#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re <i>Inter Partes</i> Review of:	)
U.S. Patent No. 8,128,244	)
Issued: March 6, 2012	)
Application No.: 13/071,169	)

For: Exterior Sideview Mirror System

FILED VIA E2E

CORRECTED PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 8,128,244

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## **Exhibit List**

Ex. No.	Description
1001	U.S. Patent No. 8,128,244 (the "'244 patent")
1002	Declaration of Jose Sasian ("Sasian Decl.")
1003	Curriculum Vitae of Jose Sasian
1004	Exhibit B to Defendant's First Supplemental Initial Non-Infringement, Invalidity, and Unenforceability Contentions, Magna Mirrors of America, Inc. v. SMR Automotive Mirrors UK Ltd. et al., No. 1:17-cv-00077 (W.D. Mich. Nov. 3, 2017)
1005	Exhibit C to Defendant's First Supplemental Initial Non-Infringement, Invalidity, and Unenforceability Contentions, Magna Mirrors of America, Inc. v. SMR Automotive Mirrors UK Ltd. et al., No. 1:17-cv-00077 (W.D. Mich. Nov. 3, 2017)
1006	File History for U.S. Patent No. 8,128,244 (the "'244 FH")
1007	RESERVED
1008	U.S. Patent No. 7,934,843 (the "'843 patent")
1009	File History for U.S. Patent No. 7,934,843 (the "'843 FH")
1010	Second Amended Complaint, Magna Mirrors of America, Inc. v. Samvardhana Motherson Reflectec Group Holdings Ltd., et al., No. 1:17-CV-77 (W.D. Mich., Aug. 17, 2017) ("2d Am. Compl.")
1011	U.S. Patent Application Publication No. 2002/0072026 (the "'026 publication")
1012	WO 2001/44013 ("Henion")
1013	WO 2001/81956 ("Platzer")
1014	U.S. Patent Application No. 12/197,666 (the "'666 application")
1015	RESERVED
1016	U.S. Patent No. 6,522,451 (the "'451 patent")

1017	U.S. Patent No. 6,717,712 (the "'712 patent")
1018	U.S. Patent No. 7,167,294 (the "'294 patent")
1019	U.S. Patent Application No. 12/851,045 (the "'045 application")
1020	Computer-generated document comparison showing differences in the '045 and '666 applications
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1028	File History for U.S. Patent No. 7,420,756 (the "'756 FH")
1029	RESERVED
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1031	RESERVED
1032	JAMES MAXWELL, PLASTICS IN THE AUTOMOTIVE INDUSTRY 114 (Woodhead Publishing Limited 1994) ("Maxwell")
1033	N. G. McCrum, C. P. Buckley, & C. B. Bucknall, Principles of Polymer Engineering (Oxford Science Publications 2d ed. 2011) (1997) ("Bucknall")
1034	U.S. Patent No. 5,721,646 ("Catlin")
1035	U.S. Patent No. 5,793,542 ("Kondo")
1036	U.S. Patent Application Publication No. 2004/0264011 (the "'011 publication")

1037	Certified English Translation of French Republic Patent Application Publication No. 2,650,982 ("Silvestre")
1038	U.S. Patent No. 6,984,048 ("Yamabe")
1039	George Platzer, The Geometry of Automotive Rearview Mirrors - Why Blind Zones Exist and Strategies to Overcome Them, SAE Technical Paper 950601 (1995)
1040	National Highway Traffic Safety Administration, U.S. Dep't of Transportation, Doc. No. TP111V-00, Laboratory Test Procedure for FMVSS 111 – Rearview Mirrors (Other Than School Buses) (October 28, 1999)

#### I. Introduction

SMR Automotive Systems USA, Inc. ("SMR") requests *inter partes* review of Claims 1-26 of U.S. Patent No. 8,128,244, "Exterior Sideview Mirror System," (Ex. 1001).

SMR is part of the Samvardhana Motherson Reflectec Group, one of the largest manufacturers of rearview mirrors in the world. SMR develops, produces, and distributes exterior mirrors, interior mirrors, blind spot detection systems and a wide range of other automotive components. Magna Mirrors of America, Inc. ("Magna") has sued SMR for infringement, accusing various two-piece mirrors SMR supplies to major automotive manufacturers including Ford, Nissan, Hyundai, Chevrolet, and Fiat, such as the following allegedly from a Chevrolet Traverse:

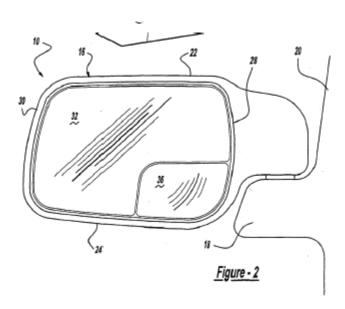


2d Am. Compl. 19 (Ex. 1010).

The '244 patent's claims are unpatentable for two reasons. *First*, Magna's older, expired, and abandoned two-mirror patents anticipate the claims. A

publication from that family – the '026 publication (Ex. 1011) – is prior art under §§ 102(a) and (e) under the earliest filing date on the face of the '244 patent, and § 102(b) art under its actual earliest effective filing date.

Second, the claims Magna has asserted in litigation against SMR would have been obvious over SMR's own patent prior art, which teaches using two separate mirrors in one assembly:



Henion Figure 2. (Ex. 1012).

The Board therefore should institute review and find all of the '244 patent's claims unpatentable. SMR should be free to continue to supply its products to the world's major manufacturers without interference from Magna's invalid patent.

#### II. Mandatory Notices under 37 C.F.R. § 42.8

#### A. Real Parties-In-Interest

SMR and the following other entities are real parties-in-interest:

Samvardhana Motherson Reflectec Group Holdings Ltd., SMR Automotive Mirror Parts and Holdings UK Limited, SMR Mirrors UK Limited, SMR Automotive Mirror Systems Holding Deutschland GmbH, SMR Automotive Mirrors Stuttgart GmbH, SMR Automotive Vision Systems Mexico S.A. de C.V., and SMR Automotive Servicios Mexico S.A. de C.V.

#### **B.** Related Matters

Magna asserted the '244 patent in Magna Mirrors of America, Inc. v. Samvardhana Motherson Reflectec Group Holdings Limited, et al., 1:17-cv-00077-RJJ-PJG (W.D. Mich.).

SMR is also filing *Inter Partes Review* ("IPR") petitions challenging asserted U.S. Pat. Nos. 7,934,843; 8,147,077; 8,267,534; 8,550,642; 8,591,047; 8,783,882; 8,899,762; and 9,694,750. Magna is prosecuting another related patent application: No. 15/638,661.

#### C. Grounds For Standing

SMR certifies that the '244 patent is available for *inter partes* review and that SMR is not barred from requesting this proceeding.

#### D. Lead And Backup Counsel And Service Information

Pursuant to 37 C.F.R. §§ 42.8(b)(3), 42.8(b)(4), and 42.10(a), SMR designates the following lead counsel:

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   Boston MA 02116; 617.880.4576.

Pursuant to 37 C.F.R. § 42.10(b), a Power of Attorney from SMR is attached. SMR consents to electronic service.

#### E. Fee For *Inter Partes* Review

The Director is authorized to charge the fee specified by 37 C.F.R. § 42.15(a) to Deposit Account No. 506269.

#### III. Identification Of Challenges (37 C.F.R. § 42.104(B))

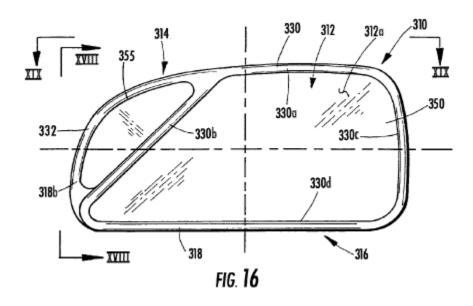
- **Ground 1:** Claims 1-26 are anticipated by the '026 publication (Ex. 1011).
- **Ground** 2: Claims 23-26 would have been obvious over Henion (Ex. 1012), Platzer (Ex. 1013), and Catlin (Ex. 1034).

All challenged claims are also unpatentable for any additional reasons identified with respect to their dependent claims.

#### IV. Background

#### A. The '244 Patent (Ex. 1001)

The '244 patent relates to an automobile sideview mirror. The claims recite an "exterior sideview mirror system" with two separate mirrors, one flat and one curved. Sasian Decl. ¶¶ 29-36 (Ex. 1002). Specifically, claim 1 recites a "plano-auxiliary reflective element assembly" comprising a "plano" (flat) mirror and "a separate auxiliary reflective element having a curvature." Figure 16 shows an example:



As explained herein, Figure 16, along with *all* disclosures of a two-mirror design, were copied into an ancestor of the '244 patent from an earlier-filed patent family which had been abandoned for years. Before insertion of this material, all previous

applications in the '244 patent's family only described a single, continuous mirror with a flat portion and a curved portion.

