural, rather than functional, and that the claim term is more appropriately construed without reference to 35 U.S.C. § 112, ¶ 6. But Patent Owner’s proposed construction improperly incorporates additional limitations not recited in the claim, such as “*substantial space*” and “to permit *high pressure* gas to flow” (emphases added). We agree with Petitioner that

the intrinsic record lacks sufficient support to incorporate such additional limitations. *See* Reply 10.

We construe “baffle means” as a “baffle plate,” and note that the claims recite specific structural limitations that apply.

5. “*valve means*”

Independent claim 5 recites “valve means for controlling gas flow between said high pressure source and said low pressure line.” Petitioner contends that the claim term “valve means” should be construed in accordance with 35 U.S.C. §112, ¶ 6, with a function of controlling gas flow between the high pressure source and the low pressure line in a gas regulator. Pet. 16. Petitioner further contends that the corresponding structure for this function is “any conventional diaphragm-type gas pressure regulator.” *Id.* (citing Ex. 1009, 8–9). Patent Owner “does not dispute that the phrase in question is a means-plus-function limitation,” but contends that the corresponding structure for the “valve means” is “a high pressure, internally relieved, diaphragm-type gas pressure regulator located outdoors.” PO Resp. 25. Patent Owner provides insufficient basis for the additional restrictions of “high pressure,” “internally relieved,” and “located outdoors” to the identified structure. Such a position also appears to be inconsistent with the position taken by Patent Owner in the Ohio lawsuit under a similar claim-construction standard. *See* Ex. 1009, 8–9. *See Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1351 (Fed. Cir. 2001) (“A patent may not, like a ‘nose of wax,’ be twisted one way to avoid anticipation and another to find infringement.” (quoting *Sterner Lighting, Inc. v.*

Allied Elec. Supply, Inc., 431 F.2d 539, 544 (5th Cir. 1970))).

We construe “valve means” in accordance with 35 U.S.C. §112, ¶ 6, with a function of controlling gas flow between the high pressure source and the low pressure line in a gas regulator, and with corresponding structure of a conventional diaphragm-type gas pressure regulator. *See* Ex. 1001, col. 3, ll. 1–36, Figs. 1–3.

6. “outlet vent tube,” “vent tube,”
“outlet vent means” and “vent means”

Independent claim 1 recites a “vent tube” having antecedent basis with a previously recited “outlet vent tube.” Independent claim 5 similarly recites a “vent means” having antecedent basis with a previously recited “outlet vent means.” The parties appear to agree that the “outlet vent means” and “vent means” should not be construed under 35 U.S.C. § 112, ¶ 6, and we agree with that position because the claims do not state sufficient function for those elements and because the claims recite sufficient structure. *See* Pet. 16–17, PO Resp. 21–23. Petitioner contends that such terms should be given their “ordinary meaning.” Pet. 16. Patent Owner advocates for a construction of such terms, as well as “outlet vent tube” and “vent tube” as “a vent tube that has an internal diameter large enough to accommodate the discharge of high pressure gas and that, in use, has a downwardly facing end portion.” PO Resp. 21–23.

Patent Owner’s proposed construction improperly incorporates additional limitations into the claims, namely that the gas discharged via such elements is

of “high pressure” and that the structure is oriented with a “downwardly facing end portion.” As Petitioner observes, other known configurations include an upward facing vent. Reply 10 (citing Ex. 1002, Figs. 4–5).

We construe each of “outlet vent tube,” “vent tube,” “outlet vent means,” and “vent means” as structure that discharges gas.

7. *“diaphragm-type gas pressure regulator” and “outside gas pressure regulator”*

The preamble of independent claim 1 recites “[a] skirt assembly for reducing ice formation at an outlet vent tube . . . of a diaphragm-type gas pressure regulator.” Patent Owner incorrectly asserts that the phrase “diaphragm-type gas pressure regulator” “is in the preamble of the two independent claims, and thus is a feature of all of the claims.” PO Resp. 21. Independent claim 5 instead recites an “outside gas pressure regulator” as an element of a combination. Petitioner does not propose a construction of either phrase, and Patent Owner advocates for a construction of “diaphragm-type gas pressure regulator” as a “high pressure, internally relieved, diaphragm-type gas pressure regulator located outdoors.” *Id.* at 25. Such a construction improperly incorporates limitations not recited in the claims, namely “high pressure,” “internally relieved,” and “located outdoors.” Moreover, Patent Owner provides insufficient reasoning to support a position that the recitation of a “diaphragm-type gas pressure regulator” in the preamble of claim 1 is limiting. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999) (“If . . . the body of the

claim fully and intrinsically sets forth the complete invention, including all of its limitations, and the preamble offers no distinct definition of any of the claimed invention's limitations, but rather merely states, for example, the purpose or intended use of the invention, then the preamble is of no significance to claim construction because it cannot be said to constitute or explain a claim limitation."). Therefore, we need not construe "diaphragm-type gas pressure regulator."

Because the "outdoor gas pressure regulator" is recited positively as an element of a combination in claim 5, it is a limiting feature of the claim. We construe the phrase in accordance with its plain and ordinary meaning as a gas pressure regulator that is located outdoors.

*8. "high pressure gas source" and
"low pressure gas line"*

Independent claim 5 recites "an outside gas pressure regulator connected between a high pressure gas source and a low pressure gas line." Patent Owner proposes that "high pressure gas source" be construed as "a gas distribution system delivering natural gas to customer connection points at a pressure higher than about 2-3 psi up to about 125 psi," and that "low pressure gas line" be construed as "a gas line having pressures low enough to be used safely by a customer's appliances." PO Resp. 26.

The specific numerical values for "high pressure" proposed by Patent Owner lack support in the Specification of the '029 patent, which instead remarks that "[g]as pressure regulators used in

natural gas distribution systems at customer connection points must typically reduce pressure from around 80 psi (used by the gas utility in its distribution system) to around 0.4 psi (used in typical consumer gas lines).” Ex. 1001, col. 1, ll. 13–17. To support its proposed construction, Patent Owner cites deposition testimony by Petitioner’s expert, Mr. Petersen, that “[when] I think of low-pressure distribution systems, I think of pressures around 2 to 3 PSI, which were typical of many of the older systems.” Ex. 2089, 110:13–15. Patent Owner also argues that “[o]ne skilled in the art would recognize that the regulator described and illustrated in the ’029 patent is a Fisher Model S254, which has a maximum inlet pressure of 125 psi.” PO Resp. 26 (citing Ex. 2093, 2); see Ex. 2087 ¶¶ 34, 46.

We are not persuaded that the specific features of the Fisher Model S254 regulator are properly incorporated as limitations of the claims in the absence of specific recitations in the claims themselves. As Petitioner observes, “many of the details Patent Owner cites are found only in the Fisher bulletin and not in the [’]029 Patent,” and “the [’]029 Patent does not refer to, or incorporate the features of, a Fisher S250 series regulator.” Reply 6 (citations omitted). At best, even fully crediting Mr. Bennett’s testimony that “[t]he gas regulator illustrated in FIGS. 1, 3 and 4 and described in the ’029 patent is a Fisher Controls Model S254 high pressure, internally relieved, diaphragm-type natural gas regulator,” that specific regulator serves only as a nonlimiting *example* used by the ’029 patent. See Ex. 2087 ¶ 34.

Petitioner provides evidence that “[a]s a general matter, all diaphragm-type gas pressure regulators are designed to reduce gas pressure from a relatively higher inlet pressure to a relatively lower output pressure.” Reply 5 (citing Ex. 1016 ¶ 8; Ex 1032, 45:16–25). Patent Owner’s witness, Paul E. Oleksa,⁴ provides testimony consistent with Petitioner’s position that “[t]here is no specific pressure that constitutes ‘high pressure,’ which simply refers to a pressure higher than the output.” *See id.* (citing Ex. 2088 ¶ 33; Ex. 2089, 108:11–22; Ex. 1031, 137:19–138:17; Ex. 1032, 44:9–13). In particular, Mr. Oleksa does not make categorical statements defining “high pressure” in his Declaration, but, rather, asserts: “The pressure in a natural gas distribution system can vary considerably. A low pressure system delivers pressure to the customer’s piping at less than one psi. *A high pressure system delivers pressure at a level higher than the low pressure.*” Ex. 2088 ¶ 33 (emphasis added).

⁴ Patent Owner contends that the testimony of Mr. Oleksa is unreliable because “Mr. Oleksa’s testimony was rejected by a court in a previous case” and because “Mr. Bennett testified that Mr. Oleksa does not have enough experience to be a person of ordinary skill in the art.” Reply 3 (citing Ex. 1032, 29:7–30:4; Ex. 1033, 1; Ex. 1031, 27:4–9). Mr. Oleksa’s testimony was rejected in the prior case because he was not a Certified Fire Investigator for the State of Ohio. Ex. 1032, 29:7–30:4. Patent Owner does not explain the relevance of such a qualification to this proceeding, and identifies no evidence that causes us to question Mr. Oleksa’s honesty or objectivity. We also find that Mr. Oleksa possesses the qualifications of one at least of ordinary skill in the art in light of our determination of that skill level above. *See* Ex. 2088 ¶¶ 3–4, Exs. A, B. Accordingly, we are not persuaded that Mr. Oleksa’s testimony is entitled only to diminished weight.

The general variation in the experts' testimony regarding precise numerical values for "high pressure" and "low pressure" reinforces the conclusion that these are relative terms, as used in claim 5. Accordingly, we construe them relative to each other, such that the "high pressure gas source" delivers gas at a pressure higher than a pressure at the "low pressure gas line."

D. Peterson '087

All of the grounds on which we instituted *inter partes* review rely of Peterson '087, alone or in combination with other art. Figure 2 of Peterson '087 is reproduced below.

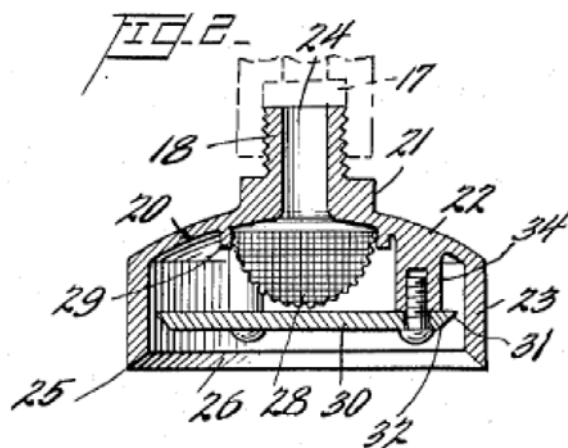


Figure 2 provides a central vertical cross-section of a breather or vent for a gas-service pressure regulator. *Id.* at col. 2, ll. 3-4. Similar to the '029 patent, Peterson '087 notes that such gas-pressure regulators may be installed outdoors and that "[a]s a result[,] such regulators are exposed to all weather and other adverse conditions, and particularly have

been troubled with stoppages of the vent passage to the air or back side of the diaphragm resulting from freezes following or occur[r]ing during rain or sleet storms or the like.” *Id.* at col. 2, ll. 17–23. Threaded nipple 18 is connected operatively to the vent tube. *Id.* at col. 2, l. 51–col. 3, l. 13.

1. Claims 1 and 5

a. Anticipation by Peterson '087

We instituted review of claims 1 and 5 as anticipated by Peterson '087. Dec. 28. In supporting its challenge on this basis, Petitioner draws a correspondence between the threaded nipple 18 and the “skirt receiver” or “skirt receiver means” recited in independent claim 1, supporting its contention with testimony by Mr. Petersen. Pet. 27–28 (citing Ex. 1016 ¶¶ 21, 23). Petitioner draws a further correspondence between the combination of dome portion 22 and skirt portion 23 of Peterson '087 with the “skirt member” recited in claim 1. Pet. 28–29 (citing Ex. 1016 ¶ 24). Petitioner contends that such a skirt member “defin[es] an interior space and [has] an upper end opening connecting said vent tube to said interior space and an outwardly flared lower end with an area substantially greater than the area of said upper end opening,” as recited in claim 1.

Petitioner contends that disc 30 corresponds to the recited “baffle means” because it underlies the upper end opening and is spaced from the interior walls of the skirt to permit gas flow therearound. Pet. 29–30 (citing Ex. 1016 ¶¶ 25, 26).

Independent claim 5 recites, in addition to elements that generally correspond to those discussed

above with respect to claim 1, a “valve means,” a “diaphragm housing,” and “a diaphragm,” with certain limitations. Petitioner draws a correspondence between each of these recitations and elements shown in Figure 1 of Peterson '087, namely between element 13 and the “diaphragm,” between element 16 and the “diaphragm housing,” and between element 12 and the “valve means.” *Id.* at 31–32 (citing Ex. 1016 ¶¶ 29–31).

We agree with Petitioner’s identifications and analysis as they relate to the anticipation ground and, in light of the claim-construction determinations set forth above, adopt them here.

We also have considered Patent Owner’s responses. Certain of Patent Owner’s arguments rely on features that we do not find are required by the claims in accordance with the claim construction set forth above, and those arguments are, therefore, unpersuasive. For example, Patent Owner contends that “[o]ne skilled in the art would understand that outlet vent tube or outlet vents means in claims 1 and 5 would mean a large-diameter outlet that would accommodate the discharge of high pressure gas in the event of an overpressure condition.” PO Resp. 31. Not only are these interpretations unsupported by our claim construction, Patent Owner’s position is belied by the '029 patent’s disclosure of a “*small* vent opening.” *See* Ex. 1001, col. 1, ll. 43–44, col. 3, ll. 29–30 (emphasis added). Patent Owner also contends that “[o]ne skilled in the art would understand that claims 1 and 5 call for a substantial space between the baffle and the interior walls of the skirt that would permit the flow of high pressure gas as might occur in the

event of an overpressure condition.” PO Resp. 31 (citing Ex. 2087 ¶ 47). But the claims require only that the “baffle means” be “spaced from the interior walls of said skirt,” and Patent Owner acknowledges that Peterson ’087 discloses a 1/16 inch gap between sharpened edge 31 and the interior of the skirt. *See id.* The claims require neither a “substantial” space nor the flow of “high pressure” gas. *See Reply 13.* Relatedly, we are not persuaded by Patent Owner’s contention that “Peterson [’087] makes no mention of discharging gas through the vent passage 15 or relief vent 20.” PO Resp. 31. Petitioner provides evidence that a “relief vent” is understood generally in the art to refer to venting gas, and we credit that evidence. *See Ex. 1016 ¶ 26; Ex. 1031, 44:1–3; Ex. 1032, 37:17–38:24; Ex. 1036 ¶¶ 17, 19.*

Patent Owner also argues that “[c]laim 5 calls for a high pressure gas source[, but] Peterson ’087 contains no disclosure of gas pressure, and therefore does not disclose a high pressure gas source.” PO Resp. 31. Because we find that the pressures associated with the “high pressure gas source” and “low pressure gas line” are relative, for the reasons explained above, we are also not persuaded by this argument.⁵

We conclude that Petitioner has demonstrated, by a preponderance of the evidence, that claims 1 and 5

⁵ Patent Owner also argues that the “same or substantially the same” art was considered during the Office’s reexamination of the ’029 patent in 2002–03. PO Resp. 32. This argument implicates the provisions of 35 U.S.C. § 325(d), which Patent Owner acknowledges it did not raise in its Preliminary Response. Tr. 35:7–9. We do not consider the argument here, as § 325(d) relates to our decision to institute.

are anticipated under 35 U.S.C. § 102(b) by Peterson '087.

b. Obviousness Over Peterson '087 and Peterson '573

We also instituted review of claims 1 and 5 as unpatentable under 35 U.S.C. § 103(a) over Peterson '087 and Peterson '573, which “relates to a safety device for a gas pressure regulator.” Ex. 1004, col. 1, ll. 10–11. Petitioner contends that Peterson '573 “expressly addresses venting gas from the atmospheric pressure chamber of a diaphragm-type gas pressure regulator through a ‘bug-proof vent protector.” Pet. 33 (citing Ex. 1004, col. 3, ll. 23–34). Petitioner argues that “[i]t would have been obvious to one of ordinary skill in the art at the time of filing the [']029 Patent application that the skirt assembly of the [Peterson] '087 patent would be used in connection with venting gas from a gas pressure regulator.” *Id.* at 33. Petitioner reasons that both Peterson '087 and Peterson '573 “are directed to vent covers for vent tubes of natural gas regulators” and that, in light of Peterson '573’s statement that vent protectors used for venting gas were “of known construction,” the combination would arrive at a predictable result. *Id.* at 33–34 (citing Ex. 1004, col. 3, ll. 25–28). Petitioner further supports its reasoning with testimony by Mr. Peterson. *Id.* at 33 (citing Ex. 1016 ¶¶ 50–52). We are persuaded by Petitioner’s reasoning. The fact that both references are directed to vent covers supports our finding that they are drawn from analogous arts, and that they achieve a predictable result, thereby supporting a conclusion of obviousness.

Patent Owner responds that “[t]he Petition fails to take into account how one skilled in the art would

have understood the prior art in light of the problem to be solved,” presenting a line of reasoning predicated on claim-construction positions we have not adopted, namely by focusing on “high pressure, internally relieved gas regulators.” PO Resp. 39. Because we have not adopted those positions, we do not find Patent Owner’s argument persuasive.

Patent Owner also contends that “[s]econdary considerations of non-obviousness are relevant to the present matter.” *Id.* at 40. In addressing such secondary considerations, Patent Owner asserts “[t]he existence of long-felt but unsatisfied need,” “copying by others,” and “the commercial success that the patented product has attained.” *Id.* Patent Owner presents insufficient evidence on these points that provides a nexus between the merits of the claimed invention and the evidence of secondary considerations. *See Ormco Corp. v. Align Tech., Inc.*, 463 F.3d 1299, 1311–12 (Fed. Cir. 2006). Without citation to evidence in the record, Patent Owner address the nexus requirement as follows:

The secondary considerations of non-obviousness of the patented product arise from features found in the ’029 patent claims. The flared nature of the skirt directs rain, snow and ice away from the vent. The horizontal baffle that underlies the outlet vent prevents freezing rain from splashing back and blocking the vent. The substantial space between the edges of the baffle and the interior walls of the skirt permit a high pressure, internally relieved regulator to be safely relieved in all icing conditions. The patented device is made of the fewest number of parts to

enhance reliability and reduce manufacturing cost and assembly time. The use of a molded plastic material and a threaded connection between the skirt and the vent mean that the device can be manufactured inexpensively and attached to a regulator in the field with minimal effort and little or no technician training.

PO Resp. 42. This conclusory catalog of advantages of the claimed invention does not qualify as “*proof* that the sales were a direct result of the unique characteristics of the claimed invention—as opposed to other economic and commercial factors unrelated to the quality of the patented subject matter.” *In re Huang*, 100 F.3d 135, 140 (Fed. Cir. 1996) (citation omitted) (emphasis added).

We conclude that Petitioner has demonstrated, by a preponderance of the evidence, that claims 1 and 5 would have been obvious over Peterson ’087 and Peterson ’573.

c. Obviousness of Claims 1 and 5 Over Peterson ’087 and Prior Art Described in the ’029 Patent

We further instituted review of claims 1 and 5 as unpatentable under 35 U.S.C. § 103(a) over Peterson ’087 and prior art disclosed in the ’029 patent. Dec. 28. Petitioner contends that the ’029 patent “discloses that diaphragm-type natural gas pressure regulators were known in the natural gas distribution industry, were commonplace, and of a simple design.” Pet. 39–40. We agree with Petitioner that claim 1 is not limited to a gas pressure regulator with particular elements, and that “[t]he conventional gas pressure regulator admitted as prior art by the inventors [of the ’029

patent] has all of the elements of the gas pressure regulator recited in claim 5.” *Id.* at 40. We further agree with Petitioner’s reasoning for combining this teaching with those of the ’087 patent because “[u]sing the gas regulator of the [prior art disclosed in the ’029 patent] with the skirt assembly of the ’087 Patent is merely combining two known devices in known ways to achieve a predictable result.” *Id.* This analysis and reasoning is supported by testimony by Mr. Petersen, which we credit. *See* Ex. 1016 ¶¶ 12–16, 27, 29–31.

Patent Owner responds that “[t]here is nothing in the [prior art described in the ’029 patent] that teaches or suggests that vent protection for any type of gas regulator is necessary or desirable,” and that “[t]here is nothing in [the prior art described in the ’029 patent] that would have led one skilled in the art to produce the claimed vent protector which requires a baffle-skirt gap sufficient to enable high pressure gas to be vented.” PO Resp. 52. We are not persuaded by these responses because they attack the prior art described in the ’029 patent for lacking features that Petitioner relies on as disclosed by Peterson ’087, and because they do not sufficiently address the combination of teachings. *See In re Keller*, 642 F.2d 413, 425 (CCPA 1981). Patent Owner refers to other arguments it makes in connection with the combination of Peterson ’087 and Peterson ’573, which we address above. *See* PO Resp. 52 (“Bennett has addressed these questions already in Section VI(G), *supra*, and incorporates those remarks herein by reference.”).

We conclude that Petitioner has demonstrated, by a preponderance of the evidence, that claims 1 and 5

would have been obvious over Peterson '087 and prior art described in the '029 patent.

2. Claims 2 and 6

Claims 2 and 6 depend from independent claims 1 and 5, respectively, and recite that “said skirt member is formed of a molded plastic material.” We instituted review of those claims on three bases: (1) obviousness over Peterson '087 and Ferguson; (2) obviousness over Peterson '087, Peterson '573, and Ferguson; and (3) obviousness over Peterson '087, the prior art described in the '029 patent, and Ferguson. Dec. 28. Essentially, these grounds correspond to the three grounds discussed above for claims 1 and 5, with the addition of Ferguson to address the additional limitation of claims 2 and 6.

Petitioner contends that, although Peterson '087 “is silent as to the material for the skirt member,” Ferguson “expressly teaches that vent covers used to protect a vent tube should be made of molded plastic material.” Pet. 34–35. Ferguson “pertains to vent covers for gas pressure regulators.” Ex. 1005, col. 1, ll. 5–6. Ferguson teaches that “all of the components of the vent cover, including the cap, are formed of a synthetic plastic material which is noncorrodable and not adversely affected by weather conditions.” *Id.* at col. 5, ll. 13–16. Petitioner asserts that one of ordinary skill in the art would have reason to combine this teaching with the teachings of Peterson '087 because both references “are directed at vent covers for vent tubes of natural gas regulators” and “address the problem of protecting the vent tube from inclement weather.” Pet. 35 (citing Ex. 1016 ¶ 57). Petitioner applies this reasoning not only in the context of

combining Ferguson with Peterson '087 alone, but also in the context of combining Ferguson with both Peterson '087 and Peterson '573, or with Peterson '087 and the prior art described in the '029 patent. *Id.* at 34–36, 37, 41. We agree with Petitioner's reasoning.

Patent Owner responds that “[n]either Peterson '087 nor Ferguson teach[es] or suggest[s] a vent protector or gas regulator such as that set forth in claims 1 and 5,” and “[a]ccordingly, even if it were obvious to make the Peterson '087 vent protector from a plastic material as disclosed by Ferguson . . . , the combination still would not produce the invention of claims [2 and 6].” PO Resp. 44. Patent Owner provides similar responses in the context of the combinations that also involve Peterson '573 or the prior art described in the '029 patent. *Id.* at 46, 53. We are not persuaded by these responses because Petitioner does not rely on Ferguson for the limitations recited in independent claims 1 and 5, from which claims 2 and 6 respectively depend, and because we conclude, for the reasons expressed above, that Petitioner has demonstrated that those underlying independent claims are unpatentable.

Patent Owner also contends that the vent cover of Ferguson is shown in a downwardly facing position and that “[i]f one were to change the orientation of the Ferguson device, the device not only would not work but it might also cause a fire or explosion.” *Id.* at 43. Such a consideration is not relevant to the combinations applied by Petitioner because of the limited manner in which Petitioner applies Ferguson, and in light of our construction of “outlet vent tube,” “vent tube,” “outlet vent means,” and “vent means.”

We conclude that Petitioner has demonstrated by a preponderance of the evidence that: (1) claims 2 and 6 would have been obvious over Peterson '087 and Ferguson; (2) claims 2 and 6 would have been obvious over Peterson '087, Peterson '573, and Ferguson; and (3) claims 2 and 6 would have been obvious over Peterson '087, the prior art described in the '029 patent, and Ferguson.

3. Claims 3 and 7

Claims 3 and 7 depend respectively from claims 2 and 6, and recite that “said molded material is an electrically conductive plastic.” We instituted review of those claims on three bases: (1) obviousness over Peterson '087, Ferguson, and Ohmae; (2) obviousness over Peterson '087, Peterson '573, Ferguson, and Ohmae; and (3) obviousness over Peterson '087, the prior art described in the '029 patent, Ferguson, and Ohmae. Dec. 28. Essentially, these grounds correspond to the three grounds discussed above for claims 2 and 6, with the addition of Ohmae to address the additional limitation of claims 3 and 7.

Ohmae “relates to an electrically conductive plastic molding using an ethylene copolymer and a process for producing the same.” Ex. 1006, col. 1, ll. 7–9. Petitioner contends that one of ordinary skill in the art would have reason to combine Ohmae’s teaching with the teachings of Peterson '087 and Ferguson because such a person “would understand the benefits of an antistatic material as the molded plastic for the skirt assembly, including reducing the likelihood of fire and explosions.” Pet. 38 (citing Ex. 1016 ¶ 63). Petitioner applies this reasoning not only in the context of combining Ohmae with Peterson '087 and

Ferguson alone, also in the context of further combination with Peterson '573 or the prior art described in the '029 patent. Pet. 39, 42. We agree with Petitioner's reasoning.

Patent Owner responds that Petitioner

does not provide a reason why one skilled in the art would want to use an antistatic material other than to conclude that "one skilled in the art would understand the benefits of an antistatic material as the molded plastic for the skirt assembly, including reducing the likelihood of fire and explosions."

PO Resp. 48 (quoting Pet. 38); *see id.* at 49–50 (referring to other analyses in the Patent Owner Response). Patent Owner contends that "[t]he way [Petitioner] handled the Ohmae reference reeks of impermissible hindsight analysis" because the reference was provided to Mr. Petersen by Petitioner's counsel and because Mr. Petersen failed "to determine the properties of the Ohmae material [such as elasticity modulus, shear modulus, tensile strength, and breakage resistance] prior to rendering his opinion." *Id.* We are not persuaded by this contention. "Any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made and does not include knowledge gleaned only from applicant's disclosure, such a reconstruction is proper." *In re McLaughlin*, 443 F.2d 1392, 1395 (CCPA 1971). Mr. Bennett testified that, at the time of invention, "static electricity was a big issue," but that concern has since

“faded away,” confirming that there was industry motivation to use antistatic material. Ex. 1037, 57:5–22. The other properties of the material described by Ohmae are not recited in the claims; what is relevant is that Ohmae discloses electrically conductive plastic molding usable “in a broad range of application[s],” including antistatic materials. Ex. 1006, col. 1, ll. 16–41.

Patent Owner also impugns Petitioner’s reliance on the testimony of Mr. Petersen to support its rationale for combining Ohmae with the other references because “it must be remembered that Mr. Petersen is not one of ordinary skill in the art of designing vent protectors.” PO Resp. 48; *see id.* at 49–50 (referring to other analyses in the Patent Owner Response). As noted above, we disagree with this assertion in light of our conclusion regarding the level of ordinary skill in the art. *See supra*, n.3.

We conclude that Petitioner has demonstrated by a preponderance of the evidence that: (1) claims 3 and 7 would have been obvious over Peterson ’087, Ferguson, and Ohmae; (2) claims 3 and 7 would have been obvious over Peterson ’087, Peterson ’573, Ferguson, and Ohmae; and (3) claims 3 and 7 would have been obvious over Peterson ’087, the prior art described in the ’029 patent, Ferguson, and Ohmae.

4. Claims 4 and 8

Claims 4 and 8 depend respectively from independent claims 1 and 5, and recite “further including a screen element covering said lower end opening.” We instituted review of those claims on three bases: (1) obviousness over Peterson ’087 and

Ferguson; (2) obviousness over Peterson '087, Peterson '573, and Ferguson; and (3) obviousness over Peterson '087, the prior art described in the '029 patent, and Ferguson. Dec. 28. Essentially, these grounds correspond to the three grounds discussed above for claims 1 and 5, with the addition of Ferguson to address the additional limitation of claims 4 and 8.

Ferguson discloses that “vent cover 34 includes . . . vent opening 38, and . . . screen 40 is located within the cover adjacent the vent opening whereby vented gas passes through the screen, and the screen prevents insects and debris from entering the neck.” Ex. 1005, col. 3, ll. 41–46. In addition, Peterson '087 discloses an optional screen as a defense to insects, dirt, and leaves, but positions such a screen near the upper end of the skirt assembly, rather than the lower end. Ex. 1001, col. 3, ll. 58–62. Petitioner reasons that, because one of ordinary skill in the art would have reason to combine the teachings of Peterson '087 and Ferguson, each of which “address[es] the problem of protecting the vent tube from inclement weather,” it “would have been obvious to try the screen at the lower end of the skirt assembly.” Pet. 36 (citing Ex. 1016 ¶¶ 59–60). Petitioner applies this reasoning not only in the context of combining Ferguson with Peterson '087 alone, but also in the context of combining Ferguson with both Peterson '087 and Peterson '573, or with Peterson '087 and the prior art described in the '029 patent. *Id.* at 34–36, 37, 41. We agree with Petitioner’s reasoning, and note that the Supreme Court has approved of “obvious to try” rationales for the combination of the teachings of applied references under appropriate circumstances:

The same constricted analysis led the Court of Appeals to conclude, in error, that a patent claim cannot be proved obvious merely by showing that the combination of elements was “[o]bvious to try.” When there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the known options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103.

KSR International Co. v. Teleflex Inc., 550 U.S. 398, 421 (2007).

Patent Owner responds that “[Petitioner’s] contention is illogical because Peterson ’087 discloses an internal screen and would not need another.” PO Resp. 44; *see id.* at 46, 53 (referring to other analyses in the Patent Owner Response). “Even if the internal screen were removed,” Patent Owner contends, “the addition of a screen at the lower end of the Peterson ’087 skirt would obviate the need for the 1/16 inch baffle-skirt spacing to exclude insects that was the reason the Peterson ’087 invention was created in the first place.” *Id.* at 44–45. Patent Owner adds that Mr. Petersen testified that adding a screen to the lower end opening “could cause icing problems,” which “is some evidence that it would not have been obvious to place a screen at the lower end opening.” *Id.* at 45 (citing Ex. 2089, 44:22–45:8); *see id.* at 46, 53 (referring to other analyses in the Patent Owner

Response). Although these are factors we consider, we are not persuaded that they effectively rebut Petitioner's contention that it would have been obvious to try an alternative location for the screen.

We conclude that Petitioner has demonstrated, by a preponderance of the evidence that: (1) claims 4 and 8 would have been obvious over Peterson '087 and Ferguson; (2) claims 4 and 8 would have been obvious over Peterson '087, Peterson '573, and Ferguson; and (3) claims 4 and 8 would have been obvious over Peterson '087, the prior art described in the '029 patent, and Ferguson.

III. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, based on a preponderance of the evidence, claims 1–8 of U.S. Patent No. 5,810,209 are held to be unpatentable;

FURTHER ORDERED that, because this is a final written decision, parties to this proceeding seeking judicial review of our decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

[List of Counsel Excluded for this Appendix]

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Appendix C

Filed September 1, 2015

**UNITED STATES PATENT
AND TRADEMARK OFFICE**

**BEFORE THE PATENT TRIAL
AND APPEAL BOARD**

ATLANTA GAS LIGHT COMPANY,
Petitioner,

v.

