

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SMR AUTOMOTIVE SYSTEMS USA, INC.,
Petitioner,

v.

MAGNA MIRRORS OF AMERICA, INC.,
Patent Owner.

Case IPR2018-00517
Patent No. 8,128,244

**PATENT OWNER MAGNA MIRRORS OF AMERICA, INC.'S
PRELIMINARY RESPONSE**

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INTRODUCTION

In accordance with 37 C.F.R. Section 42.107, patent owner Magna Mirrors of America, Inc. (“Magna”) submits this preliminary response to the Petition filed by SMR Automotive Systems USA, Inc. (“SMR”) requesting *inter partes* review of claims 1-26 of U.S. Patent No. 8,128,244 (“the ‘244 patent”). Magna requests that the Board deny the *inter partes* review as to all grounds, none of which have merit.

SMR’s first proposed ground is anticipation based on U.S. Pat. Pub. No. 2002/0072026 (“Lynam ‘026”), the published application of Dr. Lynam’s prior U.S. Pat. No. 6,717,712 (“the ‘712 patent”), which is incorporated by reference into the ‘244 patent. But Lynam ‘026 was considered in depth during the prosecution of the ‘244 patent and seven other patents in the ‘244 patent family. For example, the PTO removed Lynam ‘026 as prior art during prosecution of related U.S. Pat. No. 7,934,843 (“the ‘843 patent”) after concluding that the ‘843 patent is entitled to its claimed priority date and that “Niall Lynam conceived or invented the subject matter disclosed in the patent application publication.” Ex. 1009, 23. The PTO reached the same conclusion regarding Lynam ‘026 in each of the eight prosecutions where it was considered, including during prosecution of the ‘244 patent. The Board should therefore deny institution of the Lynam ‘026 ground both because that application is not prior art to the ‘244 patent and also,

pursuant to 35 U.S.C. § 325(d), because the question of whether it is prior art has been extensively considered by the PTO.

SMR's remaining ground relies on WO 01/44013 to Henion ("Henion '013"). Henion '013 is directed to an entirely different application, namely, a trailer towing mirror, in contrast to the inventions claimed in the '244 patent, which are directed to exterior rearview mirror systems for improved viewing of the blind spot. SMR's attempts to address some of Henion '013's deficiencies through obviousness arguments completely ignore other deficiencies in Henion '013 previously raised by Magna in the co-pending district court litigation and fail to set forth a sufficient reason, other than hindsight, why a person of ordinary skill would have combined the references to arrive at the claimed inventions of the '244 patent. Institution should therefore be denied on this ground as well.

BACKGROUND

I. Magna

Patent Owner Magna was founded in 1905 to become Donnelly Corporation in the 1980s. Donnelly Corporation was acquired by Magna International in 2002 and became known as Magna Donnelly Corporation. In 2008, it changed its name to Magna Mirrors of America, Inc. Magna is a leading supplier of mirror and electronic vision systems for the automotive industry. Magna supplies products that practice the '244 patent to automobile original equipment manufacturers

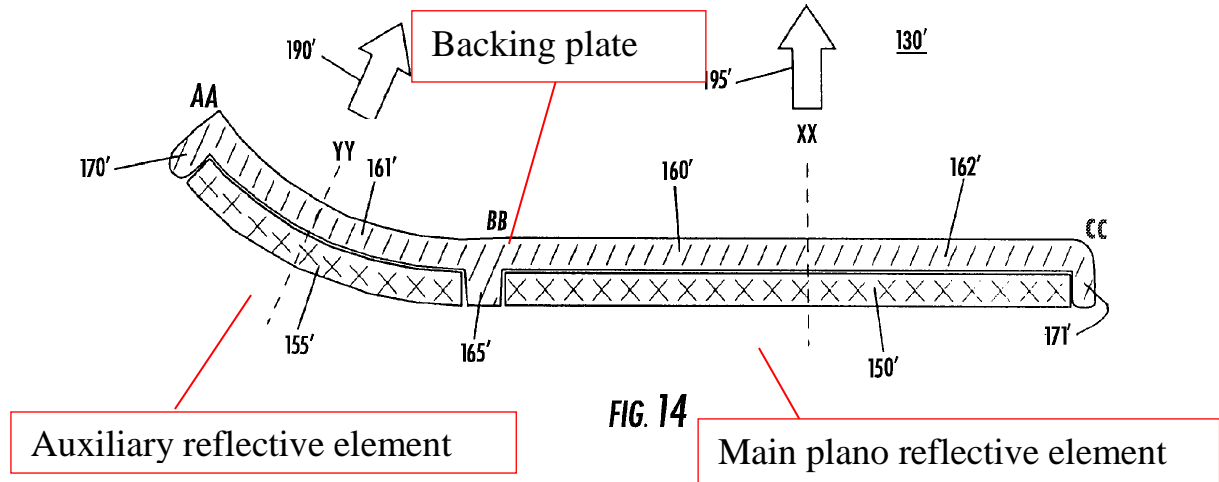
(“OEMs”) such as Ford, Hyundai, and Kia. These products, as well as infringing products sold by SMR, have enjoyed widespread commercial success.

Dr. Lynam, the inventor of the ‘244 patent, was a longtime Donnelly employee and is currently Magna’s Chief Technical Officer. He is a named inventor on hundreds of issued U.S. Patents.

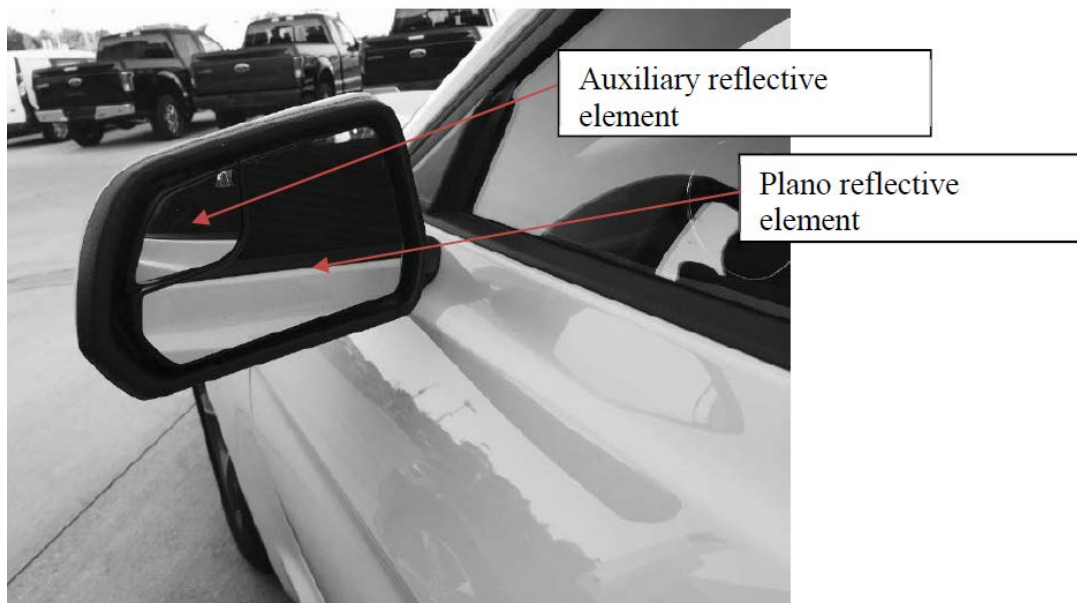
II. The ‘244 Patent

The ‘244 patent’s claims generally relate to a mirror system with a main flat (plano) reflective element and a separate, outboard curved auxiliary reflective element on a single backing plate. This mirror system is designed to solve the problem of the blind spot that a conventional, flat exterior side view mirror has in a side lane adjacent to the driver. The blind spot means that a driver may not see a passing vehicle in an adjacent side lane, and may therefore attempt to merge into the lane when the lane is not clear of traffic. Prior to the invention of the ‘244 patent, the blind spot problem had existed for decades. While many proposed solutions existed in the art, no blind spot solution had achieved significant commercial success or widespread adoption prior to the ‘244 patent invention date. *See, e.g.*, U.S. Pat. No. 5,579,133, Ex. 2003, at 1:23-33 (noting that blind spot problem “has existed in the art practically since the advent of the enclosed automobile” and “[n]umerous attempts to solve this problem have been made”).