#### B. The Person Of Ordinary Skill In The Art ("POSA")

A POSA would have had at the relevant time 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. This description is approximate, and a higher level of education or skill may make up for less experience, and vice-versa, e.g., a B.S. in the above fields with 4-6 years of experience in the industry. Sasian Decl. ¶¶ 16-18.

#### C. Claim Construction

Because the '244 patent has not expired, the Board applies the "broadest reasonable construction in light of the specification of the patent in which it appears." 37 C.F.R. § 42.100(b). This is different from—and broader than—the standard applied in district court. *Versata Dev. Grp., Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1327-28 (Fed. Cir. 2015).<sup>1</sup>

All claim terms, including those not specifically addressed in this section,

<sup>&</sup>lt;sup>1</sup> SMR does not concede that the meaning of any claim terms are as broad under the *Phillips* rubric as they are under the broadest reasonable interpretation. SMR reserves the right to argue alternative and narrower definitions in district court.

have been accorded their broadest reasonable interpretation.

#### 1. "side-by-side"

All challenged claims require that the primary and secondary mirrors be "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." *See*, *e.g.*, '244 patent claim 1. Magna has asserted in litigation that a secondary mirror located in a corner of the primary mirror (as depicted below using a mirror allegedly from a Chevrolet Traverse) is in a "side-by-side relationship" with the primary mirror:



2d Am. Compl. 19 (Ex. 1010). For purposes of this petition under the "broadest reasonable construction" standard, Petitioner adopts Magna's interpretation of the term "side-by-side" as including an arrangement of mirrors that face each other along two edges (e.g., where a secondary mirror is in the corner of a primary mirror as depicted above). Regardless, even under a narrower construction of

"side-by-side," the challenged claims would still be invalid for the reasons discussed herein.

#### V. Magna's '026 Publication Is Prior Art Under §§ 102(a) And (e)

As petitioner, SMR bears the ultimate burden of demonstrating unpatentability. Dynamic Drinkware, LLC v. National Graphics, Inc., 800 F.3d 1375, 1377 (Fed. Cir. 2015). SMR has met its initial burden of production for purposes of institution of a trial by proffering U.S. Pat. Publ. 2002/0072026 ("the '026 publication," Ex. 1011) as invalidating art. The '026 publication is "by another" because it names three inventors – John Lindahl, Hahns Y. Fuchs, and Niall Lynam – whereas the '244 patent names just one inventor, Lynam. Furthermore, the '026 publication arises from an application filed December 20, 2000 and was published on June 13, 2002, which is before the earliest claimed priority date on the face of the '244 patent, May 20, 2003. If Magna attempts to offer evidence that the '244 patent claims and relevant disclosure in the '026 publication have a common inventive entity, that evidence should be subject to cross examination during the trial phase of the requested *inter partes* review proceeding.

## VI. The '244 Patent Is Entitled To An Effective Filing Date No Earlier Than August 5, 2010, So The '026 Publication Is Also § 102(b) Prior Art

The '244 patent is entitled only to the actual filing date of its ancestor U.S. Patent No. 7,934,843 (Ex. 1008). The '843 patent's application was filed August 5, 2010, which is well over one year after the '026 was published in 2002.

The '244 patent is not entitled to the benefit of an earlier filing date because the '843 patent's immediate parent, U.S. Patent Application No. 12/197,666 (Ex. 1014) does not provide written description support for the '244 patent's claims. At best, the '244 patent's claims find support only in two patents referenced in passing in the '666 application's specification: U.S. Patent Nos. 6,522,451 (Ex. 1016) and 6,717,712 (Ex. 1017), the latter of which arose from the '026 publication. But this is insufficient for the '666 application itself to support the '244 patent's claims. First, only the portions of the '451 and '712 patents regarding the field of view – not any portions related to the two-mirror structure – were incorporated by reference in the '666 application. Second, even if the '451 and '712 patents were incorporated in their entireties (and they were not), a POSA would conclude that the '666 application does not show possession of the '244 patent's claimed two-mirror subject matter because the '666 application itself is directed to a single mirror design.

#### A. Background Law

For a claim to be entitled to the benefit of an earlier-filed application, the earlier application must provide written description support for the claim. 35

U.S.C. § 120; *Tronzo v. Biomet, Inc.*, 156 F.3d 1154, 1158 (Fed. Cir. 1998). There must also be a continuous chain of co-pending applications, each supporting the subject matter presently claimed. *Hollmer v. Harari*, 681 F.3d 1351, 1355 (Fed. Cir. 2012). "This requirement prevents an inventor from 'overreaching' in a later-filed application as to the scope of what was invented at the time of the earlier-filed application by requiring that the invention be described in 'such detail that . . . future claims can be determined to be encompassed within the . . . original creation." *ButamaxTM Advanced Biofuels LLC v. Gevo, Inc.*, IPR2013-00539, Paper 33 at 12-13 (Mar. 3, 2015) (quoting *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1561 (Fed. Cir. 1991)).

Magna overreached here. Magna improperly revived prosecution of an abandoned family by transforming the application for the '843 patent into that of the patent family Magna had abandoned.

#### **B.** Background Facts

1. Magna previously prosecuted, and abandoned, a two-mirror design in the '712 patent family

The '712 patent is a continuation-in-part of the '451 patent. The '712 patent in turn has one continuation, U.S. Patent No. 7,167,294 (Ex. 1018). All three

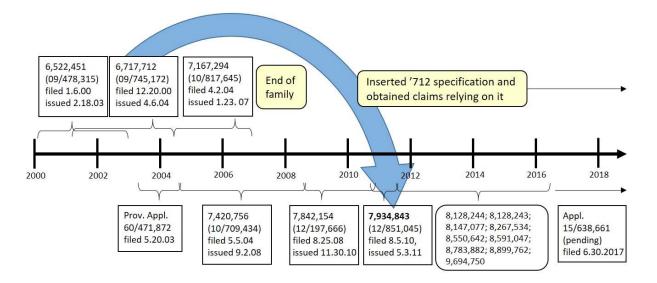
patents in this family (referred to herein as the "'712 family") relate to a side-view mirror with a two-mirror design having a flat primary mirror and a separate, curved auxiliary mirror. *See*, *e.g.*, '451 patent Figures 5A-5H & claim 1 (Ex. 1016); '712 patent Figures 5A-5H & claim 1 (Ex. 1017); '294 patent Figures 5A-5H & claim 1 (Ex. 1018). The examiner of the '712 family repeatedly *rejected* the as-filed claims of these patents, forcing Magna to add several claim limitations, such as the requirement in claim 1 of the '712 patent that the mirror include a "frame element assembly" with a "first open portion" and "second open portion." '712 patent claim 1. After the '294 patent issued on January 23, 2007, Magna did not file any further continuations in the family.

# 2. Magna impermissibly used the '843 patent's application to revive prosecution of the abandoned '712 patent family

The '843 patent's application, Appl. No. 12/851,045 ("the '045 application," Ex. 1019) was filed on August 5, 2010, ostensibly as a continuation of the '154 patent's application, the '666 application. '843 FH 1145 (Ex. 1009). Although Magna called the '045 application a continuation of the '666 application, Magna actually used the '045 application to impermissibly reinitiate prosecution of the earlier-filed '712 patent family, which had not had a pending application for nearly four years, before a new examiner. Magna thus improperly revived its ability to draft claims directed to the '712 patent family's two-element mirrors. Magna

proceeded to acquire twelve new patents with 367 new claims in under seven years, all directed to the abandoned '712 patent's disclosure.

To revive prosecution of the '712 patent's abandoned family, Magna copied the entire '712 patent specification (except the Background and Summary of Invention) into the '045 application and drafted claims directed to the '712 family's purported invention:



Magna inserted the '712 patent's disclosure into the as-filed '045 application at the front of the Detailed Description. *See* Ex. 1020 (comparing '045 and '666 applications). With its filing of the '045 application, Magna stated that the attached application was a copy of the parent application ('843 FH 1145), but then corrected itself, stating that the '045 application adds "Figures 9-[23]<sup>2</sup> and discussion

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<sup>&</sup>lt;sup>2</sup> Magna incorrectly stated "Figures 9-22."

thereof, which are from U.S. Patent 6,717,712, which is incorporated by reference in the present application and its priority applications" and "new claims 1-92." '843 FH 1146; Ex. 1020 (computer-generated redline showing differences between the '045 and '666 applications).

This insertion of the '712 patent's disclosure expanded the '045 application to roughly four times the size of its parent, the '666 application. The number of figures increased from 9 to 33 (including new Figures 13A-H, 14, 14A, 14B), and the text grew from 16 pages (14 pages of description, 2 pages of claims) to 68 pages (37 pages of description, 31 pages of new claims). *Compare* Ex. 1014 ('666 application) *with* Ex. 1019 ('045 application); Ex. 1020 (computer-generated redline).