BENNETT REGULATOR GUARDS, INC.,
Patent Owner.

Case IPR2015-00826
Patent 5,810,029

Before JENNIFER S. BISK, JAMES B. ARPIN, and
PATRICK M. BOUCHER, *Administrative Patent
Judges.*

BOUCHER, *Administrative Patent Judge.*

DECISION

Institution of Inter Partes Review

37 C.F.R. § 42.108

Atlanta Gas Light Company (“Petitioner”) filed a Petition (Paper 1, “Pet.”) pursuant to 35 U.S.C. §§ 311–319 to institute an *inter partes* review of claims 1–8 of U.S. Patent No. 5,810,029 (Ex. 1001, “the ’029 patent”). Bennett Regulator Guards, Inc. (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”).¹ Pursuant to our authorization, Petitioner filed a Reply (Paper 11, “Reply”), limited to addressing issues raised under 35 U.S.C. § 315(b) by the Preliminary Response.

Applying the standard set forth in 35 U.S.C. § 314(a), which requires demonstration of a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim, we institute an *inter partes* review of claims 1–8 of the ’029 patent. We have not made a final determination of the patentability of any claim.

I. BACKGROUND

A. *The ’029 Patent*

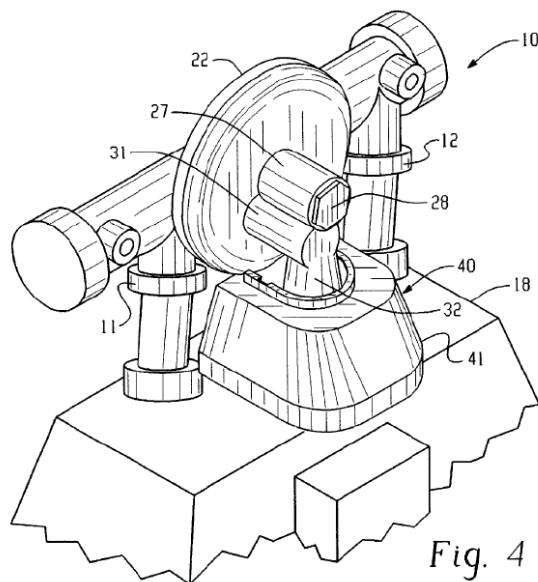
The ’029 patent, titled “Anti-Icing Device for Gas Pressure Regulators,” issued on September 22, 1998, based on Application No. 08/491,273. The ’029 patent “relates to natural gas distribution and especially to problems associated with the pressure regulator valve used to reduce gas pressure from the relatively high level used in a distribution system to the relatively low pressure level used in a customer’s building or residence.” Ex. 1001, col. 1, ll. 5–9. The pressure regulator may include a flexible diaphragm that

¹ A motion to seal the Preliminary Response was granted on July 6, 2015. Paper 10. A redacted version of the Preliminary Response accessible by the public was filed as Paper 8.

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divides the interior space of a surrounding diaphragm housing into low-pressure and atmospheric-pressure chambers, with an opening provided to vent the atmospheric-pressure chamber to the atmosphere. *Id.* at col. 1, ll. 37–44. Because the pressure regulator may be mounted on the outside of a building, where it is exposed to prevailing weather conditions, the vent may be protected with a vent tube having a downward orientation that prevents precipitation from entering the vent tube. *Id.* at col. 1, ll. 51–60. A metal screen over an outlet end of the vent tube further protects against intrusion by insects. *Id.* at col. 1, ll. 56–60. As the '029 patent explains, these precautions do not prevent problems associated with icing, which can manifest by the formation of an icicle or by splashing of freezing rain, either of which eventually may block the vent tube. *Id.* at col. 1, ll. 61–67.

Figure 4 of the '029 patent is reproduced below:



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Figure 4 of the '029 patent illustrates flared skirt assembly 40 connected to vent tube 31. The skirt assembly “prevents the formation of an icicle over the end 32 of the vent tube by enclosing the space around the vent tube and providing a substantially expanded passage.” *Id.* at col. 3, ll. 47–49. In addition, “because the skirt assembly is flared out substantially from the center line of the exit passage, rain or freezing rain is deflected away from an area where it could splash upwardly back into the vent tube.” *Id.* at col. 3, ll. 50–53).

Figure 6 of the '029 patent, reproduced below, illustrates a further feature of the skirt assembly:

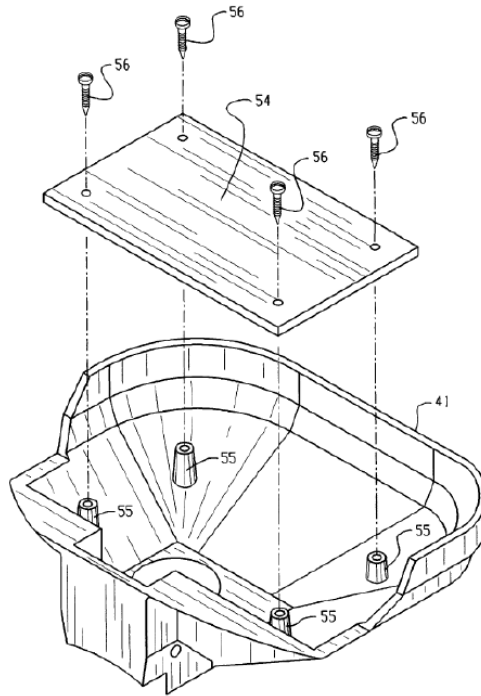


Fig. 6

Figure 6 of the '029 patent provides an exploded perspective view of the bottom of the skirt assembly, showing baffle plate 54 having edges that “are sufficiently spaced from the interior walls of the skirt that substantial space is provided for the venting of gas and or air through the skirt.” *Id.* at col. 4, ll. 6–8. A screen may be mounted at the lower end of the skirt to prevent insect intrusion. *Id.* at col. 4, ll. 8–9.

B. Illustrative Claim

Claims 1 and 5 are independent claims. Claims 2–4 depend directly or indirectly from claim 1, and claims 6–8 depend directly or indirectly from claim 5. Claim 1 of the '029 patent is illustrative of the claims at issue:

1. skirt assembly for reducing ice formation at an outlet vent tube from the atmospheric pressure chamber of a diaphragm-type gas pressure regulator, comprising:

a skirt receiver adapted to be operatively connected to said vent tube;

a skirt member defining an interior space and having an upper end opening connecting said vent tube to said interior space and an outwardly flared lower end with an area substantially greater than the area of said upper end opening, said skirt member being operatively connected to said skirt receiver means; and

baffle means located in said interior space to underlie said upper end opening and being spaced from the interior walls of said skirt to permit gas flow therearound;

whereby ice formation tending to block said vent tube is inhibited.

Ex. 1001, col. 4, ll. 42–57.

C. References

Petitioner relies on the following references in its challenges to claims 1–8 of the '029 patent. Pet. 6–7.

Ward	US 2,494,679	Jan. 17, 1950	Ex. 1003
Peterson '087	US 2,620,087	Dec. 2, 1952	Ex. 1002
Peterson '573	US 3,012,573	Dec. 12, 1961	Ex. 1004
Ferguson	US 3,985,157	Oct. 12, 1976	Ex. 1005
Ohmae	US 4,957,660	Sept. 18, 1990	Ex. 1006

Canadian Meter Company Inc., *Quality Communiqué: Domestic Regulator Approval* (April 1992) (Ex. 1007) (“CMC”).

Prior art described at column 1, lines 13–50, of the '029 patent (Ex. 1001).

D. Asserted Grounds of Unpatentability

Petitioner challenges claims 1–8 on the following grounds.² Pet. 7–10.

² For each asserted ground in which Petitioner relies on prior art described in the '029 patent, Petitioner also asserts that it relies on the “knowledge of a person of ordinary skill in the art.” Pet. 6–10. Petitioner also asserts that it relies on the “knowledge of a person of ordinary skill in the art” in its challenges based on CMC and Peterson '087. Such knowledge may be relevant to a determination “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). But identification of the elements themselves is limited in an *inter partes* review proceeding to that based solely on “prior art consisting of patents or printed publications.” 35 U.S.C. § 311(b).

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Reference(s)	Basis	Claim(s) Challenged
Peterson '087	§ 102(b)	1 and 5
Peterson '087 and Peterson '573	§ 103(a)	1 and 5
Peterson '087 and Ferguson	§ 103(a)	2, 4, 6, and 8
Peterson '087, Ferguson, and Peterson '573	§ 103(a)	2, 4, 6, and 8
Peterson '087, Ferguson, and Ohmae	§ 103(a)	3 and 7
Peterson '087, Ferguson, Ohmae, and Peterson '573	§ 103(a)	3 and 7
Peterson '087 and prior art described in the '029 patent	§ 103(a)	1 and 5
Peterson '087, Ferguson, and prior art described in the '029 patent	§ 103(a)	2, 4, 6, and 8
Peterson '087, Ferguson, Ohmae, and prior art described in the '029 patent	§ 103(a)	3 and 7
Ward	§ 102(b)	1 and 4
Ward and Peterson '573	§ 103(a)	1 and 4

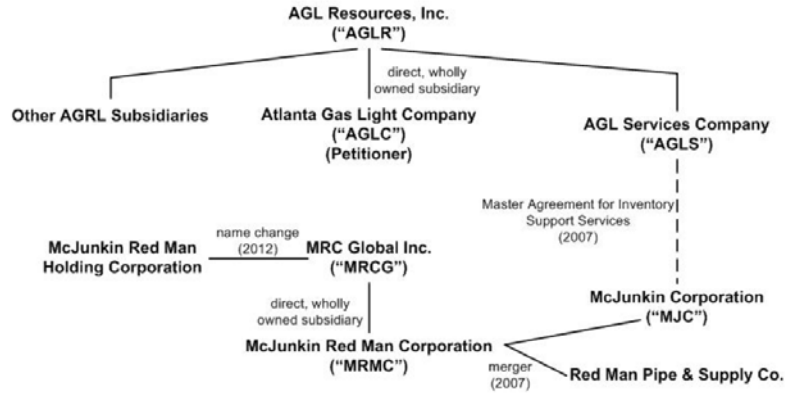
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Ward and Ferguson	§ 103(a)	2
Ward, Ferguson, and Peterson '573	§ 103(a)	2
Ward, Ferguson, and Ohmae	§ 103(a)	3
Ward, Ferguson, Ohmae, and Peterson '573	§ 103(a)	3
Ward and prior art described in the '029 patent	§ 103(a)	1, 4, 5, and 8
Ward, Ferguson, and prior art described in the '029 patent	§ 103(a)	2 and 6
Ward, Ferguson, Ohmae, and prior art described in the '029 patent	§ 103(a)	3 and 7
CMC and Peterson '087	§ 103(a)	1, 2, 4, 5, 6, and 8
CMC, Peterson '087, and Ohmae	§ 103(a)	3 and 7

E. Parties

The issues presented to us involve a number of parties. The Board's diagram below summarizes the relationships among those parties.

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The summary of relationships provided by the above diagram is relevant to, *inter alia*, Patent Owner’s argument that a privy of Petitioner—namely, McJunkin Red Man Corporation (“MRMC”)—was served with a complaint alleging infringement of the ’029 patent more than one year before the Petition was filed. *See* Prelim. Resp. 37–52.

Petitioner is a distributor of natural gas in Georgia. Ex. 2006, 4. It is a direct, wholly owned, subsidiary of AGL Resources, Inc. (“AGLR”), which has a number of other subsidiaries. *Id.* One of those other subsidiaries is AGL Services Company (“AGLS”). *Id.* at 5.

MRMC is a distributor of pipe, valve, and fitting products to the energy and industrial markets. Ex. 2010. It is a direct, wholly owned, subsidiary of MRC Global Inc. (“MRCG”), which was known as McJunkin Red Man Holding Corporation before it amended its certificate of incorporation and bylaws to effect a name change on January 10, 2012. *Atlanta Gas Light Co. v. Bennett Regulator Guards Inc.*, Case IPR2013-00453, Ex. 1028 ¶ 4. MRMC itself was formed in 2007 from

the merger of McJunkin Corporation (“MJC”) and Red Man Pipe & Supply Co. Ex. 2010.

MRCG and MRMC share the same office space, have the same telephone number, have the same facsimile number, and, at relevant times, have had the same upper management. Exs. 2007, 2008, 2009, 2012, 2013. The Texas Secretary of State’s records show that MRMC is registered as a foreign corporation and that an agent for service of process has been designated. Exs. 2012, 2013. Patent Owner contends, and Petitioner does not dispute, that the Texas Secretary of State has no records for MRCG. Prelim. Resp. 15.

F. The Supply Agreements

On July 1, 2001, AGLR “and its present and future subsidiaries” entered into a Systems Contract Agreement with MJC (“the 2001 Agreement”) for materials at an agreed price schedule. Ex. 2017 ¶ 36. On January 1, 2007, the 2001 Agreement was amended and expanded by way of a Master Agreement for Inventory Support Services (“the 2007 Agreement”). Ex. 2018. The entities covered by the 2007 Agreement include AGLS, “in its own behalf and/or on behalf of [AGLR] and one or more of the subsidiaries of [AGLR].” *Id.* The 2007 Agreement includes certain indemnification provisions, and AGLR and MRCG have disputed the scope of indemnification obligations as they relate to proceedings described below. *See, e.g.*, Exs. 2031–2033.

G. The Ohio Lawsuit

The '029 patent currently is involved in *Bennett Regulator Guards, Inc. v. McJunkin Red Man Corp.*, Civ. No. 5:12-cv-1040 (N.D. Ohio) (“the Ohio lawsuit”). Pet. 1–2.

The Ohio lawsuit arose from allegations by Patent Owner that Petitioner and MRMC developed and sold a product that infringes the '029 patent. Prelim. Resp. 49. Patent Owner specifically contends that “MRMC has a direct, preexisting, substantive relationship with AGLR and its subsidiaries such as AGLC concerning the development, manufacture and sale of the product that has been accused of infringing the '029 patent.” *Id.* Patent Owner further contends that “[t]hat relationship arises from MRMC and AGLR and its subsidiaries being parties to the 2001 and 2007 Agreements that govern the development and sale of the Accused Product.” *Id.*

Patent Owner filed a complaint (Ex. 2002) initiating the Ohio lawsuit on April 26, 2012. Prelim. Resp. 13. The caption of the complaint identified Petitioner and MRCG as defendants; the body of the complaint included assertions that “[u]pon information and belief, on or about January 10, 2012, McJunkin Redman Corporation . . . changed its name to MRC Global Inc.,” and that references to MRCG referred both to MRCG and to “McJunkin Redman.” Ex. 2002 ¶ 3. MRCG was served with the complaint on July 11, 2012. Ex. 2003. Petitioner was served with the complaint on July 18, 2012. Pet. 2; Ex. 2060, 3 (No. 4).

The complaint's assertion that MRMC changed its name to MRC Global Inc. proved incorrect. In fact, as noted above, MRCG amended its certificate of incorporation and bylaws on January 10, 2012, to reflect a name change of McJunkin Red Man Holding Corporation to MRCG. Subsequently, Patent Owner filed an amended complaint, naming Petitioner and MRMC as defendants, and deleting MRCG as a named defendant. Ex. 2004. Petitioner and MRMC consented to the filing of the amended complaint, with both Petitioner and MRMC agreeing that the amended complaint "relates back to the filing of the Complaint on April 26, 2012." Ex. 2005; *see* Prelim. Resp. 16.

On July 3, 2013, the district court dismissed Petitioner as a defendant for lack of personal jurisdiction. Exs. 1017, 2006. The parties agree that the dismissal was without prejudice. Pet. 2; Prelim. Resp. 6.

H. The Related IPR

The '029 patent was also the subject of IPR2013-00453 ("the related IPR"), which was terminated upon a finding that Petitioner failed to establish that it had identified all real parties-in-interest in its petition. *Atlanta Gas Light Co. v. Bennett Regulator Guards, Inc.*, IPR2013-00453, slip op. at 13 (PTAB Jan. 6, 2015) (Paper 88) (citing 35 U.S.C. § 312(a)(2)). We found in the related IPR that AGLR was a real party-in-interest, but was not identified as such by Petitioner. *Id.* at 13. Petitioner identifies AGLR as a real party-in-interest in this proceeding. Pet. 1.

Certain negotiations regarding the scope of indemnity required by the 2007 Agreement implicate

the Ohio lawsuit and the related IPR, and, by logical extension, this proceeding. During the course of those negotiations, AGLR deferred resolution of the indemnification dispute until after resolution of the related IPR, and noted that “even in the absence of an indemnification agreement, AGL has taken steps to support MRC’s defense [in the Ohio lawsuit].” Ex. 2031. In the context of explaining such steps, AGLR asserted that “AGL has also filed a petition for *inter partes* review of Bennett’s U.S. Patent No. 5,810,029 by the U.S. Patent and Trademark Office – at AGL’s sole expense.” *Id.*

MRMC then indicated its willingness to “wait to be indemnified by AGL until the reexamination [*sic: inter partes* review] process has been completed.” Ex. 2032. MRMC also expressed its position on the scope of indemnification as explicitly contingent on the outcome of the related IPR, noting the potential impact of a decision in the related IPR on the Ohio lawsuit. *Id.* Approximately six weeks later, AGLR confirmed that discussions had taken place outlining a possible indemnification structure that depended on the outcome of the related IPR, *but disputed that any agreement had been reached.* Ex. 2033.

II. ANALYSIS

A. Time Bar Under 35 U.S.C. § 315(b)

Section 315(b) of Title 35 of the U.S. Code provides:

An inter partes review may not be instituted if the petition requesting the proceeding is filed more than 1 year after the date on which the petitioner, real party in interest, or privy of the petitioner is

served with a complaint alleging infringement of the patent.

Patent Owner contends that the Petition is barred under this provision “because it was filed more than one year after [Petitioner] was served with a complaint for patent infringement and more than one year after a privy of [Petitioner] was served with a complaint for patent infringement.” Prelim. Resp. 6. On this record, we are persuaded that Petitioner is deemed not to have been “served with a complaint alleging infringement of the [’029] patent” because it was dismissed from the Ohio lawsuit *without prejudice*. On this record, we also are persuaded that MRMC is not a privy of Petitioner within the meaning of § 315(b). Accordingly, we conclude that institution of an *inter partes* review is not barred by § 315(b). We do not reach the issue whether MRMC is deemed to have been served with a complaint alleging infringement of the ’029 patent more than one year before the instant Petition was filed.

1. Service Upon Petitioner

When considering the statutory bar under § 315(b), the Board has consistently held that dismissal without prejudice of a party from district court litigation nullifies the effect of service on that party of the underlying complaint. *See, e.g., Macauto U.S.A. v. BOS GmbH Co. KG*, Case IPR2012-00004, slip op. at 14–16 (PTAB Jan. 24, 2013) (Paper 18) (finding no bar based on voluntary dismissal without prejudice); *BAE Sys. Info. & Elec. Sys. Integration, Inc. v. Cheetah Omni, LLC*, Case IPR2013-00175, slip op. at 3–4 (PTAB July 3, 2013) (Paper 15) (same); *Cyanotech Corp. v. Bd. Of Trustees of the Univ. of Ill.*,

Case IPR2013-00401, slip op. at 9–12 (PTAB Dec. 19, 2013) (Paper 17) (finding no bar based on dismissal without prejudice for failure to join indispensable party); *InVue Sec. Prods. Inc. v. Merch. Techs.*, Case IPR2013-00122, slip op. at 9–10 (PTAB June 27, 2013) (Paper 17) (finding no bar based on dismissal without prejudice for lack of subject-matter jurisdiction); *Nautique Boat Co., Inc. v. Malibu Boats, LLC*, Case IPR2014-01045, slip op. at 10 (PTAB Nov. 26, 2014) (Paper 13) (finding no bar based on involuntary dismissal without prejudice); *Gordon * Howard Assocs., Inc. v. LunarEye, Inc.*, Case IPR2014-01213, slip op. at 10–15 (PTAB Feb. 3, 2015) (Paper 11) (no bar based on dismissal without prejudice for lack of personal jurisdiction). We are persuaded by the reasoning articulated in these cases and Patent Owner has not articulated sufficient reasoning that persuades us to depart from this conclusion.

The Federal Circuit has characterized the effect of dismissals without prejudice as “leaving the parties as though the action had never been brought.” *Graves v. Principi*, 294 F.3d 1350, 1356 (Fed. Cir. 2002); see *Bonneville Assocs., Ltd. P’ship v. Barram*, 165 F.3d 1360, 1364 (Fed. Cir. 1999). This is, of course, a legal fiction—the initiation of even procedurally defective proceedings have certain effects, and the Federal Circuit’s statement is understood properly as referring to the restored ability of parties to pursue courses of action available to them before the action had been brought.

Several aspects of Patent Owner’s argument turn the Federal Circuit’s statement about the *effect* of a dismissal without prejudice on its head by attempting

to elevate it to a threshold *requirement*: “The cases relied on by [Petitioner] stand for the proposition that a compliant will not be deemed to have been filed or served if the complaint is dismissed and the dismissal leaves the parties ‘as though the action never had been brought.’” Prelim. Resp. 6. Patent Owner proceeds to identify certain preclusive effects that result from its limited participation in the Ohio lawsuit, as well as “litigation events” that resulted in admissions made as a result of discovery. *Id.* at 33–35. We are not persuaded by these contentions, which amount to little more than an observation that the legal fiction expressed by the Federal Circuit is, in fact, a fiction.

The narrow preclusion associated with personal jurisdiction in Ohio does not justify treating the dismissal without prejudice in the Ohio lawsuit any differently than other dismissals without prejudice. *See Gordon * Howard*, slip op. at 12. The impact of the “litigation events” identified by Patent Owner are similarly limited and also do not justify different treatment.

Accordingly, we are persuaded that Petitioner is deemed not to have been “served with a complaint alleging infringement of the [’029] patent” within the meaning of 35 U.S.C. § 315(b). Consequently, the Petition is not barred on that basis and on this record.

2. Privity Between Petitioner and MRMC

The Office Trial Practice Guide (“Practice Guide”) provides guidance on the concept of privity, referring to common-law preclusion doctrines and citing the Supreme Court decision in *Taylor v. Sturgell*. 77 Fed. Reg. 48,756, 48,759 (Aug. 14, 2012) (citing 553 U.S.

880 (2008)). Because nonparty preclusion risks binding those who have not had a full and fair opportunity to litigate, the Supreme Court has cautioned that there is a general rule against nonparty preclusion, subject only to limited exceptions. *See Taylor v. Sturgell*, 553 U.S. 880, 892–93 (2008). In *Taylor*, while noting that it was not a “definitive taxonomy” (*id.* at 893 n.6), the Court set forth a list of six “categories” under which nonparty preclusion may be allowed. *Id.* at 893–895. These categories include: (1) whether the third party agrees to be bound by the determination of issues in the proceeding; (2) whether a pre-existing substantive legal relationship with the party named in the proceeding justifies binding the third party; (3) “in certain limited circumstances,” whether the third party is adequately represented by someone with the same interests; (4) whether the third party exercised or could have exercised control over the proceeding; (5) whether the third party is bound by a prior decision and is attempting to rehear the matter through a proxy; and (6) whether a statutory scheme forecloses successive hearing by third parties. *Id.*

In the Institution Decision for the related proceeding, we were persuaded, based on the evidence developed at that time, that “Patent Owner’s basis for privity [between MRMC and Petitioner], namely various provisions of the [2007 Agreement], did not go into effect until service was effected on Petitioner.” *Atlanta Gas Light Co. v. Bennett Regulator Guards, Inc.*, IPR2013-00453, slip op. at 15 (PTAB Jan. 22, 2014) (Paper 31), *vacated on other grounds, Atlanta Gas Light Co. v. Bennett Regulator Guards, Inc.*, IPR2013-00453, slip op. at 17 (PTAB Jan. 6, 2015)

(Paper 88). We are similarly persuaded on the current record in this proceeding.

The Board has consistently held that a buyer-seller relationship is insufficient to confer privity, within the meaning of § 315(b), between buyer and seller. *See, e.g., Hewlett-Packard Co. v. MCM Portfolio LLC*, IPR2013-00217, slip op. at 8 (PTAB Sept. 10, 2013) (Paper 10). We find the reasoning of these cases persuasive here, because, as Petitioner observes, the buyer-seller relationship established by the 2007 Agreement “does not establish that [Ppetitioner] has controlled MRMC in the Ohio [l]awsuit such that [Ppetitioner] litigated invalidity through MRMC.” Reply 9–10. We also are persuaded by Petitioner that the disputed indemnification obligations and identified level of cooperation between Petitioner and MRMC are not sufficient to confer privity. *See id.* at 10–12; *see Nestlé USA, Inc. v. Steuben Foods, Inc.*, Case IPR2015-00195, slip op. at 10–17 (PTAB June 29, 2015) (Paper 51).

For example, Patent Owner provides evidence that Petitioner and MRMC collaborated in the development of the product accused of infringing the '029 patent in the Ohio lawsuit. Patent Owner also provides evidence that Petitioner has provided “support” for MRMC’s defense in the Ohio lawsuit through the preparation of non-infringement contentions, invalidity contentions, and claim construction positions, as well as filing petitions to institute the related IPR and the instant proceeding. Prelim. Resp. 49–50 (citing Ex. 2031). But there is no indication in the record that Petitioner is or was financing the Ohio lawsuit or that MRMC is or was

financing this proceeding, nor is there sufficient indication that either party can or could dictate the strategy to be followed by the other. Nothing in the record indicates that MRMC's involvement in the Ohio lawsuit rises to the level that MRMC should be excluded from the general rule against nonparty preclusion.

Patent Owner's contention that MRMC has "agreed to be bound by the results of the [related] IPR" is relevant to the first *Taylor* category. *See* Prelim. Resp. 50. But the strength of this argument is significantly diminished by the lack of evidence that an agreement to be bound was actually reached. At best, the evidence presented thus far establishes only that MRMC *offered* to be bound by the results of the related IPR to the extent that it would accept indemnification contingent on the result of the related IPR. *See* Ex. 2032. The response that no agreement was reached acted as a rejection of that offer. *See* Ex. 2033.

Accordingly, MRMC has not been established to be a privy of Petitioner within the meaning of § 315(b). Whether MRMC was served more than one year before filing the instant Petition is, thus, irrelevant to the applicability of the statutory bar to AGLC.

B. Claim Construction

The Board interprets claims of an unexpired patent using the broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *see In re Cuozzo Speed Techs., LLC*, No. 2014-1301, 2015 WL 4097949, at *5–*8 (Fed. Cir. July 8, 2015), *reh'g en banc denied*, 2015

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WL 4100060 (Fed. Cir. July 8, 2015); *see* Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012).

Petitioner proposes the following constructions of certain claim terms. Pet. 12–17. Patent Owner does not propose any claim constructions, but Petitioner represents that “many” of its proposed constructions are “consistent with Patent Owner’s claim construction positions and infringement contentions asserted in the Ohio Lawsuit.” Pet. 12. Because we are persuaded that Petitioner’s proposed constructions are consistent with the broadest reasonable interpretation and with the specification, we adopt them based on this record and for purposes of this Decision.

Claim Term	Construction
“skirt receiver”	a structure that connects a skirt member or skirt to the vent tube of a gas pressure regulator. Pet. 12–13.
“skirt receiver means”	a structure that connects a skirt member or skirt to the vent tube of a gas pressure regulator. Pet. 13.
“skirt member”	structure that (a) defines an interior space, (b) has an upper end opening connecting a vent tube to the interior space or communicating with a vent passage, (c) has an outwardly flared lower end

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	<p>opening with an area substantially greater than the area of the upper end opening, and (d) is operatively connected to a skirt receiver means. Pet. 13–14.</p>
“baffle means”	<p>Interpreted as a means-plus-function limitation under § 112, paragraph 6. <u>Function</u>: underlie the upper end opening or vent passage and permit gas to flow around the baffle; or assist in the prevention of ice formation by blocking splash-back of rain or freezing rain upwardly toward the vent tube opening. <u>Structure</u>: baffle plate 54. Pet. 14–16.</p>
“valve means”	<p>Interpreted as a means-plus-function limitation under § 112, paragraph 6. <u>Function</u>: control gas flow between the high pressure source and the low pressure line in a gas regulator. <u>Structure</u>: any conventional diaphragm-type gas pressure regulator. Pet. 16.</p>

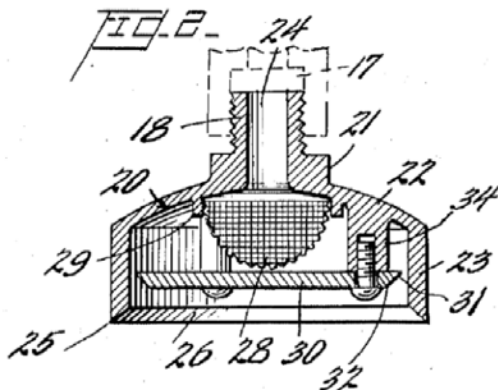
<p>“outlet vent means” “vent means”</p>	<p>Not governed by § 112, paragraph 6, and “should be given their ordinary meaning.” Pet. 16–17. No express construction is required at this time.</p>
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C. Asserted Grounds Based on Peterson '087³

1. Claims 1 and 5

a. Anticipation by Peterson '087

Petitioner challenges claims 1 and 5 as anticipated by Peterson '087, which discloses “breathers and vents for gas service pressure regulators.” Ex. 1002, col. 1, ll. 3–4. Figure 2 of Peterson '087, reproduced below, is illustrative:



³ Several, but not all, of Petitioner’s challenges are similar to those previously made also in the related IPR, and a record was developed with respect to such challenges during the trial. At this stage of this proceeding, Patent Owner has not addressed the merits of Petitioner’s challenges in this proceeding. Accordingly, we do not consider Patent Owner’s positions as developed in the related IPR for purposes of this Decision.

Figure 2 provides a central vertical cross-section of a breather or vent for a gas-service pressure regulator. *Id.* at col. 2, ll. 3–4. Similar to the '029 patent, Peterson '087 notes that such gas-pressure regulators may be installed outdoors and that “[a]s a result[,] such regulators are exposed to all weather and other adverse conditions, and particularly have been troubled with stoppages of the vent passage to the air or back side of the diaphragm resulting from freezes following or occurring [sic] during rain or sleet storms or the like.” *Id.* at col. 2, ll. 17–23.

Threaded nipple 18 is connected operatively to the vent tube. *Id.* at col. 2, l. 51–col. 3, l. 13. Petitioner draws a correspondence between the threaded nipple 18 and the “skirt receiver” recited in independent claim 1,⁴ supporting its contention with testimony by James A. Petersen, P.E. Pet. 27–28 (citing Ex. 1016 ¶¶ 21, 23). Petitioner draws a further correspondence between the combination of dome portion 22 and skirt portion 23 of Peterson '087 with the “skirt member” recited in claim 1. Pet. 28–29 (citing Ex. 1016 ¶ 24). Petitioner contends that such a skirt member “defin[es] an interior space and [has] an upper end opening connecting said vent tube to said interior space and an outwardly flared lower end with an area substantially greater than the area of said upper end opening,” as recited in claim 1.

⁴ In addition to reciting a “skirt receiver,” independent claim 1 recites “said skirt receiver means,” without apparent antecedent support. For purposes of this Decision, we construe “said skirt receiver means” in claim 1 as referring to the previously recited “skirt receiver.”

Petitioner contends that disc 30 corresponds to the recited “baffle means” because it underlies the upper end opening and is spaced from the interior walls of the skirt to permit gas flow therearound. Pet. 29–30 (citing Ex. 1016 ¶¶ 25, 26).