An exemplary depiction of the side view of a mirror subassembly (the reflective elements and the backing plate) from the ‘244 patent is shown below:



An exemplary photograph of one of Magna’s complete mirror assemblies for the Ford Mustang that practices the ‘244 patent can be seen here:



The auxiliary reflective element is supported on the single backing plate at an angle relative to the primary reflective element. More specifically, among

numerous other requirements, the ‘244 patent claims require that the auxiliary reflective element be angled and positioned such that it “generally views towards a blind spot in the side lane” while the plano reflective element “generally views rearwardly of the equipped automobile.” *See* Ex. 1001, Claims 1, 23, 25. Claim 1 is set forth below (emphases added):

1. An exterior sideview mirror system suitable for use on an automobile, said exterior sideview mirror system comprising:

[a] an exterior sideview mirror assembly adapted for attachment to a side of an automobile;

[b] said exterior sideview mirror assembly including a reflective element having a rearward field of view when attached to the side of the automobile;

[c] said reflective element attached to an electrically-operated actuator of said exterior sideview mirror assembly and movable by said actuator in order to position said rearward field of view to a driver-desired position when said exterior sideview mirror assembly is attached to the side of the automobile;

[d] wherein said reflective element comprises a plano-auxiliary reflective element assembly, said plano-auxiliary reflective element assembly comprising a plano

reflective element having unit magnification and a separate auxiliary reflective element having a curvature;

[e] said plano reflective element and said auxiliary reflective element of said plano-auxiliary reflective element assembly mounted adjacently at said plano-auxiliary reflective element assembly in a side-by-side relationship and not superimposed with one reflective element on top of the other reflective element;

[f] said plano reflective element and said auxiliary reflective element supported at a backing plate element, said backing plate element mounting to said actuator such that movement of said backing plate element of said plano-auxiliary reflective element assembly by said actuator simultaneously and similarly moves said plano reflective element and said auxiliary reflective element;

[g] said auxiliary reflective element having a wide-angle field of view encompassing a blind spot in the side lane adjacent the side of the automobile to which said exterior sideview mirror assembly is attached;

[h] said backing plate element having a first support portion supporting said plano reflective element and a second support portion supporting said auxiliary reflective element;

[i] wherein said auxiliary reflective element is positioned at an outboard portion of said plano-auxiliary reflective element assembly when said exterior sideview mirror assembly is mounted to the side of the automobile;

[j] wherein said backing plate element comprises a polymeric substrate that is formed as a single element by injection molding of a polymeric resin;

[k] wherein said backing plate element is capable of supporting said plano reflective element and said auxiliary reflective element;

[l] wherein said first support portion of said backing plate element comprises a flat portion and wherein said plano reflective element is disposed at said flat portion;

[m] wherein said second support portion of said backing plate element comprises a curved portion and wherein said auxiliary reflective element is disposed at said curved portion;

[n] wherein the rearward field of view of said auxiliary reflective element is different from and angled to the rearward field of view of said plano reflective element when both are attached to said backing plate element of said plano-auxiliary reflective element assembly when said plano-auxiliary reflective element assembly is included in said exterior sideview mirror assembly and

when said exterior sideview mirror assembly is attached to the side of the automobile;

[o] wherein angling of the rearward field of view of said auxiliary reflective element relative to the rearward field of view of said plano reflective element is achieved, at least in part, by an angling of said second support portion of said backing plate element supporting said auxiliary reflective element relative to said first support portion of said backing plate element supporting said plano reflective element;

[p] wherein, when said exterior sideview mirror assembly is attached to the side of the automobile, the field of view of said plano reflective element generally views rearwardly of the equipped automobile and the field of view of said auxiliary reflective element generally views towards a blind spot in the side lane adjacent the side of the automobile to which said exterior sideview mirror assembly is attached, said blind spot being generally outside the rearward field of view of said plano reflective element when said plano reflective element is viewed by a driver of the equipped automobile when said exterior sideview mirror assembly is attached to the side of the automobile;

[q] wherein at least one of said plano reflective element and said auxiliary reflective element comprises one of (a)

a glass substrate having a surface coated with a metallic reflector coating and (b) a polymeric substrate having a thin glass element applied to a surface thereof and with an opposing surface thereof having a reflecting layer applied thereto;

[r] wherein said plano reflective element and said auxiliary reflective element are adjacently supported at said backing plate element at a joint, and wherein said plano-auxiliary element assembly includes a demarcation element, said demarcation element disposed at said joint to form a demarcation between said plano reflective element and said auxiliary reflective element, said demarcation element having a portion visible to a driver of the automobile when said exterior sideview mirror assembly is attached to the side of the automobile;

[s] wherein at least a portion of said auxiliary reflective element adjacent said plano reflective element has its front surface generally coplanar with the front surface of said plano reflective element;

[t] wherein said demarcation element is dark colored;

[u] wherein said demarcation element comprises a polymer material

[v] wherein said joint comprises a space between said plano reflective element and said auxiliary reflective element;

[w] wherein said demarcation element is at least partially disposed at said space between said plano reflective element and said auxiliary reflective element; and

[x] wherein said demarcation element comprises a wall on said backing plate element, said wall located on said backing plate element at said joint, said wall disposed between said plano reflective element and said auxiliary reflective element.

Certain dependent claims provide further specificity regarding the field of view and angling of the auxiliary reflective element. Other dependent claims include limitations specifying the composition of the mirror glass and a limitation specifying the ratio between the width of the primary reflective element and the auxiliary reflective element.

PETITIONER FAILS TO SHOW A REASONABLE LIKELIHOOD THAT THE CHALLENGED CLAIMS ARE ANTICIPATED OR OBVIOUS.

I. Legal Standards

For each claim challenged in its petition for *inter partes* review, SMR bears the burden of showing that there is a “reasonable likelihood” that it will prevail in its challenge. 35 U.S.C. § 314(a); *see also* 37 C.F.R. § 42.108(c). As the Board has explained, the petitioner has “the burden of proof to establish that it is entitled

to the requested relief.” *Hopkins Mfg. Corp. v. Cequent Performance Prods., Inc.*, IPR2015-00616, Paper 9 at 7 (PTAB Aug. 17, 2015) (citing 37 C.F.R. § 42.20(c)). As explained further below, the Board may also deny institution of *inter partes* review for discretionary reasons, including because “the same or substantially the same prior art or arguments previously were presented to the Office.” 35 U.S.C. § 325(d).

II. The Board Should Deny Institution On Ground 1.

A. Ground 1 Should Be Denied Because Lynam ‘026 Is Not Prior Art, As The PTO Repeatedly Found.

As demonstrated below, the PTO considered the issues raised in Ground 1 (including whether the ‘244 patent is entitled to its claimed priority date and whether Lynam ‘026 qualifies as prior art) repeatedly during the prosecution of the ‘244 patent and its family. In these circumstances, the Board can and should exercise its discretion to deny institution under 35 U.S.C. § 325(d). *See Cultec, Inc. v. Stormtech LLC*, IPR2017-00777, Paper 7 at 13 (PTAB Aug. 22, 2017) (informative) (denying institution under Section 325(d) because “the same or substantially the same prior art or arguments as are presented in the Petition previously were presented to the Office”); *Hospira, Inc. v. Genentech, Inc.*, IPR2017-00739, Paper 16 at 17–19 (PTAB July 27, 2017) (informative) (denying institution under Section 325(d) because the petitioner’s priority challenge was already considered by the PTO). Instituting *inter partes* review on Ground 1

“would not be an efficient use of Board resources.” *Unified Patents Inc. v. Berman*, IPR2016-01571, Paper 10 at 12 (PTAB Dec. 14, 2016) (informative) (denying institution on certain claims because “the Petition relies on the same or substantially the same prior art and arguments presented previously to the Office”).

1. The Prosecution History of the ‘244 Patent.

Dr. Lynam conceived of the inventions that were later claimed in the ‘244 patent sometime in 1999. He filed a patent application disclosing his claimed inventions on January 6, 2000, which issued as U.S. Patent No. 6,522,451 on February 18, 2003. Dr. Lynam is the sole named inventor of the ‘451 patent. On December 20, 2000, he filed a continuation-in-part of the ‘451 patent, which issued on April 6, 2004 as U.S. Pat. No. 6,717,712 (“the ‘712 patent”). The application that issued as the ‘712 patent was published on June 13, 2002, as the Lynam ‘026 reference—the reference SMR relies upon in its request. The ‘712 patent names two additional Donnelly employees as co-inventors, John O. Lindahl and Hahns Yoachim Fuchs, due to their contribution of elements (namely, a “frame element assembly”) disclosed and claimed in the ‘712 patent that are not relevant to the claims of the ‘244 patent.

Dr. Lynam filed provisional patent application no. 60/471,872 (“the ‘872 provisional”), to which the ‘244 patent claims priority, on May 20, 2003. The ‘872 provisional disclosed an inventive composition for a mirror, which SMR refers to

as the “thin glass” feature. ‘872 provisional, Ex. 2010, 2:4-10; Petition, 17. The ‘872 provisional also disclosed a mirror assembly using the novel mirror composition. *E.g.*, 2010, 2:13-18. In addition, the ‘872 provisional incorporated by reference a number of other Magna Donnelly patents and patent applications disclosing mirrors and features that the novel mirror composition could be used with, including the ‘451 patent and the ‘712 patent (*id.*, 5:2-6) and interior electrochromic mirror assemblies (*id.*, 9:28-10:15).