The substance of the '045 application changed drastically, too. The '712 patent described and claimed an assembly with *two separate mirrors* (one planar and the other curved) which work together to achieve a wide field of view. *See* Sasian Decl. ¶¶ 31-53 (Ex. 1002). The '045 application's parent, the '666 application, described achieving a *similar field of view* to the '712 patent's two-mirror assembly using *just one reflective element* having an ultrathin and flexible layer of glass. Sasian Decl. ¶¶ 38-46. Magna improperly transformed this brief performance comparison touting the benefits of a single reflective element into an

opportunity to revive prosecution of the two-mirror assembly from the abandoned '712 patent family.

To be clear, no member of the '843 patent family, including the '244 patent, claimed priority to the '712 patent family. Before the disclosure of the '712 patent was inserted into the '045 application, the '451 and '712 patents were only briefly mentioned with incorporation by reference language, among over 100 other documents (Sasian Decl. ¶¶ 61, 47-53) in the '666 patent application.

# 3. Magna's defective attempt to antedate the prior art and effectively claim priority to the '712 patent family

On November 16, 2011, the examiner issued an Office Action on the merits, rejecting all pending claims as anticipated by U.S. Pat. Publ. 2002/0072026 ("the '026 publication," Ex. 1011), the published application that issued as the '712 patent (Ex. 1017). '244 FH 144-162 (Ex. 1006). The examiner concluded that the '026 publication was prior art because it was "by another," and might be overcome by a Rule 132 declaration that the reference was derived from the current inventor alone or "an appropriate showing under 37 CFR 1.131." *See* '244 FH 144-145.

Just six days later, Magna argued in response that the '026 publication was not prior art. Magna first contended nonsensically that because "Lynam '026 published prior to the priority date of the presently claimed invention" it "cannot be cited as prior art under 35 U.S.C. §102(e)." '244 FH 248. Magna also contended (i) the pending application is entitled to its provisional application's filing date

because '712 patent and its parent, the '451 patent (Ex. 1016) were incorporated in all of the earlier applications from which the '169 application claimed priority, and (ii) the '451 patent's application demonstrated a conception and reduction to practice before the '026 publication was published. '244 FH 248-250 (Ex. 1006).

Magna did not submit evidence sufficient to prove either point. Instead,
Magna made multiple misleading arguments and submitted evidence that confused
the issues. *First*, Magna assumed, but did not expressly contend or demonstrate,
that the '451 and '712 patents were incorporated in their entireties. '244 FH 249.

Second, Magna did not contend that the relevant material from the '026 publication (which issued as the '712 patent with two other named inventors in addition to Lynam) is by the same inventor and therefore not prior art under § 102(a) and (e). MPEP 715.01(c), 716.10; '244 FH 166-69, 248-250. Instead, Lynam addressed the inventorship of the '451 patent (Ex. 1016). However, regardless of the inventorship of the '451 patent, the unrelated '244 patent cannot claim the benefit of the issued '451 patent's earlier filing date and defeat the '026 publication as prior art. See MPEP 716.10 (common inventorship does not give the

pending application the benefit of the earlier patent's date (citing *In re Costello*, 717 F.2d 1346 (Fed. Cir. 1983))).<sup>3</sup>

*Third*, Magna attempted to swear behind the '026 publication by pointing to the '451 patent application as evidence of a reduction to practice, misapplying 37 C.F.R. § 1.131's requirements for an *actual* reduction to practice.

Lynam's Rule 131 declaration was insufficient to remove the '026 publication from consideration as prior art for any reason. Indeed, Lynam's conclusory Rule 131 declaration was insufficient to antedate the '026 publication as a matter of law, even if every word is taken at face value. He addressed only claim 1 and did not address any other pending claims. He also did not point to any corroborating evidence that he actually constructed the claimed mirror and demonstrated that it worked for its intended purpose, as required to demonstrate an

<sup>&</sup>lt;sup>3</sup> The MPEP citations in this section are to the 8th edition, Rev. 8, which was in effect during the prosecution of the '244 patent. The relevant pre-AIA law has not changed in the meantime.

<sup>&</sup>lt;sup>4</sup> Magna's filing of a terminal disclaimer ('244 FH 134) does not cure its failure to meet the requirements of 35 U.S.C. § 120. Magna cannot revive prosecution of the '451 patent family nearly four years after it refrained from filing a co-pending continuation in that family.

actual reduction to practice. *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1169 (Fed. Cir. 2006) (listing requirements to establish an actual reduction to practice).<sup>5</sup>

Lynam merely pointed to the '451 patent and application, which corroborates only conception at best. '244 FH 169 (Ex. 1006); *Costello*, 717 F.2d at 1350 (because no co-pending application claiming priority was filed, the '451 patent application "is inoperative for any purpose, save as evidence of conception"); 3A-10, Chisum on Patents § 10.05 (earlier filing date ceases to be a constructive reduction to practice if the applicant fails to file a continuation before the patent issues). He also failed to allege, much less demonstrate, *any* diligence, let alone diligence until a constructive reduction to practice, *i.e.*, the earliest claimed effective filing date of the '045 application (May 20, 2003), as required. 37 C.F.R. § 1.131(b); MPEP 715.07.

Lynam also failed to acknowledge, much less address, the "thin glass" feature recited in each of the challenged claims. *See* '244 FH 168 (element "q"); '244 patent claim 1, element [q].<sup>6</sup> This feature was the focus of the '666

<sup>&</sup>lt;sup>5</sup> If Magna offers any such evidence in response to this petition, that evidence should be subject to cross examination during the trial phase of the requested *inter partes* review proceeding.

<sup>&</sup>lt;sup>6</sup> See Claim Listing appendix for claim language for all claim elements.

application and its parent applications, and it is not disclosed in the '451 and '712 patents. By failing to address this critical feature and its combination with the '451 patent's alleged invention, Lynam failed to contend that the '451 patent evidenced conception, much less any reduction to practice, of the pending claims. *Novozymes A/S v. DuPont Nutrition Biosciences APS*, 723 F.3d 1336, 1349 (Fed. Cir. 2013) (for a disclosure to support a claim, it must address all of the claim's features "as an integrated whole").

The declaration and applicant's arguments also mix up the requirements for an earlier actual reduction to practice with that of an earlier conception followed by diligence "to the filing of the application," which is sometimes called a "constructive reduction to practice." 37 C.F.R. § 1.131; MPEP 715. A constructive reduction to practice, *i.e.*, "the filing of *the* application" refers to the effective filing date of the application under examination, not the filing date of some other application in another family. *See* 37 C.F.R. 1.131(b) (the antecedent basis for "the application" is "an application" that has been rejected); 37 C.F.R. § 41.201 (constructive reduction to practice must be "through a chain of patent applications including in the involved application or patent"); *Costello*, 717 F.2d at 1350; Chisum § 10.05 (an unrelated application cannot serve as a constructive reduction to practice).

As the Board previously recognized when presented with nearly identical facts, Magna was "for practical purposes asking for the benefit of the earlier filing date" of the '451 patent by pointing to it "as a constructive reduction to practice." *Ex Parte Schatz*, No. 2007-1335, 2007 WL 2814106, at \*5 (BPAI Sept. 21, 2007). But because the '244 patent did not claim priority to the '451 patent under 35 U.S.C. § 120, "the statute prohibits [Lynam] from obtaining benefit of the earlier filed application." *Id*.

## 4. The examiner legally erred by finding the declaration sufficient to antedate the prior-art '026 publication

The examiner allowed the claims on January 24, 2012, incorrectly stating that the deficient Rule 131 declaration "is sufficient to overcome the Lynam et al US 2002/0072026 reference" that later issued as the '712 patent. '244 FH 258 (Ex. 1006). The examiner did not explain his reasoning.

The examiner's conclusion was legally deficient, and enabled Magna to circumvent the requirements of 35 U.S.C. § 120. *First*, Lynam's Rule 131 declaration did not address priority at all. *Second*, the examiner also failed to go beyond the declaration and determine whether the '451 and '712 patents were incorporated in their entireties *and* whether the combined disclosures supported the claimed invention.

*Third*, even assuming the '169 application of the '244 patent (Ex. 1001) was entitled to its provisional application's filing date (and it was not), the declaration

failed to allege sufficient facts to "swear behind" the '026 publication, as explained above. Although Lynam's Rule 131 declaration purported to demonstrate an earlier reduction to practice, the examiner failed to hold Lynam to the requirements of that Rule, including showing diligence or an earlier actual reduction to practice. 37 C.F.R. § 1.131.

**Fourth**, the examiner failed to recognize that the declaration only partially addressed claim 1, because it failed to address the thin-glass limitation, and did not address the remaining claims.