Independent claim 5 recites, in addition to elements that generally correspond to those discussed above with respect to claim 1, a “valve means,” a “diaphragm housing,” and “a diaphragm,” with certain limitations. Petitioner draws a correspondence between each of these recitations and elements shown in Figure 1 of Peterson ’087, namely between element 13 and the “diaphragm,” between element 16 and the “diaphragm housing,” and between element 12 and the “valve means.” *Id.* at 31–32 (citing Ex. 1016 ¶¶ 29–31).

On this record, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that independent claims 1 and 5 are anticipated by Peterson ’087.

b. Obviousness Over Peterson ’087 and Peterson ’573

Petitioner also challenges claims 1 and 5 as unpatentable under 35 U.S.C. § 103(a) over Peterson ’087 and Peterson ’573, which “relates to a safety device for a gas pressure regulator.” Ex. 1004, col. 1, ll. 10–11. Petitioner contends that Peterson ’573 “expressly addresses venting gas from the atmospheric pressure chamber of a diaphragm-type gas pressure regulator through a ‘bug-proof vent protector.’” Pet. 33 (citing Ex. 1004, col. 3, ll. 23–34). In addition to contending that claims 1 and 5 are anticipated by Peterson ’087, Petitioner relies upon

Peterson '573 to support the limited argument that “[i]t would have been obvious to one of ordinary skill in the art at the time of filing the [']029 Patent application that the skirt assembly of the [']087 Patent would be used in connection with venting gas from a gas pressure regulator.” *Id.* Petitioner supports its contention that one of ordinary skill in the art would have reason to combine the teachings of Peterson '087 and Peterson '573, with testimony by Mr. Petersen. *Id.* (citing Ex. 1016 ¶¶ 50–52).

On this record, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing on its challenge of claims 1 and 5 as unpatentable under 35 U.S.C. § 103(a) over Peterson '087 and Peterson '573.

*c. Obviousness Over Peterson '087 and
Prior Art Described in the '029 Patent*

Petitioner further challenges claims 1 and 5 as unpatentable under 35 U.S.C. § 103(a) over Peterson '087 and prior art described in the '029 patent because “[t]he inventors’ [prior art described in the '029 patent] also discloses that diaphragm-type natural gas pressure regulators were known in the natural gas distribution industry, were commonplace, and of a simple design.” Pet. 39–40. Petitioner supports its analysis with testimony by Mr. Petersen. *Id.* at 40–41 (citing Ex. 1016 ¶¶ 12–13, 14–16, 27, 29–31).

In the “BACKGROUND OF THE INVENTION,” the '029 patent includes a discussion of such regulators, including the valve, diaphragm housing, and diaphragm. Ex. 1001, col. 1, ll. 13–50. The pressure regulator valve shown in Figures 1–3 of the

'029 patent is described as “*typical* of the type used by natural gas utilities in a gas distribution system.” *Id.* at col. 3, ll. 3–4 (emphasis added). The additional skirt assembly is provided to address the problems of ice formation. *Id.* at col. 3, ll. 46–49.

On this record, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that claims 1 and 5 are unpatentable under 35 U.S.C. § 103(a) over Peterson and prior art described in the '029 patent.

2. Claims 2 and 6

Each of dependent claims 2 and 6 recites that “said skirt member is formed of a molded plastic material.” Petitioner contends that, although Peterson '087 “is silent as to the material for the skirt member,” Ferguson “expressly teaches that vent covers used to protect a vent tube should be made of molded plastic material.” Pet. 34–35. Petitioner contends that claims 2 and 6 would have been obvious over Peterson '087 and Ferguson, alone or in further combination with either Peterson '573 or prior art described in the '029 patent. Pet. 34–35, 37, 41.

Ferguson “pertains to vent covers for gas pressure regulators.” Ex. 1005, col. 1, ll. 5–6. Ferguson teaches that “all of the components of the vent cover, including the cap, are formed of a synthetic plastic material which is noncorrodable and not adversely affected by weather conditions.” *Id.* at col. 5, ll. 13–16. Petitioner asserts that one of ordinary skill in the art would have reason to combine this teaching with the teachings of Peterson '087 because both references “are directed at vent covers for vent tubes of natural gas regulators”

and “address the problem of protecting the vent tube from inclement weather.” Pet. 35 (citing Ex. 1016 ¶ 57).

On this record, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that claims 2 and 6 are unpatentable under 35 U.S.C. § 103(a) over Peterson ’087 and Ferguson, alone or in further combination with Ferguson ’573 or prior art described in the ’029 patent.

3. Claims 3 and 7

Each of dependent claims 3 and 7 recites that “said molded material is an electrically conductive plastic.” Petitioner contends that, although Ferguson “does not expressly state the electrical properties of the plastic used for the vent cover,” Ohmae “teaches a composition for a moldable plastic that is electrically conductive.” Pet. 38. Petitioner contends that these claims would have been obvious over Peterson ’087, Ferguson, and Ohmae, alone or in further combination with either Peterson ’573 or prior art described in the ’029 patent. Pet. 37–38, 39, 42.

Ohmae “relates to an electrically conductive plastic molding using an ethylene copolymer and a process for producing the same.” Ex. 1006, col. 1, ll. 7–9. Petitioner contends that one of ordinary skill in the art would have reason to combine Ohmae’s teaching with the teachings of Peterson ’087 and Ferguson because such a person “would understand the benefits of an antistatic material as the molded plastic for the skirt assembly, including reducing the likelihood of fire and explosions.” Pet. 38 (citing Ex. 1016 ¶ 63).

On this record, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that claims 3 and 7 are unpatentable under 35 U.S.C. § 103(a) over Peterson '087, Ferguson, and Ohmae, alone or in further combination with Ferguson '573 or prior art described in the '029 patent.

4. Claims 4 and 8

Each of dependent claims 4 and 8 recites “further including a screen element covering said lower end opening.” Petitioner contends that these claims would have been obvious over Peterson '087 and Ferguson, alone or in further combination with either Peterson '573 or prior art described in the '029 patent. Pet. 35–36, 37, 41.

Ferguson discloses that “vent cover 34 includes . . . vent opening 38, and . . . screen 40 is located within the cover adjacent the vent opening whereby vented gas passes through the screen, and the screen prevents insects and debris from entering the neck.” Ex. 1005, col. 3, ll. 41–46. In addition, Peterson '087 discloses an optional screen as a defense to insects, dirt, and leaves, but positions such a screen near the upper end of the skirt assembly, rather than the lower end. Ex. 1001, col. 3, ll. 58–62. Petitioner contends that, because one of ordinary skill in the art would have reason to combine the teachings of Peterson '087 and Ferguson, each of which “address[es] the problem of protecting the vent tube from inclement weather,” it “would have been obvious to try the screen at the lower end of the skirt assembly.” Pet. 36 (citing Ex. 1016 ¶¶ 59–60).

On this record, we are persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that claims 4 and 8 are unpatentable under 35 U.S.C. § 103(a) over Peterson '087 and Ferguson, alone or in further combination with Ferguson '573 or prior art described in the '029 patent.

D. Asserted Grounds Based on Ward

Ward discloses “ventilating devices and, more particularly, . . . an insect-proof, ice- and weather-proof, fire- and explosion-resistant breather cap.” Ex. 1003, col. 1, ll. 1–4. Figure 1 of Ward, reproduced below, is illustrative.

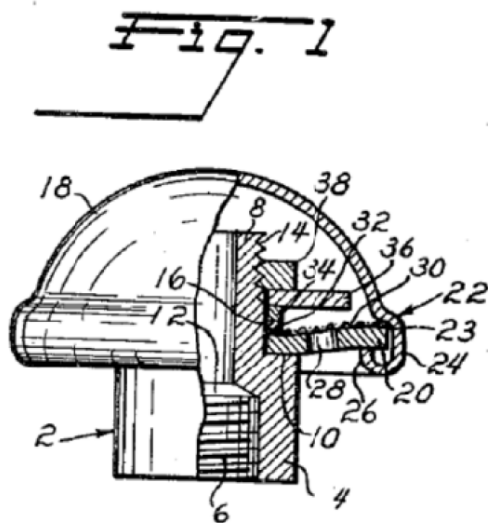


Figure 1 provides a partially broken-away, elevational view of a breather cap that may be used as part of a pressure-regulating apparatus for domestic gas systems. *See id.* at col. 1, ll. 5–10; *see also id.* at col. 1, ll. 50–51. In its analysis, Petitioner draws a

correspondence between the “skirt member” recited in claims 1 and 5 and cap 18 of Ward, including identifying the “upper end opening” as the opening that connects to the vent pipe (i.e., the opening at element 8 in Figure 1). Pet. 44–45. Petitioner further draws a correspondence between the “baffle means” recited in claims 1 and 5 and baffle 36. *Id.* at 45–46.

Even crediting this correspondence, we are not persuaded by Petitioner’s contention that the “baffle means . . . underlie[s] said upper end opening,” as recited in independent claim 1 or that the “baffle means . . . underlie[s] said vent passage,” as recited in independent claim 5. To “underlie” means “to lie or be situated under.” Ex. 3001. Although baffle 36 is positioned at a lower position than the “upper end opening” or “vent passage” identified by Petitioner, it is apparent from Figure 1 that no vertical line intersects both the baffle and the “upper end opening” or “vent passage.” The position of baffle 36 cannot be characterized fairly as “under” such an opening. Accordingly, we are not persuaded that Petitioner has demonstrated adequately that Ward discloses a “baffle means” that “underlie[s] said upper end opening” or that “underlie[s] said vent passage.”

Thus, we are not persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing on any of its challenges of claims 1–8 as unpatentable over Ward alone or in combination with other art.

*E. Asserted Grounds Based on CMC
and Peterson '087*

For the reasons set forth above and on this record, we are persuaded that Petitioner has demonstrated a

reasonable likelihood of prevailing on its challenges of claims 1–8 as unpatentable over Peterson '087, alone or in combination with other art. We decline also to institute an *inter partes* review of those claims on grounds that they are unpatentable over CMC and Peterson '087, alone or in combination with other art. 37 C.F.R. § 42.108(a).

III. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that *inter partes* review is *instituted* with respect to the following grounds of unpatentability:

(1) claims 1 and 5 as anticipated under 35 U.S.C. § 102(b) by Peterson '087;

(2) claims 1 and 5 as unpatentable under 35 U.S.C. § 103(a) over Peterson '087 and Peterson '573;

(3) claims 2, 4, 6, and 8 as unpatentable under 35 U.S.C. § 103(a) over Peterson '087 and Ferguson;

(4) claims 2, 4, 6, and 8 as unpatentable under 35 U.S.C. § 103(a) over Peterson '087, Ferguson, and Peterson '573;

(5) claims 3 and 7 as unpatentable under 35 U.S.C. § 103(a) over Peterson '087, Ferguson, and Ohmae;

(6) claims 3 and 7 as unpatentable under 35 U.S.C. § 103(a) over Peterson '087, Ferguson, Ohmae, and Peterson '573;

(7) claims 1 and 5 as unpatentable under 35 U.S.C. § 103(a) over Peterson '087 and prior art described in the '029 patent;

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(8) claims 2, 4, 6, and 8 as unpatentable under 35 U.S.C. § 103(a) over Peterson '087, Ferguson, and prior art described in the '029 patent; and

(9) claims 3 and 7 as unpatentable under 35 U.S.C. § 103(a) over Peterson '087, Ferguson, Ohmae, and prior art described in the '029 patent;

FURTHER ORDERED that *inter partes* review is *not instituted* with respect to any other ground of unpatentability; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(a), *inter partes* review of the '029 patent is hereby instituted commencing on the entry date of this Order, and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial.

[List of Counsel Excluded for this Appendix]

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Appendix D
Filed January 6, 2015

**UNITED STATES PATENT
AND TRADEMARK OFFICE**

**BEFORE THE PATENT TRIAL
AND APPEAL BOARD**

ATLANTA GAS LIGHT COMPANY,
Petitioner,

v.

BENNETT REGULATOR GUARDS, INC.,
Patent Owner.

Case IPR2013-00453
Patent 5,810,029

Before JENNIFER S. BISK, JAMES B. ARPIN, and
PATRICK M. BOUCHER, *Administrative Patent
Judges*.

BOUCHER, *Administrative Patent Judge*.

ORDER

35 U.S.C. § 312(a) and 37 C.F.R. § 42.8(b)(1)

On January 22, 2014, we instituted an *inter partes*
review of claims 1–8 of U.S. Patent No. 5,810,029 (“the

'029 patent”), based on a Petition filed by Atlanta Gas Light Company (“Petitioner”). Because the Petition failed to identify all real parties in interest as required by 35 U.S.C. § 312(a)(2), we vacate our Decision to Institute (Paper 31) and terminate the review.

I. FACTUAL BACKGROUND

Petitioner is a utility company that constructs, operates, and maintains a natural-gas-system infrastructure in Georgia. Ex. 1037 ¶ 5. On July 18, 2012, Petitioner was served by Patent Owner with a complaint alleging infringement of the '029 patent in *Bennett Regulatory Guards, Inc. v. McJunkin Red Man Corp. and Atlanta Gas Light Company*, Civil Action 5:12-cv-1040 (N.D. Ohio) (“the related litigation”). Paper 4 (“Pet.”), 1. On July 3, 2013, the U.S. District Court dismissed Petitioner from the related litigation for lack of personal jurisdiction. *Id.* at 1–2. Exactly one year after being served in the related litigation, on July 18, 2013, Petitioner filed its Petition for *inter partes* review of the '029 patent. Paper 3.

Petitioner is a direct, wholly owned subsidiary of AGL Resources, Inc. (“AGLR”). Ex. 2006, 4. AGLR has officers, but no other employees, and is characterized by Petitioner as a “holding company that . . . conducts substantially all of its operations through its subsidiaries.” Paper 62 (“Reply”), 17 (citing Ex. 2043, 51:24–25, 59:11; Ex. 1039 ¶ 4).

Another of AGLR’s several subsidiaries is AGL Services Company (“AGLS”), a sister company of Petitioner. Ex. 2006, 5. AGLS “provides support services (*e.g.*, legal, supply chain, facilities) to various

subsidiaries of AGLR, such as [Petitioner].” Reply 17–18 (citing Ex. 2043, 38:15–25, 43:18–44, 125:24–126:2). Petitioner explains that operating entities such as Petitioner “dictate what they want and what they need’ in the form of support services from AGLS.” Reply 18 (citing Ex. 2043, 92:13–22). The cost of work performed by AGLS on behalf of an entity, such as Petitioner, and the cost of materials related to such work are charged to the entity receiving the service or using the materials. Reply 18 (citing Ex. 2043, 93:5–22, 97:1–4, 119:8–120:3).

Evidence presented established that, although certain functions are assigned to the different entities, they are referred to casually, both internally and externally, by the umbrella designations “AGL” or “AGL Resources.” *See, e.g.*, Ex. 2043, 8:23–9:2, 12:20–22. The extent of this corporate blurring is illustrated by negotiations with McJunkin Red Man Corporation (“MRMC”) related to indemnity provisions of a “Master Agreement for Inventory Support Services” (“the supply agreement”).¹ The supply agreement was entered into by AGLR “in its own behalf and/or on behalf of [AGLR] and one or more subsidiaries of AGLR.” Paper 55 (“PO Resp.”), 3 (citing Ex. 2018, 1); *see* Ex. 2006, 5. After Patent Owner sued Petitioner for infringement of the ’029 patent, Petitioner and MRMC disputed “whether any indemnity is owed between them” in connection with the related litigation as a

¹ McJunkin Red Man Corporation was formed in 2007 as the result of a merger between McJunkin Corporation and Red Man Pipe & Supply Co. Ex. 2010. The relationships among various entities related to McJunkin Red Man Corporation are summarized by our diagram on page 8 of our Decision to Institute (Paper 31). Those details are not relevant to our conclusions herein.

result of those indemnity provisions. Paper 27, 4 (citing Ex. 1027 ¶ 3).

Negotiations with MRMC were undertaken by at least Robert (“Bob”) Schnorr and Bryony Hodges. PO Resp. 4–5. Mr. Schnorr serves as Vice President, Supply Chain and Fleet, for Petitioner, as well as for other AGLR subsidiaries. Reply 18 n.3; Ex. 1027 ¶ 1.² During such negotiations, various pieces of correspondence were exchanged directly between Mr. Schnorr and Rory Isaac of MRMC. *See* Exs. 2021, 2031–2033. Those originated by Mr. Schnorr are written on “AGL Resources” letterhead (*see, e.g.*, Ex. 2031) or bear the “AGL Resources” letterhead symbol in the body of an email communication (*see, e.g.*, Ex. 2033). Those originated by Mr. Isaac are addressed to Mr. Schnorr at “AGL Resources Inc.” (Ex. 2030) or “AGL Resources, Inc.” (Ex. 2032).³ The body

² Mr. Schnorr’s deposition (*see* Ex. 2043) involved considerable inquiry by Patent Owner attempting to establish Mr. Schnorr’s precise position at Petitioner and/or related entities. Two factors appear to underlie much of the apparent disconnect between Patent Owner’s questions and Mr. Schnorr’s responses: (1) different assumptions whether a vice-president is an “named officer” (*compare* Paper 87 (“Tr.”), 59:22 *with id.* at 75:3–10); and (2) Mr. Schnorr’s casual reference to “AGL Resources” as an umbrella term referring to AGLR and its subsidiaries. We need not decide whether the lack of clarity in Mr. Schnorr’s testimony resulted from a desire not to answer, a lack of knowledge, or a simple difference in assumptions underlying questions by Patent Owner and responses by Mr. Schnorr. The specific character of that lack of clarity is sufficient as evidence of the pervasive nature of the corporate blurring by AGLR and its subsidiaries, including Petitioner and AGLS.

³ Correspondence between attorneys was more precise in identifying parties to the negotiation. *See, e.g.*, Ex. 2022 (letter from

of these pieces of correspondence identify the party with whom MRMC is negotiating as “AGL.”⁴ During his deposition, Mr. Schnorr testified that he had access to letterhead specific to Petitioner (“AGLC”), but did not “know specifically” whether he had previously written letters on “AGLC letterhead”: “it would depend on the individual circumstance and *what company I was representing at the time.*” Ex. 2043, 144:15–145:13 (emphasis added).

In addition, Mr. Schnorr identifies himself as “Vice President, Supply Chain & Fleet at AGL Resources” on his LinkedIn® profile. Ex. 2045. His business card includes a similar identification and provides his email address as “bschnorr@aglresources.com.” Ex. 2048. A similar identification also is provided with his biographical information on the “AGL Resources” web site at http://www.aglresources.com/about/bios_Schnorr.aspx. Ex. 2047. The “AGL Resources” web site also identifies Mr. Schnorr as “Vice President, Supply Chain and Fleet” on a web page bearing the copyright notice “©2014 AGL Resources Inc.” Ex. 2035. Barbara Christopher, Assistant Corporate Secretary for Petitioner, provided a declaration in the related litigation that identifies Mr. Schnorr as an “officer[] of

Russell Blythe, counsel for Petitioner, to Rick L. Rambo, counsel for MRMC, identifying party as “Atlanta Gas Light Company”).

⁴ We accept Petitioner’s explanation at oral hearing that “the specific identification of a particular AGL entity or McJunkin entity was [not] at issue in the discussion.” Tr. 81:6–8. Nevertheless, the casual identification of “AGL” as a party to the negotiation and use of the “AGL Resources” logo by Mr. Schnorr contribute to an overall picture in which AGLR and its subsidiaries externally blur distinctions between them.

AGL Resources Inc.,” with the title “Vice President, Supply Chain and Fleet,” and that omits Mr. Schnorr’s name in a list of “officers” of Petitioner. Ex. 2046 ¶ 11. Mr. Schnorr testified that his “paycheck comes from AGL Resources Services, Inc. [presumably AGL Services Company].” Ex. 2043, 54:7–8.

Ms. Hodges’s participation in the negotiations is evidenced by an email string between her and Aditi Dravid, in-house counsel for an entity related to MRMC. Ex. 2026. Her email communications identify her as “Chief Counsel, Field Operations & Litigation,” without specific identification of the entity that employs her. *Id.* During those negotiations, Ms. Hodges used the email address “bhodges@aglresources.com.” *Id.* Ms. Christopher testified in the related litigation that Ms. Hodges is “employed by AGL Services Company,” and affirmatively testified that she is “not employed by Atlanta Gas Light Company [i.e., Petitioner].” Ex. 2038, 35.

We consider the facts related more directly to this proceeding in light of this corporate blurring. For example, in describing actions taken with respect to this proceeding, Mr. Schnorr signed a letter that stated:

Please note that, even in the absence of an indemnification agreement, AGL has taken steps to support [MRMC]’s defense. For example, AGL’s outside counsel has taken the lead on preparing joint exchanges and filings (including non-infringement contentions, invalidity contentions, and claim construction positions). In addition, *AGL has also filed a petition for inter partes*

review of [Patent Owner]’s U.S. Patent No. 5,810,029 by the U.S. Patent and Trademark Office – at AGL’s sole expense.

Ex. 2031 (emphasis added). These statements were prepared with the assistance of Ms. Hodges. Ex. 2043, 161:20–162:1, 166:16–167:10. Preparation for Mr. Schnorr’s deposition included assistance by David Slovensky, whom Ms. Christopher identified as “Vice President and Associate General Counsel (Distribution Operations)” for “AGL Resources Inc.” Ex. 2043, 11:21–12:15; Ex. 2046. Ms. Christopher did not identify Mr. Slovensky as an officer of Petitioner.

II. ANALYSIS

A petition for *inter partes* review “may be considered *only if*— . . . the petition identifies *all* real parties in interest.” 35 U.S.C. § 312(a)(2) (emphases added).

A. Burden

“In an *inter partes* review . . . , the petitioner shall have the burden of proving a proposition of unpatentability by a preponderance of the evidence.” 35 U.S.C. § 316(e).

The statutory requirement that a petition for *inter partes* review identify all real parties in interest defines a “threshold issue.” See *ZOLL Lifecor Corp. v. Philips Elec. N. Am. Corp.*, Case IPR2013-00606, slip op. at 10 (PTAB Mar. 10, 2014) (Paper 13). The Office Trial Practice Guide (“Practice Guide”) explains that “[t]he typical common-law expression of the ‘real party-in-interest’ . . . does not fit directly into the AIA trial context” because that notion reflects standing

concepts, and no such requirement exists in the context of an *inter partes* review proceeding.” 77 Fed. Reg. 48,756, 48,759 (Aug. 14, 2012). Rather, a real party in interest is a party that “desires review” of the patent at issue, and “may be the petitioner itself, and/or it may be the party or parties at whose behest the petition has been filed.” *Id.* The Practice Guide further directs parties to the Office’s prior application of similar principles in the context of *inter partes* reexaminations, specifically noting those set forth in *In re Guan, Inter Partes Reexamination Proceeding*, Control No. 95/001,045, Decision Vacating Filing Date (Aug. 25, 2008).

In *Guan*, the Office explained that, generally, in *inter partes* reexamination proceedings, it “will not look beyond the required statement identifying the real party in interest,” but that exploration is appropriate when “the statement related to the real party in interest is not facially accurate, or is ambiguous.” *Guan* at 7. Similarly, in *inter partes* review proceedings, the Board generally accepts the petitioner’s identification of real parties in interest at the time of filing the petition. *Zoll*, 7 (citing 77 Fed. Reg. at 48,695).

The Board has adopted the Federal Rules of Evidence as applying to *inter partes* review proceedings. 37 C.F.R. § 42.62(a). The Office’s practice, explained in *Guan*, of initially accepting the identification of real parties in interest in a petition as accurate acts as a rebuttable presumption that benefits petitioners. “[T]he party against whom a presumption is directed has the burden of producing evidence to rebut the presumption. *But this rule does*

not shift the burden of persuasion, which remains on the party who had it originally.” Fed. R. Evid. 301 (emphasis added). Thus, when, as here, a patent owner provides sufficient rebuttal evidence that reasonably brings into question the accuracy of a petitioner’s identification of the real parties in interest, the burden remains with the petitioner to establish that it has complied with the statutory requirement to identify all the real parties in interest.⁵

This allocation of the burden for establishing whether third parties have, or have not, been identified properly as real parties in interest appropriately accounts for the fact that a petitioner is far more likely to be in possession of, or to have access to, evidence relevant to the issue than is a patent owner.

⁵ The Board has not adopted the Federal Rules of Civil Procedure. Nevertheless, an analogy with the allocation of burden to show satisfaction of the “minimal contacts” prong of the *International Shoe* test for personal jurisdiction by a district court—also a “threshold issue”—is instructive. *Int’l Shoe v. Wash.*, 326 U.S. 310 (1945). The Federal Circuit has held that this prong allocates the burden to the plaintiff to show that (1) the defendant purposefully directed its activities at residents of the forum state, and (2) the claim arises out of or relates to the defendant’s activities with the forum state. *Grober v. Mako Products, Inc.*, 686 F.3d 1335, 1346 (Fed. Cir. 2012). The burden allocated to the defendant of showing that personal jurisdiction is otherwise unreasonable relates to the “fair play and substantial justice” prong of the *International Shoe* test, and is reached only after the threshold “minimal contacts” prong has been satisfied by the plaintiff. *Id.*

B. Factors

“Whether a party who is not a named participant in a given proceeding nonetheless constitutes a ‘real party-in-interest’ . . . to that proceeding is a highly fact-dependent question.” Practice Guide at 48,759. Several factors are relevant. *Id.* (citing *Taylor v. Sturgell*, 553 U.S. 880 (2008)). In *Taylor*, the Supreme Court identified the following factors, but noted that the list “is meant only to provide a framework . . . , not to establish a definitive taxonomy” (*Taylor*, 553 U.S. at 893 n.6): (1) whether the third party agrees to be bound by the determination of issues in the proceeding; (2) whether a pre-existing substantive legal relationship with the party named in the proceeding justifies binding the third party; (3) “in certain limited circumstances,” whether the third party is adequately represented by someone with the same interests; (4) whether the third party exercised or could have exercised control over the proceeding; (5) whether the third party is bound by a prior decision and is attempting to rehear the matter through a proxy; and (6) whether a statutory scheme forecloses successive hearing by third parties.

A common focus of inquiry is the fourth factor, namely whether the third party exercised or could have exercised control over the proceeding. But “[c]ourts and commentators agree . . . that there is no bright-line test for determining the necessary quantity or degree of participation to qualify as a ‘real party-in-interest’ . . . based on the control concept.” Practice Guide at 48,759 (citing *Gonzalez v. Banco Cent. Corp.*, 27 F.3d 751, 759 (1st Cir. 1994)).

C. Application

Both AGLR and AGLS have had a level of involvement in this proceeding. The issue before us is whether Petitioner has shown that that level of involvement is insufficient to conclude that they are real parties in interest.

We find that Mr. Schnorr engaged in negotiations with MRMC regarding whether indemnity was owed, and that he conducted those negotiations at least partially on behalf of AGLR. Even if Mr. Schnorr also has a position with Petitioner, both the testimony of Ms. Christopher and extrinsic evidence establish that he is an officer of AGLR. In addition, even though he had access to letterhead specific to Petitioner, Mr. Schnorr repeatedly conducted those negotiations with letterhead that bears the designation “AGL Resources,” a federally registered trademark owned by AGLR.⁶ See Ex. 3001. Mr. Schnorr testified specifically that choice of letterhead would depend on the individual circumstances and which company he was representing at the time. His letter of August 5, 2013, to Mr. Isaac, in which Mr. Schnorr asserted that “AGL has also filed a petition for *inter partes* review . . . at AGL’s sole expense” was made in response to a letter addressed to him in his capacity at “AGL Resources, Inc.,” i.e., at AGLR. His August 5, 2013,

⁶ Petitioner was asked at oral hearing about who owns the trademark, but did not provide an unambiguous response. Tr. 73:15–74:5. Contrary to the position taken by Patent Owner, we do not find that every use of “AGL Resources” letterhead must be imputed to AGLR. Rather, our conclusion that Mr. Schnorr engaged in negotiations, at least in part, on behalf of AGLR results from considering the totality of the circumstances.

letter was prepared with the assistance of Ms. Hodges, an employee of AGLS and not of Petitioner. Furthermore, Mr. Schnorr was prepared for his deposition in this proceeding, at least in part, by Mr. Slovensky, an officer of AGLR.

It remains unclear who paid the filing fees and legal expenses associated with this proceeding. Petitioner intimates that such fees and expenses may have been paid by AGLS and charged back to Petitioner, but makes no unambiguous statement to that effect:

Operating entities such as [Petitioner] ‘dictate what they want and what they need’ in the form of support services from AGLS. Work done by AGLS on behalf of an entity such as AGLC *may get billed* to the entity receiving the service. Likewise, the cost of materials – such as the accused products in the litigation – is charged to the entity that uses the materials. As a sister company, there is no indication that AGLS could control AGLC’s operations.

Reply 17 (emphasis added, citations omitted). Patent Owner correctly observes that Petitioner has not produced receipts or statements that show Petitioner paid the filing fee, and has not produced internal records showing a chargeback to Petitioner for any filing fees or other legal expenses that may have been paid by AGLS. Tr. 50: 2–51:7. When asked at oral hearing why Petitioner did not produce such documents, Petitioner’s counsel replied that “it is not clear that there is any single document that would clear that up,” and reaffirmed that his law firm represents Petitioner. *Id.* at 77:16–78:6.

Rather than maintaining well-defined corporate boundaries, AGLR, Petitioner, and AGLS are so intertwined that it is difficult for both insiders and outsiders to determine precisely where one ends and another begins. Indeed, use of the umbrella term “AGL Resources” in referring to AGLR and its subsidiaries—on letterheads, email addresses, website addresses, etc.—encourages the perception that AGLR and its subsidiaries function as a single entity. Although parent-subsidiary relationships are not among those expressly identified by the Supreme Court in the second *Taylor* factor, this factor weighs heavily in favor of finding AGLR to be a real party in interest in this proceeding. *Taylor*, 553 U.S. at 894 (“Qualifying relationships include, *but are not limited to*, preceding and succeeding owners of property, bailee and bailor, and assignee and assignor” (emphasis added)).

We also find that the fourth *Taylor* factor weighs in favor of finding AGLR to be a real party in interest in this proceeding, particularly when considered in light of Petitioner’s overall burden to establish that it correctly identified all real parties in interest in its Petition. As explained in *Gonzalez*,

[T]here is no bright-line test for gauging substantial control. The inquiry must be case-specific, and fact patterns are almost endlessly variable. The critical judgment cannot be based on isolated facts. Consequently an inquiring [tribunal] must consider the totality of the circumstances to determine whether they justify a reasonable inference of the nonparty’s potential or actual involvement as a decisionmaker. . . . The

nonparty’s participation may be overt or covert, and the evidence of it may be direct or circumstantial—so long as the evidence as a whole shows that the nonparty possessed effective control over a party’s conduct of the [proceeding] as measured from a practical, as opposed to a purely theoretical, standpoint.

Gonzalez, 27 F.3d at 759 (citations omitted).⁷ We emphasize that our determination that AGLR possessed sufficient control over the proceeding to conclude—in combination with application of other *Taylor* factors—that it is a real party in interest does not hinge on any particular, isolated fact. Rather, our determination results from consideration of the entire circumstance of AGLR’s involvement in this proceeding, including the demonstrated participation of officers and employees of AGLR and AGLS and the lack of clarity over who actually financed filing fees and attorney costs.

In applying the remaining *Taylor* factors, we note that we give little weight to the fifth and sixth factors, which are not readily applicable to the facts at issue in this proceeding. Although we conclude that AGLR

⁷ This quotation from *Gonzalez* continues by asserting that “[t]he burden of persuasion ultimately rests with him who asserts that control (or the right to exercise it) existed to such a degree as would warrant invoking nonparty preclusion.” *Gonzalez* addressed real party in interest in the context of whether issue preclusion could be asserted against a non-party to a prior litigation. Thus, its discussion of “burden of persuasion” is not entirely applicable here. However, we note that this assertion of who must come forward with evidence is consistent with our determination that Patent Owner must rebut adequately the presumption that Petitioner accurately identified all real parties in interest.

has the same interests in this proceeding as Petitioner, and that Petitioner adequately represents those interests, we also give little weight to *Taylor*'s third factor because it is not apparent that this proceeding falls within the "limited circumstances" identified by the Supreme Court.