Dr. Lynam filed U.S. Patent Application No. 12/851,045 (“the ‘045 application”), which later issued as the ‘843 patent, on August 5, 2010.¹ Because

¹ Contrary to SMR’s assertion, the filing of the ‘045 application was not an attempt “[t]o revive prosecution of the ‘712 patent’s abandoned family.” Petition, 12. The ‘045 application included discussion of the novel thin glass substrate first described in the ‘872 provisional and included claim limitations directed to that substrate, as well as discussion of the two-element blind spot mirror assembly disclosed in the ‘451 patent that is incorporated by reference in the ‘872 provisional. *See* Ex. 1019, ¶¶ 3-17, 44-45, 89-107 (discussing thin glass and related features), ¶¶ 45-88 (discussing plano-auxiliary mirror assembly and related features). The ‘045 application could not have been filed as a continuation of the

the claims in the '045 application included the two-element blind spot mirror assembly described in the '451 and '712 patents, along with the thin glass limitations from the '872 provisional, the '045 application copied material from the '451 and '712 patents that had previously been incorporated by reference directly into the specification of the '045 application. For example, the '045 application added figures 9-23, which had previously been included through the incorporation by reference of the '451 and '712 patents.

During the prosecution of the '045 application, the PTO initially rejected the pending claims on the alleged basis that they were not entitled to claim priority to the '872 provisional. Ex. 1009, 139-40. Specifically, the PTO rejected all claims other than claims 24-26 as anticipated by Lynam '026, the same as SMR's first invalidity ground. *Id.*, 141-51.

Dr. Lynam responded by explaining why the priority claim to the '872 provisional was proper, due to the incorporation by reference of the '451 and '712 patents in the '843 patent and the applications to which the '843 patent claims priority. *Id.*, 46-48. Additionally, Dr. Lynam submitted a declaration to explain why Lynam '026 did not qualify as prior art. *Id.*, 53-55.

'451 and '712 patent family because those patents do not disclose the thin glass substrate.

In response, the PTO allowed the application that issued as the ‘843 patent. The Reasons for Allowance explained that the “Applicant has overcome the prior art rejection and questions regarding priority by filing a 37 CFR 1.131 affidavit which proved sufficient to overcome the Lynam et al reference. The 37 CFR 1.131 affidavit proves that Niall Lynam conceived or invented the subject matter disclosed in the patent application publication.” *Id.*, 23 (emphasis added). In other words, the Lynam ‘026 was found not to be prior art because it was not the work of another.

Dr. Lynam went on to prosecute a number of additional patent applications claiming priority to the ‘843 patent and to the ‘872 provisional. Rejections over Lynam ‘026 were issued in seven of these prosecutions, including in the prosecution of the ‘244 patent, as set forth in the table below. Each time (before two different examiners)², Dr. Lynam overcame the rejections in the same manner as during the prosecution of the ‘843 patent.

² U.S. Pat. No. 8,783,882 was prosecuted before a different examiner than the ‘843 patent and the other patents listed below. *Compare* Ex. 1008, cover *with* Ex. 1022, cover.

U.S. Patent No.	Rejection Over Lynam '026	Response by Dr. Lynam Explaining Incorporation by Reference	Affidavit by Dr. Lynam explaining Lynam '026 is not Prior Art	Notice of Allowance Agreeing with Dr. Lynam
8,128,243	10/31/2011 (Ex. 2004, 4-11)	11/3/2011 (Ex. 2004, 15-18)	11/3/2011 (Ex. 2004, 19-21)	1/20/2012 (Ex. 2004, 27)
8,128,244	11/16/2011 (Ex. 1006, 144-61)	11/22/2011 (Ex. 1006, 248-50)	11/22/2011 (1006, 166-69)	1/24/2012 (Ex. 1006, 258)
8,147,077	1/5/2012 (Ex. 2006, 3-19)	1/6/2012 (Ex. 2006, 22-24)	1/6/2012 (Ex. 2006, 25-28)	2/17/2012 (Ex. 2006, 34)
8,267,534	5/17/2012 (Ex. 2007, 4-7)	5/21/2012 (Ex. 2007, 22-24)	5/21/2012 (Ex. 2007, 27-28)	8/6/2012 (Ex. 2007, 34)
8,550,642	4/23/2013 (Ex. 2008, 5-7)	7/17/2013 (Ex. 2008, 21-23)	7/17/2013 (Ex. 2008, 26-28)	9/5/2013 (Ex. 2008, 35)
8,591,047	8/16/2013 (Ex. 2009, 3-12)	8/21/2013 (Ex. 2009, 26-28)	8/21/2013 (Ex. 2009, 30-32)	9/27/2013 (Ex. 2009, 39)
8,783,882	12/17/2013	3/17/2014	3/17/2014	6/10/2014

U.S. Patent No.	Rejection Over Lynam ‘026	Response by Dr. Lynam Explaining Incorporation by Reference	Affidavit by Dr. Lynam explaining Lynam ‘026 is not Prior Art	Notice of Allowance Agreeing with Dr. Lynam
	(Ex. 1023, 135, 137-50)	(Ex. 1023, 179-80)	(Ex. 1023, 184-86)	(Ex. 1023, 349-51)

Accordingly, Lynam ‘026 is not prior art to the ‘244 patent and the question has been considered eight times, by two different examiners.

2. SMR Fails To Show Why The Board Should Reconsider The PTO’s Conclusion That The ‘244 Patent Properly Claims Priority To The ‘872 Provisional.

SMR focuses its priority argument on whether the application preceding the ‘843 patent, the ‘666 application (Ex. 1014, which became the ‘154 patent), provides a written description of the claims of the ‘244 patent, asserting that the ‘666 application does not incorporate by reference the relevant teachings of the ‘451 and ‘712 patents (Petition, 21-25), and that even if it did, the written description would not support the ‘244 patent claims (Petition, 26-35). As the PTO previously determined when Dr. Lynam prosecuted the ‘244 patent family, SMR’s arguments are incorrect.

a. The ‘666 application incorporates by reference the ‘451 and ‘712 patents in their entirety.

The standard for whether material is incorporated by reference “is whether one reasonably skilled in the art would understand the application as describing with sufficient particularity the material to be incorporated,” which “is a question of law.” *Harari v. Lee*, 656 F.3d 1331, 1334 (Fed. Cir. 2011). In this regard, an application may incorporate a reference in its entirety, and this incorporation can then be used to provide written description support. *Id.* at 1335, 1338 (concluding that “the entire ‘579 application disclosure was incorporated by the broad and unequivocal language: ‘The disclosures of the two applications are hereby incorporate[d] by reference’” and that therefore “the portions of the ‘579 application that Harari argues provide the written description support for its claims are part of the optimized erase and write implementations” at issue).

The ‘666 application includes the same type of “broad and unequivocal language” that was found to incorporate the entirety of a reference in *Harari*: “The reflective element 12 may provide a field of view similar to the plano-auxiliary reflective element assembly disclosed in U.S. Pat. Nos. 6,522,451 and 6,717,712, which are hereby incorporated herein by reference.” Ex. 1014, ¶ 28 (emphasis added). SMR asserts that this statement incorporates by reference only the field of view disclosed in the ‘451 and ‘712 patents (Petition, 22-24), but that argument is grammatically incorrect. The verb used in the incorporation by reference

statement is “are,” which is used for a plural subject. This indicates that the subject of the incorporation by reference statement is the plural “U.S. Pat. Nos. 6,522,451 and 6,717,712,” not the singular “a field of view” as SMR contends. The sentence is properly broken down into two parts: 1) a statement that reflective element 12 may provide a field of view similar to the plano-auxiliary reflective element assembly disclosed in the ‘451 and the ‘712 patents, and 2) a statement that the ‘451 and ‘712 patents are incorporated by reference.

SMR points to language in the ‘666 application where a reference is said to be incorporated “in its entirety,” arguing that the lack of such a statement indicates that something less than the entirety of the ‘451 and ‘712 patents are incorporated in the statement at issue. Petition at 23. However, the Federal Circuit has agreed that “there is no need to use such words as ‘in its entirety’ to indicate that the entire reference is incorporated.” *Harari*, 656 F.3d at 1335. Indeed, as in *Harari*, the ‘666 application reveals that when Dr. Lynam intended to incorporate only specific portions of a reference, he said so explicitly. *Compare* Ex. 1014, ¶ 44 (“[T]he mirror assembly may include one or more displays of the types described in [certain references], which are all hereby incorporated herein by reference, without affecting the scope of the present invention.”) (emphases added) *with Harari*, 656 F.3d at 1335-36 (“We contrast the incorporation used here, ‘the disclosures,’ with the incorporation language used later in the same specification, ‘relevant portions

of the disclosures.’ When the drafter intended to incorporate only a portion it did so expressly.”). Because here, as in *Harari*, Dr. Lynam broadly and unequivocally stated in the ‘666 application that the ‘451 and ‘712 patents “are hereby incorporated,” his broad language should be respected. Ex. 1014, ¶ 28.

SMR fails to cite a single case where a broad and unequivocal statement that a reference is incorporated was found not to incorporate a reference in its entirety. See Petition, 24 (citing *Zenon*, *Husky*, and *Callaway Golf*). In *Zenon Envtl., Inc. v. U.S. Filter Corp.*, 506 F.3d 1370 (Fed. Cir. 2007), the incorporation by reference statement was expressly limited to specific subject matter. *Id.* at 1379 (incorporation by reference stated only that “details relating to the construction and deployment of a most preferred skein are found in” the references and that “the relevant disclosures of each [reference] are included by reference”) (emphasis added). In *Husky Injection Molding Sys. Ltd. v. Athena Automation Ltd.*, 838 F.3d 1236, 1248 (Fed. Cir. 2016), the court declined to reach the issue of whether a reference was incorporated in its entirety. And in *Callaway Golf Co. v. Acushnet Co.*, 576 F.3d 1331 (Fed. Cir. 2009), the issue of whether a reference was incorporated in its entirety was not before the court at all. *Id.* at 1346-47 (reversing district court and holding that specific materials disclosed in prior application were incorporated by reference; the question of whether anything else from the prior application was incorporated was not raised by either party).

b. The Written Description Of The ‘666 Application Supports The Claims Of The ‘244 Patent.