Petitioner notes that a different examiner objected to Magna's priority claim during prosecution of a later-filed patent in the family, U.S. Patent No. 8,783,882 ("the '882 patent," Ex. 1022). '882 FH 135-136 (Ex. 1023). Magna misled that examiner too in essentially the same manner. In short, Magna responded to the priority objection by avoiding the question, arguing that it did not introduce any "new matter," which is a 35 U.S.C. § 132 issue, instead of squarely addressing the §§ 112 and 120 issues. '882 FH 180. Magna also submitted a Rule 131 declaration that had similar deficiencies to the one submitted for the '244 patent. *Id.* at 182,

184-186. The examiner allowed the claims on the same legally erroneous basis. '882 FH 344, 349.<sup>7</sup>

# C. The '244 Patent Is Not Entitled To The Filing Date Of Earlier-Filed Applications Because The Relevant Portions Of The '451 And '712 Patents Were Not Incorporated By Reference

The '666 application describes a single multi-radius reflective element that provides an "enhanced field of view" for a mirror assembly. '666 application ¶¶ 27, 47 (Ex. 1014). The application explains that this single reflective element provides a field of view similar to that of the two-element mirror described in the '451 and '712 patents, but it did not incorporate the entire description of the two-element assembly disclosed in those patents. However, that two-element assembly is the subject of the challenged claims.

A host document incorporates material by reference only if it "identif[ies] with detailed particularity what specific material it incorporates and clearly

<sup>&</sup>lt;sup>7</sup> The examiner also did not address the defective priority claim in the application for the '882 patent. The priority claims to the '247 and '091 applications did not match that in the ADS even after Magna attempted to correct an error in the priority claim. *Compare* '882 FH 101 (Req. for Corr. Filing Rec't) with '882 FH 104 (ADS showing that the '004 application claims priority directly to the '247 and '091 applications, and no priority claim from the '247 to the '091 application) (Ex. 1023).

indicate[s] where that material is found in the various documents." *Husky Injection Molding Sys. Ltd. v. Athena Automation Ltd.*, 838 F.3d 1236, 1248 (Fed. Cir. 2016) (citation omitted). To determine what was incorporated, if anything, the Board assesses "whether a skilled artisan would understand the host document to describe with sufficient particularity the material to be incorporated." *Id.* Where there is ambiguity, nothing is incorporated; specificity is required to incorporate subject matter by reference. *See Hollmer*, 681 F.3d at 1358 ("Such ambiguity in incorporation does not suffice."); *Zenon Envtl., Inc. v. U.S. Filter Corp.*, 506 F.3d 1370, 1378 (Fed. Cir. 2007) ("the host document must identify with *detailed particularity* what specific material it incorporates and *clearly indicate where* that material is found" (emphasis in original)).

Reading the relevant language in the '666 application in context, a POSA would conclude that the '666 application identified with detailed particularity, and thus incorporated by reference, only the "field of view" of the two-mirror assembly disclosed in the '451 and '712 patents. The '666 application describes a one-piece reflective element 12. *E.g.*, '666 application ¶ 27. The '666 application explains that this one-piece "reflective element 12" can provide a similar "field of view" to the two-piece reflective element described in the '451 and '712 patents. *Id.* ¶ 28. And, in the same sentence, the '666 application incorporates by reference this "field of view" disclosed in the '451 and '712 patents:

Reflective element 12 may comprise an aspheric or multi-radius or wide angle single element reflective element substrate. 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.

Id. (emphasis added). Therefore, far from incorporating the disclosures of two-piece mirror assemblies in the '451 and '712 patents (let alone the entirety of those patents), the '666 application expressly distinguishes them and incorporates only a single aspect—the "field of view"—applicable to the one-piece "reflective element 12" described in the '666 application. Sasian Decl. ¶¶ 47-53.

By contrast, when Magna intended to incorporate a reference into the '666 application in its entirety, Magna said so. '666 application ¶ 1 ("hereby incorporated herein by reference in its entirety"); ¶ 45 ("hereby incorporated herein by reference in their entireties"); ¶ 46 ("hereby incorporated herein by reference in its entirety"). Consequently, a POSA would understand that, in the '666 application, Magna only intended to incorporate a reference in its entirety when Magna clearly said so. Sasian Decl. ¶ 47.

Because Magna did not state in the '666 application that it was incorporating the '451 and '712 patents in their entirety, a POSA would understand that the applicant did not intend to incorporate those patents in their entirety. Rather, a POSA would understand that Magna intended to incorporate the "field of view"

disclosed in those patents by identifying this feature with detailed particularity.

Sasian Decl. ¶¶ 47-53.

In similar circumstances, the Federal Circuit has found only specific material incorporated. For example, in *Zenon*, the court held that where the host patent stated that "details relating to the construction and deployment of a most preferred skein" were found in previous patents, only those details were incorporated. 506 F.3d at 1379. And, in *Callaway Golf Co. v. Acushnet Co.*, 576 F.3d 1331, 1345-47 (Fed. Cir. 2009), the court held that only the described foamable polymeric materials were incorporated. So too here: only the "field of view" disclosed in the '451 and '712 patents is incorporated by reference—not the two-component assembly or the patents in full.<sup>8</sup>

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<sup>&</sup>lt;sup>8</sup> In *Husky*, the host patent discussed certain material from a prior patent and later stated, "All cross-referenced patents and application[s] referred to in this specification are hereby incorporated by reference." 838 F.3d at 1241 n.2. Tellingly, instead of relying on the broad incorporation language to find the prior patent incorporated in full (an issue the court did not reach), the court read the two passages "in concert" and held that the specifically discussed material was incorporated. *Id.* Here, as discussed, the only incorporation statement is focused on

This is not a situation in which a patent uses unqualified language to incorporate a reference in full. *See, e.g., Harari v. Lee,* 656 F.3d 1331, 1335 (Fed. Cir. 2011) (prior applications fully incorporated where host patent stated "*the disclosures* of the two applications are hereby incorporated by reference") (emphasis altered). Nor is this a case in which a patent is incorporated in full at the end of the recitation of a priority chain. *See, e.g., X2Y Attenuators, LLC v. ITC,* 757 F.3d 1358, 1361 (Fed. Cir. 2014); *Comcast Cable Comm'n, LLC v. Rovi Guides, Inc.*, IPR2017-00950, Paper 12 at 19-20 (Sep. 20, 2017). Unlike in such cases, a POSA would conclude that the '666 application incorporated only the field-of-view performance of the earlier-patented two-element mirror assemblies.

As a result, the claims of the '244 patent—all of which recite the '712 patent's two-element assemblies—lack written description support in the '666 application. They are therefore not entitled to an effective filing date earlier than the '843 patent's actual filing date.

the "field of view" and Magna did *not* use the incorporation in "entirety" language which it used to incorporate other references.

# D. The '244 Patent's Claims Are Not Supported By The '666 Application Regardless Of The Extent Of Incorporation By Reference

### 1. The written description requirement in 35 U.S.C. § 120

Under 35 U.S.C. § 120, a claim is not entitled to the benefit of an earlier-filed application unless the earlier application provides written description support. To do so, the specification must "reasonably convey[] to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Ariad Pharms., Inc. v. Eli Lily & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc).

The written description analysis requires "[t]aking each claim . . . as an integrated whole rather than as a collection of independent limitations."

Novozymes, 723 F.3d at 1349. Further, the disclosure must "provide sufficient 'blaze marks' to guide a reader through the forest of disclosed possibilities toward the claimed [apparatus], which reside[s] among the myriad others that also could have been made." Id. at 1346. Describing an obvious variation of the claimed subject matter is not enough: "Entitlement to a filing date does not extend to subject matter which is not disclosed, but would be obvious over what is expressly disclosed." Lockwood v. Am. Airlines, Inc., 107 F.3d 1565, 1571-72 (Fed. Cir. 1997).

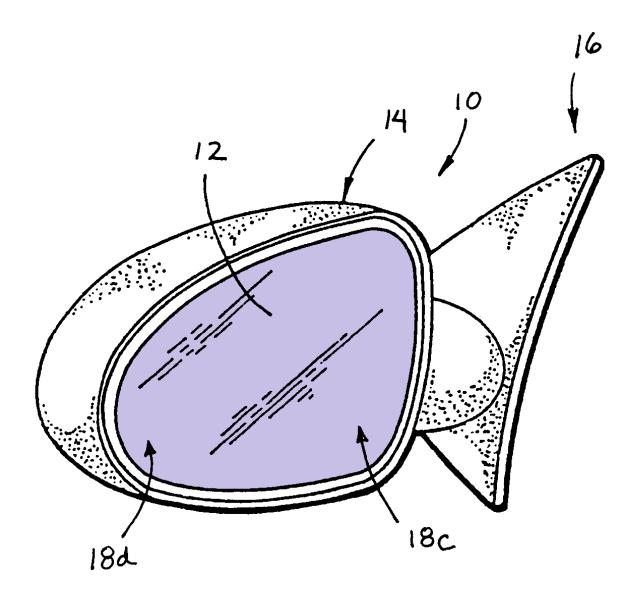
2. The '666 application lacks written description support for the '244 patent's claims even if the '712 and '451 patents were incorporated in their entireties

The '666 application, to which the '244 patent attempts to claim priority through the '843 patent, does not reasonably convey to a POSA that the applicant had possession of the two-element mirror assemblies of the '451 and '712 patents as of the filing date of the '666 application. The '666 application unambiguously defines its invention as a single-element mirror, with a detailed description how to make and use this single-element mirror having the performance of a two-element mirror. The "present invention" of the '666 application is a single-element mirror formed by applying a thin and flexible glass protective layer to a polymeric substrate. '666 application ¶¶ 16, 18-19, 47(Ex. 1014); Sasian Decl. ¶¶ 37-46. Specifically, the '666 application explains that "[t]he present invention" has a single "molded wide angle or multi-radius substrate for a reflective element" with two sections having different shapes, "a less curved/flatter or substantially flat inboard portion or surface and a more curved outboard portion or surface." '666 application ¶ 6.