The only *Taylor* factor that weighs against finding AGLR to be a real party in interest is the first factor. No evidence establishes, or even suggests, that AGLR has agreed to be bound by the determination of issues in this proceeding. Indeed, Petitioner's vigorous opposition suggests the opposite.

D. Correction of Petition

We conclude that at least AGLR is a real party in interest that Petitioner failed to identify in its Petition. The Petition is, therefore, incomplete and, pursuant to 35 U.S.C. § 312(a)(2), may not be considered.

Petitioner argues that "the remedy is not termination of the IPR." Reply 20. Instead, Petitioner contends that "the Board could simply allow [Petitioner] one month to add other parties under 37 CFR § 42.106(b) and then proceed to a final decision." *Id.* Two considerations caution against doing so.

First, the Board has previously authorized amendment of a petition to correct the identification of real parties in interest under 37 C.F.R. § 42.106(b). *See, e.g., Petroleum Geo-Services Inc. v. Westerngeco LLC*, Case IPR2014-00678, slip op. at 6–7 (PTAB Aug. 12, 2014) (Paper 23). But Petitioner acknowledges that, to its knowledge, such authorizations have only been made by the Board *before* institution of a trial

(Tr. 38:19–39:24), and we are unaware of any instance in which the Board has granted such an authorization *after* trial institution. Patent Owner contends that, because the Petition was, in fact, accorded a filing date, the curative provisions of 37 C.F.R. § 42.106(b) are not applicable. Paper 65, 4. Patent Owner reasons that accepting Petitioner’s position that a petition could be cured after institution for failure to identify all real parties in interest would encourage concealment at the time of filing. *Id.*

We lack sufficient briefing by the parties whether the curing provision of 37 C.F.R. § 42.106(b) should extend to correction of incomplete petitions after trial institution. Petitioner was aware that Patent Owner challenged its identification of real parties in interest, including its failure to identify AGLR as a real party in interest, before we instituted trial. Paper 13, 16; Paper 26, 8–11. Nevertheless, Petitioner did not request authorization to correct its Petition, even when granted authorization, over Patent Owner’s opposition, to file a Reply to Patent Owner’s Preliminary Response and Supplemental Preliminary Response to address issues raised under 35 U.S.C. § 312(a). *See* Paper 22, 2–3. At best, and only after institution of trial, Petitioner has *suggested* that correction of the Petition is a potential remedy—without actively and affirmatively seeking authorization to make such a correction and while simultaneously resisting acknowledging that AGLR is a real party in interest. Petitioner, thus, has failed to take the necessary steps to put the merits of its position squarely before us.

Second, Petitioner filed its Petition exactly one year after being served with a complaint in the related litigation. Pet. 1. Correction of the Petition as proposed by Petitioner would require assignment of a new filing date. 37 C.F.R. § 42.106(b). Because the new filing date necessarily would fall more than a year after service of the complaint, the Petition would be barred under 35 U.S.C. § 315(b) if service of the complaint was effective.

Both parties acknowledge that the complaint was dismissed with respect to Petitioner for lack of personal jurisdiction. Reply 20. Petitioner contends that the complaint was dismissed without prejudice and, therefore, is treated as though it had never been filed under the reasoning of *Macauto U.S.A. v. BOS GmbH & KG*, Case IPR2012-00004, slip op. at 15 (PTAB Jan. 24, 2013) (Paper 18). Patent Owner contends that “*Macauto* does not stand for the sweeping proposition that any dismissal of a complaint without prejudice makes service a nullity,” distinguishing the *voluntary* dismissal at issue in *Macauto* with the *involuntary* dismissal in the litigation related to this proceeding. Although Petitioner appears to have the stronger position, Petitioner’s failure to seek authorization to correct its Petition again leaves us with insufficient briefing to address fully this issue on its merits.

In the absence of adequate opportunity by both parties to address fully the issues of (1) whether 37 C.F.R. § 42.106(b) applies to correction of petitions after institution of a trial, and (2) whether an involuntary dismissal for lack of personal jurisdiction

renders service of a complaint a nullity, we decline to decide these issues.

E. Sanctions

During the course of the trial, Petitioner cross-examined, as routine discovery, Gregory A. Bennett and Joseph M. Prahl, both of whom provided declarations filed in this proceeding by Patent Owner. *See* Exs. 1031, 1032. At the depositions of both Mr. Bennett and Dr. Prahl, before examination by Petitioner, Patent Owner objected to the qualifications of the videographer and the court reporter, asserting that it believes a contractual relationship between them and Petitioner's counsel calls their objectivity into question. Ex. 2052, 5; Ex. 2053, 5. Patent Owner subsequently filed a Motion to Exclude the deposition testimony of Mr. Bennett and Dr. Prahl, asserting that "[t]he court reporter was not authorized by law to take the depositions in violation of 35 U.S.C. § 23, 37 C.F.R. § 42.53(f), and Rule 30(b)(5), Fed. R. Civ. Pro." Paper 72, 2. In opposing Patent Owner's Motion to Exclude, Petitioner filed a declaration by Linda Oda, General Manager for the Atlanta office of the reporting firm that employed the court reporter. Paper 78, 1; Ex. 1054. Patent Owner subsequently cross-examined Ms. Oda as routine discovery. Ex. 2058.

Each party requests that sanctions be imposed on the other party as a result of this sequence of events. Petitioner contends that Patent Owner lacked a good-faith basis for its Motion to Exclude, and that Petitioner improperly "was forced to conduct a factual investigation, obtain a declaration from a third party, and prepare [an] opposition paper." Paper 78, 8. Patent Owner contends that Ms. Oda's deposition was

disrupted by actions of the deponent's attorney that "were serious violations of the deposition guidelines laid down in Appendix D of the Trial Practice Guide as well as 37 C.F.R. [§] 42.1(b) and (c)." Paper 83, 3. Patent Owner specifically contends that Ms. Oda's attorney "interpos[ed] numerous speaking objections," "argued with [Patent Owner's] counsel in a hostile manner, gave speeches, . . . answered questions as if he were a witness," and "instructed the witness not to answer questions on a number of occasions that did not involve preserving a privilege." *Id.* at 2–3.

The Board has discretion to impose a sanction against a party for misconduct, including "[f]ailure to comply with an applicable rule or order in the proceeding," "[a]dvancing a misleading or frivolous argument," and "actions that harass or cause unnecessary delay or an unnecessary increase in the cost of the proceeding." 37 C.F.R. § 42.12(a). We decline to impose sanctions on either party.

Although Patent Owner's objections at the time of the depositions appear to be based on weak evidence, namely a remark made by the videographer (Paper 78, 4 n.3), it was required to make any objection to the qualifications of officers taking the deposition at the time of the deposition and on the record. 37 C.F.R. § 42.53(f)(8). Patent Owner's Motion to Exclude relies instead on sworn testimony by Tiffany Horton. Ex. 2054. Even if aspects of Ms. Horton's testimony would be entitled to little weight, we do not find Patent Owner's argument sufficiently frivolous to warrant imposition of sanctions.

We have reviewed the transcript of Ms. Oda's deposition and find Patent Owner's characterization

generally accurate. But termination of this proceeding renders consideration of whether to exclude Ms. Oda's declaration and deposition transcript, as requested by Patent Owner (Paper 83, 3), moot. We also decline to award Patent Owner fees and expenses in connection with Ms. Oda's deposition. Petitioner was the proponent of Ms. Oda's direct testimony, and our Rules already contemplate that "[e]xcept as the Board may order or the parties may agree in writing, the proponent of the direct testimony shall bear all costs associated with the testimony, including the reasonable costs associated with making the witness available for the cross-examination." 37 C.F.R. § 42.53(g).

Because we terminate this proceeding and vacate our Decision to Institute, we do not reach the merits of Patent Owner's Motion to Exclude.

III. ORDER

In consideration of the foregoing, it is

ORDERED that the proceeding is hereby *terminated*; and

FURTHER ORDERED that the Decision to Institute (Paper 31) is *vacated*.

[List of Counsel Excluded for this Appendix]

App-110

Appendix E
Filed January 22, 2014

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Judges*.

BOUCHER, *Administrative Patent Judge*.

DECISION
Institution of Inter Partes Review
37 C.F.R. § 42.208

On July 18, 2013, Atlanta Gas Light Company (“Petitioner” or “AGLC”) filed a petition (Paper 2) to institute an *inter partes* review of claims 1–8 of U.S. Patent No. 5,810,029 (“the ’029 patent”) pursuant to 35 U.S.C. §§ 311–319. A corrected petition (Paper 4, “Pet.”) was filed on July 26, 2013. Bennett Regulator Guards, Inc. (“Patent Owner”) filed a preliminary response (Paper 13, “Prelim. Resp.”) to the corrected petition on October 23, 2013. Pursuant to our authorization, Patent Owner filed a supplemental preliminary response (Paper 21, “Suppl. Prelim. Resp.”) on November 15, 2013, and Petitioner filed a reply (Paper 27, “Reply”) to the preliminary response and supplemental preliminary response on November 27, 2013.

I. BACKGROUND

The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a):

THRESHOLD—The Director may not authorize an *inter partes* review to be instituted unless the Director determines that the information presented in the petition filed under section 311 and any response filed under section 313 shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.

Upon consideration of the corrected petition, patent owner preliminary response, supplemental patent owner preliminary response, and petitioner reply, we determine that the information presented in the corrected petition establishes that there is a reasonable likelihood that Petitioner would prevail

with respect to claims 1–8 of the '029 patent. Accordingly, pursuant to 35 U.S.C. § 314, we authorize an *inter partes* review to be instituted as to claims 1–8 of the '029 patent.

A. The '029 Patent (Ex. 1014)

The '029 patent, titled “Anti-Icing Device for a Gas Pressure Regulators,” issued on September 22, 1998, based on Application No. 08/491,273. The '029 patent “relates to natural gas distribution and especially to problems associated with the pressure regulator valve used to reduce gas pressure from the relatively high level used in a distribution system to the relatively low pressure level used in a customer’s building or residence.” Ex. 1014, col. 1, ll. 5–9. Pressure regulators may include a flexible diaphragm that divides the interior space of a surrounding diaphragm housing into low-pressure and atmospheric-pressure chambers, with an opening provided to vent the atmospheric-pressure chamber to the atmosphere. *Id.* at col. 1, ll. 37–44. Because pressure regulators may be mounted on the outside of a building, where they may be exposed to prevailing weather conditions, the vent may be protected with a vent tube having a downward orientation that reduces the amount of, or prevents, precipitation from entering the vent tube. *Id.* at col. 1, ll. 51–60. A metal screen over an outlet end of the vent tube further reduces, or prevents, intrusion by insects into the housing. *Id.* at col. 1, ll. 56–60. As the '029 patent explains, these precautions do not prevent problems associated with icing, which can manifest by the formation of an icicle or by splashing of freezing rain,

either of which eventually may block the vent tube. *Id.* at col. 1, ll. 61–67.

Figure 4 of the '029 patent is reproduced below:

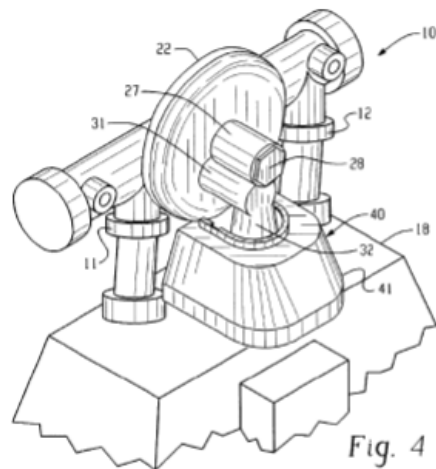


Figure 4 illustrates a flared skirt assembly 40 connected to vent tube 31. The skirt assembly “prevents the formation of an icicle over the end 32 of the vent tube by enclosing the space around the vent tube and providing a substantially expanded passage.” *Id.* at col. 3, ll. 47–49. In addition, “because the skirt assembly is flared out substantially from the center line of the exit passage, rain or freezing rain is deflected away from an area where it could splash upwardly back into the vent tube.” *Id.* at col. 3, ll. 50–53.

Figure 6 of the '029 patent, reproduced below, illustrates a further feature of skirt assembly 40:

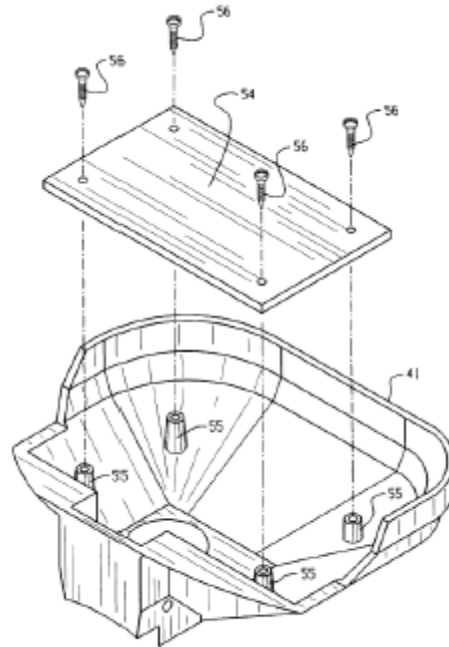


Fig. 6

Specifically, Figure 6 provides an exploded, perspective view of the interior of skirt assembly 40, showing baffle plate 54 having edges that “are sufficiently spaced from the interior walls of the skirt that substantial space is provided for the venting of gas and or air through the skirt.” *Id.* at col. 4, 11. 6–8. A screen (not shown) may be mounted at the lower end of the skirt to reduce or prevent insect intrusion. *Id.* at col. 4, 11. 8–9.

B. Illustrative Claim

Claim 1 of the '029 patent is illustrative of the claims at issue:

1. A skirt assembly for reducing ice formation at an outlet vent tube from the atmospheric pressure

chamber of a diaphragmtype gas pressure regulator, comprising:

a skirt receiver adapted to be operatively connected to said vent tube;

a skirt member defining an interior space and having an upper end opening connecting said vent tube to said interior space and an outwardly flared lower end with an area substantially greater than the area of said upper end opening, said skirt member being operatively connected to said skirt receiver means; and

baffle means located in said interior space to underlie said upper end opening and being spaced from the interior walls of said skirt to permit gas flow therearound;

whereby ice formation tending to block said vent tube is inhibited.

C. Asserted Grounds of Unpatentability

1. References Relied Upon

Petitioner relies on the following references.

Ward	US 2,494,679	Jan. 17, 1950	(Ex. 1016)
Peterson	US 2,620,087	Dec. 2, 1952	(Ex. 1015)
Ferguson	US 3,985,157	Oct. 12, 1976	(Ex. 1017)
Ohmae	US 4,957,660	Sept. 18, 1990	(Ex. 1018)

Canadian Meter Company Quality Communiqué (“CMC”), published April 1992 (Ex. 1019).

Prior art described at col. 1, ll. 13–50 of the '029 patent (Ex. 1014).

2. Specific Grounds

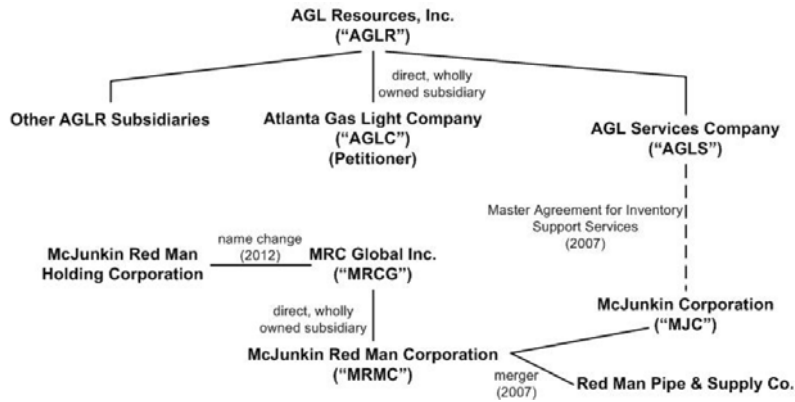
Petitioner challenges claims 1–8 of the '029 patent on the following grounds (Pet. 5–7):

Reference(s)	Basis	Claim(s) Challenged
Peterson	§ 102(b)	1 and 5
Peterson and Ferguson	§ 103(a)	2, 4, 6, and 8
Peterson, Ferguson, and Ohmae	§ 103(a)	3 and 7
Peterson and prior art described in the '029 patent	§ 103(a)	5
Peterson, prior art described in the '029 patent, and Ferguson	§ 103(a)	6 and 8
Peterson, prior art described in the '029 patent, Ferguson, and Ohmae	§ 103(a)	7
Ward	§ 102(b)	1, 4, 5, and 8
Ward and Ferguson	§ 103(a)	2 and 6
Ward, Ferguson, and Ohmae	§ 103(a)	3 and 7
Ward and prior art described in the '029 patent	§ 103(a)	5 and 8

Ward, prior art described in the '029 patent, and Ferguson	§ 103(a)	6
Ward, prior art described in the '029 patent, Ferguson, and Ohmae	§ 103(a)	7
CMC and Peterson	§ 103(a)	1, 2, 4–6, and 8
CMC, Peterson, and Ohmae	§ 103(a)	3 and 7

D. Related Parties and Proceedings

Issues presented to us under 35 U.S.C. §§ 312(a) and 315(b) involve a number of third parties related to Petitioner. The Board’s diagram below summarizes those relationships.



The summary of relationships provided by the above diagram is relevant to a proceeding in which the '029 patent currently is involved, namely *Bennett Regulatory Guards, Inc. v. McJunkin Red Man Corp.*

and Atlanta Gas Light Company, Civil Action 5:12-cv-1040, pending in the United States District Court for the Northern District of Ohio (“the district court proceeding”). Pet. 1.

Patent Owner filed a complaint (Ex. 2002) initiating the district court proceeding on April 26, 2012. Prelim. Resp. 2. The caption of the complaint identified Petitioner and MRC Global Inc. (“MRCG”) as defendants; the body of the complaint included assertions that “[u]pon information and belief, on or about January 10, 2012, McJunkin Redman Corporation . . . changed its name to MRC Global Inc.,” and that references to MRCG referred both to MRCG and to McJunkin Redman Corporation (“MRMC”). Ex. 2002 ¶ 3. MRCG was served with the complaint on July 11, 2012 (Ex. 2003 (Return of service MRCG)), and Petitioner was served on July 18, 2012. Pet. 1.

The complaint’s assertion that MRMC changed its name to MRC Global Inc. proved incorrect. In fact, on January 10, 2012, MRCG amended its certificate of incorporation and bylaws to reflect a name change of a different entity, McJunkin Red Man Holding Corporation, to MRC Global Inc. Ex. 1028 ¶ 4. Subsequently, Patent Owner filed an amended complaint in the district court proceeding, naming Petitioner and MRMC as defendants and deleting MRCG as a named defendant. Ex. 2004. Petitioner and MRMC consented to the filing of the amended complaint, with both Petitioner and MRMC agreeing that the amended complaint “relates back to the filing of the Complaint on April 26, 2012.” Ex. 2005.

On July 3, 2013, the district court dismissed Petitioner as a defendant for lack of personal

jurisdiction. Ex. 2006. MRMC remains a defendant. Prelim. Resp. 11.

Patent Owner asserts that MRMC is a direct, wholly owned subsidiary of MRCG, Prelim. Resp. 3 (citing Ex. 2016 at 3), formed in 2007 from the merger of McJunkin Corporation (“MJC”) and Red Man Pipe & Supply Co., Prelim. Resp. 3 (citing Ex. 2010). Patent Owner further asserts that Petitioner is a direct, wholly owned subsidiary of AGL Resources, Inc. (“AGLR”). Prelim. Resp. 3 (citing Ex. 2006 at 4). Another of AGLR’s subsidiaries is AGL Services Company (“AGLS”). Prelim. Resp. 3 (citing Ex. 2006 at 5).

In 2007, MJC executed a “Master Agreement for Inventory Support Services” (“the supply agreement”) with AGLS “in its own behalf and/or on behalf of [AGLR] and one or more of the subsidiaries of [AGLR]” to supply AGLR subsidiaries with various products at an agreed price schedule. *See* Ex. 2006 at 5. The supply agreement includes certain indemnification and limitation-of-liability provisions. *See* Reply 3–4. Petitioner represents that “AGLC [Petitioner] and MRMC have disputed whether any indemnity is owed between them” in connection with the district court proceeding. Reply at 4 (citing Ex. 1027 ¶ 3).

II. DISCUSSION

A. Real Parties-in-Interest Under 35 U.S.C. § 312(a)

The statute governing *inter partes* review proceedings sets forth certain requirements for a petition for *inter partes* review, including that “the petition identif[y] *all* real parties in interest.” 35 U.S.C. § 312(a) (emphasis added); *see also* 37 C.F.R.

§ 42.8(b)(1) (requirement to identify real parties in interest in mandatory notices). The Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,764 (Aug. 14, 2012) (“Practice Guide”) explains that “[w]hether a party who is not a named participant in a given proceeding nonetheless constitutes a ‘real party-in-interest’ . . . to that proceeding is a highly fact-dependent question.” 77 Fed. Reg. 48,759. The Practice Guide further states that

the spirit of that formulation as to IPR . . . proceedings means that, at a general level, the ‘real party-in-interest’ is the party that desires review of the patent. Thus, the ‘real party-ininterest’ may be the petitioner itself, and/or it may be the real party or parties *at whose behest* the petition has been filed.

Id. at 48,759 (emphasis added).

Patent Owner contends that, by virtue of the provisions of the supply agreement, MRMC, AGLR, and the AGLR subsidiaries are real parties-ininterest with respect to each other, and that Petitioner failed to identify any of these parties as real parties-in-interest in its petition. Suppl. Prelim. Resp. 15–19. Patent Owner asserts that, pursuant to the indemnification provisions of the supply agreement, “MRMC is required to defend any infringement claim against AGLR and its subsidiaries, and AGLR and its subsidiaries are required to reasonably cooperate in any such defense.” *Id.* at 10. Patent Owner reasons that “[t]he Petition amounts to a defense of the [district court proceeding] in a forum other than the trial court and was filed by a party that was required

to cooperate in the defense of the [district court proceeding].” *Id.*

The Practice Guide indicates that

[t]he core function[] of the “real party-in interest” . . . requirement[] [is] *to assist members of the Board in identifying potential conflicts, and to assure proper application of the statutory estoppel provisions.* The latter, in turn, seeks to protect patent owners from harassment via successive petitions by the same or related parties, to prevent parties from having a ‘second bite at the apple,’ and to protect the integrity of both the USPTO and Federal Courts by assuring that all issues are promptly raised and vetted.

77 Fed. Reg. at 48,759 (emphasis added). As applied before the Office, the statutory estoppel provisions provide that

[t]he petitioner in an inter partes review of a claim in a patent under this chapter that results in a final written decision under section 318(a), or the real party in interest . . . of the petitioner, may not request or maintain a proceeding before the Office with respect to that claim on any ground that the petitioner raised or reasonably could have raised during that inter partes review.

35 U.S.C. § 315(e)(1) (emphasis added). Patent Owner has not argued that these explicit statutory estoppel provisions apply to bar requesting or maintaining an *inter partes* review initiated by Petitioner. Rather, Patent Owner relies only on the requirement that all real parties-in-interest be identified *in the petition* and its speculation that “[f]iling the Petition after AGLR

and its subsidiaries had been dismissed from the [district court proceeding] *suggests* that MRMC is controlling and paying for the Petition.” Suppl. Prelim. Resp. 16 (emphasis added).

Patent Owner provides insufficient evidence to support its speculative contention that any party other than Petitioner, in fact, is funding or controlling Petitioner’s involvement in this proceeding, or that the Petition was filed “at the behest” of any party other than Petitioner. To the contrary, Petitioner has provided a declaration (Ex. 1027) by Bob Schnorr, Vice President of Supply Chain & Fleet for Petitioner, in support of its representations that “MRMC has not indemnified AGLC – nor has it directed, controlled, or funded AGLC – in connection with the [district court proceeding] or this IPR proceeding.” Reply 1. Mr. Schnorr asserts that MRMC has not directed Petitioner’s filing of the petition or exercised control over Petitioner’s involvement in this proceeding, has not provided any funding for Petitioner’s involvement in this proceeding, and did not draft the petition. Ex. 1027 ¶¶ 8–10.¹

On the record before us, and after consideration of the specific arguments presented to us, we conclude

¹ We agree with Patent Owner (*see* Paper 30 at 2) that Mr. Schnorr’s assertion that “AGLC and MR[M]C *have disputed whether* any indemnity is owed between them in connection with the Lawsuit” is potentially inconsistent with his assertion that “[n]either AGLC nor MR[M]C has indemnified, *or agreed to indemnify in the future*, the other party in connection with the Lawsuit.” Ex. 1027, ¶ 3 (emphases added). Because our conclusion does not depend on resolution of the potential inconsistency, however, we do not address that potential inconsistency further here.

that institution of an *inter partes* review is not barred by 35 U.S.C. § 312(a) under these facts.

B. Privies Under 35 U.S.C. § 315(b)

Under 35 U.S.C. § 315(b), institution of an *inter partes* review is barred “if the petition requesting the proceeding is filed more than 1 year after the date *on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent*” (emphasis added).

Patent Owner contends that, by virtue of various provisions of the supply agreement, MRMC is a privy of Petitioner and that institution of an *inter partes* review is barred because MRMC was served with a complaint alleging infringement of the '029 patent more than one year before the petition was filed. Prelim. Resp. 2.

We note that “[t]he notion of ‘privity’ is more expansive, encompassing parties that do not necessarily need to be identified in the petition as a ‘real party-in-interest.’” 77 Fed. Reg. at 48,759. It is undisputed that service was effected on MRMG as an initially named defendant in the district court proceeding on July 11, 2012, more than one year before the petition was filed on July 18, 2013. Ex. 2003. Patent Owner provides evidence that MRMG and MRMC share the same office space, telephone number, and facsimile number, and that they have overlapping management. Prelim. Resp. 4 (citing Exs. 2007–2009, 2012, and 2013). Petitioner does not dispute this evidence. Patent Owner provides no evidence of service on MRMC, but asserts instead that “MRMG and MRMC are sufficiently closely related

that service of the complaint on one constitutes service of the complaint on the other.” *Id.* at 14. It also is undisputed that Petitioner was served as a defendant in the district court proceeding on July 18, 2012. Pet. 1.

Because we conclude that Patent Owner’s basis for privity, namely various provisions of the supply agreement, did not go into effect until service was effected on Petitioner, i.e., until Petitioner was noticed of the nature of the complaint against it, we need not reach the issue whether MRCG and MRMC are related sufficiently closely to impute service on one to service on the other. *See* 77 Fed. Reg. at 48,759 (“a common consideration is whether the non-party exercised or *could have exercised* control over a party’s participation in a proceeding”; emphasis added). The determination whether a third party is a privity is contextual; “[w]hether a party who is not a named participant in a given proceeding nonetheless constitutes a . . . ‘privity’ to that proceeding is a highly fact-dependent question,” *Id.* (citing *Taylor v. Sturgell*, 553 U.S. 880 (2008)). Patent Owner does not relate its assertion of privity adequately to the rights asserted in the petition and to the context provided by 35 U.S.C. § 315(b).

Patent Owner contends that MRMC has breached certain provisions in the supply agreement and that “[t]hat breach imposes an obligation to make AGLR and its subsidiaries whole for any damages sustained by them *in an infringement suit.*” Suppl. Prelim. Resp. 7 (emphasis added). Patent Owner’s proposition that “the word ‘privity’ should mean a party that has a direct relationship with AGLC concerning the manufacture,

sale and/or division of revenues from sales of the product that has been accused of infringing the '029 patent[,] or that has a direct interest in the proceeding or its outcome,” (Prelim. Resp. 10; *see also* Suppl. Prelim. Resp. 15), is too broad because it takes insufficient account of the context provided by 35 U.S.C. § 315(b). Specifically, Patent Owner’s privity theory relies fundamentally on MRMC having the right to control Petitioner’s involvement in this proceeding—a right that, at best, arises from Petitioner having been served with the complaint in the district court proceeding. Service upon MRMC and/or MRMC, prior to service upon Petitioner, creates no clear obligation or opportunity for control of Petitioner by MRMC in this proceeding. To the extent that such obligation or opportunity for control arose when Petitioner was served on July 18, 2012, Petitioner’s filing of the petition on July 18, 2013, is timely.²

Therefore, we conclude that institution of an *inter partes* review is not barred by 35 U.S.C. § 315(b).

² Our present analysis is consistent with the Board’s reasoning under different facts in *Synopsys, Inc. v. Mentor Graphics Corp.*, IPR2012-00042 (Paper 16). In *Synopsys*, a third party became a wholly owned subsidiary of the petitioner after the date on which the petition for *inter partes* review was filed. That third party had been served with a complaint alleging infringement of the patent at issue more than a year before the petition was filed. The Board concluded that 35 U.S.C. § 315(b) did not bar institution of the *inter partes* review because the patent owner provided no persuasive evidence that the petitioner could have exercised control over the third party’s participation in the *inter partes* review at the time of service of the complaint upon the third party.

*C. Analysis of Asserted Grounds of Unpatentability*³

1. Claim Interpretation

Consistent with the statute and legislative history of the America Invents Act (AIA), the Board interprets claims using the “broadest reasonable construction in light of the specification of the patent in which [they] appear[].” 37 C.F.R. § 42.100(b); *see also* 77 Fed. Reg. at 48,766. Under that construction, claim terms are given their ordinary and customary meaning as would be understood by one of ordinary skill in the art in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Nevertheless, a “claim term will not receive its ordinary meaning if the patentee acted as his own lexicographer and clearly set forth a definition of the disputed claim term in either the specification or prosecution history.” *Id.* Such definitions must be set forth with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). In the absence of such a special definition or other consideration, “limitations are not to be read into the claims from the specification.” *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

Petitioner proposes the following constructions of certain claim terms. Pet. 10–15. Patent Owner does not propose any claim construction, but Petitioner represents that each of its proposed constructions, except the “baffle means,” is the same as Patent Owner’s proposed construction in the district court

³ Patent Owner’s preliminary response and supplemental preliminary response do not address the asserted grounds of unpatentability.

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proceeding. Because Petitioner’s proposed constructions are consistent with the broadest reasonable interpretation and with the Specification, we adopt them for purposes of this decision.

Claim Term	Construction
“skirt receiver”	“a structure that connects a skirt member or skirt to the vent tube of a gas pressure regulator,” Pet. 10.
“skirt receiver means”	“structure that connects a skirt member or skirt to the vent tube of a gas pressure regulator,” Pet. 12.
“skirt member”	“structure that (a) defines an interior space, (b) has an upper end opening connecting a vent tube to the interior space or communicating with a vent passage, (c) has an outwardly flared lower end opening with an area substantially greater than the area of the upper end opening, and (d) is operatively connected to a skirt receiver means,” Pet. 12.
“baffle means”	Interpreted as a means-plus-function limitation under § 112, ¶ 6.