The inquiry for written description is whether the specification “reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc). Because the ‘666 application incorporates by reference the ‘451 and ‘712 patents in their entirety, the incorporation by reference provides sufficient written description support for nearly the entirety of the scope of the claims of the ‘244 patent. The incorporation by reference of the ‘712 patent, which issued from the application that was published as Lynam ‘026, places all of the teachings of Lynam ‘026 into the ‘666 application as if they were explicitly contained therein. *See Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1316, 1329 (Fed. Cir. 2001) (“When a document is ‘incorporated by reference’ into a host document, such as a patent, the referenced document becomes effectively part of the host document as if it were explicitly contained therein.”).³ Because SMR contends, in its Ground 1, that Lynam ‘026 discloses

³ SMR cites to an earlier, abrogated case to argue to the contrary (Petition, 33), but the case involved an issue of claim construction, not written description or priority, and is therefore distinguishable. *Modine Mfg. Co. v. ITC*, 75 F.3d 1545, 1553

the limitations of, and indeed anticipates claims 1-26, SMR cannot dispute that the same teachings, when present in the ‘666 application, provide written description support for the same limitations.

The only limitations of the ‘244 patent that are not disclosed in Lynam ‘026, by SMR’s own admission, are related to the “thin glass” embodiment that is optionally claimed as part of claims 1, 23, and 25. *See* Petition, 36, 48-49. But SMR acknowledges that the “thin glass” feature is disclosed in the ‘666 application because it contends in parallel proceedings that “thin glass” is disclosed by the ‘666 application’s immediate parent, Lynam ‘011. *See, e.g., SMR Automotive Sys. USA, Inc. v. Magna Mirrors of Am., Inc.*, IPR2018-00491, Petition at 47; Ex. 1014, ¶ 1. The same disclosures SMR relies on from Lynam ‘011 in IPR2018-00491 are also set forth in the ‘666 application. *Compare* IPR2018-00491, Ex. 1036, ¶¶ 6-9, 27, 32, 35, 36, 38-41, 47, Figs. 2-5 *with* IPR2018-00491, Ex. 1014, ¶¶ 6-9, 27, 32, 35, 36, 38-41, 47, Figs. 2-5. Accordingly, the ‘666 application, including the material incorporated by reference, provides support for the full scope of the claims of the ‘244 patent.

(Fed. Cir. 1996), *abrogated by Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 234 F.3d 558 (Fed. Cir. 2000) (en banc).

SMR's argument that the '666 application fails to provide written description support even if the '451 and '712 patents are incorporated in their entirety is predicated on the incorrect assertion that the '666 application "unambiguously defines its invention as a single-element mirror" based on descriptions of such a mirror as "the present invention." Petition, 27-35.

However, the text from the '451 and '712 patents that is in the '666 application through the incorporation by reference defines the invention more broadly. It states, for example, that "[t]he present invention relates to ... plano-auxiliary reflective element assemblies." Ex. 1016, 1:7-10. It states that these reflective elements may be made of a glass substrate with a metallic reflector coating. *Id.*, 7:13-15, 8:18-20. The '666 application further adds the "thin glass" feature, and its discussion of the "present invention" indicates that "thin glass" can be used in a variety of mirror assemblies.

For example, the '666 application states that "[t]he present invention relates generally to rearview mirror elements for a rearview mirror assembly of a vehicle," indicating that the invention includes multiple "elements" for a single "rearview mirror assembly." Ex. 1014, ¶ 2 (emphases added). As another example, the '666 application discloses that "the reflective element of the present invention may be suitable for use in" both the single-element exterior rearview mirror shown in Fig. 1 that is relied upon by SMR, as well as "a reflective element for an interior

rearview mirror assembly (not shown)” *Id.*, ¶ 27. It also discloses that a mirror assembly “of the present invention may comprise an electrochromic mirror, such as an electrochromic mirror assembly and electrochromic element utilizing principles disclosed in” a list of nineteen patents “which are hereby incorporated herein by reference.” *Id.* at ¶ 43. Moreover, the ‘666 application expressly states that “[c]hanges and modifications in the specifically described embodiments can be carried out without departing from the principles of the present invention.” *Id.*, ¶ 48.

Based on the foregoing disclosures, a person of ordinary skill in the art could not reasonably conclude that Dr. Lynam’s invention was limited to the exterior side view mirror assembly depicted in Figs. 1-3, as SMR contends. Petition, 28-30. Rather, a person of ordinary skill in the art would conclude that Dr. Lynam contemplated using the “thin glass” mirror substrate described in the ‘666 application with a variety of different types of mirrors, including the plano-auxiliary reflective element assembly that was previously conceived of by Dr. Lynam. And by virtue of the incorporated-by-reference text, a POSA would conclude that Dr. Lynam had possession of the plano-auxiliary reflective element assembly using a glass substrate with a metallic reflector coating as well.

In sum, the parent ‘666 application provides complete written description support for the claims of the ‘244 patent,⁴ and SMR fails to demonstrate that the PTO’s conclusion that the ‘244 patent is entitled to its May 20, 2003 priority date should be revisited.

3. SMR Fails To Show Why The Board Should Reconsider The PTO’s Conclusion That Lynam ‘026 Is Not Prior Art.

Lynam ‘026 was published on June 13, 2002, less than one year before the ‘244 patent’s May 20, 2003 priority date. It therefore is not prior art pursuant to 35 U.S.C. § 102(b).

Lynam ‘026 is not prior art pursuant to 35 U.S.C. § 102(a) and (e) because it is not the work of “another.” 35 U.S.C. § 102(e) applies only to “an application for patent ... by another.” By the same token, it is well-settled law that “one’s own work is not prior art under §102(a).” *In re Katz*, 687 F.2d 450, 454 (C.C.P.A. 1982); *see also Allergan, Inc. v. Apotex Inc.*, 754 F.3d 952, 968 (Fed Cir. 2014) (quoting *In re Katz*); MPEP 2132.01 (citing and discussing *In re Katz*).

In *Katz*, an article published within one year of the filing of a patent application was found not to be prior art under §102(a) because it described the

⁴ The prior applications in the priority chain, going back to the ‘872 provisional, provide the same written description support for the claims, as Dr. Lynam explained during prosecution. *See* Ex. 1006, 248-250.

inventor's own work, even though the article included additional non-inventor co-authors. *See Katz*, 687 F.2d at 455-56. In a declaration, the sole inventor of the application stated that the article described his own work, and that the co-authors were not involved in the conception of the subject matter described. *See id.* at 455. The court found this declaration was sufficient to show that the article described the inventor's own work, and thus was not available as prior art under § 102(a) as a publication "by others." *Id.* at 455-56.

So too here. As discussed above, the PTO issued a rejection over Lynam '026, which Dr. Lynam overcame by submitting a declaration sufficient to show that Lynam '026 was not the work of another because the co-inventors listed on Lynam '026 were not involved in the conception of the subject matter of the '244 patent claims, which was solely conceived of by Dr. Lynam.

SMR attempts to mischaracterize the prosecution history of the '244 patent, asserting that "Magna did not contend that the relevant material from the '026 publication ... is by the same inventor and therefore not prior art." Petition, 15. But that is precisely what Dr. Lynam's declaration showed. Dr. Lynam declared that he "conceived of the claimed invention of at least the independent claims as filed in the present application," reciting the specific limitations of claim 1 of the '244 patent. Ex. 1006, 166-169. Dr. Lynam noted that his invention of those limitations was "evidenced by the attached specification and drawings," which

became the ‘451 patent. *Id.*, 169. Dr. Lynam further noted that he is “the sole named inventor of [the present application] and I am the sole named inventor of [the ‘451 patent].” *Id.* In other words, Dr. Lynam established that he solely conceived of the subject matter of the claims of the ‘244 patent by noting that the same subject matter was already disclosed in the application that became the ‘451 patent prior to the date of Lynam ‘026, and that he is the sole named inventor on the ‘451 patent, indicating that he solely conceived of that subject matter. As the subject matter of the claims of the ‘244 patent was already present in the application that became the ‘451 patent prior to the filing date of Lynam ‘026, Messrs. Lindahl and Fuchs could not have contributed to the conception of that subject matter, because they did not contribute to the ‘451 patent.⁵

The fact that Dr. Lynam solely conceived of the subject matter of the claims of the ‘244 patent can also be independently verified, without the benefit of Dr.

⁵ SMR’s petition makes a number of arguments asserting that Dr. Lynam’s declaration was insufficient to “swear behind” Lynam ‘026 (Petition, 16-20), but this is a red herring. Swearing behind Lynam ‘026 by demonstrating a prior conception, reduction to practice, and diligence would only have been necessary if Lynam ‘026 would have otherwise qualified as prior art pursuant to 35 U.S.C. § 102(a) and (e) because it was the work of another. Such is not the case here.