The '666 application repeatedly describes that its "present invention" is a *single* reflective element. *Id.* ¶ 16 ("[T]he present invention provides *a molded* wide angle or multi-radius single substrate for a rearview mirror assembly which has an anti-abrasion or anti-scratch film or layer applied to the curved, wide angle

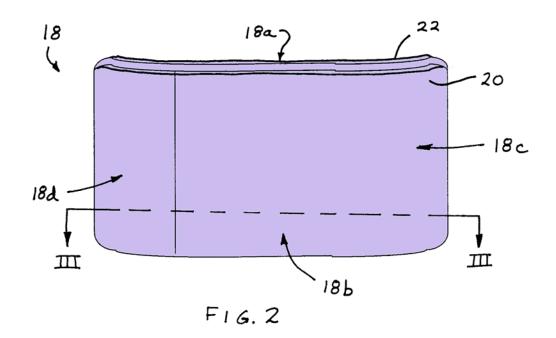
or multi-radius exterior surface of the substrate."); ¶ 47 ("[T]he present invention provides *a wide angle or multi-radius single substrate or reflective element* which may provide an enhanced field of view for an interior or exterior rearview mirror assembly."); ¶ 6 ("The present invention provides *a molded wide angle or multi-radius substrate* for a reflective element."). Furthermore, during prosecution of the earliest patent in the '244 patent's family, U.S. Patent No. 7,420,756, Magna characterized the invention in the same way, referring to "*the wide angle reflective element of the present invention*" in distinguishing prior art—including the '451 patent (Ex. 1016). *See*, *e.g.*, '756 FH (Ex. 1028) 93, 117, 143, 165, 168, 203 (emphasis added).

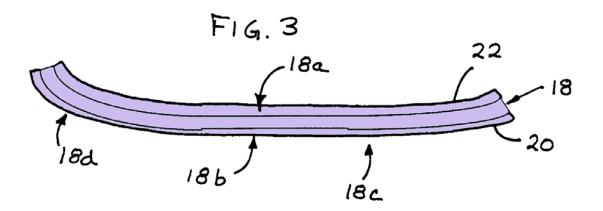
The '666 application explains that its "present invention" is "suitable for use in a reflective element for an exterior rearview mirror assembly (as shown in FIG. 1)" that has *one* reflective element, as shown below:



'666 application ¶ 27, Figure 1; *id.* ¶ 18 (Figure 1 is a mirror assembly "in accordance with the present invention"). In such a mirror, "the more curved outboard portion or surface 18d may provide an extended field of view when combined with the less curved inboard portion or surface 18c." *Id.* ¶ 31. Figures 2

and 3 illustrate the single wide-angle multi-radius element with a "less curved or substantially flat inboard portion" 18c and a "more curved outboard portion" 18d:

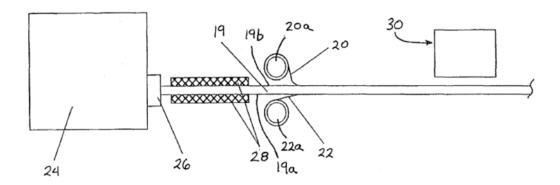




'666 application ¶¶ 27-31, Figures 2, 3; Sasian Decl. ¶¶ 38-42.

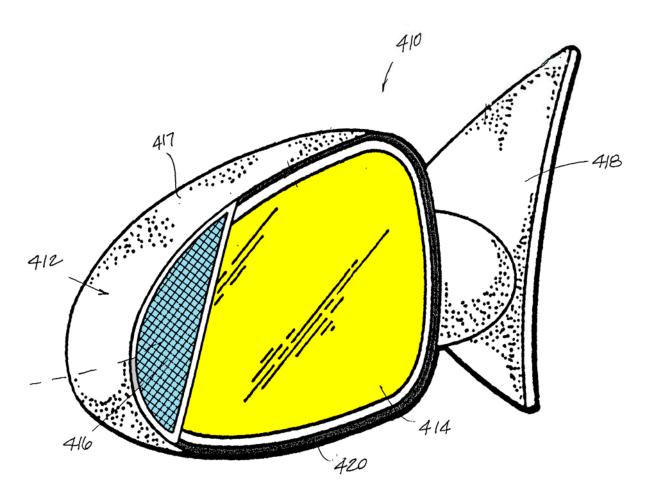
The '666 application also describes how to make its single-element mirror, incorporating over 100 other documents along the way. *Id.* ¶¶ 28-47. It describes

making its single-element mirror by unrolling flexible thin glass layers 20 and 22 onto an extruded or molded polymeric substrate 19:



'666 application 18 (Figure 5), ¶¶ 6-9, 36, 38. The polymeric substrate is molded into the desired shapes, and the "flexible ultrathin glass film or layer of the present invention...conform[s] to the curved or multi-radius or aspheric shape and provide enhanced protection or scratch resistance to the substrate." '666 application ¶ 32.

By contrast, the '666 application *never* describes the two-element mirror disclosed in the '451 or '712 patents as "the present invention." Sasian Decl. ¶¶ 43, 62-68. The two-element mirror of the '451 and '712 patents is a distinct design, with a main planar mirror (colored in yellow) and a separate curved outboard mirror (colored in blue), as shown below:



F16.15

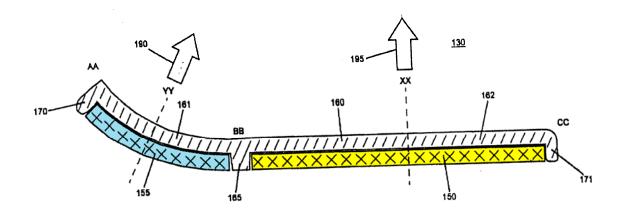


Figure 6

'712 patent Figures 6 & 15 (Ex. 1017); Sasian Decl. ¶¶ 50-59 (Ex. 1002).

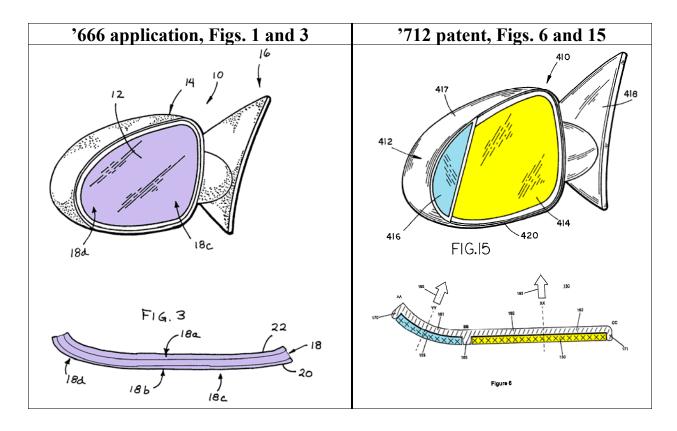
Even if the '451 and '712 patents were incorporated in full in the '666 application (and they were not), this "incorporation by reference does not convert the invention of the incorporated patent into the invention of the host patent."

\*Modine Mfg. Co. v. ITC, 75 F.3d 1545, 1553 (Fed. Cir. 1996), abrogated on other grounds, \*Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 234 F.3d 558 (Fed. Cir. 2000) (en banc). Over 100 patents and publications are incorporated by reference in the '666 application. '666 application ¶¶ 3-46. A POSA would not understand the invention of the '666 application to be something entirely different from what is described as the "present invention" in the '666 application itself, but which can be found among the 100+ patents and publications incorporated by reference. \*Novozymes\*, 723 F.3d at 1346 (the disclosure must "provide sufficient" blaze marks' to guide a reader through the forest of disclosed possibilities toward

the claimed [apparatus], which reside[s] among the myriad others that also could have been made"). Indeed, the consistent and repeated disclosure that the "present invention" is a single-element mirror in the '666 application would lead the reader away from the '712 patent's two-mirror approach. Sasian Decl. ¶¶ 39-46, 53, 62-68.

There is simply nothing in the '666 application that would lead a POSA to conclude that a two-element mirror was part of the invention, contrary to the consistent disclosure of a single element mirror as the "present invention," even if the entire '712 patent were incorporated by reference. The '666 application does not suggest that its single-element mirror could be used as part of the two-element mirror disclosed in the '712 patent. Rather, the '666 application states that the described single-element mirror provides a similar "field of view" to the previously patented two-element assembly. '666 application ¶ 28. In other words, the '666 application discloses a single-element mirror (as shown on the left below) that can match the field of view provided by the two-element mirrors disclosed in the '451 and '712 patents (as shown on the right below):

<sup>&</sup>lt;sup>9</sup> These arguments also apply to the '451 patent.