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	<p><u>Function</u>: “underlie the upper end opening or vent passage and permit gas to flow around the baffle” or “to assist in the prevention of ice formation by blocking splash-back of rain or freezing rain upwardly toward the vent tube opening”</p> <p><u>Structure</u>: baffle plate 54, Pet. 13–14.</p>
<p>“valve means”</p>	<p>Interpreted as a means-plus-function limitation under § 112, ¶ 6.</p> <p><u>Function</u>: “to control gas flow between the high pressure source and the low pressure line in a gas regulator”</p> <p><u>Structure</u>: “any conventional diaphragm-type gas pressure regulator,” Pet. 14–15.</p>
<p>“outlet vent means” / “vent means”</p>	<p>Not governed by § 112, ¶ 6, and “should not be given their ordinary meaning,” Pet. 15.</p>

2. Asserted Grounds based on Peterson (Ex. 1015)

a. Independent claim 1

Peterson discloses “breathers and vents for gas service pressure regulators.” Ex. 1015, col. 1, ll. 3–4. Figure 2, reproduced below, is illustrative:

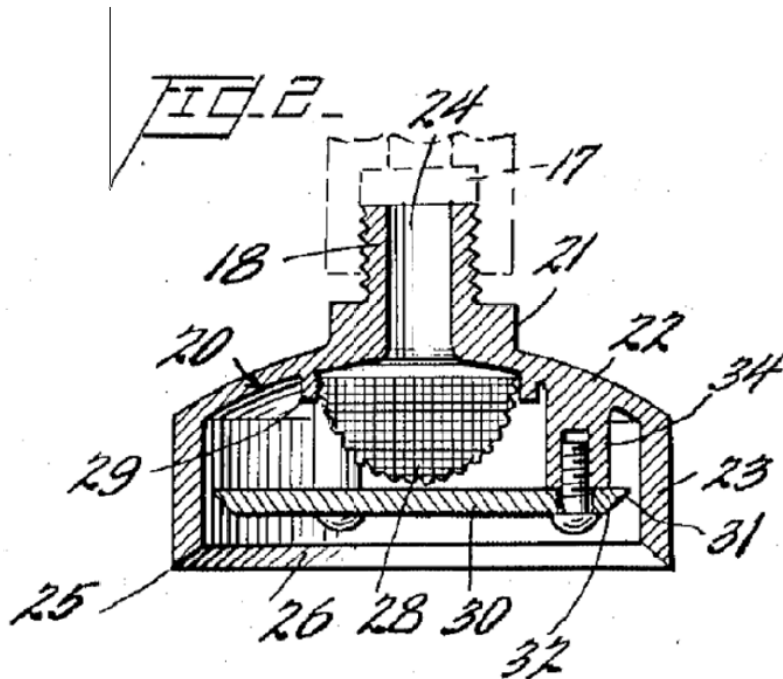


Figure 2 provides a central vertical cross-section of a breather or vent for a gas-service pressure regulator. *Id.* at col. 2, ll. 3–4. Similar to the '029 patent, Peterson notes that such gas-pressure regulators may be installed outdoors and that “[a]s a result[,] such regulators are exposed to all weather and other adverse conditions, and particularly have been troubled with stoppages of the vent passage to the air or back side of the diaphragm resulting from freezes

following or [occurring] during rain or sleet storms or the like.” *Id.* at col. 2, ll. 17–23.

Threaded nipple 18 is connected operatively to the vent tube. *Id.* at col. 2, l. 51 – col. 3, l. 13. Petitioner argues a correspondence between threaded nipple 18 and the “skirt receiver” recited in independent claim 1.⁴ Pet. 26–27. Petitioner argues a further correspondence between the combination of “dome-like portion 22” and “cylindrical skirt 23 depending from the edge of the dome portion,” as disclosed by Peterson, with the “skirt member” recited in claim 1. Pet. 27–28; *see* Ex. 1015, col. 3, ll. 17–22. As noted by Petitioner, such a dome-like portion “defin[es] an interior space and [has] an upper end opening connecting said vent tube to said interior space and an outwardly flared lower end with an area substantially greater than the area of said upper opening,” and is connected operatively to threaded nipple 18, as recited in claim 1.

Petitioner contends that “rigid disc 30” corresponds to the “baffle means” because rigid disc 30 underlies the upper end opening or vent passage and permits gas to flow around, while acting to assist in the prevention of ice formation by blocking splash-back of rain or freezing rain upwardly toward the vent tube opening.” Pet. 29–30. As Peterson explains, “[t]he sharpened periphery of the disc is well protected against any accumulation of moisture so that this

⁴ In addition to reciting a “skirt receiver,” independent claim 1 recites “said skirt receiver means,” without apparent antecedent support. For purposes of this decision, we construe “said skirt receiver means” in claim 1 as referring to the previously recited “skirt receiver.”

annulus is never closed as the result of rain or freezing.” Ex. 1015, col. 3, ll. 43–47.

We determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that independent claim 1 is anticipated by Peterson.

b. Independent claim 5

As Petitioner points out, “[t]he subject matter of claim 5 is almost identical to the subject matter of claim 1.” Pet. 31. Claim 5 additionally recites a “valve means,” “a diaphragm housing,” and “a diaphragm,” with certain limitations. Peterson discloses that “[t]he vent is associated with the chamber closing the back face of the diaphragm which responds to gas pressure to actuate the regulator valve.” Ex. 1015, col. 2, ll. 25–28.

Therefore, in view of the foregoing discussion of claim 1 and the additional limitations disclosed by Peterson, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that independent claim 5 is anticipated by Peterson.

Alternatively, Petitioner contends that the combination of Peterson and the prior art described by the '029 patent renders claim 5 obvious because “[t]he inventors’ [prior art described in the '029 patent] also discloses that diaphragm-type natural gas pressure regulators were *known in the natural gas distribution industry, [were] commonplace, and of a simple design.*” Pet. 47 (emphasis added). In the “BACKGROUND OF THE INVENTION,” the '029 patent includes a discussion of such regulators, including the valve, diaphragm housing, and diaphragm. Ex. 1014, col. 1,

ll. 13–50. The pressure regulator valve shown in Figures 1–3 of the '029 patent is described as “*typical* of the type used by natural gas utilities in a gas distribution system.” *Id.* at col. 3, ll. 3–4 (emphasis added). The additional skirt assembly is provided to address the problems of ice formation. *Id.* at col. 3, ll. 46–49.

Therefore, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that independent claim 5 is unpatentable over the combination of Peterson and prior art described in the '029 patent.

c. Dependent claims 2 and 6

Each of dependent claims 2 and 6 recites that “said skirt member is formed of a molded plastic material.” Petitioner contends that, although Peterson “is silent as to the material for the skirt member,” Ferguson “expressly teaches that vent covers used to protect a vent tube should be made of molded plastic,” (Pet. 40).

Ferguson “pertains to vent covers for gas pressure regulators.” Ex. 1017, col. 1, ll. 5–6. Ferguson teaches that “all of the components of the vent cover, including the cap, are formed of a synthetic plastic material which is noncorrodable and not adversely affected by weather conditions.” *Id.* at col. 5, ll. 13–16. Petitioner asserts that one of ordinary skill in the art would combine this teaching with the teachings of Peterson because both references “are directed at vent covers for vent tubes of natural gas regulators” and “address the problem of protecting the vent tube from inclement weather.” Pet. 41.

We determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that claims 2 and 6 are unpatentable over Peterson and Ferguson, and that claim 6 is unpatentable over Peterson and Ferguson in combination with prior art described in the '029 patent.

d. Dependent claims 3 and 7

Each of dependent claims 3 and 7 recites that “said molded material is an electrically conductive plastic.” Petitioner contends that, although Ferguson “does not expressly state the electrical properties of the plastic used for the vent cover,” Ohmae “teaches a composition for a moldable plastic that is electrically conductive.” Pet. 43.

Ohmae “relates to an electrically conductive plastic molding using an ethylene copolymer and a process for producing the same.” Ex. 1018, col. 1, ll. 7–9. Petitioner contends that one of ordinary skill in the art would have combined Ohmae’s teaching with the teachings of Peterson and Ferguson because such a person “would understand the benefits of an antistatic material as the molded plastic for the skirt assembly, including reducing the likelihood of fire and explosions.” Pet. 44.

We determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that claims 3 and 7 are unpatentable over Peterson, Ferguson, and Ohmae, and that claim 7 is unpatentable over Peterson, Ferguson, and Ohmae in combination with prior art described in the '029 patent.

e. Dependent claims 4 and 8

Each of dependent claims 4 and 8 recites “further including a screen element covering said lower end opening.”

Ferguson discloses that “vent cover 34 includes . . . vent opening 38, and . . . screen 40 is located within the cover adjacent the vent opening whereby vented gas passes through the screen, and the screen prevents insects and debris from entering the neck.” Ex. 1017, col. 3, ll. 41–46. In addition, Peterson discloses an optional screen as a defense to insects, dirt, and leaves, but positions such a screen near the upper end of the skirt assembly, rather than the lower end, as recited in claims 4 and 8. Ex. 1015, col. 3, ll. 58–63. Accordingly, Petitioner contends that, because one of ordinary skill in the art would combine the teachings of Peterson and Ferguson, each of which “address[es] the problem of protecting the vent tube from inclement weather,” it “would have been *obvious to try* the screen at the lower end of the skirt assembly,” as suggested by Ferguson. Pet. 42 (emphasis added).

We determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that claims 4 and 8 are unpatentable over Peterson and Ferguson.

3. Asserted Grounds Based on Ward (Ex. 1016)

Ward discloses “ventilating devices and, more particularly, . . . an insect-proof, ice- and weather-proof, fire- and explosion-resistant breather cap.” Ex. 1016, col. 1, ll. 1–4. Figure 1, reproduced below, is illustrative:

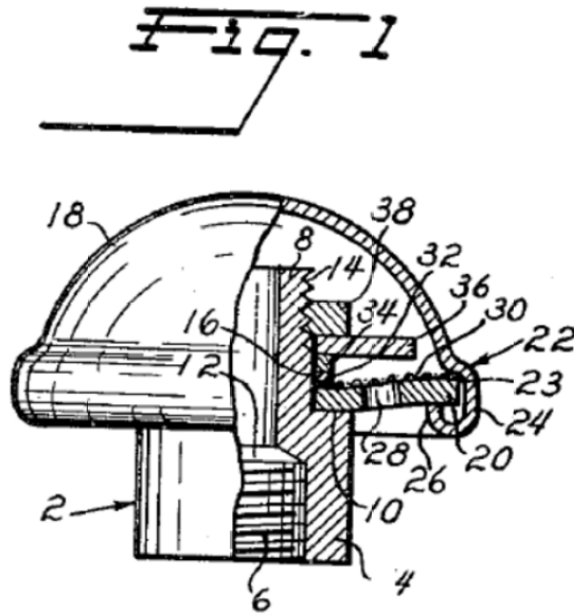


Figure 1 provides a partially broken-away, elevational view of a breather cap that may be used as part of a pressure-regulating apparatus for domestic gas systems. See Ex. 1016, col. 1, 11. 5–10. Similar to the '029 patent, Ward notes that such pressure regulators customarily include a vent or stand that extends outdoors for connecting one side of a diaphragm chamber to the atmosphere, and that such vent pipes “are notoriously vulnerable to freezing rain. Festoons of ice form around the lips with affinity towards the center because of the inhaling respiratory action of the breather, until the mouth is closed.” *Id.* at col. 1, 11. 13–17.

Ward teaches that, “[a]ccordingly, it is intended to provide a dome-shaped cap having a certain flare so that ice will form away from the opening.” *Id.* at col. 1,

11. 17–20. Petitioner finds a correspondence between hollow center post 2, as shown in Figure 1, and the “skirt receiver” or “skirt receiver means,” as recited in independent claims 1 and 5. Pet. 34. Petitioner finds a further correspondence between cap 18 and the “skirt member,” as recited in independent claims 1 and 5, noting that the cap defines an interior space and having an upper end opening connecting the vent tube to the interior space and an outwardly flared lower end with an area substantially greater than the area of the upper end opening, as required by the claims.

Petitioner contends that Ward further discloses a baffle means that meets the limitations recited in the claims. *Id.* at 36. A baffle is described by Ward as follows:

It should be noted that the outer edge of baffle 36 is spaced from the inner side of cap 18 and, further, that disk 36 overlies and masks perforations 28, thus [detering] entry of moisture to the interior of the cap while also constituting a further element of the trap against fire from the exterior.

Ex. 1016, col. 3, ll. 7–13.

With respect to the “valve means,” “diaphragm housing,” and “diaphragm,” recited in independent claim 5, Petitioner contends that such elements are disclosed, at least inherently, by Ward. Pet. 37–39. We disagree with this contention because Petitioner’s arguments merely suggest that it would be obvious to use the breather cap of Ward with a valve and diaphragm of the type recited in claim 5. This, however, is not the standard for evaluating whether a

characteristic is inherent. “The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.” *In re Rijckaert*, 9 F.3d 1531, 1534 (Fed. Cir. 1993). Rather, “[t]o establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is *necessarily* present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency . . . may not be established by probabilities or possibilities.” *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) (emphasis added; citations and internal quotations omitted).

Thus, although we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that independent claim 1 is anticipated by Ward, we determine that Petitioner has not demonstrated a reasonable likelihood of prevailing on its obviousness grounds with respect to independent claim 5, nor with respect to claim 8, which depends therefrom.

With respect to claim 4, which recites “further including a screen element covering said lower end opening,” Petitioner contends that Ward discloses this element. Pet. 39. Ward teaches that “disk-like screen 30 is disposed over the upper surface of disk 20, preferably with the outer edges of the screen clamped between the disk and seat 23 on the cap. Screen 30 excludes insects and also militates against the entry of moisture and flame.” Ex. 1016, col. 2, ll. 50–55. We determine that Petitioner has demonstrated a reasonable likelihood of prevailing on its contention that claim 4 is anticipated by Ward.

Petitioner's remaining contentions regarding other grounds based on Ward apply the same prior art discussed above for the grounds based on Peterson. Pet. 44–47, 50–51, 52, 53–54. For similar reasons, we are persuaded that Petitioner has made a persuasive showing. Specifically, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing on the following contentions: that claims 2 and 6 are unpatentable over Ward and Ferguson; that claims 3 and 7 are unpatentable over Ward, Ferguson, and Ohmae; that claims 5 and 8 are unpatentable over Ward and prior art described in the '029 patent; that claim 6 is unpatentable over Ward, prior art described in the '029 patent, and Ferguson; and that claim 7 is unpatentable over Ward, prior art described in the '029 patent, Ferguson, and Ohmae.

4. Grounds Based on CMC

Petitioner contends that claims 1, 2, 4–6, and 8 are unpatentable over CMC and Peterson, and that claims 3 and 7 are unpatentable in further combination with Ohmae. Pet. 54–58. These grounds rely on Peterson's disclosure of a "rigid disc," which Petitioner contends corresponds to the "baffle means" recited in independent claims 1 and 5.

Petitioner has not articulated adequately a meaningful distinction in terms of relative strengths and weaknesses with respect to application of CMC, instead of Peterson or Ward, with respect to the various claim limitations. Accordingly, we decline to institute an *inter partes* review on these grounds, which are redundant with the grounds based on Peterson and with the grounds based on Ward. *See*

Liberty Mutual Ins. Co. v. Progressive Casualty Ins. Co., CBM2012-0003 (Paper No. 7) (expanded panel).

D. Conclusion

We conclude that Petitioner has demonstrated a reasonable likelihood of prevailing on the following grounds of unpatentability asserted in the Petition:

Claims 1 and 5 under 35 U.S.C. § 102(b) as anticipated by Peterson;

Claims 2, 4, 6, and 8 under 35 U.S.C. § 103(a) as unpatentable over Peterson and Ferguson;

Claims 3 and 7 under 35 U.S.C. § 103(a) as unpatentable over Peterson, Ferguson, and Ohmae;

Claim 5 under 35 U.S.C. § 103(a) as unpatentable over Peterson and prior art described in the '029 patent;

Claims 6 and 8 under 35 U.S.C. § 103(a) as unpatentable over Peterson, prior art described in the '029 patent, and Ferguson;

Claim 7 under 35 U.S.C. § 103(a) as unpatentable over Peterson, prior art described in the '029 patent, Ferguson, and Ohmae;

Claims 1 and 4 under 35 U.S.C. § 102(b) as anticipated by Ward;

Claims 2 and 6 under 35 U.S.C. § 103(a) as unpatentable over Ward and Ferguson;

Claims 3 and 7 under 35 U.S.C. § 103(a) as unpatentable over Ward, Ferguson, and Ohmae;

Claims 5 and 8 under 35 U.S.C. § 103(a) as unpatentable over Ward and prior art described in the '029 patent;

Claim 6 under 35 U.S.C. § 103(a) as unpatentable over Ward, prior art described in the '029 patent, and Ferguson; and

Claim 7 under 35 U.S.C. § 103(a) as unpatentable over Ward, prior art described in the '029 patent, Ferguson, and Ohmae.

III. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that the Petition is granted as to claims 1–8 of the '029 patent;

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(a), *inter partes* review of the '029 patent is hereby instituted commencing on the entry date of this Order, and pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial;

FURTHER ORDERED that the trial is limited to the grounds identified under the heading “Conclusion” above, and trial is not authorized for any other grounds set forth in the petition; and

FURTHER ORDERED that an initial conference call with the Board is scheduled for 3:00PM Eastern Time on February 25, 2014. The parties are directed to the Office Patent Trial Practice Guide, 77 Fed. Reg. at 48,765–66, for guidance in preparing for the initial conference call, and should come prepared to discuss any proposed changes to the Scheduling Order entered

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herewith and any motions the parties anticipate filing during the trial.

[List of Counsel Excluded for this Appendix]

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Appendix F
Filed July 3, 2013

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

BENNETT REGULATOR)	
GUARDS, INC.	)	CASE NO.
	)	4:12CV1040
Plaintiff,)	
	)	JUDGE JOHN R.
vs.	)	ADAMS
)	
MRC GLOBAL INC., et al.	)	<u>ORDER</u>
)	
Defendants.)	

Pending before this Court is Defendant's Atlanta Gas Light Company's ("AGLC") motion to dismiss for lack of personal jurisdiction, Doc. 13, and Plaintiff Bennett Regulator Guards, Inc.'s, motion for leave to file a second amended complaint (Doc. 49) to add AGL Resources, Inc. ("AGLR") and SouthStar Energy Services, LLC ("SouthStar") as defendants. This Court concludes that AGLC's motion is well taken and therefore GRANTS its motion to dismiss. Doc. 13. With regard to Bennett's request to amend its complaint, the Court concurs with AGLC's argument that an amendment would be futile as this Court would not have personal jurisdiction over AGLR and the proposed amended complaint fails to state a claim against SouthStar. Therefore, Bennett's motion to amend its complaint is DENIED.

I. Personal Jurisdiction

Under Fed. R. Civ. P. 12(b)(2), a defendant may move to be dismissed from a case for lack of personal jurisdiction. Bennett, as the plaintiff in this action, bears the burden of proving that the Court has personal jurisdiction over the respective defendants. *Air Prods. and Controls, Inc. v. Safetech Intern., Inc.*, 503 F.3d 544, 549 (6th Cir. 2007).

This Court applies Ohio law in determining whether it may exercise jurisdiction over Defendants. *American Greetings Corp. v. Cohn*, 839 F.2d 1164, 1167 (6th Cir. 1988). The Court must engage in a two-step analysis to determine personal jurisdiction under Ohio law. The Court must determine: “(1) ... whether [Ohio’s] ‘long-arm’ statute and the applicable Civil Rule confer personal jurisdiction, and if so, (2) whether granting jurisdiction under the statute and rule would deprive the defendant of the right to due process of law pursuant to the Fourteenth Amendment to the United States Constitution.” *Goldstein v. Christiansen*, 638 N.E.2d 541, 543 (Ohio 1994) (quoting *U.S. Sprint Communications Co., L.P. v. Mr. K’s Foods, Inc.*, 624 N.E.2d 1048, 1051 (Ohio 1994)). The Court must engage in both steps if Ohio’s long-arm statute applies because it does not extend jurisdiction fully to the limits of due process. *Goldstein*, 638 N.E.2d at 545, n.1. Accordingly, to establish that jurisdiction is proper, both prongs of the analysis must be satisfied. *Id.*

As noted above, Bennett bears the burden of establishing personal jurisdiction. *American Greetings Corp.*, 839 F.2d at 1168. However, when a court rules solely based upon the pleadings, a plaintiff need make

only a *prima facie* showing of personal jurisdiction to survive a motion to dismiss. *Dean v. Motel 6 Operating L.P.*, 134 F.3d 1269, 1272 (6th Cir. 1998); *CompuServe, Inc., v. Patterson*, 89 F.3d 1257, 1262 (6th Cir. 1996). Accordingly, when ruling without holding an evidentiary hearing, this Court must view the jurisdictional evidence in the light most favorable to the plaintiff. *See Goldstein*, 638 N.E.2d at 544. Despite this fact, a plaintiff may not rely solely on the pleadings in the case; rather, it must show, by affidavit or other documentary evidence, specific facts establishing personal jurisdiction.¹ *Theunissen v. Matthews*, 935 F.2d 1454, 1458 (6th Cir. 1991). The Court must draw all reasonable inferences and resolve all factual disputes in favor of Plaintiff as the party invoking federal jurisdiction. *See Nationwide Mutual Ins. Co. v. Tryg Int'l Ins. Co.*, 91 F.3d 790 (6th Cir. 1996).

a. AGLC

AGLC moved to dismiss Bennett's claims against it pursuant to Fed.R.Civ.P. 12(b)(2). AGLC has submitted the declaration of Barbara Christopher, Assistant Corporate Secretary for AGLC, in support of its position.

Bennett's first amended complaint asserts jurisdiction over AGLC as follows:

This court has personal jurisdiction over Defendants because Defendants have transacted

¹ The Court afforded the parties the opportunity to conduct jurisdictional discovery. The Court will, however, review the evidence in the light most favorable to Bennett as this more lenient standard does not alter the Court's conclusion.

business within this district and have caused tortious injury by an act within this district, including their infringement of U.S. Re. Patent No. 5,810,029 C1 (“the ‘029 patent”) as alleged hereafter, which has injured Bennett in this district. In addition, this court has personal jurisdiction over MRMC because MRMC is licensed to do business in Ohio and has offices in this district.

Although AGLC’s motion to dismiss is based upon Bennett’s first amended complaint, in light of Bennett’s motion for leave to amend its complaint, the Court has reviewed the motion to dismiss with respect to *both* existing first amended complaint and the proposed second amended complaint. The proposed second amended complaint asserts jurisdiction on as follows:

This court has personal jurisdiction over Defendants because Defendants have transacted business within this district and have caused tortious injury by an act within this district, including their infringement of U.S. Re. Patent No. 5,810,029 C1 (“the ‘029 patent”) as alleged hereafter, which has injured Bennett in this district. In addition, this court has personal jurisdiction over MRMC because MRMC is licensed to do business in Ohio and has offices in this district. Further, this court has personal jurisdiction over AGLR and SouthStar because SouthStar is licensed to do business in Ohio and has offices in this district and because SouthStar is the alter ego of AGLR and Piedmont.

As can be seen above, the assertion of jurisdiction over AGLC is not altered by the proposed second amended complaint.

Ohio's long-arm statute, Revised Code Section 2307.382, provides, in relevant part, as follows:

(A) A court may exercise personal jurisdiction over a person who acts directly or by an agent, as to a cause of action arising from the person's:

- (1) Transacting any business in this state;
- (2) Contracting to supply services or goods in this state;
- (3) Causing tortious injury by an act or omission in this state;
- (4) Causing tortious injury in this state by an act or omission outside this state if he regularly does or solicits business, or engages in any other persistent course of conduct, or derives substantial revenue from goods used or consumed or services rendered in this state;
- (5) Causing injury in this state to any person by breach of warranty expressly or impliedly made in the sale of goods outside this state when he might reasonably have expected such person to use, consume, or be affected by the goods in this state, provided that he also regularly does or solicits business, or engages in any other persistent course of conduct, or derives substantial revenue from goods used or consumed or services rendered in this state;
- (6) Causing tortious injury in this state to any person by an act outside this state committed with

the purpose of injuring persons, when he might reasonably have expected that some person would be injured thereby in this state;

AGLC is a subsidiary of AGL Resources, Inc. While it concedes that some of AGL Resources subsidiaries operate in Ohio, it contends that any potential jurisdiction over its parent or sister subsidiaries does not extend to it.

AGLC contends that this suit does not arise out of any contact by AGLC with Ohio and that AGLC does not have any contact with Ohio that would give rise to personal jurisdiction. It contends, and Bennett does not contest, that it is a Georgia Corporation, with its principal place of business in Atlanta, Georgia, and that it constructs, operates, and maintains a natural gas system infrastructure consisting of approximately 32,250 miles of natural gas pipeline, all located in the state of Georgia. According to Barbara Christopher's declaration, AGLC 1) is not registered to do business in Ohio, 2) does not maintain a place of business or have an office in Ohio, 3) does not have a bank account or employees in Ohio, 4) does not conduct sales activity in Ohio, 5) does not direct advertisements to Ohio, 6) does not provide or contract to provide any goods or services to customers in Ohio, 7) does not own any real or personal property in Ohio, 8) does not lease any real or personal property in Ohio and 9) does not make, use, offer to sell, or sell splash guard products in Ohio.

Bennett's bare conclusory allegation that AGLC conducts business in this state is insufficient to support the exercise of personal jurisdiction over AGLC. Barbara Christopher's declaration makes it clear that AGLC operates solely in Georgia.

Bennett's remaining argument is that an agreement between McJunkin Corporation, a West Virginia corporation, and AGL Services Company, a Georgia Corporation, in its own behalf and/or on behalf of AGL Resources Inc. and one or more of the subsidiaries of AGL Resources, Inc., provides a connection upon which this Court can base personal jurisdiction.

Specifically, Bennett contends that AGL Resources entered into an agreement wherein McJunkin would supply AGL Resource subsidiaries with various products at an agreed price schedule. With regard to "specially manufactured products," which Bennett contends includes the infringing product, AGLR was entitled to a percentage of any profit McJunkin made selling the products to a third party. Bennett contends that McJunkin sold the infringing product to a Michigan company from its Ohio office. As such, Bennett argues that AGLC was "entitled" to a profit from a sale from the infringing product from an Ohio office. This connection is tenuous at best. Neither McJunkin nor Bennett are Ohio corporations and there is no indication that the agreement between McJunkin and AGLC's parent company was made in Ohio, or that AGLC ever received profits, ie, *caused* a tortious injury, in Ohio. To so conclude would be to determine that every action McJunkin has taken should be imputed to AGLR and all of its subsidiaries.² This Court will not make such

² Plaintiff is essentially arguing a civil conspiracy without asserting civil conspiracy in its complaint. Without such an assertion, which would require a heightened pleading standard, this Court

an unreasonable conclusion as it has found no legal precedent that would support imputing such conduct for jurisdictional purposes. Accordingly, Ohio's long-arm statute does not confer personal jurisdiction over AGLC.

b. AGLR

After the motion to dismiss AGLC was briefed, Bennett requested leave from this Court to file a second amended complaint to add AGLR and SouthStar. Defendants responded, arguing that an amendment would be futile because this Court does not have personal jurisdiction over AGLC. This Court agrees. "It is well settled that the district court may deny a motion for leave to amend a complaint if such complaint, as amended, could not withstand a motion to dismiss." *Neighborhood Dev. Corp. v. Advisory Council on Historic Pres., Dep't of Hous. & Urban Dev., City of Louisville*, 632 F.2d 21, 23 (6th Cir. 1980)

Bennett asserts that this Court has personal jurisdiction as follows:

This court has personal jurisdiction over Defendants because Defendants have transacted business within this district and have caused tortious injury by an act within this district, including their infringement of U.S. Re. Patent No. 5,810,029 C1 ("the '029 patent") as alleged hereafter, which has injured Bennett in this district. In addition, this court has personal jurisdiction over MRMC because MRMC is licensed to do business in Ohio and has offices in

will not and cannot impute all of McJunkin's actions to AGLR and its subsidiaries.

this district. Further, this court has personal jurisdiction over AGLR and SouthStar because SouthStar is licensed to do business in Ohio and has offices in this district and because SouthStar is the alter ego of AGLR and Piedmont.

There is an implicit recognition in this statement that AGLR is not registered to do business in Ohio, does not maintain a place of business or have an office in Ohio, does not have a bank account or any employees in Ohio, and does not own or lease any real or personal property in Ohio. Rather, Bennett specifically asserts personal jurisdiction over AGLR for two reasons: 1) causing tortious injury in the state and 2) having a subsidiary that is licensed to do business in Ohio and has offices in Ohio and is the alter ego of AGLR.

Bennett's first basis, that AGLR caused tortious injury in Ohio is once again premised on the contract between AGLR and McJunkin. However, as explained above, this Court will not impute all of McJunkin's alleged infringing actions to AGLR simply based upon this contract. Bennett has not pled civil conspiracy, but rather contributory patent infringement. From all accounts, any action AGLR may have engaged in to induce McJunkin to make an infringing product did not occur in Ohio. Accordingly, the Court concludes that it does not have personal jurisdiction over AGLR under this legal theory.

Bennett next contends that the Court has personal jurisdiction over AGLR because its subsidiary, SouthStar, is licensed to do business in Ohio, has offices in Ohio, and is the alter ego of AGLR. Bennett's argument regarding whether SouthStar is

an alter ego of Bennett raises issues with the due process analysis of the personal jurisdiction test.

The law is clear that a court may exercise general jurisdiction over a foreign corporation in those circumstances where the court has jurisdiction over a subsidiary and the domestic subsidiary is a mere alter ego of the parent. *Carrier Corp. v. Outokumpu Ojy*, 673 F.3d 430, 450–51 (6th Cir. 2012). This circuit has adopted the alter-ego theory of personal jurisdiction, which “provides that a non-resident parent corporation is amenable to suit in the forum state if the parent company exerts so much control over the subsidiary that the two do not exist as separate entities but are one and the same for purposes of jurisdiction.” *Id.* (quoting *Estate of Thomson v. Toyota Motor Corp. Worldwide*, 545 F.3d 357, 362 (6th Cir. 2008) (emphasis added)).

In Re Automotive Part Antitrust litigation, 2013 WL 2456610 (E.D. Mich. June 6, 2013). Bennett does not plead any facts that would allow this Court to reasonably infer that SouthStar is the alter ego of AGLR in that AGLR exerts so much control over SouthStar as the two are one entity. Bennett states that “[u]pon information and belief, AGLC provides support services to certain joint ventures and subsidiaries of AGLR, including SouthStar.” Bennett further explains that “SouthStar is a joint venture in which AGLR has an 85% ownership interest and Piedmont Natural Gas Company (“Piedmont”) has a 15% ownership interest.” As this Court has often noted, “a complaint must contain sufficient factual matter, accepted as true, to state a claim to relief that

is plausible on its face.” *Ashcroft v. Iqbal*, 556 U.S. 662, 129 S. Ct. 1937, 1949, 173 L.Ed.2d 868 (2009) (internal quotations omitted). In contrast to that standard, Bennett has offered no factual allegations that would suggest that would support an alter-ego theory. As Bennett fails to establish the due process requirements of the Constitution are met for purposes of personal jurisdiction, it is unnecessary to analyze jurisdiction under the state long-arm statute[.]” *Conn v. Zakharov*, 667 F.3d 705, 711–12 (6th Cir. 2012).

c. SouthStar

Bennett also attempts to name SouthStar, a subsidiary of AGLR, in its proposed second amended complaint. Defendants contend that this amendment would similarly be futile pursuant to Fed. R. Civ. P. 12(b)(6) for failure to state a claim. Based upon the discussion above, this Court concludes that Bennett has failed to state a claim against South Star.

SouthStar is a Delaware limited liability company, with its principal place of business and corporate headquarters in Atlanta, GA. It is not disputed that SouthStar is a joint venture in which AGLR has an 85% ownership interest and that SouthStar is licensed to do business in Ohio and conducts such business under the trade name “Ohio Natural Gas,” and has offices in Cleveland, Ohio.