Lynam's declaration, by comparing the disclosures in Lynam '026 that SMR relies on to the disclosures in the '451 patent. An annotated copy of Lynam '026, with the paragraphs that also appear in the '451 patent highlighted, is being filed as Exhibit 2012. For each limitation of each claim of the '244 patent that SMR contends is disclosed by Lynam '026, SMR relies on one or more disclosures from Lynam '026 that are also present in the '451 patent, and which are therefore sufficient to disclose the relevant limitations of the '244 patent. Ex. 2001, ¶¶ 30-32. The presence of these disclosures in the '451 patent demonstrates that Dr. Lynam was solely responsible for their conception.

B. Ground 1 Should Also Be Denied Because It Raises Inventorship Questions That Are Better Addressed In District Court.

An additional reason for the Board to exercise its discretion to deny Ground 1 pursuant to 35 U.S.C. § 325(d) is that the issues raised are better addressed in the co-pending district court litigation, where the court has tools that are not available to the Board in an IPR. The key issue for Ground 1 is whether Lynam '026 qualifies as prior art. As discussed further above, Lynam '026 is not prior art under 35 U.S.C. § 102(a) or (e) if it is not the work of "another." This question turns on whether the material from Lynam '026 that SMR relies on was solely conceived of by Dr. Lynam (as Dr. Lynam declared and the PTO repeatedly found), or whether any of the material was contributed by the two other Magna /

Donnelly employees named as inventors on Lynam '026, John Lindahl and Hahns Fuchs.

Although Magna contends that the PTO's eight prior determinations of this issue were correct, if it were ultimately found that Messrs. Lindahl and Fuchs contributed to the relevant disclosures of Lynam '026, that would not be fatal to the '244 patent. Rather, it would mean that the claims of the '244 patent were conceived of jointly by Dr. Lynam and Messrs. Lindahl and Fuchs when they were working together, and that Messrs. Lindahl and Fuchs should be named as co-inventors on the '244 patent.⁶ *See, e.g., Sewall v. Walters*, 21 F.3d 411, 415 (Fed. Cir. 1994) (“[d]etermining ‘inventorship’ is nothing more than determining who conceived the subject matter at issue”). Inventorship can be corrected in district court litigation by order of the court. *See* 35 U.S.C. § 256(b) (“The court before which such matter is called in question may order correction of the patent on notice and hearing of all parties concerned and the Director shall issue a certificate accordingly”). If inventorship is corrected in this manner, “[t]he error of omitting inventors ... shall not invalidate the patent in which such error occurred.” *Id.*

⁶ Messrs. Lindahl and Fuchs were employees of Donnelly (as Magna was called at the time) with obligations to assign their inventions, as they assigned the '712 patent that issued from Lynam '026. *See* '712 patent, Ex. 1017, cover.

Accordingly, in the co-pending district court litigation, if the court ultimately determines that Messrs. Lindahl and Fuchs contributed to the conception of the claimed subject matter, it can correct inventorship rather than invalidating the ‘244 patent. No similar mechanism is available to the Board in an IPR. As a consequence, if the Board were to institute on Ground 1 (which it should not), and inventorship of the ‘244 patent was subsequently changed in the district court proceedings to add Messrs. Lindahl and Fuchs such that Lynam ‘026 could not qualify as prior art under Sections 102(a) and (e), the Board’s work on this ground would be a waste of effort. *See Unified Patents*, IPR2016-01571, Paper 10 at 12 (denying institution where it “would not be an efficient use of Board resources”). For all of these reasons, the Board should exercise its discretion to deny Ground 1 in favor of allowing these issues to be addressed in the co-pending district court litigation.

III. The Board Should Deny Institution On Ground 2 Because SMR Has Not Shown That The Prior Art Discloses All Claim Limitations Or A Sufficient Motivation To Combine.

SMR’s Ground 2 is defective for several reasons. First, SMR fails to set forth sufficient explanation of how the teachings of the prior art purportedly match up to the claims and the purported motivation to combine the teachings of the prior art in its petition, relying instead on an impermissible incorporation by reference of its proffered expert’s declaration. Second, the reference SMR uses as a starting

point, Henion '013, would not have been relied upon by a POSA because it is directed to an entirely different type of mirror for a different application, namely, a trailer towing mirror instead of a blind spot mirror. Third and fourth, SMR glosses over critical claim requirements when applying Henion '013, largely because SMR ignores important claim construction issues. More specifically, SMR fails to establish a reasonable likelihood that Henion '013 discloses (a) a reflective element that “generally views towards a blind spot” and (b) a “backing plate” that gives the auxiliary reflective element an outwardly and/or downwardly angled field of view, neither of which SMR even attempts to construe. Nor do SMR’s obviousness arguments attempt to cure these deficiencies. And finally, SMR’s obviousness arguments are also defective because SMR relies on the unsupported opinion of a purported expert who does not possess the knowledge and experience of a POSA and who fails to set forth sufficient reason why a POSA would combine the asserted references to arrive at the claimed inventions of the '244 patent.

A. The Petition Improperly Incorporates By Reference The Sasian Declaration.

SMR fails to meet its burden to set forth a more than conclusory explanation of the evidence that allegedly supports its arguments for Ground 2, particularly without the purported explanations provided by its improper incorporation by reference of the Sasian declaration. When determining whether to institute an IPR, the Board “address[es] only the basis, rationale, and reasoning put forth by the

Petitioner[] in the Petition.” *Hopkins*, IPR2015-00616, Paper 9 at 7 (citation omitted). Much of SMR’s Ground 2 consists of conclusory statements with no explanation of how the asserted art purportedly teaches the limitations of the claims, or why a person of ordinary skill in the art would have combined the references at issue. Rather than setting forth the required explanation in its petition, SMR instead relies upon citations to large sections of the supporting Sasian declaration.

For example, when setting forth the motivation to combine Henion ‘013, Platzer ‘956, and Catlin, SMR states that “[a] POSA would have been motivated to combine these references,” with little explanation beyond the fact that the references all involve automobile mirrors. Petition, 53-54. SMR supports this single paragraph in its petition with a citation to seventeen non-sequential paragraphs of the Sasian declaration, which adds up to nearly eight pages of explanation that is not set forth in the petition. Petition, 53-54; Ex. 1002, ¶¶ 73-78, 306-310, 370-375. As another example, SMR asserts that “[a] POSA at the time of the invention would have understood that moving the curved auxiliary reflective element of Henion to the outboard position as in Platzer was an option for addressing the problem of blind spots,” with no further explanation. Petition, 62. Instead of explaining this assertion, SMR cites to thirteen paragraphs of the Sasian declaration, which comprises seven pages of text. *Id.*; Ex. 1002, ¶¶ 286-98. As yet

another example, SMR asserts that “Henion discloses, or at minimum renders obvious, that the auxiliary mirror’s field of view is directed outwardly and downwardly as recited in element 25[s].” Petition, 76. In support, it cites to eight paragraphs of the Sasian declaration, comprising three pages of analysis. *Id.*, 77; Ex. 1002, ¶¶ 379-86.

The Board has held that the “practice of citing [a] Declaration to support conclusory statements that are not otherwise supported in the Petition [] amounts to incorporation by reference.” *Cisco Sys., Inc. v. C-Cation Techs., LLC*, IPR2014-00454, Paper 12 at 9 (PTAB Aug. 29, 2014). “It is improper to incorporate by reference arguments from one document into another document.” *Id.* at 10 (citing 37 C.F.R. § 42.6(a)(3)). In such circumstances, the Board has noted that “incorporation by reference of numerous arguments from [an expert’s] 250-page Declaration into the Petition serves to circumvent the page limits imposed on petitions for *inter partes* review, while imposing on our time by asking us to sift through over 250 pages ... to locate the specific arguments corresponding to the numerous paragraphs cited to support Petitioner’s assertions.” *Id.* The Board has held that it “will not consider arguments that are not made in the Petition, but are instead incorporated by reference.” *Id.* Because SMR’s petition fails to set forth an explanation of Ground 2 with particularity, institution on this ground should be denied. *See Apple, Inc. v. Contentguard Holdings, Inc.*, IPR2015-00358, Paper 9

at 9-10 (PTAB July 2, 2015) (“Petitioner’s blanket citation to over one hundred paragraphs of [expert’s] declaration” to support obviousness arguments “does not satisfy its burden.”).

B. Henion ‘013 Discloses A Trailer Towing Mirror, Not A Blind Spot Mirror.

SMR’s argument that a POSA would have looked to Henion ‘013 to arrive at the claimed inventions is defective because SMR fails to acknowledge that Henion ‘013 discloses a trailer towing mirror and fails to explain why a POSA would have plucked a reference disclosing such a mirror from the sea of prior art to arrive at the claimed blind spot mirror of the ‘244 patent. *See WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1337 (Fed. Cir. 2016) (“Too often the obviousness analysis is framed as an inquiry into whether a person of skill, with two (and only two) references sitting on the table in front of him, would have been motivated to combine.... The real question is whether that skilled artisan would have plucked one reference out of the sea of prior art.”).