Consequently, a POSA would conclude that the applicant for the '666 application possessed a single-element mirror, not the two-element mirror described in the '712 patent. Sasian Decl. ¶¶ 54-68. Claim 1, and the rest of the claims in the '244 patent, therefore are not supported by the '666 application and are not entitled to its filing date or any earlier filing date.

# VII. Ground 1: Claims 1-26 are Anticipated by the '026 Publication (Ex. 1011)

The '026 publication issued as the '712 patent, and it includes all of the '451 patent's disclosure, aside from its summary of invention and claims. The '026 publication is prior art under §§ 102 (a), (b), and (e) for the reasons discussed above.

Magna has already represented to the Office (supported by sworn testimony from the named inventor) that the '451 and '712 patents teach all the claim elements because Magna improperly relied on their disclosure to support the claims. '244 FH 249-250. Therefore, Magna has admitted that the disclosure meets the claim requirements, and little explanation is needed to appreciate that the cited paragraphs teach each claim element. <sup>10</sup>

#### A. Independent Claim 1

The '026 publication describes automotive sideview mirror assemblies containing planar and auxiliary mirrors in one of three configurations: (i) the planar and auxiliary mirrors are mounted on a backing plate, *see* '026 publication ¶¶ 42-61 & Figures 3, 6, 7; (ii) the planar and main mirrors are mounted in the perimeter of a frame, *see id*. ¶¶ 62-67 & Figures 8-9; and (iii) the auxiliary mirror is separately mounted in a bezel, *see id*. ¶¶ 68-71 & Figures 8-9. *See also* Sasian Decl. ¶ 72.

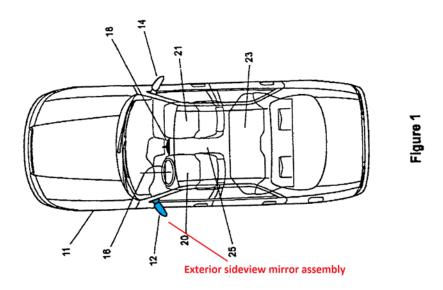
The '244 patent's claims are generally directed to the first configuration.

The discussion below addresses that embodiment and general disclosures

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<sup>&</sup>lt;sup>10</sup> The optional thin-glass element in claim element 1[q] is not required for anticipation or obviousness, but it is required for written description.

applicable to all three configurations, such as mounting the mirror to an automobile:



'026 publication Figure 1 (annotated).

# 1. Preamble, [a], [b] Exterior sideview mirror assembly

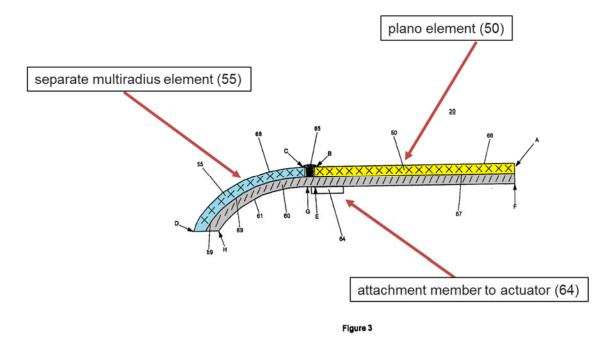
The '026 publication discloses a sideview mirror that attaches to an automobile and provides a rearward view as recited in the preamble (to the extent it is limiting) and claim elements 1[a] and 1[b]. 11 '026 publication at Abstract, ¶¶ 9, 13, 15, 19, 41, 57, 59, 61, Figures 1, 7; Sasian Decl. ¶¶ 84-87.

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<sup>&</sup>lt;sup>11</sup> See Claim Listing appendix for claim language for all claim elements.

## 2. [d] Plano-auxiliary assembly

The '026 publication discloses the reflective element having a planoauxiliary reflective element assembly comprising a planar (flat) reflective element with unit magnification and a curved auxiliary element as recited in claim element 1[d]:



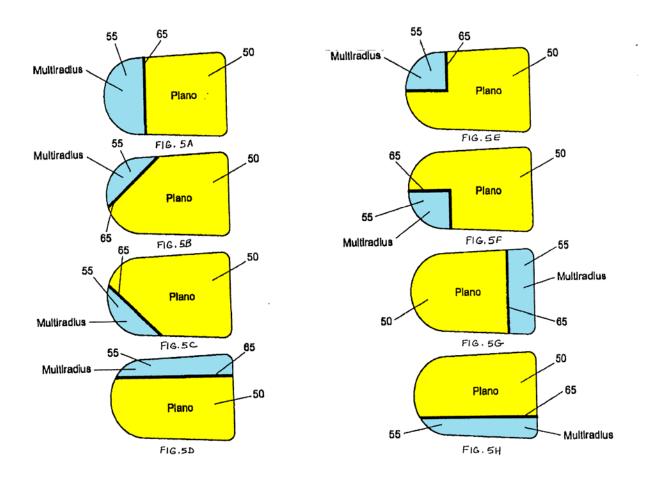
'026 publication Figure 3 (annotated), ¶¶ 8, 9, 42-43, 45, 49, 58-59, 61, 64, claim 1, claim 31, Figures 3, 5A-H, 6-8; Sasian Decl. ¶¶ 88-91.

# 3. [q] Reflective Element Substrates

The element requires one of two options. The '026 publication discloses option (a), the main or auxiliary element having a glass substrate with a metallic reflector coating. '026 publication ¶¶ 43, 47, 48, 55, 64; Sasian Decl. ¶¶ 92-94.

# 4. [e], [i] Mounted adjacently, outboard

The '026 publication discloses mounting the planar and auxiliary elements adjacently, side-by-side, and not superimposed, with entirety of the auxiliary mirror outboard of (further from the driver than) the main mirror as recited in claim elements 1[e], 1[i]. This limitation is disclosed regardless of whether "side-by-side" is construed to permit the auxiliary mirror to be in a corner of the primary mirror under the broadest reasonable construction:



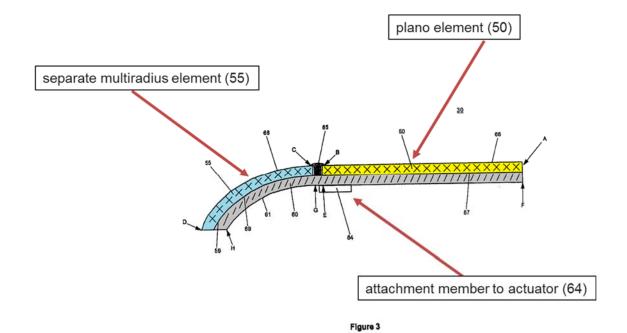
'026 publication Figures 5A-5H (annotated); '026 publication ¶¶ 10, 12, 42, 44, 45, 50-52, 59, 61, Figures 3, 5A-H, 6-8; Sasian Decl. ¶¶ 95-99.

## 5. [c] Electrically-operated actuator

The '026 publication discloses attaching the sideview mirror's reflective element to an electrically-operated actuator to position the mirror as recited in claim element 1[c]. '026 publication  $\P\P$  9, 15, 19, 41; Sasian Decl.  $\P\P$  101-04; *see also* the backing-plate discussion below.

## 6. [f] Backing plate mounted to actuator

The '026 publication discloses mounting the backing plate that supports the planar and auxiliary elements to the actuator so that they move simultaneously and similarly, as recited in claim 1. '026 publication ¶¶ 42, 58, and Figures 3, 6; Sasian Decl. ¶¶ 105-07; *see also* the actuator discussion above.



7. [h], [k], [l], [m] Support portions and capable of supporting

The '026 publication discloses the backing plate having first and a second support portions capable of and actually supporting the planar and auxiliary elements, respectively, as recited in claim elements 1[h], [k]. '026 publication ¶¶ 42, 50-52, 59, 61, Figures 3, 6; Sasian Decl. ¶¶ 108-11 (discussing all aspects of elements [h], [k], [l], [m]).

The first support portion is flat to match the planar (flat) main element and the second support portion is curved to match the auxiliary element, as recited in claim elements 1[1] and [m] respectively. '026 publication ¶¶ 43, 45, 50, 59, Figures 3 and 6; Sasian Decl. ¶¶ 108-11.

## 8. [j] Polymeric substrate

The '026 publication discloses that the backing plate is a polymeric substrate formed as a single injection-molded unit. '026 publication ¶¶ 50-51 (including demarcation element), 53; Sasian Decl. ¶¶ 112-14.

## 9. [g], [p] Planar and auxiliary field of view, blind spot

The '026 publication discloses that the auxiliary element has a wide field of view that includes a blind spot in the adjacent lane that falls outside the field of view of the plano mirror when attached to the vehicle, as recited in claim elements 1[g] and 1[p]. '026 publication ¶¶ 3, 52, 58-59, 61, 77, Figure 14. *See also* Sasian Decl. ¶¶ 115-18.

It further discloses, as already discussed above with respect to the preamble and claim elements 1[a] and [b], that the mirror assembly provides a rearward field of view when attached to the side of the automobile.