Bennett, however, does not assert any independent claim against SouthStar. Bennett’s claims against SouthStar are based on the theory that SouthStar is an alter ego of AGLR. As explained above, however, there are no facts to support the contention that SouthStar is the alter ego of AGLR.

Moreover, there is not a solitary allegation against SouthStar that it somehow engaged in infringing activity. As such, Bennett has failed to state a claim against SouthStar pursuant to Fed. R. Civ. P. 12(b)(6).

II. Conclusion

The Court GRANTS AGLC's motion to dismiss. Doc. 13. With regard to Bennett's request to amend its complaint, the Court concludes that an amendment would be futile as this Court does not have personal jurisdiction over AGLR and the proposed second amended complaint fails to state a claim against SouthStar. Therefore, Bennett's motion to amend its complaint is DENIED.

IT IS SO ORDERED.

/s/ John R. Adams

Judge John R. Adams

UNITED STATES DISTRICT COURT

DATED: July 3, 2013

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Appendix G
Filed December 6, 2016

**UNITED STATES PATENT
AND TRADEMARK OFFICE**

**BEFORE THE PATENT TRIAL
AND APPEAL BOARD**

ATLANTA GAS LIGHT COMPANY,
Petitioner,

v.

BENNETT REGULATOR GUARDS, INC.,
Patent Owner.

Case IPR2015-00826
Patent 5,810,029

Before JENNIFER S. BISK, JAMES B. ARPIN, and
PATRICK M. BOUCHER, *Administrative Patent
Judges*.¹

BOUCHER, *Administrative Patent Judge*.

¹ Judge James B. Arpin has taken no part in this decision due to
recusal.

DECISION

*Patent Owner's Request for Rehearing and
Patent Owner's Motion for Sanctions
37 C.F.R. §§ 42.12, 42.71*

On August 20, 2016, we issued a Final Written Decision holding that, based on a preponderance of the evidence, claims 1–8 of U.S. Patent No. 5,810,029 (Ex. 1001, “the ’029 patent”) are unpatentable. Paper 31 (“Dec.”). Bennett Regulator Guards, Inc. (“Patent Owner”) filed a Request for Rehearing of that Final Written Decision. Paper 33 (“Req. Reh’g”). Pursuant to our authorization, Patent Owner also filed a Motion for Sanctions against Atlanta Gas Light Company (“Petitioner”). Paper 35 (“Mot.”). Petitioner opposed the Motion (Paper 36, “Opp.”), and Patent Owner replied (Paper 38, “Reply”).

We deny the Request for Rehearing. We grant the Motion for Sanctions and award Patent Owner costs and fees incurred in association with this proceeding from the time after issuance of the Final Written Decision until the date of this Decision.

I. BACKGROUND

In 2012, Patent Owner filed a complaint in the Northern District of Ohio alleging infringement of the ’029 patent by Petitioner and a third party (“the district court proceeding”). Ex. 2002. On July 3, 2013, the district court dismissed Petitioner as a defendant for lack of personal jurisdiction. Exs. 1017, 2006. The parties agree that the dismissal was without prejudice. Pet. 2, Paper 6, 6.

On July 18, 2013, Petitioner filed a petition to institute an *inter partes* review of all claims of the ’029

patent in IPR2013-00453 (“the related IPR”). *Atlanta Gas Light Company v. Bennett Regulator Guards, Inc.*, Case IPR2013-00453, Paper 4. Throughout the entire pendency of the related IPR, Petitioner was a direct, wholly owned subsidiary of AGL Resources, Inc. (“AGLR”). *Atlanta Gas*, slip op. at 2 (PTAB Jan. 6, 2015) (Paper 88) (citing related IPR, Ex. 2006, 4). After completion of briefing and an oral hearing in the related IPR, we found that AGLR was an unidentified real party in interest, and accordingly terminated the proceeding in accordance with 35 U.S.C. § 312(a)(2) (“A petition . . . may be considered only if— . . . the petition identifies all real parties in interest”). *Id.* at 13, 17.

On February 27, 2015, Petitioner filed its Petition to institute an *inter partes* review of all claims of the ’029 patent in IPR2015-00826 (“this proceeding”). Paper 1. The Petition asserts that “[t]he following entities are in privity with [Petitioner], but out of an abundance of caution, Petitioner also identifies them as real parties-in-interest: AGL Resources Inc. (holding company and direct or indirect parent company of [Petitioner] and the following entities), [and other entities].” *Id.* at 1.

On July 1, 2016 (i.e., between the time the oral hearing was held in this proceeding on May 27, 2016, and the time the Board issued its Final Written Decision on August 20, 2016), AMS Corp. (a wholly owned subsidiary of The Southern Company) merged with and into AGLR. Paper 34, 3. AGLR was the surviving corporation in the merger, which resulted in termination of the separate corporate existence of AMS Corp. and in AGLR becoming a wholly owned

subsidiary of The Southern Company. *Id.* Following the merger, on July 11, 2016, AGLR effected a name change to become Southern Company Gas. *Id.* On September 20, 2016, after the panel issued its Final Written Decision in this case, the Board ordered Petitioner to “file . . . an updated mandatory notice pursuant to 37 C.F.R. § 42.8(a)(3)” in response to a concern raised by Patent Owner that not all real parties in interest had been identified. Paper 32. In its updated mandatory notices, Petitioner asserted that

[t]he following entities are in privity with [Petitioner], but out of an abundance of caution, Petitioner also identifies them as real parties-in-interest: The Southern Company (parent company of Southern Company Gas f/k/a/ AGL Resources Inc.), Southern Company Gas f/k/a AGL Resources, Inc. (holding company and direct or indirect parent company of [Petitioner] and the following entities), [and other entities].

Paper 34, 4.

The original panel for this proceeding, as well as the panel for the related IPR, was composed of Judges Bisk, Arpin, and Boucher through the issuance of the Final Written Decision in this proceeding. Upon learning that The Southern Company may be a real party in interest, Judge Arpin recused himself from further participation. The Board substituted Judge Quinn, and the reconstituted panel has considered the issues discussed herein.

II. MOTION FOR SANCTIONS

The Board has authority to impose a sanction against a party for misconduct, including “[f]ailure to

comply with an applicable rule or order in the proceeding.” 37 C.F.R. § 42.12(a)(1); *see* 35 U.S.C. § 316(a)(6). A motion for sanctions should address three factors: (1) whether a party has performed conduct that warrants a sanction; (2) whether the moving party has suffered harm from that conduct; and (3) whether the sanction requested is proportionate to the harm suffered by the moving party. *See Square, Inc. v. Think Comput. Corp.*, Case CBM2014-00159, slip op. at 2 (PTAB Nov. 27, 2015) (Paper 48) (citing *Ecclesiastes 9:10-11-12, Inc. v. LMT Holding Co.*, 497 F.3d 1135, 1143 (10th Cir. 2007)). The burden is on the moving party to persuade the Board that a sanction is warranted. *Id.*

First, Patent Owner’s contention that Petitioner failed to comply with the continuing obligation to notify the Board of changes in real parties in interest is predicated primarily on its position that “[The] Southern Company (“SC”) has been a real party-in-interest since completion of a merger with AGLR on July 1, 2016.” Mot. 1. Petitioner disagrees with that position and contends instead that The Southern Company is not a real party in interest because “it is an entirely separate corporate entity and has not controlled, funded, or had the opportunity to control or fund this IPR.” Opp. 3. Petitioner also contends that AGLR’s “name change [to Southern Company Gas] did not create a new entity or real party-in-interest.” *Id.* at 4–5.

With respect to Southern Company Gas, Petitioner’s assertion ignores the fact that Southern Company Gas did not result merely from a name change, but rather also from a merger with AMS Corp.

that occurred before the name change. *See* Paper 34, 3. In the related IPR, the Board specifically found that AGLR is a real party in interest, and it follows that the merged entity is also a real party in interest. *Atlanta Gas*, slip op. at 13 (PTAB Jan. 6, 2015) (Paper 88). The merger with AMS Corp. has meaningful effects that impose an obligation on Petitioner to apprise the Board that Southern Gas Company is a real party in interest. Petitioner's failure to file timely the updated mandatory notice is especially significant in light of the central nature that the issue of AGLR's status as a real party in interest played in the related IPR. *See Atlanta Gas*, Paper 87, 46:6–9 (“The problem that we have, and you will remember, we had to fight like tooth and nail to get these documents. At every turn there was an objection to producing documents related to the real party in interest issue or the privity issue.” (statement by Patent Owner at oral hearing in the related IPR)).

With respect to The Southern Company, we do not credit Petitioner's argument that The Southern Company is not a real party in interest in light of Petitioner's explicit notification to the contrary. Petitioner cannot have it both ways, identifying The Southern Company as a real party in interest (even “out of an abundance of caution”) to ensure compliance with 35 U.S.C. § 312(b), while simultaneously maintaining that it is *not* a real party in interest to evade the obligations of 37 C.F.R. § 42.8(a)(3).

In light of these various considerations, we conclude that Petitioner has performed conduct that warrants a sanction.

Second, Patent Owner has suffered harm as a result of Petitioner's conduct. Patent Owner contends that Petitioner "conceal[ed] [The Southern Company's] status as a real party in interest," and thereby "attempted to preserve the ability to file another IPR petition in the event of an unfavorable Decision." Mot. 1. Although this contention is speculative, particularly in its assignment of a specific motive to what Petitioner represents was "inadverten[ce]," the contention is consistent with a theory maintained by Patent Owner throughout at least the related IPR regarding Petitioner's failure to identify all real parties in interest. *See* Opp. 4; *see, e.g., Atlanta Gas*, Paper 55, 42 ("It would be unfair for a behind-the-scenes controlling party such as AGLR to conduct the IPR in the name of a subsidiary and then have the opportunity to initiate another IPR or a litigation defense based on arguments advanced, or possibly even not advanced, in the present IPR. The fundamental unfairness of having two bites at the apple is the basis for the requirement that all real parties-in-interest be identified in the Petition."); Mot. 4 ("A similar, but far more egregious, situation has occurred in the present IPR. [Petitioner] did not identify [The Southern Company] as a new real party-in-interest upon completion of the merger, knowing that the Board's Decision would be issued shortly thereafter. By not disclosing the results of the merger, [Petitioner] attempted to preserve the ability of [The Southern Company] to file another IPR petition if the Decision produced an unfavorable result."). At the time Patent Owner learned of the merger and of the consequential potential for The Southern Company to be an unidentified real party in interest, it had not

exhausted its avenues for further consideration by the Board, as reflected by its subsequent filing of a Request for Rehearing (Paper 33). The possibility thus existed that the Board would reverse or modify its Final Written Decision on rehearing, and prudent steps needed to be taken to ensure that estoppel provisions would be correctly applied.

Third, Patent Owner proposes that “[a]n appropriate sanction would be to expunge the Decision and the request for rehearing, dismiss the Petition with prejudice, and order [Petitioner] to pay compensatory expenses and attorney fees to [Patent Owner].” Mot. 5. We disagree that this proposed sanction is proportionate to the harm suffered by Patent Owner. In particular, as Petitioner contends, the harm suffered by Patent Owner is limited because “the estoppel provisions apply to the petitioner and ‘the real party in interest *or privy of the petitioner.*” Opp. 6 (citing 35 U.S.C. § 325(e)(1)) (emphasis by Petitioner). There is no requirement that a petitioner identify all of its privies in a petition, and Patent Owner’s ability to address whether The Southern Company was a privy that would give rise to estoppel was not impacted by Petitioner’s original failure to file an updated mandatory notice.

Furthermore, “[a] sanction imposed under this rule *must be limited* to what suffices to deter repetition of the conduct or comparable conduct by others similarly situated.” 37 C.F.R. § 42.11(d)(4) (emphasis added). We have considered, but are not persuaded by, Patent Owner’s argument that “[a]ny remedy short of termination with prejudice would encourage future petitioners to try to suppress the

identification of real parties-in-interest.” Mot. 6. A more limited sanction will have sufficient deterrent effect.

We determine that an appropriate sanction, proportionate to the harm suffered by Patent Owner, is to award costs and fees incurred in association with this proceeding from the time after issuance of the Final Written Decision until the date of this Decision. 37 C.F.R. § 42.12(b)(6). Accordingly, we authorize Patent Owner to file a Motion for Costs and Fees that includes specific information as to the total amount of costs and fees requested, details regarding the tasks performed underlying those fees, and reasons why the amounts of those fees are reasonable. Any privileged information may be redacted from billing information submitted with the Motion. The Motion must be filed no later than ten business days after entry of this Decision, and is limited to 1000 words.

III. RECUSAL

Sua sponte, we consider the impact of Judge Arpin’s recusal in the context of Patent Owner’s request for a sanction that vacates the Final Written Decision. We conclude that vacating the Final Written Decision is unwarranted.

In deciding whether to vacate a decision in light of a district-court judge’s recusal, the following factors apply: (1) the risk of injustice to the parties in the particular case; (2) the risk that the denial of relief will produce injustice in other cases; and (3) the risk of undermining the public’s confidence in the judicial process. *Shell Oil Co. v. United States*, 672 F.3d 1283, 1292 (Fed. Cir. 2012). We see no compelling reason not

to apply parallel considerations in considering the impact of recusal by a judge of the Board.

First, there is no risk of injustice to the parties in allowing the Final Written Decision to stand. That Decision was rendered by a properly constituted panel because the recused judge was unaware of any potential conflict at the time of the Decision. *See* 28 U.S.C. § 455(b)(4) (“He *knows* that he . . .”) (emphasis added). In addition, the reconstituted panel has considered the Final Written Decision anew and expressly adopts its findings and conclusions.

Second, there is minimal risk that allowing the Final Written Decision to stand will produce injustice in other cases because, as noted above, the sanction crafted herein will have sufficient deterrent effect.

Third, there is minimal risk that the public’s confidence in *inter partes* reviews will be eroded by allowing the Final Written Decision to stand because the Board has taken appropriate steps to ensure the integrity of the Decision by reconstituting the panel. In this context—and in fashioning an appropriate sanction—we are mindful that our duties in considering the patentability of claims on a fully developed record in an *inter partes* review extend not only to the parties involved in the proceeding, but to the public. *See generally* 35 U.S.C. § 317(a) (stating that the Office may proceed to a final written decision even when no petitioner remains in an *inter partes* review as a result of settlement).

IV. REQUEST FOR REHEARING

On rehearing, the burden of showing that the Decision should be modified lies with Patent Owner,

the party challenging the Decision. 37 C.F.R. § 42.71(d). “The request must specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed in a motion, an opposition, or a reply.” *Id.*

A. The National Meter Reference

As noted in the Final Written Decision, “[t]he ’029 patent issued on a first-action allowance, and underwent an *ex parte* reexamination initiated by Patent Owner.” Dec. 5 (citing Ex. 1010). In its Response to the Petition, Patent Owner observed that “[t]he reexamination included . . . a National Meter reference entitled ‘Weather and Bug Proof Breather Vents,’” and argued that the inverted vent described in that reference “appears to be identical to [Peterson] ’087,” i.e., the reference involved in all of the bases on which we concluded the claims of the ’029 patent are unpatentable. Paper 16, 32 (citing Ex. 1010, 18); Dec. 34–49. Patent Owner asserts in its Request for Rehearing that it “argued that Peterson ’087 did not anticipate or make obvious the ’029 patent because the same or substantially the same prior art was considered by the PTO during reexamination.” Req. Reh’g 3 (citing Paper 16, 32–33, 38, 41, 43, 46, 49, 51, 54). Patent Owner presents the following argument:

The Board refused to consider the National Meter reference, implying that Bennett had waived consideration of this reference because it had not raised the issue in its Preliminary Response. . . . The Board relied on the provisions of 35 U.S.C. § 325(d), which authorizes the Board to take into account whether “the same or substantially the

same prior art or arguments previously were presented to the Office.”

Id. (citing Dec. 37 n.5). Patent Owner contends that “[t]he Board’s refusal to consider the National Meter reference not only violates the [Administrative Procedures Act], but it also raises constitutional issues of denial of due process.” *Id.* at 5 (citing *Goldberg v. Kelly*, 397 U.S. 254 (1970)).

We are not persuaded by Patent Owner’s argument, which obscures the fundamental precept that the issue before us was whether claims of the ’029 patent are anticipated by Peterson ’087 or would have been obvious over the combination of Peterson ’087 and other cited references. Patent Owner was afforded full opportunity to address that issue and does not contend otherwise. Rather, Patent Owner presents a daisy-chained argument that an aspect of Peterson ’087 “appears to be identical” to an aspect of another reference considered during an *ex parte* reexamination and that we must, therefore, reach the same conclusion as the Examiner during reexamination. Such a position is untenable.

Even if Peterson ’087 itself had been before the Examiner during reexamination, rather than what Patent Owner believes to be a surrogate, that fact would not preclude us from conducting an independent evaluation of the teachings of Peterson ’087. *See, e.g., Microsoft Corp. v. Parallel Networks Licensing, LLC*, Case IPR2015-00483, slip op. at 14–15 (PTAB July 15, 2015) (Paper 10) (instituting *inter partes* review involving art previously considered by Examiner, noting that consideration of such art may be justified because *ex parte* nature of reexamination

differs from adversarial nature of *inter partes* review). Patent Owner's argument also improperly conflates different aspects of *inter partes* review proceedings, which include separate institution and merits phases. *See Achates Reference Publishing, Inc. v. Apple Inc.*, 803 F.3d 652, 654 (Fed. Cir. 2015) ("Both IPR and CBMR proceed in two stages. In the first stage, the Director determines whether to institute IPR or CBMR. . . . In the second phase, the Board conducts the IPR or CBMR proceedings on the merits and issues a final written decision."). During the institution phase, the Board, acting on authority delegated by the Director, may take into account whether "the same or substantially the same prior art or arguments previously were presented to the Office" in determining whether to institute the proceeding. 35 U.S.C. § 325(d). Patent Owner concedes that it made no such argument during the institution phase. Paper 30, 35:7–9.

Patent Owner's conflation of distinct inquiries is especially evident from how it couched its argument in its Response that "[f]urther evidence that Peterson '087 does not anticipate the claimed skirt assembly is found in the PTO's consideration of the same or substantially the same reference during the 2002-03 reexamination." *See* Paper 16, 32. In making that argument, even though the institution phase had concluded, Patent Owner cited § 325(d) for the proposition that "[i]n determining whether to institute an IPR, the Board is authorized to take into account whether 'the same or substantially the same prior art or arguments previously were presented to the Office.'" *Id.* n.8.

Ultimately, Patent Owner's arguments regarding the National Meter reference cannot trump an independent consideration of the art upon which *inter partes* review was actually initiated. No matter how much the National Meter reference may "appear to be identical" to Peterson '087, it is *not* identical, nor was it subject to the same kind of consideration by the Office during an *ex parte* proceeding as given in adversarial proceedings.

B. Claim Construction

The '029 patent expired before the Final Written Decision was issued, and we accordingly construed the claims under principles similar to those used during a district court's review. Dec. 22–34. Patent Owner contends that "[d]espite using the correct legal standard, the Board made erroneous claim construction rulings," and that "[i]f the disputed claim terms are construed as requested by [Patent Owner], they result in the claims not being anticipated or obvious." Req. Reh'g 9, 24. Patent Owner specifically contends that the Board failed sufficiently to discuss the evidence presented by Patent Owner and to provide an explanation for how the evidence supports the Board's claim constructions. *Id.* at 11–21.

A central aspect of Patent Owner's argument is its contention that "[c]laims are to be construed to preserve validity in the case of ambiguity." *Id.* at 22 (citing *Innolux Corp. v. Semiconductor Energy Lab. Co., Ltd.*, Case IPR2013-00064, slip op. at 10 (PTAB Apr. 30, 2013) (Paper 11); Paper 16, 21; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1327–28 (Fed. Cir. 2005) (en banc)). We disagree that this is a correct statement of law as applied to *inter partes* review proceedings.

The standard asserted by Patent Owner is rooted in 35 U.S.C. § 282, which states that “[a] patent shall be presumed valid.” While a presumption of validity is accordingly applied by district courts, the contention that § 282 must be applied in proceedings before the Office “miscontrues the purposes for which that statute [was] enacted.” *In re Etter*, 756 F.2d 852, 856 (Fed. Cir. 1985) (en banc). “A statute setting rules of procedure and assigning burdens to litigants in a court trial does not automatically become applicable to proceedings before the PTO.” *Id.*

Although *Etter* considered application of a presumption of validity in the context of reexamination proceedings, its reasoning equally applies to *inter partes* review proceedings in light of the Supreme Court’s explicit recognition that “the purpose of [an *inter partes* review] proceeding is not quite the same as the purpose of district court litigation.” *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144 (2016). “Although Congress changed the name from ‘reexamination’ to ‘review,’ nothing convinces us that, in doing so, Congress wanted to change its basic purposes, namely, to reexamine an earlier agency decision.” *Id.* In *Cuozzo*, the Supreme Court explicitly endorsed the Office’s use of the broadest-reasonable-interpretation standard for unexpired patents by analogy with reexamination proceedings; it logically follows by the same analogy that the Office’s use, in reexamination proceedings, of a claim construction standard similar to that used by district courts, but without a presumption of validity, applies to *inter partes* review proceedings.

In addressing the specific claim constructions of the Final Written Decision, Patent Owner places particular focus on construction of “diaphragm-type gas pressure regulator,” “outside gas pressure regulator,” and “valve means,” “because the manner in which these claim terms are construed affects the manner in which other claim terms are construed.” Req. Reh’g 12. In addressing these terms, Patent Owner contends that it “provided substantial analysis of the ’029 specification and drawings, as well as extrinsic evidence, to support its claim construction positions and for the proposition that the ’029 patent disclosed and claimed only a Fisher S254 high pressure, internally relieved regulator outdoors.” *Id.* (citing Paper 16, 13–19, “and the evidence referenced therein”). Patent Owner further contends that “[a]t oral argument, [Patent Owner’s] counsel emphasized that one skilled in the art would recognize that the regulator disclosed in the ’029 patent could only be a Fisher S254 regulator, citing the deposition testimony of [its expert,] Mr. Oleksa.” *Id.* On this basis, Patent Owner continues to seek claim constructions that read in limitations not recited explicitly in the claims, namely “high pressure,” “internally relieved,” and “located outdoors.” *Id.* Patent Owner makes similar arguments that seek to incorporate unrecited limitations into the construction of other terms. *Id.* at 15–21.

Although we agree with Patent Owner in the abstract that the “ordinary and customary meaning” standard applied to expired patents requires that evidence be viewed through the eyes of one of ordinary skill in the art, Patent Owner stretches that principle too far. *See id.* at 9–10. “[A] claim construction

analysis must begin and remain centered on the claim language itself.” *Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 382 F.3d 1111, 1116 (Fed. Cir. 2004). Patent Owner asks us to deviate far from this cardinal principle by incorporating features of the Fisher S254 regulator that are not recited in the claims themselves, under circumstances in which the Fisher S254 regulator is not explicitly identified as such anywhere in the specification of the ’029 patent. “Reading a claim in light of the specification, to thereby interpret limitations explicitly recited in the claim, is a quite different thing from reading limitations of the specification into a claim, to thereby narrow the scope of the claim by implicitly adding disclosed limitations which have no express basis in the claim.” *In re Prater*, 415 F.2d 1393, 1404–05 (CCPA 1969). This is particularly the case when the standard we are obliged to apply does not afford Patent Owner a presumption of validity of the patent’s claims.

For these reasons, we are not persuaded that we misapprehended or overlooked any aspect of Patent Owner’s claim-construction arguments. Nor are we persuaded that Patent Owner’s evidence in support of those arguments was inadequately considered.

C. Preclusive Effects of the District Court Proceeding

In the Final Written Decision, we concluded that the Petition was not barred under 35 U.S.C. § 315(b), which provides: “An inter partes review may not be instituted if the petition requesting the proceeding is filed more than 1 year after the date on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging

infringement of the patent.” Dec. 13–20. Although Petitioner was served with a complaint alleging infringement of the ’029 patent, its dismissal without prejudice for lack of personal jurisdiction nullified the effect of that service as it relates to § 315(b). *Id.* at 14 (“When considering the statutory bar under § 315(b), the Board has consistently held that dismissal without prejudice of a party from district-court litigation nullifies the effect of service on that party of the underlying complaint.”). Patent Owner takes issue with the portion of our analysis that explained that “[t]he Federal Circuit has characterized the effect of dismissals without prejudice as ‘leaving the parties as though the action had never been brought,’ thereby restoring the ability of the parties to pursue courses of action available to them before the action had been brought.” *Id.* at 16 (citing *Graves v. Principi*, 294 F.3d 1350, 1355–56 (Fed. Cir. 2002); *Bonneville Assocs., Ltd. P’ship v. Barram*, 165 F.3d 1360, 1364 (Fed. Cir. 1999)).

In particular, Patent Owner contends that “[t]he Board overlooked Bennett’s arguments and evidence concerning the preclusive effects of the Ohio suit that do not ‘[leave] the parties as though the action had never been brought[.]’” Req. Reh’g 25 (citation omitted). Patent Owner sets forth a number of preclusive effects that flow from the district court proceeding before Petitioner’s dismissal, including burden-of-proof effects on decided jurisdictional issues, a bar against refiling an infringement action against Petitioner in Ohio, and the impact of admissions made by the parties during the district court proceeding. *Id.* at 25–26. Patent Owner expresses particular concern that the Final Written

Decision gave effect as admissions to certain statements made in preliminary claim-construction positions advocated in the district court proceeding. *Id.* at 26–30.

We are not persuaded by Patent Owner’s arguments. Patent Owner merely observes that the district court proceeding impacts the positions that can be sustained by the parties in other proceedings, including this IPR proceeding, and that it may have other effects. But as we explained in the Institution Decision, the Federal Circuit’s characterization of the effect of dismissals without prejudice as leaving the parties as though the action had never been brought “is, of course, a legal fiction—the initiation of even procedurally defective proceedings have certain effects, and the Federal Circuit’s statement is understood properly as referring to the restored ability of parties to pursue courses of action available to them before the action had been brought.” Paper 12, 13. It is neither the case that a dismissal without prejudice somehow erases admissions by the parties involved so that those admissions can never be considered elsewhere, nor that a petitioner must show an utter absence of effects flowing from a prior district-court proceeding for the nullification of the effect of service to attach.

We thus disagree with Patent Owner’s characterization that “the Board estopped Bennett from asserting claim constructions different than those asserted in the Ohio suit.” Req. Reh’g 29. No estoppel has been applied; rather, the Final Written Decision merely took note of the inconsistency in positions as a factor in the Board’s determination that

the claims were not properly construed as Patent Owner advocated. *See, e.g.*, Dec. 28 (“Such a position [to incorporate ‘high pressure,’ ‘internally relieved,’ and ‘located outdoors’ into the construction of ‘valve means’] *also* appears to be inconsistent with the position taken by Patent Owner in the Ohio lawsuit under a similar claim-construction standard.” (emphasis added)).

Accordingly, we are not persuaded that we misapprehended or overlooked any matter related to the preclusive effects of the district court proceeding.

D. Summary

For the foregoing reasons, we deny Patent Owner’s Request for Rehearing.

III. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that Patent Owner’s Motion for Sanctions is *granted*;

FURTHER ORDERED that Patent Owner is awarded costs and fees incurred in association with this proceeding from the time after issuance of the Final Written Decision until the date of this Decision;

FURTHER ORDERED that Patent Owner is authorized to file, within ten business days of entry of this Decision and limited to 1000 words, a Motion for Costs and Fees that sets forth an accounting of amounts requested; and

FURTHER ORDERED that Patent Owner’s Request for Rehearing is *denied*.

[List of Counsel Excluded for this Appendix]

App-174

Appendix H
Filed February 23, 2015

**UNITED STATES PATENT
AND TRADEMARK OFFICE**

**BEFORE THE PATENT TRIAL
AND APPEAL BOARD**

ATLANTA GAS LIGHT COMPANY,
Petitioner,

v.

BENNETT REGULATOR GUARDS, INC.,
Patent Owner.

Case IPR2013-00453
Patent 5,810,029

Before JENNIFER S. BISK, JAMES B. ARPIN, and
PATRICK M. BOUCHER, *Administrative Patent
Judges*.

BOUCHER, *Administrative Patent Judge*.

DECISION
Denying Request for Rehearing
37 C.F.R. § 42.71

In our order terminating this proceeding (Paper 88, “Termination Order” or “Term.”), we concluded that Petitioner bears the burden of showing that all real parties-in-interest have been identified in the Petition as required by 35 U.S.C. § 312(a)(2) and that Petitioner failed to identify at least AGL Resources, Inc. (“AGLR”) as a real party-in-interest in its Petition. Petitioner requests rehearing (Paper 90, “Req. Reh’g”), arguing that (1) such allocation of the burden is an erroneous conclusion of law; and (2) the Board’s finding that AGLR is a real party-in-interest is erroneous as a matter of law. We address both contentions.

The burden of showing that our Termination Order should be modified lies with Petitioner, the party challenging the decision. *See* 37 C.F.R. § 42.71(d). In addition, “[t]he request must specifically identify all matters the party believes the Board misapprehended or overlooked, and the place where each matter was previously addressed.” *Id.*

I. BURDEN

In our Termination Order, we concluded that petitioners in *inter partes* review proceedings bear the burden of establishing that they have identified all real parties-in-interest under the statute governing such proceedings before the Patent Trial and Appeal Board. Term. 6–8. A petitioner enjoys a rebuttable presumption that its identification of real parties-in-interest in its petition is accurate, but “when . . . a patent owner provides sufficient rebuttal evidence that reasonably brings into question the accuracy of a petitioner’s identification of the real parties-in-interest, the burden remains with the petitioner to

establish that it has complied with the statutory requirement.” *Id.* at 8.

Petitioner advances three contentions in arguing that this framework, particularly the allocation to Petitioner of the burden for showing that all real parties-in-interest were identified in its Petition, was an erroneous conclusion of law: (1) such allocation is inconsistent with Supreme Court authority as set forth in *Taylor v. Sturgell*, 553 U.S. 880 (2008) (Req. Reh’g 3–6); (2) such allocation is inconsistent with prior Patent Office decisions allocating the burden to Patent Owner in real party-in-interest disputes (*id.* at 6–9); and (3) such allocation is inconsistent with earlier conduct during this proceeding (*id.* at 9–11).

A. Supreme Court Authority

Petitioner correctly observes that the Office Trial Practice Guide (77 Fed. Reg. 48,756–48,773 (Aug. 12, 2012), “Practice Guide”) directs parties to *Taylor v. Sturgell* for guidance on considerations that are applied in determining whether a party who is not a named participant in a given proceeding nonetheless constitutes a real party-in-interest. Req. Reh’g 3–4. *Taylor* involved two lawsuits filed in response to refusals by the Federal Aviation Administration to Freedom of Information Act requests for certain technical documents. *Taylor*, 553 U.S. at 885. The Supreme Court addressed the preclusive effect of a judgment in the first lawsuit on the second, concluding that the general rule against nonparty preclusion is subject to exceptions that the Court grouped into six categories. *Id.* at 894. The Practice Guide characterizes these six categories as “factors relevant to the question of whether a non-party may be

recognized as a ‘real party-in-interest.’” Practice Guide at 48,759. Accordingly, our Termination Order included an analysis applying these factors to the facts developed during the trial for this proceeding. Term. 9–13.