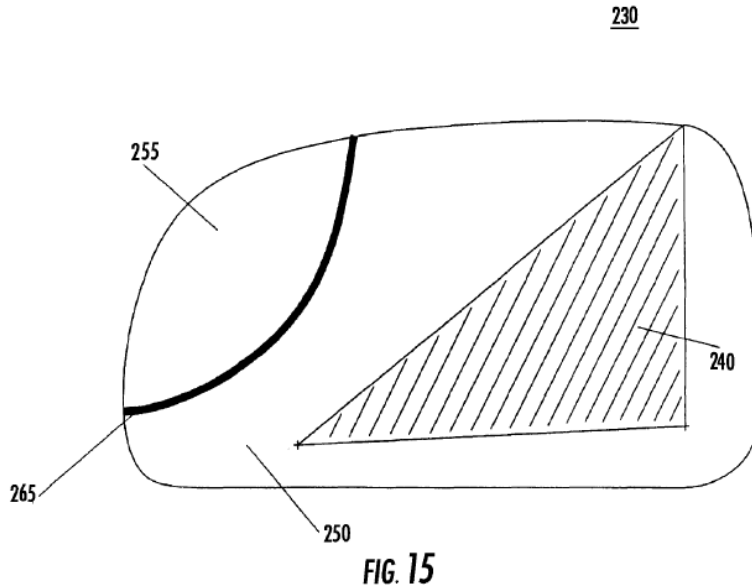
A trailer towing mirror is a specific type of mirror used by vehicles that may have a need to tow a trailer, camper, boat, mobile home, or the like. Ex. 2001, ¶ 49. A driver pulling a large trailer has a need to see around the trailer and to have a clear view along the side of the trailer. *Id.*, ¶ 50. Having a clear view alongside the trailer is particularly important for avoiding obstacles while parking or backing up. *Id.*, ¶ 51. Trailer towing mirrors, because they are typically attached to larger

trucks, SUVs, and similar vehicles, are also generally larger than a mirror on a typical car, which uses smaller mirrors for styling and aerodynamics. *Id.*, ¶ 53.

There are at least two reasons that a POSA would have understood that Henion '013 discloses a trailer towing mirror due to the position of the auxiliary reflective element in the inboard portion of the assembly. *Id.*, ¶¶ 54-56. First, the inboard location is more suited for achieving the objectives of a trailer towing mirror than the objectives of a blind spot mirror. The inboard location of the auxiliary depicted in Henion '013 is ideally suited for seeing further inboard than the plano mirror, along the side of the vehicle. *Id.*, ¶ 54. The '244 patent confirms that this is the purpose that an inboard auxiliary is most suited for, explaining that such a configuration “allows the driver [to] view the side of the vehicle (something many drivers desire in order to have a frame of reference for their rearward field of view) while facilitating having a wide field of view for the plano portion.” Ex. 1001, 12:22-28.

Second, the inboard lower location of the auxiliary confirms that the composite mirror must be larger than a typical car mirror (as is a trailer towing mirror) in order to both comply with Federal Motor Vehicle Safety Standards (FMVSS) and accommodate an auxiliary reflective element in that location. FMVSS requires that a driver-side mirror be able to view a triangular shaped target of a certain size, located at a certain distance to the rear of the driver seating

location. Ex. 2001, ¶¶ 55-56. The '244 patent depicts the FMVSS triangle in a conventional car mirror at Fig. 15, reproduced below. *Id.*, ¶ 55.



As Fig. 15 shows, the outboard-located auxiliary reflective element described in the '244 patent can be accommodated within the dimensions of a conventional car mirror because it is located outside of the FMVSS triangle. Placing the auxiliary reflective element in an inboard, lower location, as depicted in Henion '013, however, would interfere with the FMVSS triangle, unless the overall dimensions of the mirror were extended, as in a trailer towing mirror. *Id.*, ¶ 56.

SMR fails to provide any reason why a POSA would have looked to a trailer towing mirror like that disclosed in Henion '013 as a starting point to arrive at the blind spot mirror that is claimed by the '244 patent. Indeed, and as discussed above, Henion '013 is not a suitable starting point to arrive at the claims of the

‘244 patent. *Id.*, ¶¶ 49-56. Accordingly, SMR fails to demonstrate a reasonable likelihood of success on Ground 2. *See WBIP*, 829 F.3d at 1337 (“Whether a skilled artisan would be motivated to make a combination includes whether he would select particular references in order to combine their elements.”).

C. Henion ‘013 Does Not Disclose Or Render Obvious Viewing Generally Towards The Blind Spot.

1. Claim Construction

SMR’s assertion that Henion ‘013 meets limitations 23[p] and 25[p] relies on a flawed implicit claim construction of “generally views towards a blind spot.”

Limitations 23[p] and 25[p] require:

wherein, when said exterior sideview mirror assembly is attached to the side of the automobile, the field of view of said plano reflective element generally views rearwardly of the equipped automobile and the field of view of said auxiliary reflective element generally views towards a blind spot in the side lane adjacent the side of the automobile to which said exterior sideview mirror assembly is attached, said blind spot being generally outside the rearward field of view of said plano reflective element when said plano reflective element is viewed by a driver of the equipped automobile when said exterior sideview mirror assembly is attached to the side of the automobile;

Ex. 1001, claims 23, 25 (emphasis added). Under the broadest reasonable interpretation standard, this term should be construed to mean that “the principal axis views into the blind spot.” Ex. 2001, ¶ 34. This construction is based on the plain and ordinary meaning of the claim language and on the specification. A POSA would understand that the “principal axis” of a field of view is a line drawn at the center of the field of view. *Id.* The specification refers to the direction that the reflective elements generally view by discussing where the principal axis of the field of view of the reflective elements is directed. *See, e.g.*, Ex. 1001, 13:27-58, 19:13-17; Ex. 2001, ¶ 34. In the context of claims 23 and 25, the auxiliary reflective element views “towards” the blind spot because the principal axis of its field of view is directed into the blind spot. Ex. 2001, ¶ 34. The word “generally” demonstrates that the auxiliary need not necessarily have its principal axis pointed at the precise center of the blind spot; having the principal axis aimed to fall within the blind spot is sufficient. *Id.*

Importantly, this limitation distinguishes the claimed invention over prior art spotter mirrors that were not angled to view towards the blind spot, such as trailer towing mirrors. Such a prior art spotter would have a wide field of view that could possibly (but need not) extend into the blind spot, but because it was not angled generally towards the blind spot, its wide angle field of view would be centered outside the blind spot such as within the field of view of the main mirror element

or even toward the side of the equipped vehicle. The wide angle field of view of a trailer tow mirror or other spotter mirror that was not angled generally towards the blind spot could potentially (but need not) extend further outward from the main mirror field of view as well as further inward toward the side of the vehicle. *Id.*, ¶¶ 35-37. This excessively wide field of view can make it difficult for a driver to determine whether a vehicle visible in the spotter is actually in the blind spot, such that the driver of the equipped vehicle should not change lanes. *Id.*, ¶¶ 38-39. In contrast, the claimed invention of the ‘244 patent has the field of view of the auxiliary reflective element aimed to view generally towards the blind spot. *Id.*, ¶ 38. This allows a driver to quickly glance at the auxiliary reflective element to determine whether a passing vehicle is in the blind spot or not. *Id.*, ¶¶ 38-39.

SMR conflates the “generally views towards a blind spot” limitation with a separate limitation that is also in claims 23 and 25 of the ‘244 patent, “said auxiliary reflective element having a wide-angle field of view encompassing a blind spot in the side lane adjacent the side of the automobile to which said exterior sideview mirror assembly is attached,” which SMR labels as element [g]. Ex. 1001, claims 23, 25; Petition, 59-60 (asserting that elements [g] and [p] are met by Henion because it purportedly discloses a convex spotter that would allow a driver to view into the blind spot). However, these are two distinct limitations in the same claim, and the claim should be construed to give meaning to both.

Although claims in an IPR are given their broadest reasonable interpretation, even in an IPR “claims should always be read in light of the specification and teachings in the underlying patent.” *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1260 (Fed. Cir. 2010). “[T]he Board cannot construe the claims ‘so broadly that its constructions are *unreasonable* under general claim construction principles.’” *In re Smith Int'l, Inc.*, 871 F.3d 1375, 1382 (Fed. Cir. 2017) (*quoting Microsoft Corp. v. Proxyconn, Inc.*, 789 F.3d 1292, 1298 (Fed. Cir. 2015) (emphasis in original)). Claim construction under the broadest reasonable interpretation standard does not involve picking the broadest possible ordinary meaning for a given term, but rather must “account for how the claims themselves and the specification inform the ordinarily skilled artisan as to precisely which ordinary definition the patentee was using.” *PPC Broadband, Inc. v. Corning Optical Commc'ns RF, LLC*, 815 F.3d 747, 752 (Fed. Cir. 2016).