# 10. [n] Different, angled rearward field of view

The '026 publication discloses that, when the sideview mirror is assembled and installed, the auxiliary mirror has a different rearward field of view which is angled from that of the planar mirror when the assembly is attached to the side of the vehicle. '026 publication at Abstract, ¶¶ 9, 13-19, 59, 61, 72-74, 76-77 & Figures 3, 6-7, 10-14, claim 1, claims 19-24; Sasian Decl. ¶¶ 119-21.

## 11. [o] Angled second support portion

The '026 publication discloses that the angling discussed above with respect to element 1[n] is achieved at least in part by angling the backing plate portion supporting the auxiliary mirror, as recited in element 1[o]. '026 publication ¶¶ 52, 59, Figure 6; Sasian Decl. ¶¶ 122-24.

## 12. [s] Generally coplanar

The '026 publication discloses that at least part of the front surfaces of the planar and auxiliary mirrors are "generally coplanar," as recited in claim element 1[s]. '026 publication ¶¶ 48 ("substantially coplanar"), 72, Figures 3, 6, 10; Sasian Decl. ¶¶ 125-27.

## 13. [r], [t], [u], [v], [w], [x] Demarcation

The '026 publication discloses that the backing plate supports the adjacent planar and auxiliary mirrors, and that there is a dark-colored, polymer-based, demarcation element at the joint between the mirrors that is visible to the driver, as recited in claim elements 1[r], [t], [u], [v]. '026 publication ¶¶ 10, 42, 50-53, 57-58, Figures 3-4, 6-7, & claims 2-3; Sasian Decl. ¶¶ 128-42; discussion of element [f] above. It further discloses a gap or space at the joint between the planar and auxiliary mirrors, with the demarcation element at least partially filling the gap as recited in claim elements 1[v], [w]. '026 publication ¶¶ 10, 42, 50-53, 59, 61, and Figures 3-4, 6-7, claim 2; Sasian Decl. ¶¶ 128-42.

The '026 publication, moreover, discloses that the demarcation element comprises a wall on the backing plate as recited in claim element 1[x]. '026 publication ¶¶ 42, 50-52, 59, 61, Figures 3, 6-7; Sasian Decl. ¶¶ 128-42.

## **B.** Claim 2: Three-Degree Angle

The '026 publication discloses that the auxiliary element is angled at least 3 degrees relative to the planar mirror as recited in claim 2. '026 publication ¶¶ 13, 16-17, 59, 74, 76, Figures 12-14; Sasian Decl. ¶¶ 143-46.

## C. Claims 3-5: Outwardly And/Or Downwardly

The '026 publication discloses that the auxiliary mirror's field of view is directed outwardly and/or downwardly as recited in claims 3-5. '026 publication at Abstract, ¶¶ 9, 13-19, 59, 61, 72-74, 76-77, Figures 3, 6-7, 10-14, claims 1, 19-24; Sasian Decl. ¶¶ 147-49.

## D. Claim 6: Adhesive attachment and bent glass substrate

The '026 publication discloses that the planar reflective element and curved auxiliary element are attached either with an adhesive or mechanically as recited in claim 6. '026 publication ¶ 50; Sasian Decl. ¶¶ 150-51.

It further discloses that auxiliary mirror has a spherical or bent shape, is comprised of a bent glass substrate, and has a metallic reflector coating as recited in claim 6. '026 publication ¶¶ 43, 47, 55 (coatings); ¶¶ 80, 83 (spheric/bent); ¶¶ 5-6, 11, 45 (bent glass); Sasian Decl. ¶¶ 152-54.

## E. Claims 7-9, 15, 16: Multiradius, Spheric, And Aspheric Shapes

The '026 publication discloses that the planar mirror has a flat glass substrate with a metallic reflector coating and the auxiliary mirror has a bent glass substrate with spherical (claims 7, 16), multiradius (claim 8), or aspherical shape (claims 9, 15), and also has a metallic reflector coating (claims 7-9). '026 publication ¶¶ 43, 47, 55 (coatings); *id.* ¶¶ 9, 15, 41-42, 44-45, 47-61, 80-83 (multiradius), ¶¶ 80, 83 (spherical and aspheric), ¶¶ 5-6, 11, 45 (bent glass); Sasian Decl. ¶¶ 155-62.

#### F. Claims 10, 19: Substrate

The '026 publication discloses that the planar and/or auxiliary mirror comprise a glass substrate with a metallic (chromium, titanium, . . . silver) reflector coating, as recited in claims 10 (both are coated, any metal) and 19 (either one, glass substrate, one of the named metals). '026 publication ¶¶ 43, 47, 55; Sasian Decl. ¶¶ 163-67.

#### G. Claim 11: Curved Portion

The '026 publication discloses that the curvature of the backing plate corresponds to the curvature of the auxiliary mirror and that it has a spherical, aspherical, or multiradius curvature as recited in claim 11. '026 publication ¶¶ 50, 53 (backing plate molded to mirrors), Figures 3, 6; Sasian Decl. ¶¶ 168-73; see also claims 7-9, 15, 16 above.

#### H. Claim 12: Demarcation Partitions

The '026 publication discloses that the demarcation element comprises a wall that partitions the curved backing plate into two regions adapted to the mirrors as recited in claim 12. '026 publication ¶¶ 42, 50-52, 59, 61, Figures 3, 6, 7; Sasian Decl. ¶¶ 174-78.

## I. Claim 13: Auxiliary Mirror Heater

The '026 publication discloses that the auxiliary mirror has a heating element. '026 publication ¶ 54; *id.* ¶¶ 65-66; Sasian Decl. ¶¶ 179-81.

#### J. Claim 14: Subtended Angle

The '026 publication discloses that the driver-side assembly provides the driver with a rearward field of view of at least 25 degrees from the side of the automobile as recited in claim 14. '026 publication ¶¶ 46, 61, 76; Figure 14; Sasian Decl. ¶¶ 179-81. The '026 publication discloses that the exterior sideview mirror system is a driver-side system for the same reasons as described above for claim 1's preamble and elements 1[a] and 1[b].

#### K. Claim 17: Relative Sizes

The '026 publication discloses that the ratio of the width of the planar mirror to the width of the auxiliary mirror is greater than 1.5 as recited in claim 17. '026 publication ¶ 49; Sasian Decl. ¶¶ 182-84.

#### L. Claim 18: 1 to 24 Feet Behind

The '026 publication discloses that the driver-side mirror's auxiliary element provides a downward view in the range of 1-24 feet behind the driver as recited in claim 18. '026 publication ¶ 59; Sasian Decl. ¶¶ 188-91. The '026 publication discloses that the exterior sideview mirror system is a driver's-side system for the same reasons as described above for claim 1's preamble and elements 1[a] and 1[b].

# M. Claim 20, 21, 22: Electro-Optic Or Fixed Reflective Element

The '026 publication discloses that the planar mirror has an electro-optic reflective element (claim 20), and the fixed-reflectance auxiliary mirror (claim 21) comprises a spherically/curved bent glass substrate with a metallic reflector coating (claim 22). '026 publication ¶¶ 43, 48, 55, 59 (electro-optical), ¶¶ 47, 55 (fixed reflectance, coating), ¶¶ 80, 83 (spheric), ¶¶ 5-6, 11, 45 (bent glass); Sasian Decl. ¶¶ 192-200.

## N. Independent Claim 23

Claim 23 contains many of the same elements as recited in claim 1 and as further explained in this section. Claim 23 contains most of the same elements as claim 1, and two additional "wherein" clauses. Claim 23 is anticipated for the same reasons as claim 1 and as further explained below.

## 1. Elements [a]-[q]

The '026 publication discloses claim elements 23[a]-[q] for the same reasons as described above with respect to claim elements 1[a]-[q]. Element 23[q] differs from its corresponding element 1[q] by requiring the main the main plano element, rather the plano or auxiliary elements, having a glass substrate with a metallic reflector coating. This is disclosed in the '026 publication at ¶¶ 43, 47-48, 55, 64. *See also* Sasian Decl. ¶¶ 81-142, 201-03.

# 2. [r] Curved substrate

The '026 patent discloses a fixed-reflectance auxiliary mirror comprising a curved glass substrate with a metallic reflector coating as recited in claim element 23[r]. '026 publication ¶¶ 47, 55 (fixed reflectance, coating); ¶¶ 45, 69, Figure 3 (curvature); 5-6, 11, 45 (bent glass); Sasian Decl. ¶¶ 192-200, 204-06.

## 3. [s] Joint space

The '026 publication discloses that the planar and auxiliary elements are adjacently supported by the backing plate at a joint as recited in claim element 23[s]. '026 patent ¶¶ 42, 50-52, 59, Figures 3, 6; Sasian Decl. ¶¶ 207-10.

It further discloses a gap or space at the joint between the planar and auxiliary mirrors, with the wall on the backing plate at the joint that partitions the curved backing plate into two regions as recited in claim element 23[s]. '026 publication ¶¶ 42, 43, 50-52, 59, 61, Figures 3, 6, 7; Sasian Decl. ¶¶ 207-10.