Petitioner contends that our Termination Order “focused on the six *Taylor* factors, but did not address the Supreme Court’s guidance as to the proper burden of proof.” Req. Reh’g 4. As Petitioner notes, the Supreme Court in *Taylor* rejected the defendant’s argument that the plaintiff should bear the ultimate burden of proving that the plaintiff was not acting as the third party’s agent, i.e. that none of the six categories of exceptions applied. *Id.* at 4 (citing *Taylor*, 553 U.S. at 906). Further, Petitioner correctly observes that the Supreme Court found that the proper approach is to allow discovery, not to shift the burden, even though “it is unlikely an opposing party will have access to direct evidence of collusion.” *Id.* (citing *Taylor*, 553 U.S. at 907).

Petitioner’s argument draws an inappropriate parallel, insufficiently accounting for relevant differences between the issue considered by the Supreme Court and the issue presented to us. Specifically, the Supreme Court explains that its conclusion of how to allocate the burden follows from the fact that “[c]laim preclusion, like issue preclusion, is an affirmative defense” and that it has never recognized claim preclusion as an exception to the general rule that it is incumbent on the defendant to plead and prove such a defense. *Taylor*, 553 U.S. at 907. The conclusions that Petitioner draws from its assertion that “the real party in interest analysis is

grounded in assessing preclusion” are too sweeping. *See id.* at 4. Although the Supreme Court’s analysis of the six categories of exceptions to nonparty preclusion is relevant to a determination of when a nonparty may be a real party-in-interest, it does not follow that every procedural posture implicating such concerns demands identical treatment. Indeed, a critical distinction between the Supreme Court’s consideration of common-law preclusion and the issue before us is a controlling statute.¹

“The starting point for a standing determination for a litigant before an administrative agency is . . . the statute that confers standing before that agency.” *Ritchie v. Simpson*, 170 F.3d 1092, 1095 (Fed. Cir. 1999). “As in any case of statutory construction, our analysis begins ‘with the language of the statute.’” *Hughes Aircraft Co. v. Jacobson*, 525 U.S. 432 (1999) (citations omitted). The statute setting forth the requirements of a petition for *inter partes* review unambiguously requires that “the petition identifies all real parties in interest.” 35 U.S.C. § 312(a)(2); *see* Term. 6. Thus, the identification of all real parties-in-interest is an essential element of a petitioner’s case

¹ Our Termination Order addresses this specific distinction in its discussion of *Gonzalez v. Banco Cent. Corp.*, 27 F.3d 751 (1st Cir. 1994). Similar to *Taylor*, the district court in *Gonzalez* concluded that “[t]he burden of persuasion ultimately rests with him who asserts that control (or the right to exercise it) existed to such a degree as would warrant invoking nonparty preclusion.” *Gonzalez* at 759. As we noted, “*Gonzalez* addressed real party in interest in the context of whether *issue preclusion* could be asserted against a non-party to a prior litigation,” and its discussion was, therefore, “not entirely applicable here.” Term. 12, n.7 (emphasis added).

and a patent owner's presentation of evidence that reasonably calls the accuracy of that identification into question is a rebuttal to petitioner's initial case, not an affirmative defense.² Petitioner has not identified persuasively any language in the controlling statute that identifies an affirmative defense.

Consequently, we disagree with Petitioner that the analysis presented in our Termination Order is inconsistent with Supreme Court authority.

B. Prior Patent Office Decisions

Petitioner identifies several prior decisions by other panels of the Patent Trial and Appeal Board that it characterizes as “indicat[ing] that the patent owner bears the *burden of proof* on the real party in interest issue.”³ Req. Reh'g 6 (citing *TRW Automotive US LLC v. Magna Electronics, Inc.*, Case IPR2014-00293, slip op. at 13 (PTAB June 27, 2014) (Paper 18)

² In our Termination Order, we remarked that allocating the burden to Petitioner “appropriately accounts for the fact that a petitioner is far more likely to be in possession of, or to have access to, evidence relevant to the issue than is a patent owner.” Term. 8. We note our disagreement with Petitioner that that remark is inconsistent with the Supreme Court's rejection of burden shifting in *Taylor*. See Req. Reh'g 4. First, the framework we articulate invokes no shifting of the burden of persuasion, which always remains with Petitioner. Second, our remark is relevant in light of the differences in calibration of discovery in district-court litigation as compared with *inter partes* review proceedings. See Paper 40, 3 (“Consistent with Congressional intent that *inter partes* review be a quick and costeffective alternative to litigation, discovery in *inter partes* review is less expansive than that typically available in district-court patent litigation”).

³ The Board has not designated any of the cited decisions as precedential.

(informative); *Chi Mei Innolux Corp. v. Semiconductor Energy Lab*, Case IPR2013-00028, slip op. at 9 (PTAB Mar. 21, 2013) (Paper 14); *Sipnet EU S.R.O. v. Straight Path IP Group, Inc.*, Case IPR2013-00246, slip op. at 11–12 (PTAB Oct. 9, 2014) (Paper 62)) (emphasis added). We have reviewed the earlier decisions cited by Petitioner. Although we acknowledge that those prior decisions include language that inferentially appears to assign a burden to patent owners to *prove* that petitioners' identification of real parties-in-interest is inaccurate, we accord that inference relatively little weight: none of the decisions cited by Petitioner includes articulated analysis of allocation of the burden that provides reasoning for us to consider.⁴

Such prior decisions also can be reconciled within the framework we describe by noting (as in our Termination Order) the distinction between the ultimate *burden of persuasion*, which remains fixed, and an intermediate *burden of production*, which may shift. *See* Term. 8 (citing Fed. R. Evid. 301). As explained by the Supreme Court, a presumption that benefits one party (like the one afforded to petitioners that its identification of real parties-in-interest is accurate) results in allocation of an intermediate *burden of production* to the other party to rebut the presumption. *Texas Dept. of Cmty. Affairs v. Burdine*, 450 U.S. 248, 252–55 (1981). “It is important to note,

⁴ *But see Zerto, Inc. v. EMC Corp.*, Case IPR2014-01329, slip op. at 6–7 (PTAB Feb. 20, 2015) (Paper 30) (concluding petitioner bears ultimate burden of establishing that it has identified all real parties-in-interest, and that petitioner is accorded initial presumption that its petition accurately identifies all real parties-in-interest).

however, that although the . . . presumption shifts the burden of *production* . . . , “[t]he ultimate burden of persuading the trier of fact . . . remains at all times with the [original party].” *St. Mary’s Honor Center v. Hicks*, 509 U.S. 502 (1993) (citing *Burdine*, 450 U.S. at 253). We understand the prior Board decisions identified by Petitioner as addressing the sufficiency of patent owners’ satisfaction of the intermediate burden of production. We also understand the various reexamination decisions cited by Petitioner as consistent with this framework. *See* Req. Reh’g 7–9.

As noted above, the statute places the burden of identifying *all* real parties-in-interest squarely on the petitioner. 35 U.S.C. § 312(a)(2). Thus, after the petitioner has listed presumptively the real parties-in-interest in its petition, the burden of production of evidence that the petitioner has failed to identify *all* real parties-in-interest shifts to the patent owner. Nevertheless, as evidenced by the statutory requirement, the burden of persuasion or proof that the petitioner has named *all* real parties-in-interest remains with the petitioner. Consequently, we conclude that the analysis presented in our Termination Order is not inconsistent with any binding Board decision.

C. Earlier Conduct During this Proceeding

Petitioner asserts that “[t]he Board’s finding that petitioner bears the ultimate burden of proof on real party in interest is also in conflict with the conduct of this proceeding.” Req. Reh’g 9. Petitioner cites acknowledgment by Patent Owner that it assumed it had the ultimate burden of proof and asserts that “Patent Owner obtained surreply briefing to support

its real party in interest arguments, consistent with the patent owner having the burden of proof.” *Id.* at 10 (citing Paper 85, 1, n.1; Paper 86, 3, Paper 64, Paper 65).

Incorrect assumptions by the parties, even when shared, do not absolve us of our responsibility to give effect to the law as we interpret it. *See Capron v. Van Noorden*, 2 Cranch (6 U.S.) 126 (1804) (“Here it was the duty of the Court to see that they had jurisdiction, for the consent of the parties could not give it”).

Petitioner’s characterization of the record in this proceeding is selective. Although Patent Owner assumed it bore the ultimate burden of persuasion, our order authorizing Patent Owner’s filing of a surreply on the issues of real party-in-interest and privity did not confirm that assumption, stating only that “[u]pon consideration of the specific facts in this proceeding, the panel concluded that a sur-reply on these issues would be helpful.” Paper 64, 3. Indeed, in our order granting oral hearing (Paper 75), we rejected Patent Owner’s specific request that it “be permitted to discuss these issues [real party-in-interest and privity] *first* while being permitted to reserve such rebuttal time on these issues as it deems appropriate.” Paper 74, 2–3 (emphasis added). Such rejection is consistent with allocation of the burden to Petitioner, not to Patent Owner.

Consequently, we disagree with Petitioner that the analysis presented in our Termination Order is inconsistent with earlier conduct in this proceeding.⁵

⁵ Petitioner suggests that allocation of the burden to prove the correct identification of real party-in-interest to petitioners would

II. FINDING THAT AGLR IS A REAL PARTY IN INTEREST

Petitioner contends that, even under the standard articulated in our Termination Order, “Patent Owner has not presented sufficient ‘rebuttal evidence’ to justify shifting the burden of proof back to [Petitioner] on this issue.” Req. Reh’g 11. Petitioner attacks individual considerations as insufficient to rebut the presumption that it accurately identified only itself as a real party-in-interest: “mere ‘involvement’ of personnel who serve dual roles . . . does not establish that the *other* entities controlled the petition”; “a discussion regarding indemnity that included the petitioner and other entities does not establish that the *other* entities controlled the Petition”; “use of a shorthand phrase that includes the petitioner and other entities does not establish that the *other* entities controlled the Petition”; “a ‘lack of clarity’ on funding of the petition does not establish funding by a nonparty.” *Id.* at 12–15. Such considerations are addressed in our Termination Order, and Petitioner’s arguments do not identify matters Petitioner believes the Board misapprehended or overlooked. Nevertheless, Petitioner’s attack of individual considerations is not persuasive. Our Termination Order

require petitioners “to anticipate all potential nonparties and prove that they are not real parties in interest at the petition stage.” Req. Reh’g. 10–11. Petitioner’s suggestion overdramatizes the impact of the framework we articulate because it insufficiently accounts for the benefit of the presumption afforded petitioners and of the gatekeeping effect of requiring patent owners to satisfy their intermediate burdens of production.

emphasize[s] that our determination that AGLR possessed sufficient control over the proceeding to conclude—in combination with application of other *Taylor* factors—that it is a real party in interest does not hinge on any particular, isolated fact. Rather, our determination results from consideration of the entire circumstance of AGLR’s involvement in this proceeding, including the demonstrated participation of officers and employees of AGLR and [AGL Services Company] and the lack of clarity over who actually financed filing fees and attorney costs.

Term. 12.

Petitioner has persuaded us neither that we misapprehended or overlooked its arguments regarding its identification of real parties-in-interest nor that our findings require alteration.

III. ORDER TO SHOW CAUSE

Petitioner argues that “the Board should issue a show cause order or otherwise allow [Petitioner] the opportunity to submit additional proof.” Req. Reh’g 15. We decline to do so at this late stage. Petitioner was afforded numerous opportunities during the trial to present its evidence on the issue. Indeed, throughout the trial, Petitioner vigorously opposed Patent Owner’s efforts to obtain the information that it now appears to wish to provide. *See* Paper 87, 46:6–9 (“The problem that we have, and you will remember, we had to fight like tooth and nail to get these documents. At every turn there was an objection to producing documents related to the real party in interest issue or the privity issue”).

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IV. ORDER

In consideration of the foregoing, it is

ORDERED that Petitioner's Request for Rehearing is *denied*.

[List of Counsel Excluded for this Appendix]

Appendix I

Filed November 21, 2012

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

BENNETT REGULATOR)	
GUARDS, INC.)	
226 Overpond Court)	
Glen Rock, PA 17327)	
Plaintiff,)	
)	
vs.)	
)	
McJUNKIN RED MAN)	
CORPORATION	)	CASE NO.
2 Houston Center	)	5:12-cv-1040-RJA
909 Fannin, Suite 3100)	
Houston, Texas 77010-1011	)	JUDGE:
	)	JOHN R. ADAMS
and)	
)	
ATLANTA GAS LIGHT)	
COMPANY)	
10 Peachtree Place)	
Northeast)	
Atlanta, Georgia)	
30309-44155)	
Defendants.)	

FIRST AMENDED COMPLAINT

For its First Amended Complaint against defendants McJunkin Red Man Corporation (“MRMC”) and Atlanta Gas Light Company (“AGLC”) (collectively “Defendants”), plaintiff Bennett Regulator Guards, Inc. (“Bennett”) alleges as follows:

PARTIES

1. Bennett is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, with its principal place of business at 226 Overpond Court, Glen Rock, PA 17327.

2. MRMC, upon information and belief, is a corporation organized and existing under the laws of the state of Delaware, with its principal place of business and corporate headquarters at 2 Houston Center, 909 Fannin, Suite 3100, Houston, Texas 77010-1011.

3. MRMC conducts business in the Northern District of Ohio through offices located in Toledo, Ohio and Stow, Ohio. MRMC is licensed to do business in Ohio.

4. AGLC, upon information and belief, is a corporation organized and existing under the laws of the state of Georgia, with its principal place of business and corporate headquarters at 10 Peachtree Place Northeast, Atlanta, GA 30309.

JURISDICTION AND VENUE

5. This action arises under the laws of the United States, including the Patent Act of 1952, 35 U.S.C. § 1 *et seq.* Subject matter jurisdiction is founded under 28 U.S.C. §§ 1331, 1332 (a)(1), 1338(a) and 35

U.S.C. § 281. The matter in controversy exceeds the sum or value of \$75,000.

6. This court has personal jurisdiction over Defendants because Defendants have transacted business within this district and have caused tortious injury by an act within this district, including their infringement of U.S. Re. Patent No. 5,810,029 C1 (“the ‘029 patent”) as alleged hereafter, which has injured Bennett in this district. In addition, this court has personal jurisdiction over MRMC because MRMC is licensed to do business in Ohio and has offices in this district.

7. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b). Each Defendant is subject to personal jurisdiction within the Northern District of Ohio as residence is defined in 28 U.S.C. § 1391(c).

FACTS

8. Bennett is the owner of the entire right, title and interest in and to the ‘029 patent, entitled “Anti-Icing Device for Gas Pressure Regulators,” which issued on September 22, 1998 and which was reissued on June 24, 2003. A copy of the reissued ‘029 patent is attached hereto as Exhibit 1.

9. Bennett sells products manufactured in accordance with the ‘029 patent throughout the United States under a number of model designations, including MBVS1200 AP, RVS-307 AP, and RVS-307 AP EX. At all relevant times, Bennett has marked its products with the patent number in accordance with 35 U.S.C. § 287(a).

10. AGLC has been aware of the existence of the '029 patent since at least 2001, when Bennett formally put AGLC on notice that it was infringing one or more claims of the '029 patent by purchasing and using a product known as SPLASH GUARD gas regulator vent guard protector. Two photographs of the SPLASH GUARD product in question are attached hereto as Exhibit 2.

11. The SPLASH GUARD product was a skirt assembly for reducing ice formation at an outlet vent tube from the atmospheric pressure chamber of a diaphragm-type gas pressure regulator as claimed in the '029 patent. Bennett's counsel sent two letters to Susan A. McLaughlin, President and CEO of Atlanta Gas Light, concerning the SPLASH GUARD product. The letters in question are dated June 19, 2001 and July 3, 2001 and are attached hereto as Exhibits 3 and 4, respectively.

12. Subsequent to putting AGLC on notice of its infringement of the '029 patent, Bennett filed suit for patent infringement in the Northern District of Ohio against AGLC's supplier of the SPLASH GUARD product, Canadian Meter Company, Inc. ("Canadian Meter") and its American subsidiary, American Meter Company, Inc. ("American Meter"), Case No. 1:04-cv-0177 ("the Lawsuit"). In September 2007 the parties settled the Lawsuit prior to trial by way of a confidential settlement agreement.

13. Upon information and belief, sometime after the settlement of the Lawsuit, AGLC sought a supplier of vent guard protectors other than Canadian Meter due to the high prices charged by Canadian Meter. Upon information and belief, AGLC induced

MRMC, or conspired with MRMC, to manufacture an inexpensive counterfeit copy of the SPLASH GUARD product (“the Accused Product”). Two photographs of the Accused Product are attached hereto as Exhibit 5.

14. Upon information and belief, AGLC has acquired substantial quantities of the Accused Product from MRMC that infringe one or more claims of the ‘029 patent and has sold or given such Accused Products to its customers.

15. Upon information and belief, MRMC manufactures the Accused Product in China and imports the Accused Product for subsequent sale to the public in the United States. MRMC sells the Accused Product not only to AGLC but also to other customers located in the United States.

16. One of MRMC’s customers is the Michigan Consolidated Gas Company subsidiary of DTE Energy Corporation (“DTE Michcon”) of Detroit, Michigan. Sales of the Accused Product to DTE Michcon have been made through MRMC’s Toledo, Ohio office located at 3110 Frenchmens Road, Toledo, Ohio 43607.

17. Since at least 2010, MRMC has sold Bennett’s patented devices to certain of MRMC’s customers, including DTE Michcon. Upon information and belief, DTE Michcon in 2010 requested that MRMC supply a quantity of Bennet’s patented devices. Rather than supply Bennett’s patented devices to DTE Michcon as requested, MRMC substituted the Accused Product, thereby depriving Bennett of substantial sales, profit and goodwill.

18. The Accused Products are not staple articles or commodities of commerce suitable for substantial noninfringing use. Defendants have known that the Accused Product is a material part of claims 5-8 of the '029 patent and that it is especially made or adapted to be an infringement of the '029 patent. Defendants' infringement of the '029 patent has been negligent, reckless, and/or willful and has been conducted with an intent to harm Bennett.

COUNT 1
PATENT INFRINGEMENT

19. Bennett incorporates herein by reference paragraphs 1-18 above as if fully rewritten herein.

20. By making, using, offering to sell, or selling the Accused Product within the United States, or importing into the United States the Accused Products during the term of the patent therefor, Defendants have infringed the '029 patent in violation of 35 U.S.C. § 271(a).

21. Defendants' conduct, as alleged above, has been negligent, reckless and/or willful and in conscious disregard of Bennett's rights.

COUNT 2
INDUCEMENT OF PATENT INFRINGEMENT

22. Bennett incorporates herein by reference paragraphs 1-18 above as if fully rewritten herein.

23. By actively inducing MGC to manufacture, import, offer to sell, and/or sell the Accused Product, AGLC has infringed the '029 patent in violation of 35 U.S.C. § 271(b).

24. By actively inducing their customers to use the Accused Product, Defendants have infringed the '029 patent in violation of 35 U.S.C. § 271(b).

25. Defendants' conduct, as alleged above, has been negligent, reckless and/or willful and in conscious disregard of Bennett's rights.

COUNT 3
CONTRIBUTORY PATENT INFRINGEMENT

26. Bennett incorporates herein by reference paragraphs 1-18 above as if fully rewritten herein.

27. With respect to claims 5-8 of the '029 patent, the Accused Products constitute a material part of the patented invention and are not staple articles or commodities of commerce suitable for substantial noninfringing use.

28. By offering to sell or selling within the United States or importing into the United States a component of a patented combination constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, Defendants have engaged in contributory infringement in violation of 35 U.S.C. § 271(c).

29. Defendants' conduct, as alleged above, has been negligent, reckless and/or willful and in conscious disregard of Bennett's rights.

RELIEF REQUESTED

WHEREFORE, Bennett prays for judgment against Defendants as follows:

- (a) that Defendants be judged to have infringed U.S. Patent No. 5,810,029;
- (b) that Defendants be required to account to Bennett for any and all profits derived by them by reason of their acts of patent infringement;
- (c) that Bennett be awarded compensatory damages in an amount adequate to compensate it for its damage and injury due to Defendants' acts of patent infringement, but in no event less than a reasonable royalty;
- (d) that in view of Defendants' deliberate and intentional acts, the case be declared exceptional pursuant to 35 U.S.C. § 285 and Bennett awarded reasonable attorney fees, and further that Bennett be awarded treble damages pursuant to 35 U.S.C. § 284;
- (e) that Defendants be permanently enjoined from infringing U.S. Patent No. 5,810,029;
- (f) that Bennett have and recover the costs of this civil action, including reasonable attorney fees and interest to the maximum extent permissible, including prejudgement interest; and
- (g) that Bennett be awarded such other and further relief as the Court may deem just and equitable.

[Signature Block Omitted for this Appendix]

JURY DEMAND

A trial by jury of all issues so triable is hereby demanded.

App-194

[Certificate of Service and Exhibits
Omitted for this Appendix]

App-195

Appendix J
Filed April 26, 2012

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

BENNETT REGULATOR)	
GUARDS, INC.)	
)	
226 Overpond Court)	
Glen Rock, PA 17327)	
)	
Plaintiff,)	
)	
vs.)	
)	
MRC GLOBAL INC.)	
)	
2 Houston Center	)	CASE NO.
909 Fannin, Suite 3100)	
Houston, Texas 77010-1011	)	JUDGE:
)	
and)	
)	
ATLANTA GAS LIGHT)	
COMPANY)	
)	
10 Peachtree Place)	
Northeast)	
Atlanta, Georgia)	
30309-44155)	
)	
Defendants.)	

COMPLAINT

For its Complaint against defendants MRC Global Inc. (“MRC”) and Atlanta Gas Light Company (“AGL”) (collectively “Defendants”), plaintiff Bennett Regulator Guards, Inc. (“Bennett”) alleges as follows:

PARTIES

1. Bennett is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, with its principal place of business at 226 Overpond Court, Glen Rock, PA 17327.

2. MRC, upon information and belief, is a corporation organized and existing under the laws of the state of Delaware, with its principal place of business and corporate headquarters at 2 Houston Center, 909 Fannin, Suite 3100, Houston, Texas 77010-1011.

3. Upon information and belief, on or about January 10, 2012, McJunkin Redman Corporation (“McJunkin Redman”) changed its name to MRC Global Inc. As used herein “MRC” shall refer to both McJunkin Redman and MRC Global Inc.

4. MRC conducts business in the Northern District of Ohio through offices located in Toledo, Ohio and Stow, Ohio.

5. AGL, upon information and belief, is a corporation organized and existing under the laws of the state of Georgia, with its principal place of business and corporate headquarters at 10 Peachtree Place Northeast, Atlanta, GA 30309.

JURISDICTION AND VENUE

6. This action arises under the laws of the United States, including the Patent Act of 1952, 35

U.S.C. § 1 et seq. and the Lanham Act, 15 U.S.C. § 1051, *et seq.* Subject matter jurisdiction is founded under 28 U.S.C. §§ 1331, 1332 (a)(1), 1338(a), 1338(b), 1367, 35 U.S.C. § 281, and 15 U.S.C. § 1125(a). The matter in controversy exceeds the sum or value of \$75,000.

7. This court has personal jurisdiction over Defendants because Defendants have transacted business within this district and have caused tortious injury by an act within this district, including their infringement of U.S. Re. Patent No. 5,810,029 C1 (“the ‘029 patent”) as alleged hereafter, which has injured Bennett in this district.

8. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b), 1391(c) and 1400(b). Each Defendant is subject to personal jurisdiction within the Northern District of Ohio as residence is defined in 28 U.S.C. § 1391(c).

FACTS

9. Bennett is the owner of the entire right, title and interest in and to the ‘029 patent, entitled “Anti-Icing Device for Gas Pressure Regulators,” which issued on September 22, 1998 and which was reissued on June 24, 2003. A copy of the reissued ‘029 patent is attached hereto as Exhibit 1.

10. Bennett sells products manufactured in accordance with the ‘029 patent throughout the United States under a number of model designations, including MBVS1200 AP, RVS-307 AP, and RVS-307 AP EX. At all relevant times, Bennett has marked its products with the patent number in accordance with 35 U.S.C. § 287(a).

11. AGL has been aware of the existence of the '029 patent since at least 2001, when Bennett formally put AGL on notice that it was infringing one or more claims of the '029 patent by purchasing and using a product known as SPLASH GUARD gas regulator vent guard protector. Two photographs of the SPLASH GUARD product in question are attached hereto as Exhibit 2.

12. The SPLASH GUARD product was a skirt assembly for reducing ice formation at an outlet vent tube from the atmospheric pressure chamber of a diaphragm-type gas pressure regulator as claimed in the '029 patent. Bennett's counsel sent two letters to Susan A. McLaughlin, President and CEO of Atlanta Gas Light, concerning the SPLASH GUARD product. The letters in question are dated June 19, 2001 and July 3, 2001 and are attached hereto as Exhibits 3 and 4, respectively.

13. Subsequent to putting AGL on notice of its infringement of the '029 patent, Bennett filed suit for patent infringement in the Northern District of Ohio against AGL's supplier of the SPLASH GUARD product, Canadian Meter Company, Inc. ("Canadian Meter") and its American subsidiary, American Meter Company, Inc. ("American Meter"), Case No. 1:04-cv-0177 ("the Lawsuit"). In September 2007 the parties settled the Lawsuit prior to trial by way of a confidential settlement agreement.

14. Upon information and belief, sometime after the settlement of the Lawsuit, AGL sought a supplier of vent guard protectors other than Canadian Meter due to the high prices charged by Canadian Meter. Upon information and belief, AGL induced

MRC, or conspired with MRC, to manufacture an inexpensive counterfeit copy of the SPLASH GUARD product (“the Accused Product”). Two photographs of the Accused Product are attached hereto as Exhibit 5.

15. Upon information and belief, AGL has acquired substantial quantities of the Accused Product from MRC that infringe one or more claims of the ‘029 patent and has sold or given such Accused Products to its customers.

16. Upon information and belief, MRC manufactures the Accused Product in China and imports the Accused Product for subsequent sale to the public in the United States. MRC sells the Accused Product not only to AGL but also to other customers located in the United States.

17. One of MRC’s customers is the Michigan Consolidated Gas Company subsidiary of DTE Energy Corporation (“DTE Michcon”) of Detroit, Michigan. Sales of the Accused Product to DTE Michcon have been made through MRC’s Toledo, Ohio office located at 3110 Frenchmens Road, Toledo, Ohio 43607.

18. Since at least 2010, MRC has sold Bennett’s patented devices to certain of MRC’s customers, including DTE Michcon. Upon information and belief, DTE Michcon in 2010 requested that MRC supply a quantity of Bennet’s patented devices. Rather than supply Bennett’s patented devices to DTE Michcon as requested, MRC substituted the Accused Product, thereby depriving Bennett of substantial sales, profit and goodwill.

19. The Accused Products are not staple articles or commodities of commerce suitable for

substantial noninfringing use. Defendants have known that the Accused Product is a material part of claims 5-8 of the '029 patent and that it is especially made or adapted to be an infringement of the '029 patent. Defendants' infringement of the '029 patent has been negligent, reckless, and/or willful and has been conducted with an intent to harm Bennett.

COUNT 1
PATENT INFRINGEMENT

20. Bennett incorporates herein by reference paragraphs 1-19 above as if fully rewritten herein.

21. By making, using, offering to sell, or selling the Accused Product within the United States, or importing into the United States the Accused Products during the term of the patent therefor, Defendants have infringed the '029 patent in violation of 35 U.S.C. § 271(a).

22. Defendants' conduct, as alleged above, has been negligent, reckless and/or willful and in conscious disregard of Bennett's rights.

COUNT 2
INDUCEMENT OF PATENT INFRINGEMENT

23. Bennett incorporates herein by reference paragraphs 1-19 above as if fully rewritten herein.

24. By actively inducing MGC to manufacture, import, offer to sell, and/or sell the Accused Product, AGL has infringed the '029 patent in violation of 35 U.S.C. § 271(b).

25. By actively inducing their customers to use the Accused Product, Defendants have infringed the '029 patent in violation of 35 U.S.C. § 271(b).

26. Defendants' conduct, as alleged above, has been negligent, reckless and/or willful and in conscious disregard of Bennett's rights.

COUNT 3
CONTRIBUTORY PATENT INFRINGEMENT

27. Bennett incorporates herein by reference paragraphs 1-19 above as if fully rewritten herein.

28. With respect to claims 5-8 of the '029 patent, the Accused Products constitute a material part of the patented invention and are not staple articles or commodities of commerce suitable for substantial noninfringing use

29. By offering to sell or selling within the United States or importing into the United States a component of a patented combination constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, Defendants have engaged in contributory infringement in violation of 35 U.S.C. § 271(c).

30. Defendants' conduct, as alleged above, has been negligent, reckless and/or willful and in conscious disregard of Bennett's rights.

COUNT 4
UNFAIR COMPETITION UNDER
FEDERAL LAW

31. Bennett incorporates herein by reference paragraphs 1-19 above as if fully rewritten herein.

32. By selling the Accused Product to DTE Michcon as a substitution for the requested Bennett device, MGC has (a) used a false designation of origin, a false or misleading description of fact, or a false or misleading representation of fact, or (b) misrepresented the nature, characteristics, qualities, or geographic origin of its or Bennett's goods in violation of 15 U.S.C. § 1125(a)(1).

33. MRC's conduct, as alleged above, has been willful, intentional, and in conscious disregard of Bennett's rights.

COUNT 5
DECEPTIVE TRADE PRACTICES UNDER
OHIO LAW

34. Bennett incorporates herein by reference paragraphs 1-19 above as if fully rewritten herein.

35. By selling the Accused Product to DTE Michcon as a substitution for the requested Bennett device, MRC's activity constitutes (a) passing off goods as those of another, (b) causing likelihood of confusion or misunderstanding as to the source, sponsorship, approval, or certification of goods, and (c) causing likelihood of confusion or misunderstanding as to affiliation, connection, or association with, or certification by, another in violation of Section 4165.02(A)(1), (2), and (3), Ohio Revised Code.

36. MRC's conduct, as alleged above, has been willful, intentional, and in conscious disregard of Bennett's rights.

RELIEF REQUESTED

WHEREFOR, Bennett prays for judgment against Defendants as follows:

- (a) that Defendants be judged to have infringed U.S. Patent No. 5,810,029, and that MRC be judged to have engaged in unfair competition in violation of federal law and to have engaged in deceptive trade practices in violation of Ohio law;
- (b) that Defendants be required to account to Bennett for any and all profits derived by them by reason of their acts of patent infringement, unfair competition, and deceptive trade practices;
- (c) that Bennett be awarded compensatory damages in an amount adequate to compensate it for its damage and injury due to Defendants' acts of patent infringement, but in no event less than a reasonable royalty;
- (d) that in view of Defendants' deliberate and intentional acts, the case be declared exceptional pursuant to 35 U.S.C. § 285 and Bennett awarded reasonable attorney fees, and further that Bennett be awarded treble damages pursuant to 35 U.S.C. § 284;
- (e) that in view of MRC's deliberate and intentional acts, the case be declared exceptional and that Bennett be awarded MRC's profits, Bennett's damages, the costs of the action, and reasonable attorney fees pursuant to 15 U.S.C. § 1117(a);

- (f) that in view of Defendants' deliberate and intentional acts, Bennett be awarded punitive damages in an amount sufficient to deter Defendants from engaging in similar conduct in the future;
- (g) that Defendants be permanently enjoined from infringing U.S. Patent No. 5,810,029;
- (h) that Bennett have and recover the costs of this civil action, including reasonable attorney fees and interest to the maximum extent permissible, including prejudgment interest; and
- (i) that Bennett be awarded such other and further relief as the Court may deem just and equitable.

[Signature Block Omitted for this Appendix]

JURY DEMAND

A trial by jury of all issues so triable is hereby demanded.

[Certificate of Service and Exhibits
Omitted for this Appendix]



US005810029A

United States Patent [19]
Speros et al.