One claim construction principle that applies when determining the broadest reasonable interpretation is the canon that a “claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so.” *In re NuVasive, Inc.*, 693 F. App'x 893, 900 (Fed. Cir. 2017) (*quoting Merck & Co., Inc. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1372 (Fed. Cir. 2005) (rejecting PTO’s construction as “unreasonably broad” because it did not comport with this canon)). SMR’s implicit construction of “generally views towards a blind spot” would

render the limitation surplusage over the “field of view encompassing a blind spot” limitation. SMR’s construction is therefore unreasonable and should be rejected.

2. SMR Does Not Show That Henion ‘013 Discloses A Reflective Element That “Generally Views Towards A Blind Spot”

SMR presents no evidence or explanation to show that Henion ‘013 meets limitations 23[p] and 25[p] as they are properly construed. It only argues that limitations 23[p] and 25[p] are met because the auxiliary mirror in Henion ‘013 is “a ‘spotter’ or ‘fisheye’ mirror [that] would allow the driver to view into that blind spot.” Petition, 59-60. SMR presents nothing to support its assertion that Henion ‘013 necessarily views into the blind spot. But, regardless, that would not be enough to meet this limitation; orienting the spotter mirror so that the principal axis of its field of view extends into the blind spot is required. Ex. 2001, ¶ 34. SMR does not argue (and indeed, could not argue) that such an orientation is disclosed or rendered obvious by Henion ‘013, and so Ground 2 fails.

D. SMR Cannot Rely On The Adjustable Auxiliary Embodiment Of Henion ‘013 To Meet Claim 25 Because It Does Not Include The Claimed “Backing Plate.”

To argue that Henion ‘013 discloses limitation 25[s], which requires “wherein the rearward field of view of said auxiliary reflective element is generally directed at least one of outwardly and downwardly,” SMR relies on Henion ‘013’s

Fig. 4-5 adjustable auxiliary embodiment. Petition, 58-59.⁷ However, claim 25 requires that this angling is set by a “backing plate” that, when properly construed, the adjustable auxiliary embodiment in Figs. 4-5 of Henion ‘013 does not have. SMR ignores the “backing plate” claim construction issue.

1. Claim Construction

Claim 25 of the ‘244 patent requires a backing plate, which first appears in the following limitation:

said plano reflective element and said auxiliary reflective element supported at a backing plate element, said backing plate element mounting to said actuator such that movement of said backing plate element of said plano-auxiliary reflective element assembly by said actuator simultaneously and similarly moves said plano reflective element and said auxiliary reflective element;

Ex. 1001, Claim 25. Other limitations of claim 25 recite additional requirements for the backing plate, including, for example:

⁷ SMR alternatively argues that it would have been obvious to modify the fixed auxiliary embodiment in Fig. 3 of Henion ‘013 to meet the requirements of claim 25[s]. Petition, 70-71. The deficiencies in this obviousness argument are addressed in Section E, *infra*.

wherein angling of the rearward field of view of said auxiliary reflective element relative to the rearward field of view of said plano reflective element is achieved, at least in part, by an angling of said second support portion of said backing plate element supporting said auxiliary reflective element relative to said first support portion of said backing plate element supporting said plano reflective element;

Id. (emphasis added).

The broadest reasonable interpretation of “backing plate” in light of the specification is “a rigid structure that supports the rear surfaces of the primary and auxiliary reflective elements.” Ex. 2001, ¶ 42. This construction is consistent with the ordinary meaning of the term “plate,” which denotes a rigid structure. *Id.*, ¶ 43. It is also consistent with the specification, which describes the backing plate as “a rigid polymeric substrate capable of supporting plano element 50 and multiradius element 155” that has “a flat portion ... that corresponds to and is aligned with plano element 150” and “a curved portion ... that corresponds to and is aligned with multiradius element 155,” and that is “formed as a single element.” Ex. 1001, 8:21-34; *see also id.*, Fig. 11 (depicting backing plate element), 10:8-28 & Fig. 14 (depicting second embodiment of backing plate element that includes demarcation element between the reflective elements); Ex. 2001, ¶ 44.

SMR does not expressly construe “backing plate,” but asserts that an embodiment of Henion ‘013 “in which the orientation of the auxiliary mirror is adjustable relative to the primary mirror” includes the claimed backing plate. Petition, 58. In this embodiment, the elements supporting the purported primary reflective element and the purported auxiliary reflective element are connected “via a bellows or flexible hinge.” Ex. 1012 at 7:13-17.

However, a support element connected to another support element by a flexible hinge or bellows (regardless of whether it is integrally formed or not) is not a “rigid” support member, as described in the specification. Ex. 1001, 8:21. Nor can two support elements connected by a flexible hinge or bellows be considered a “plate” consistent with the ordinary meaning of that term. Ex. 2001, ¶ 43.

SMR’s implicit construction is also inconsistent with the rest of claim 25, which specifies the backing plate has “an angling,” rather than being comprised of adjustable elements. Ex. 1001, Claim 25. Similarly, the specification repeatedly describes the backing plate elements as being at an angle or being angled relative to one another, rather than being adjustable with respect to one another. *See, e.g., id.*, 10:19-20 (“section AA to BB of backing plate element 160’ is angled to section BB to CC”), 10:27-28 (“the angling of section AA to BB to section BB to CC”), 14:24-25 (“portion AA to BB of backing plate element 160’ is generally

angled to portion BB to CC of backing plate 160”) (all emphases added); Ex.

2001, ¶ 45.⁸

Because the angle is described as fixed and provided by the backing plate, the angle is to be set by the manufacturer of the mirror assembly. Ex. 2001, ¶ 48. This ensures that “plano element 150 and multiradius element 155 are adjusted and positioned in tandem and simultaneously when the driver ... activates actuator 136

⁸ There is a separate embodiment described in the specification of the ‘244 patent where the two reflective elements are “separately and independently mounted.” Ex. 1001, 21:8-10. In this embodiment, the auxiliary reflective element is “fixedly mounted to bezel 420 of mirror casing 417,” while the primary reflective element is “independently positionable” because it is “mounted by a backing member, such as a backing plate, to an actuator, which provides multi-axis positioning.” *Id.*, 20:60-62, 21:4-7. This embodiment is not claimed by the ‘244 patent, which requires mounting both the plano reflective element and the auxiliary reflective element to a single “backing plate element.” *Id.*, claims 1, 23, 25; Ex. 2001, ¶ 47. The fact that the ‘244 patent teaches providing for independent adjustment of the mirror elements by separately mounting the mirror elements further supports the conclusion that the claimed single backing plate embodiment does not allow for independent adjustability. Ex. 2001, ¶ 47.

to reposition the rearward field of view of plano-multiradius reflective element assembly 130.” Ex. 1001, 6:2-8; Ex. 2001, ¶ 48. As the specification of the ‘244 patent explains, “[t]he tandem mounting ... so that a driver can simultaneously and similarly move the auxiliary element and the plano element so as to position their respective rearward fields of view ... is an important element of this present invention.” Ex. 1001, 12:38-48. A person of skill in the art reading the specification would understand that one benefit of the claimed invention is that a driver need only correctly position the main mirror element consistent with his or her normal practice, and the auxiliary reflective element will automatically be positioned correctly based on the predetermined angle between the mirror elements set by the manufacturer. Ex. 2001, ¶ 48. SMR’s implicit construction of backing plate as encompassing two support elements connected by a flexible hinge or bellows is contrary to the specification, and is therefore unreasonable.

2. Henion ‘013 Does Not Disclose Limitation 25[s].

For limitation 25[s], SMR relies on Henion ‘013’s Fig. 4-5 adjustable auxiliary embodiment to meet the “generally directed at least one of outwardly and downwardly” requirement. *See* Petition, 76-78. But SMR’s argument is contrary to the plain meaning of the claim language.

In addition to limitation 25[s], claim 25 also requires the “backing plate” element, *i.e.* a rigid structure that supports the rear surfaces of the primary and

auxiliary reflective elements. Because the backing plate is rigid, it supports the primary and auxiliary reflective element in a fixed relationship relative to each other. Ex. 2001, ¶¶ 43, 45, 48. Accordingly, when read as a whole, claim 25 requires that the primary and auxiliary reflective element are at a fixed angle relative to each other on the backing plate so that the rearward field of view of the auxiliary reflective element is generally directed at least one of outwardly and downwardly. The Figs. 4-5 adjustable auxiliary embodiment of Henion ‘013, in which the rearward field of view of the auxiliary is adjustable because it is not supported by a “backing plate,” does not meet these claim requirements. Ex. 2001, ¶ 43. As discussed above, the use of an adjustable auxiliary negates a key benefit of the claimed invention of the ‘244 patent, which is that drivers are not required to determine the correct adjustment of the auxiliary mirror.

E. SMR’s Obviousness Arguments Rely On The Unsupported Opinions Of Its Unqualified “Expert.”

SMR relies on the unsupported opinion of its “expert” to argue that it would have been obvious to angle the field of view of the auxiliary element “at least one of outwardly and downwardly” as required by limitation 25[s] and that, in view of Platzer ‘956, it would have been obvious to position the auxiliary reflective element in an outboard position as required by elements 23[i] and 25[i]. Petition, 61-64, 76-78. However, SMR’s expert is not a POSA and is not qualified to offer opinions on automotive issues that are outside of his expertise.