[11] **Patent Number:** **5,810,029**
 [45] **Date of Patent:** **Sep. 22, 1998**

[54] **ANTI-ICING DEVICE FOR A GAS PRESSURE REGULATORS**

3,768,503 10/1973 Billington 137/377
 4,091,837 5/1978 Edmunds et al. 137/341
 4,460,013 7/1984 Milo 137/493.4
 4,462,223 7/1984 Perkins 62/514

[75] Inventors: **Philip C. Speros**, Easton; **Brian Fullerton**, Kingsville, both of Md.

Primary Examiner—Stephen M. Hepperle
Attorney, Agent, or Firm—Rankin, Hill, Lewis & Clark

[73] Assignee: **Bennett Regulator Guards, Inc.**, Baltimore, Md.

[57] **ABSTRACT**

[21] Appl. No.: **491,273**

An ice preventing device for use with an outside gas pressure regulator that has a pressure vent and a downwardly opening vent tube. The device includes a skirt connected to and surrounding the vent tube. The upper end of the skirt has an opening that communicates with the passage in the vent tube. The skirt also has an enlarged, flared-out lower end with an opening substantially greater than the area of the opening at the upper end. Located within the skirt is a baffle positioned in a generally horizontal plane. The baffle is positioned below the vent tube opening of the pressure regulator to prevent rain or freezing rain from splashing back upwardly into the passage. The sides of the baffle are spaced from the interior walls of the skirt to accommodate gas flow around the baffle,

[22] Filed: **Jun. 16, 1995**

[51] **Int. Cl.**⁶ **F16K 27/12**

[52] **U.S. Cl.** **137/377; 137/505**

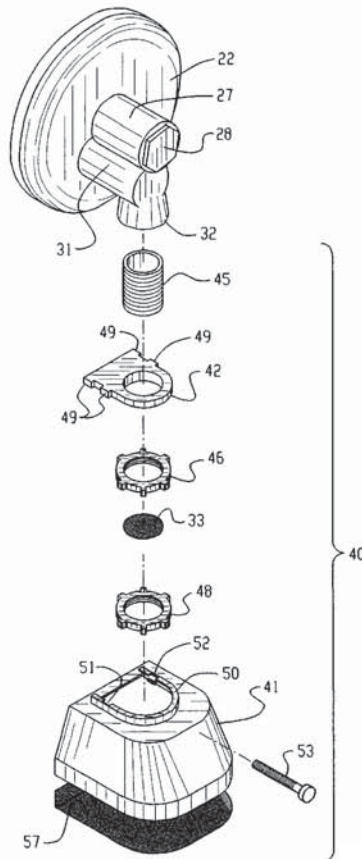
[58] **Field of Search** **137/377, 382, 137/505**

[56] **References Cited**

U.S. PATENT DOCUMENTS

2,421,700 6/1947 Johnson 137/377
 2,937,658 5/1960 Stewart 137/505
 2,968,314 1/1961 Whitworth 137/505 X
 3,012,573 11/1961 Peterson 137/505
 3,747,629 7/1973 Bauman 137/505 X

8 Claims, 4 Drawing Sheets



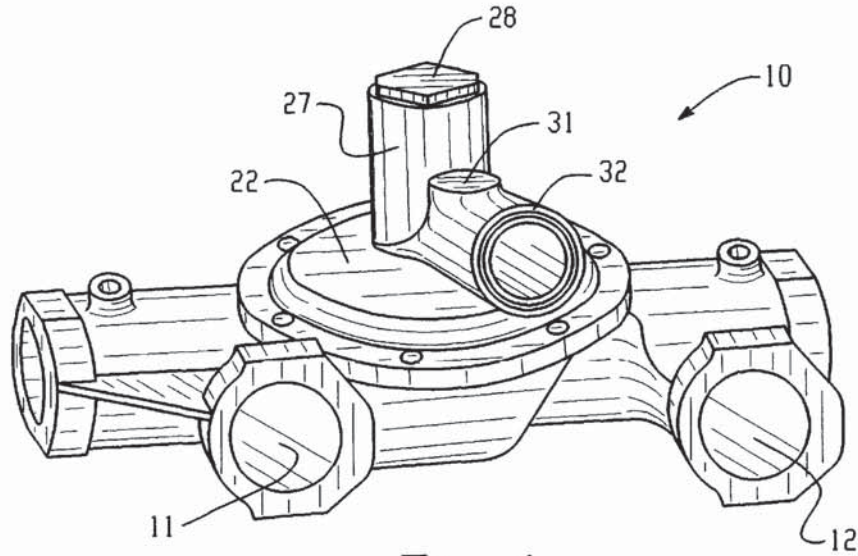


Fig. 1

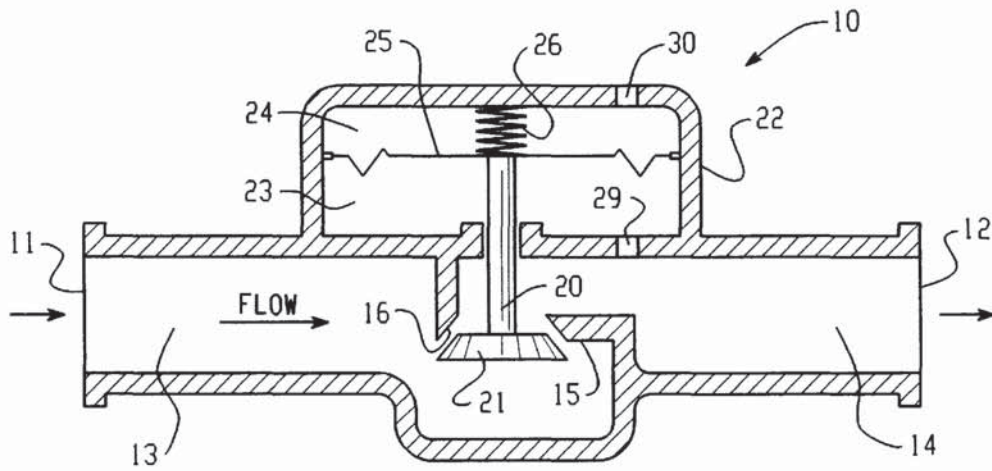


Fig. 2

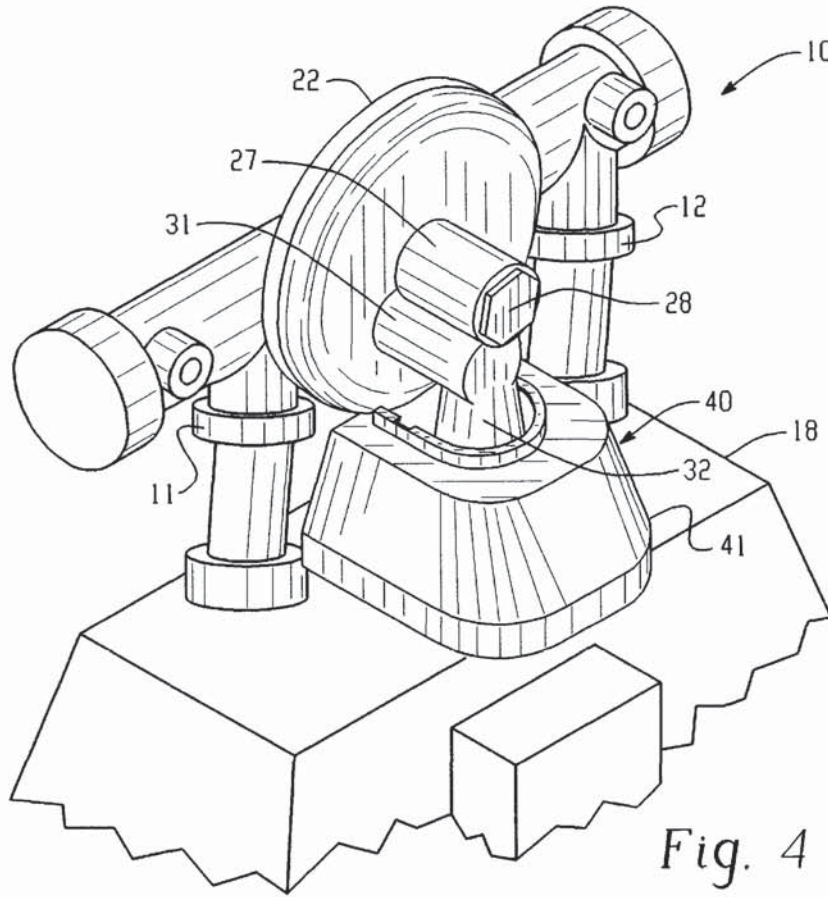
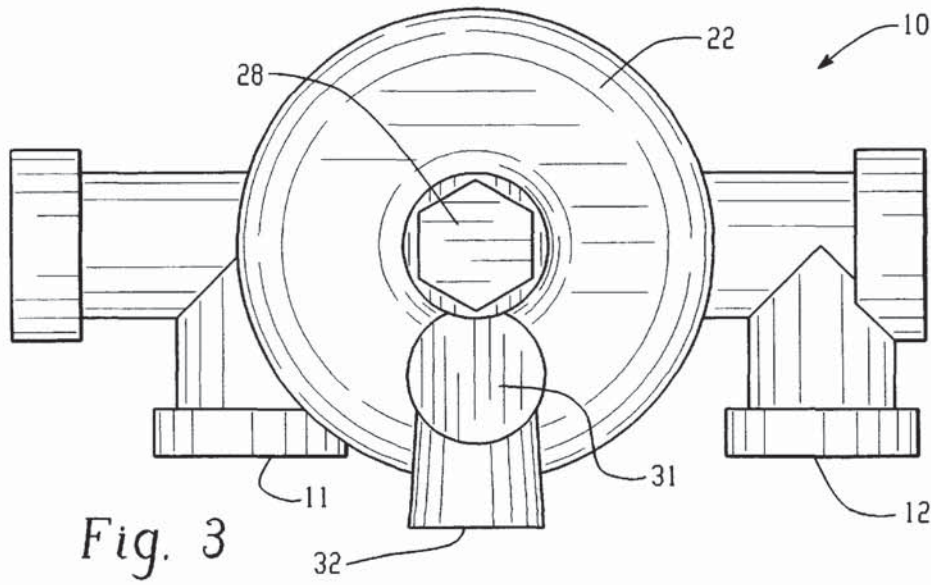
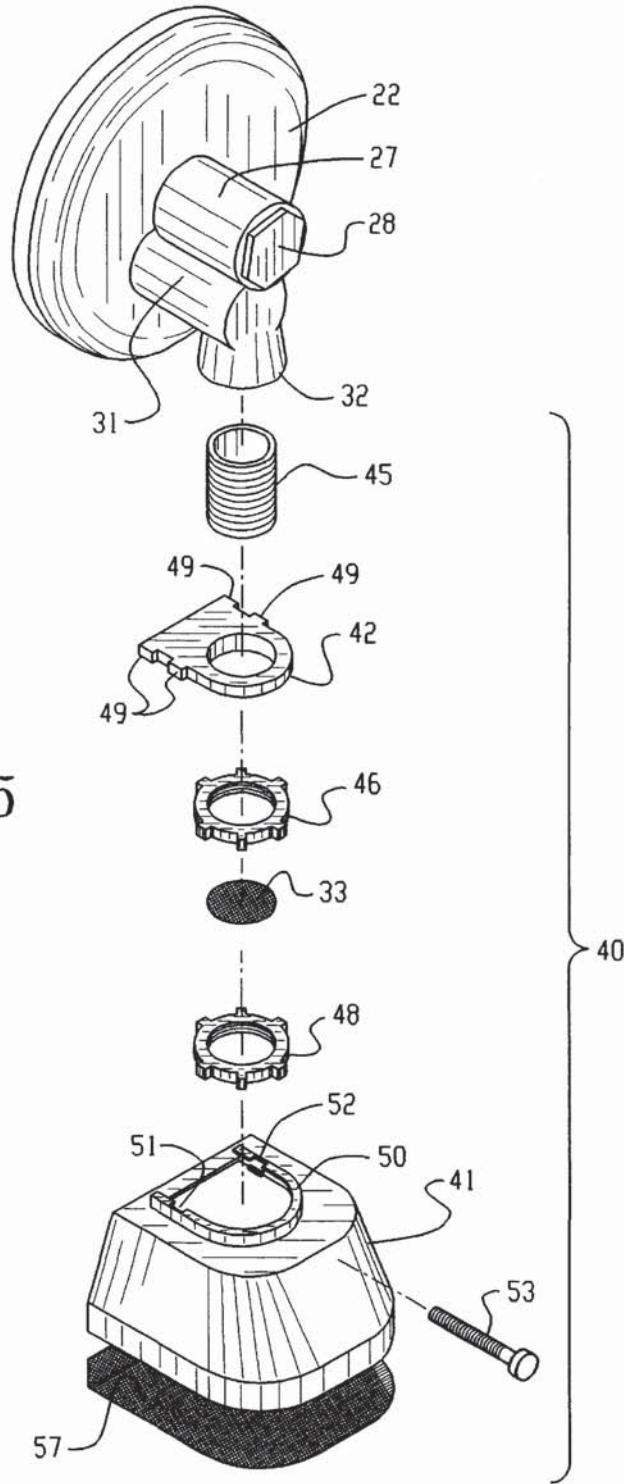


Fig. 5



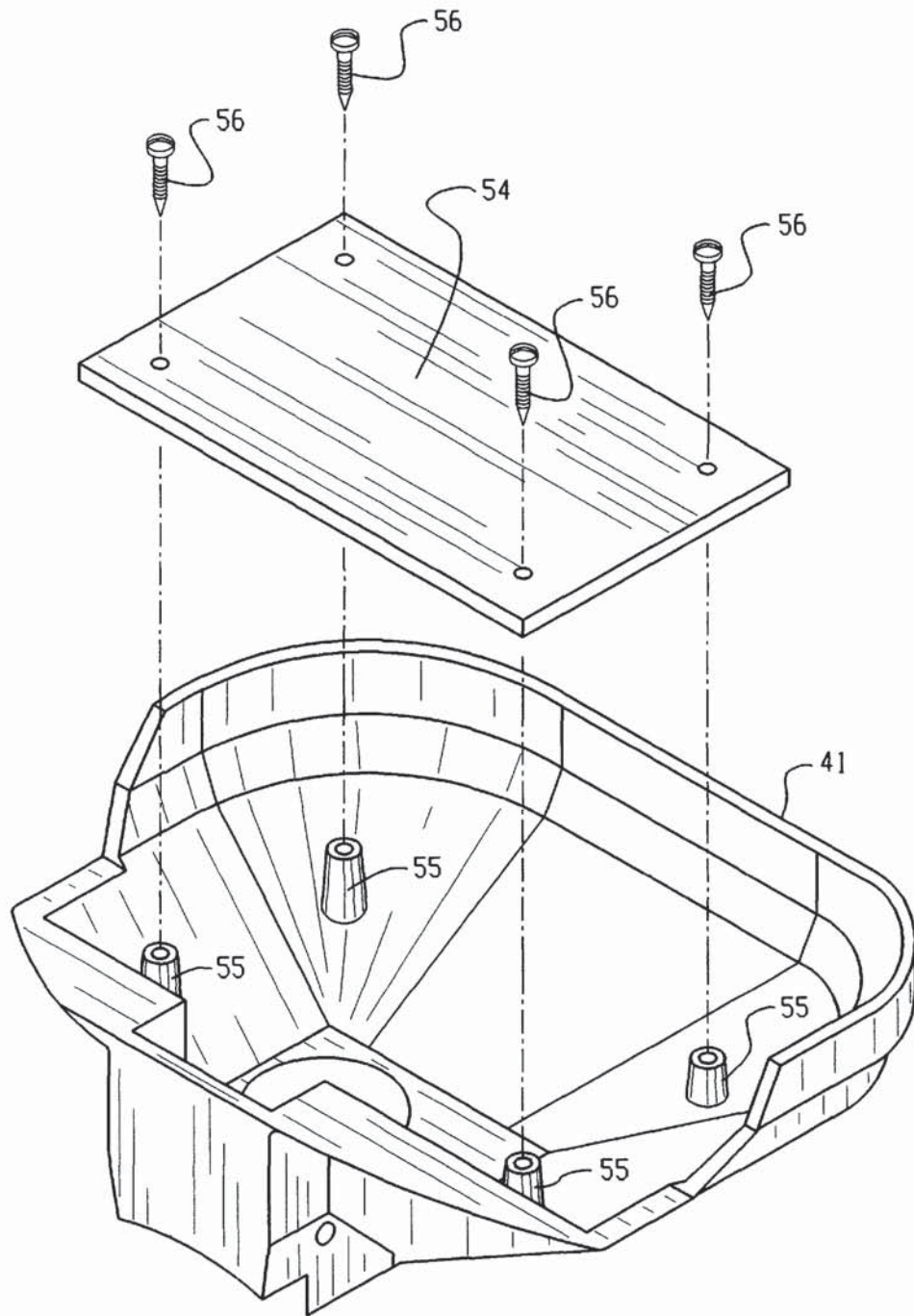


Fig. 6

5,810,029

1

ANTI-ICING DEVICE FOR A GAS PRESSURE REGULATORS

BACKGROUND OF THE INVENTION

This invention relates to natural gas distribution and especially to problems associated with the pressure regulator valve used to reduce gas pressure from the relatively high level used in a distribution system to the relatively low pressure level used in a customer's building or residence. More particularly, the invention relates to a means for preventing failure of the pressure regulator due to ice formation.

Gas pressure regulators used in natural gas distribution systems at customer connection points must typically reduce pressure from around 80 psi (used by the gas utility in its distribution system) to around 0.4 psi (used in typical consumer gas lines). The regulator valve most commonly used, for example, in residential connections, is a mechanical valve located outside the building or residence to be served. It functions as a pressure transducer, controller, and actuator.

The device, however, is relatively simple in design. The pressure transmitted to the downstream side (i.e. customer lines) is adjusted by opening or closing a poppet valve which throttles the flow of gas from one side to the other. As the valve is adjusted, the controlled pressure falls or rises. The poppet valve thus serves as the actuator in a feedback control system. The head of the poppet valve is mounted on a plunger which moves between open and closed positions.

The reference input is the force applied by a compression spring, usually a helical spring. The spring is operatively connected to the opposite end of the plunger and biases the plunger to the valve open position. The spring force is countered by the fluid pressure acting on the input side of the valve and tending to close it.

A diaphragm housing is located on the downstream or low pressure side of the valve and has a flexible diaphragm therein that divides the interior space into a low pressure chamber and an atmospheric pressure chamber. The low pressure chamber communicates through a small opening with the low pressure gas passage on the output side of the valve and the atmospheric pressure chamber is vented to atmosphere through a small opening.

The plunger is connected to the diaphragm so that when the desired gas pressure on the output side is reached, sufficient pressure is applied to the diaphragm, and thus to the plunger, to move the valve head toward its closed position. This rather simple automatic pressure control system performs in a very reliable manner.

One problem encountered, however, with this type of pressure regulator, is that of icing. The regulator is generally mounted outside the building or structure where it is exposed to prevailing weather conditions. For this reason, the vent in the diaphragm housing is usually protected by a section of tubing (vent tube) that faces downwardly and has a metal screen over the outlet end. The vent tube's orientation prevents snow and rain from entering and the screen protects against insects, etc. that might otherwise enter the passage.

This arrangement, however, does not prevent the problem associated with freezing rain, sleet, etc. The icing problem may occur in two ways: First of all, an icicle may form on the lower end of the vent tube and actually cause complete closure. Secondly, rain or freezing rain may splash up to the end of the pipe and freeze on the screen causing eventual closure.

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When either or both of these circumstances occur, the atmospheric pressure chamber of the diaphragm housing is not vented and pressure may build up without regulation. In some instances, gas may leak around the diaphragm to the atmospheric pressure chamber and have no means of escape. In this case, the valve will not close and as a result, pressure on the outlet or downstream side will build up to dangerous levels. This can cause catastrophic results such as explosion and/or fire.

The device of the present invention, however, reduces the difficulties outlined above and affords other features and advantages heretofore not obtainable.

SUMMARY OF THE INVENTION

In accordance with the present invention, there is provided an ice preventing device for use in combination with an outside gas pressure regulator connected between a high pressure gas source and a low pressure gas line such as at a customer connection point. The regulator with which the ice preventing device is used includes a valve for controlling gas flow between the high pressure source and the low pressure line, and a flexible diaphragm. A resilient device (e.g. a spring) biases the valve to an open position. The diaphragm is operatively connected to the valve and defines an atmospheric pressure chamber on one side and a low pressure gas chamber on the other side. The low pressure gas chamber communicates with the low pressure gas line and the atmospheric pressure chamber is vented to atmosphere. The vent passage has its exit side located in a vent tube with an outer end that faces vertically downward so that rain and snow cannot enter the passage.

The ice preventing device of the invention includes a skirt receiver means adapted to be operatively connected to the vent tube, and a skirt having an upper end with an opening adapted to communicate with the passage in the vent tube and an enlarged or flared out lower end with an opening having an area of substantially greater than the area of the opening at the upper end. The skirt is operatively connected to the receiver means. Located within the skirt, is a baffle positioned in a generally horizontal plane and supported therein. The baffle is positioned below the vent tube opening to prevent rain or freezing rain from splashing back upwardly into the passage. The sides of the baffle are spaced from the interior walls to provide for gas flow around the baffle adjacent the interior walls of the skirt. The device, thus described, functions to prevent icicles from forming in such a manner as to block the outlet of the skirt and also prevents ice formation from splash-back of rain or freezing rain which could otherwise seal the vent passage opening.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a typical gas pressure regulator valve assembly of the type with which the device of the present invention may be used;

FIG. 2 is a diagrammatic view illustrating the operation of the gas regulator valve of FIG. 1;

FIG. 3 is a front elevation of a gas pressure regulator valve of FIGS. 1 and 2 shown in its proper vertical orientation;

FIG. 4 is a perspective view showing the gas regulator valve of FIGS. 1, 2, and 3 with an ice preventing skirt assembly connected thereto in accordance with the invention;

FIG. 5 is an exploded perspective view illustrating the connection of the protective skirt to the regulator valve; and

FIG. 6 is an exploded perspective view showing the bottom of the protective skirt and the manner in which the baffle and screen are mounted therein.

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Referring more particularly to the drawings and initially to FIGS. 1, 2, and 3, there is shown a pressure regulator valve typical of the type used by natural gas utilities in a gas distribution system. The purpose of the regulator valve is to reduce the pressure from the distribution system which is around 80 psi to a suitable pressure for use in the gas lines used in the customers facility which may be a commercial or industrial building or a private residence.

Normally, the pressure regulator valve is located outside and in association with the gas meter. The regulator valve has an inlet fitting 11 for connection to the high pressure gas distribution line and a low pressure fitting 12 for connection to the customer service line. The fittings 11 and 12 communicate with a high pressure passage and a low pressure passage 13 and 14 respectively. The passages 13 and 14 are separated by a partition 15 that defines a circular valve port 16. Extending through the valve port 16 is a plunger 20 with a valve head 21 on one end adapted to seat against the portions of the partition 15 that define the valve port 16.

A diaphragm housing 22 is formed on the valve body and defines therein a low pressure gas chamber 23 and an atmospheric gas chamber 24 separated by a flexible diaphragm 25. A helical spring 26 located in a cylindrical spring housing 27 extends into the atmospheric pressure chamber and engages the opposite end of the plunger 20 which in turn is connected to the diaphragm 25. The spring housing has a plug 28 threaded therein to permit replacement of the spring as necessary. The low pressure gas chamber 23 communicates with the low pressure passage 14 through a small port 29 and the atmospheric pressure chamber is vented to atmosphere through a small vent opening 30. The vent opening extends into a vent tube 31 with an outer end portion 32 that extends downwardly to prevent snow and rain from collecting therein. Normally, the vent tube has a screen 33 mounted over its opening to prevent intrusion by insects, etc.

In accordance with the invention, a skirt assembly 40 is connected to the vent tube 31 to reduce the possibility of closure of the vent opening by ice formation. Ice formation without the skirt assembly can occur either through the formation of a large icicle on the lower end 32 of the vent tube 31 or by splash-back of rain or freezing rain upwardly to the lower end of the vent tube which, in certain temperature conditions, can result in ice formation over the screen 33.

The skirt 4 assembly deals with these problems in two ways. First of all, it prevents the formation of an icicle over the end 32 of the vent tube by enclosing the space around the vent tube and providing a substantially expanded passage. Secondly, because the skirt assembly is flared out substantially from the center line of the exit passage, rain or freezing rain is deflected away from an area where it could splash upwardly back into the vent tube.

The skirt assembly 40 includes a main skirt body 41 and a receiver 42. A nipple 45 is threaded into the end 32 of the vent tube 41 and the receiver 42 is secured in position against the end of the vent tube by a nut 46. The screen 33 is secured on the outer end of the nipple 45 by a threaded retainer cap 48. The receiver 42 is provided with outwardly extending tabs 49 which cooperate with a retainer fitting 50 located on top of the skirt body 41. The retainer fitting has a pair of oppositely located slots 51 and 52 which receive the tabs 49 so that the skirt body 41 may be pushed laterally over the receiver 42 into the desired position. The skirt body 41 is then secured to the receiver fitting with a screw 53.

FIG. 6 illustrates the interior of the skirt body 41 wherein a baffle plate 54 is positioned to further assist in the

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prevention of ice formation. The baffle plate is secured to four downwardly extending posts 55 by means of screws 56 so as to position the baffle plate in a manner that blocks any splash-back of rain or freezing rain upwardly toward the vent tube opening. The edges of the baffle plate, however, are sufficiently spaced from the interior walls of the skirt that substantial space is provided for the venting of gas and air through the skirt. Normally, a screen 57 is mounted at the lower end of the skirt to prevent intrusion by insects, etc.

The skirt body 41, retainer 42, and baffle 54 should be formed of a moldable material that satisfies the requirements for this particular application. The material should be chemically resistant to natural gas, methanol, and ethanol and should be ultraviolet resistant to prevent degradation by sunlight. Also, the material should be flame resistant to prevent fires being initiated by ignition of the skirt.

It is also important that the material have anti-static characteristics to prevent sparks during installation. It is particularly important that the material be conductive and have, for example, a resistivity of no greater than 1000 ohms. One material that is particularly suitable is identified by the trade designation ELECTRAFIL, an acrylonitrile-butadiene-styrene using 3% fine stainless steel fibers as a filler. With this material, static build-up is prevented by conducting any accumulated charge to the metal vent pipe.

Also, the mounting screw 53 is preferably formed of stainless steel which cuts the paint and aluminum body of the regulator, thus creating a contiguous body of stainless steel from the skirt to the regulator housing.

While the invention has been shown and described with respect to a specific embodiment thereof, this is intended for the purpose of illustration rather than limitation and other variations and modifications of the specific device herein shown and described will be apparent to those skilled in the art all within the intended spirit and scope of the invention. Accordingly, the patent is not to be limited in scope and effect to the specific embodiment herein shown and described nor in any other way that is inconsistent with the extent to which the progress in the art has been advanced by the invention.

What is claimed is:

1. A skirt assembly for reducing ice formation at an outlet vent tube from the atmospheric pressure chamber of a diaphragm-type gas pressure regulator, comprising:

a skirt receiver adapted to be operatively connected to said vent tube;

a skirt member defining an interior space and having an upper end opening connecting said vent tube to said interior space and an outwardly flared lower end with an area substantially greater than the area of said upper end opening, said skirt member being operatively connected to said skirt receiver means; and

baffle means located in said interior space to underlie said upper end opening and being spaced from the interior walls of said skirt to permit gas flow therearound; whereby ice formation tending to block said vent tube is inhibited.

2. A skirt assembly as defined in claim 1 wherein said skirt member is formed of a molded plastic material.

3. A skirt assembly as defined in claim 2 wherein said molded material is an electrically conductive plastic.

4. A skirt assembly as defined in claim 1, further including a screen element covering said lower end opening.

5. In combination, an outside gas pressure regulator connected between a high pressure gas source and a low pressure gas line, and a skirt assembly for reducing ice formation; said regulator comprising;

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valve means for controlling gas flow between said high pressure source and said low pressure line, a diaphragm housing, a diaphragm located in said housing operatively associated with said valve means and defining with said housing an atmospheric pressure chamber on one side thereof and a low pressure gas chamber on the other side thereof, said low pressure chamber communicating with said low pressure gas line and said atmospheric chamber having an outlet vent means defining a vent passage; said skirt assembly comprising; skirt receiver means adapted to be operatively connected to said vent means; a skirt member defining an interior space, an upper end with an opening adapted to communicate with said vent passage, and an outwardly flared lower end with an opening having an area substantially greater than

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the area of said upper end opening, said skirt member being operatively connected to said skirt receiver means; and baffle means located in said interior space to underlie said vent passage and being spaced from the interior walls of said skirt to permit gas flow therearound; whereby ice formation tending to block said vent passage is inhibited.

6. A combination as defined in claim 5 wherein said skirt member is formed of a molded plastic material.

7. A combination as defined in claim 6 wherein said molded material is an electrically conductive plastic.

8. A combination as defined in claim 5 further including a screen element covering said lower end opening.

* * * * *

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO : 5,810,029
DATED : September 22, 1998
INVENTOR(S) : Speros et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the title page: Item [54] and Column 1, line 2,

In the title of the invention after "FOR" delete "A". The title of the invention should read --ANTI-ICING DEVICE FOR GAS PRESSURE REGULATORS--.

Item [75]

Please correct the inventorship to include Greg Bennett as a coinventor.

Signed and Sealed this
Fifth Day of January, 1999

Attest:



Attesting Officer

Acting Commissioner of Patents and Trademarks



US005810029C1

(12) **REEXAMINATION CERTIFICATE** (4800th)

United States Patent
Bennett et al.

(10) **Number:** US 5,810,029 C1
(45) **Certificate Issued:** Jun. 24, 2003

- (54) ANTI-ICING DEVICE FOR GAS PRESSURE REGULATORS
- (75) Inventors: **Greg Bennett**, Stewartstown, PA (US);
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- (73) Assignee: **Bennett Regulator Guards, Inc.**,
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Primary Examiner—John Rivell

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- (51) **Int. Cl.⁷** **F16K 27/12**
- (52) **U.S. Cl.** **137/377; 137/505**
- (58) **Field of Search** **137/377, 382, 137/505**

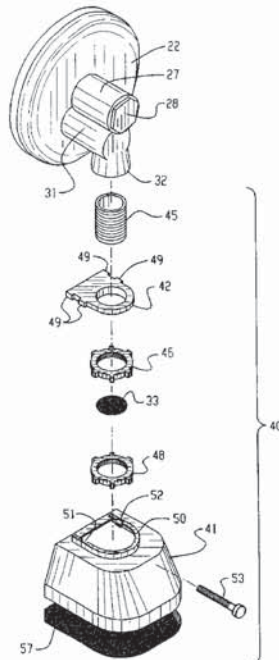
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(57) **ABSTRACT**

An ice preventing device for use with an outside gas pressure regulator that has a pressure vent and a downwardly opening vent tube. The device includes a skirt connected to and surrounding the vent tube. The upper end of the skirt has an opening that communicates with the passage in the vent tube. The skirt also has an enlarged, flared-out lower end with an opening substantially greater than the area of the opening at the upper end. Located within the skirt is a baffle positioned in a generally horizontal plane. The baffle is positioned below the vent tube opening of the pressure regulator to prevent rain or freezing rain from splashing back upwardly into the passage. The sides of the baffle are spaced from the interior walls of the skirt to accommodate gas flow around the baffle.



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REEXAMINATION CERTIFICATE
ISSUED UNDER 35 U.S.C. 307

NO AMENDMENTS HAVE BEEN MADE TO
THE PATENT

2
AS A RESULT OF REEXAMINATION, IT HAS BEEN
DETERMINED THAT:

The patentability of claims 1-8 is confirmed.

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