1. SMR's Expert Is Not A POSA.

SMR incorrectly defines a POSA as having “a M.S. in Optics, Optical Engineering, or similar studies in a related field (e.g., Physics or Mechanical Engineering) with 2-3 years of experience in the optics/mechanical industry.”

Petition, 6. In fact, a POSA would have an M.S. in any kind of engineering relevant to automotive component design (e.g., electrical engineering, mechanical engineering, or optical engineering), as well as 2-3 years of experience in the automotive industry designing components for automobiles.

The claimed invention of the ‘244 patent is an “exterior sideview mirror system suitable for use on an automobile.” Ex. 1001, Claims 1, 23, 25. The challenge that the invention of the ‘244 patent overcame was not to provide a mirror with an advanced design from an optics perspective. The challenge addressed by Dr. Lynam’s inventions was one specific to the automotive field, namely, recognizing the fields of view and mirror design that drivers will find useful and non-distracting to solve the long-standing blind spot problem with exterior side view mirrors. This is a problem that had plagued automobile designers since the dawn of the automobile, and that was not successfully solved before Dr. Lynam’s inventions claimed in the ‘244 patent. SMR’s expert, who has no experience in the automotive industry, is not qualified to testify regarding what would have been allegedly obvious to a person of ordinary skill in the art.

The specification discusses many concerns and technical issues that are unique to the automotive industry. For example, it discusses designing the mirror so that a driver is continuously aware of a passing vehicle without being distracted. Ex. 1001, 19:61-20:36. It discusses the requirement for the primary reflective element to have a view that complies with Federal Motor Vehicle Safety Standards (“FMVSS”). Ex. 1001, 12:48-13:5, 15:20-46; Ex. 2001, ¶ 24. It also discusses the advantages to drivers of mounting the primary and auxiliary reflective elements on a single backing plate so that the driver can adjust both elements simultaneously and similarly. Ex. 1001, 12:29-48. The specification further discloses that there are manufacturing benefits to such an arrangement. *Id.*, 15:12-19. These types of issues and considerations would not be familiar to a person with an optics degree, such as SMR’s purported expert, who lacks automotive experience.

Because SMR’s expert is not qualified as a POSA, he provides conclusory and overly simplistic analysis that does not appreciate the difficulty, without the benefit of hindsight, of plucking these few references out of the vast field of art directed at solving the blind spot problem. Nor does SMR’s expert appreciate the novelty and inventiveness of the field of view and angling limitations disclosed in the ‘244 patent. SMR’s expert also repeatedly opines on issues, such as what a POSA would have understood from the requirements of FMVSS (*e.g.*, Ex. 1002, ¶ 296), drivers’ preferences regarding adjustable mirrors (*e.g.*, *id.*, ¶¶ 333, 385), and

where obstacles are likely to be located in the blind spot (*e.g.*, *id.*, ¶ 383), that he has no qualifications whatsoever to opine upon. This unqualified testimony is entitled to little weight. *See SCHOTT Gemtron Corp. v. SSW Holding Co.*, IPR2014-00367, Paper No. 62 at 11-13 (PTAB May 26, 2015) (“Petitioner’s witness ... does not qualify as a person of ordinary skill” and accordingly “we accord the testimony ... regarding the alleged obviousness of the claims less weight.”).

2. SMR Fails To Show That Limitation 25[s] Is Obvious.

With respect to limitation 25[s], SMR’s expert opines (without citing evidence) that a POSA would have been motivated to modify Henion ‘013 to angle the mirror outwardly and downwardly to “cover the blind spot” and to “capture more of the area in which objects of interest or concern are most likely to appear.” (Ex. 1002, ¶ 383), but does not address why a POSA would have angled the mirror, as opposed to increasing its overall field of view, to achieve the same objective. Ex. 2001, ¶¶ 57-58. Indeed, Henion ‘013 itself discloses that spotter mirrors typically have a sufficiently wide field of view to make outward angling unnecessary. Ex. 1012, 8:15-17; Ex. 2001, ¶ 58. And tellingly, SMR points to no reference that actually discloses an auxiliary reflective element with a field of view that is angled outwardly and downwardly, or that views generally downwardly. SMR’s reliance on the *ipse dixit* opinion of its unqualified “expert” is insufficient

to meet SMR's burden. *See Johns Manville Corp. v. Knauf Insulation Inc.*, IPR 2015-01633, Paper No. 10 at 12-14 (PTAB Jan. 4, 2016) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled or little or no weight.") (citation omitted).

3. SMR Fails To Show That A Field Of View Of At Least 25 Degrees Is Obvious.

Limitations 24[e] and 25[u] require that "said driver-side exterior sideview mirror assembly provides to the driver of the equipped automobile a total field of view that generally subtends an angle of at least about 25 degrees with respect to the side of the equipped automobile." SMR's reliance on a combination of Henion '013 with Platzer '956 to disclose the specific field of view requirements of claims 24 and 25 is predicated on the assumption that Platzer '956 discloses the same major components as Henion '013. *E.g.*, Petition, 53-54; Ex. 1002, ¶ 298.

However, Platzer '956 differs from Henion '013 because Platzer '956's auxiliary reflective element is located in "the upper and outer quadrant of the rearview mirror," unlike the lower, inboard-located auxiliary in Henion '013. Ex. 1013, 15:16-17; Petition, 56-57 (citing Ex. 1012 at Fig. 2). The different location of the auxiliary mirror affects the fields of view provided by the mirror assemblies. Ex. 2001, ¶¶ 59-60. SMR does not address why a POSA would have looked to the differently-configured mirror assembly disclosed by Platzer '956 in order to determine the field of view for the mirror assembly disclosed in Henion '013.

4. SMR Fails To Show That Elements 23[i] and 25[i] Are Obvious.

Elements 23[i] and 25[i] require, in relevant part, that the auxiliary reflective element “is positioned at an outboard portion of said plano-auxiliary reflective element assembly.” SMR relies on Platzer ‘956 for this limitation, but fails to set forth a sufficient reason why a POSA would have modified Henion ‘013 to use the outboard positioning disclosed in Platzer. SMR relies on its purported expert’s opinion that the field of view provided by an inboard auxiliary mirror “has the potential to confuse drivers as to the location of overtaking automobiles in their blind spot, with associated safety implications.” Ex. 1002, ¶ 294. But SMR’s expert cites no evidence to support the assertion that a POSA would have recognized that drivers would be confused, or that there would be safety implications, and he is not qualified to offer such an opinion. For all of these reasons, SMR’s obviousness arguments for Ground 2 do not present a reasonable likelihood that it will prevail in its challenge.

CONCLUSION

For the foregoing reasons, Magna respectfully requests that *inter partes* review is not instituted on any of the grounds in SMR’s petition.

Dated: April 26, 2018

/Joseph A. Micallef/
Joseph A. Micallef
Reg. No. 39,772

SIDLEY AUSTIN LLP
1501 K Street, N.W.
Washington, D.C. 20005
jmicallef@sidley.com
(202) 736-8492
Attorney for Patent Owner

CERTIFICATE OF COMPLIANCE

I hereby certify that this brief complies with the type-volume limitations of 37 C.F.R. § 42.24, because it contains 11,674 words (as determined by the Microsoft Word word-processing system used to prepare the brief), excluding the parts of the brief exempted by 37 C.F.R. § 42.24.

Dated: April 26, 2018

/Joseph A. Micallef/
Joseph A. Micallef
Reg. No. 39,772
SIDLEY AUSTIN LLP
1501 K Street, N.W.
Washington, D.C. 20005
jmicallef@sidley.com
(202) 736-8492
Attorney for Patent Owner

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I hereby certify that on this 26th day of April, 2018, I caused to be served a true and correct copy of the foregoing by electronic mail on the following counsel:

Charles H. Sanders
charles.sanders@lw.com
Anant K. Saraswat
anant.saraswat@lw.com
Latham & Watkins LLP
200 Clarendon Street
Boston MA 02116

Jonathan M. Strang
jonathan.strang@lw.com
Latham & Watkins LLP
555 Eleventh Street, NW, Ste. 1000
Washington, DC 20004

Dated: April 26, 2018

/Joseph A. Micallef/
Joseph A. Micallef
Reg. No. 39,772
SIDLEY AUSTIN LLP
1501 K Street, N.W.
Washington, D.C. 20005
jmicallef@sidley.com
(202) 736-8492
Attorney for Patent Owner

Exhibit List

Ex. No.	Description
2001	Declaration of Michael Nranian
2002	Curriculum Vitae of Michael Nranian
2003	U.S. Patent No. 5,579,133
2004	Excerpts of File History for U.S. Patent No. 8,128,243
2005	Reserved
2006	Excerpts of File History for U.S. Patent No. 8,147,077
2007	Excerpts of File History for U.S. Patent No. 8,267,534
2008	Excerpts of File History for U.S. Patent No. 8,550,642
2009	Excerpts of File History for U.S. Patent No. 8,591,047
2010	U.S. Provisional Patent Application No. 60/471,872
2011	Reserved
2012	Annotated Copy of Lynam '026
2013	Random House Webster's Unabridged Dictionary (2nd Ed.) p. 1539
2014	American Heritage Dictionary (4th Ed. 2000) p. 1344-45