#### O. Claim 24

Dependent claim 24 repeats limitations found in claims 7, 11, 12, 14. Claim element 24[a] is recited in claim 7 (and repeats the fixed-reflectance limitation of 23[r]); 24[b] is recited in claim 11; 24[c] is recited in claim 12; and 24[d] and [e] are recited in claim 14. These limitations are disclosed for the same reasons as described for claims 7, 11, 12, and 14.

#### P. Independent Claim 25

Claim 25 contains many of the same elements as recited in claim 1, and three additional "wherein" clauses. Claim 25 is anticipated for the same reasons as claim 1 and as further explained below.

#### 1. Elements [a]-[q]

The '026 publication discloses claim elements 25[a]-[q] for the same reasons as above for claim elements 1[a]-[q]. Element 25[q] differs from corresponding element 1[q] by limiting the substrate option to only the main plano element. The '026 patent also discloses this. '026 publication ¶¶ 43, 47-48, 55, 64; Sasian Decl. ¶¶ 81-142, 222-24.

# 2. [r] Spherically bent glass substrate

The '026 publication discloses a fixed-reflectance auxiliary mirror comprises a spherically bent glass substrate with a metallic reflector coating. '026 publication ¶¶ 47, 55 (fixed reflectance, coating), ¶¶ 80, 83 (spheric), ¶¶ 5-6, 11, 45 (bent glass); Sasian Decl. ¶¶ 225-27.

## 3. [s] Outwardly and downwardly

The '026 publication discloses that the auxiliary mirror's field of view is directed outwardly and downwardly. '026 publication Abstract, ¶¶ 9, 13-19, 59, 61, 72-74, 76-77, Figures 3, 6-7, 10-14, claim 1, claims 19-24; Sasian Decl. ¶¶ 147-49, 228-30.

## 4. [t], [u] Total field of view

The '026 publication discloses a driver-side plano-auxiliary assembly that provides the driver with a rearward field of view at least 25 degrees from the side of the automobile for the same reasons as described above with respect to claim elements 1[a], [b], [d], and claim 14. '026 publication ¶¶ 46, 61, 76, Figure 14; Sasian Decl. ¶¶ 182-84, 231-33.

## Q. Claim 26 – Glass Substrate

The '026 publication discloses the main element having a glass substrate with a metallic reflector coating, and that the curvature of the backing plate corresponds to the curvature of the auxiliary mirror. '026 publication ¶¶ 43, 47, 48, 55, 64 (glass substrate); ¶¶ 50, 53 (backing plate molded to mirrors), Figures 3, 6; Sasian Decl. ¶¶ 234-40.

It further discloses that the backing plate has a partition between the mirror-adapted regions for the planar and auxiliary mirrors. '026 publication ¶¶ 42, 50-52, 59, 61, Figures 3, 6, 7; Sasian Decl. ¶¶ 215-16, 238-40.

# VIII. Ground 2: Claims 23-26 Would Have Been Obvious Over Henion (Ex. 1012), Platzer (Ex. 1013), and Catlin (Ex. 1034)

All challenged claims should be held unpatentable for the reasons discussed above because the '244 patent is not entitled to the filing date of any earlier-filed application. Even if the '244 patent were entitled to the earliest possible filing date (which it is not), the challenged claims remain unpatentable. Claims 23-26 would have been obvious over Henion in combination with Platzer and Catlin.

#### A. Overview

Claims 23-26 cover variations on the same basic structure: a side-view mirror with a flat primary mirror and a curved secondary mirror for viewing the blind spot, both mounted on the same backing plate. The primary and secondary mirrors must provide specific fields of view ("FOVs") relative to the vehicle and/or each other. The claims also include limitations on the structure of the backing plate and on the construction of the mirrors. Henion (Ex. 1012) discloses the majority of the structural elements required by the challenged claims and discloses or renders obvious the required FOVs. Platzer (Ex. 1013) and Catlin (Ex. 1034) supply structural elements not found in Henion.

#### B. The Asserted Prior Art

During prosecution of the '244 patent, the examiner did not discuss any of the prior art relied upon herein.

## 1. International Pub. No. WO 2001/44013 (Ex. 1012, "Henion")

Henion published on June 21, 2001, and is prior art under 35 U.S.C. §§

102(a) and (b) (pre-AIA). Henion discloses an automotive sideview mirror containing a flat primary element and a curved auxiliary element mounted adjacently on a common backing plate. The backing plate is adapted to fit within a mirror housing assembly, which is attached to the exterior of an automobile. The curved mirror provides a wider FOV that helps drivers see into the blind spot. Henion discloses that the driver may adjust the angle of the curved reflective element relative to the flat reflective element, enabling the driver to achieve different angles or degrees of overlap between the FOVs of the two mirrors. Sasian Decl. ¶¶ 74-75.

## 2. International Pub. No. WO 2001/81956 (Ex. 1013, "Platzer")

Platzer published on November 1, 2001, and is prior art under at least 35 U.S.C. §§ 102(a) and (b) (pre-AIA). Platzer discloses an automotive sideview mirror comprising a flat primary mirror having unit magnification mounted alongside a curved secondary mirror that is capable of viewing into the blind spot. This structure provides a combined FOV that allows a driver to see a vehicle passing on the left-hand side without losing sight of it. Sasian Decl. ¶¶ 76-77.

# 3. U.S. Pat. No. 5,721,646 (Ex. 1034, "Catlin")

Catlin issued on February 24, 1998, and is prior art under at least 35 U.S.C. §§ 102(a) and (b) (pre-AIA). Catlin discloses an automotive sideview mirror that

includes a mirror support plate that is injection molded from a resinous plastic to match the shape of the mirror. Sasian Decl. ¶ 78.

#### C. Motivation To Combine

Claims 23 and 24 are unpatentable over Henion in view of Catlin and Platzer. Henion discloses every limitation of claim 1 except for the "injection molded polymeric substrate" of the backing plate, which is disclosed by Catlin, and the auxiliary curved mirror being placed at the outboard edge of the mirror assembly, which is disclosed by Platzer. Platzer also discloses that the total field of view of the rearview mirror assembly subtends an angle of at least about 25 degrees, as required by claim 24.

Claims 25 and 26 are unpatentable over Henion in view of Platzer and Catlin. Henion discloses every limitation of Claim 25 except for the "injection molded polymeric substrate" of the backing plate, which is disclosed by Catlin, the auxiliary curved mirror being placed at the outboard edge of the mirror assembly, which is disclosed by Platzer, and the requirement that the total field of view of the rearview mirror assembly subtend an angle of at least about 25 degrees, which is also disclosed by Platzer. Henion also discloses the additional limitations required by claim 26.

A POSA would have been motivated to combine these references. *See* Sasian Decl. ¶¶ 73-78, 306-10, 370-75. All are addressed to the same field of

endeavor: improving rearward and sideward FOVs for automotive mirror assemblies. *See* Sasian Decl. ¶¶ 73-78, 306-10, 370-75; Henion 1:1-5:6; Platzer 1:12-4:14; Catlin 1:59-2:3. And all disclose the same major components: exterior rearview mirror assemblies containing multiple mirrors angled relative to each other, mirror housings, and backing plates. *See* Henion 1:3-18, 5:9-7:10, Figures; Platzer 2:6-4:14, 15:21-25 & Figures 1-10; Catlin 1:65-3:52.

Further motivations to combine Henion with Platzer and Catlin are described in the discussion of the claim elements below.

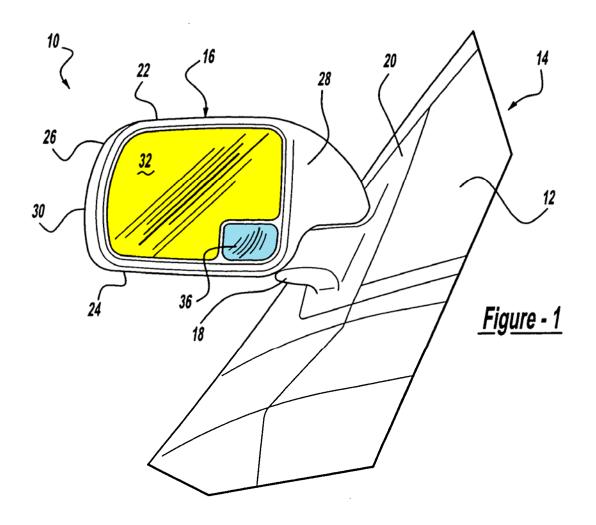
#### D. Claim 23

## 1. Preamble, [a], [b] Exterior sideview mirror assembly

Henion discloses a sideview mirror that attaches to an automobile and provides a rearward view as recited in Claim 1's preamble (to the extent it is limiting) and claim elements 1[a] and 1[b]. See Henion 5:9-16 & Figure 1; Sasian Decl. ¶¶ 242-45.

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<sup>&</sup>lt;sup>12</sup> See Claim Listing appendix for claim language for all claim elements.



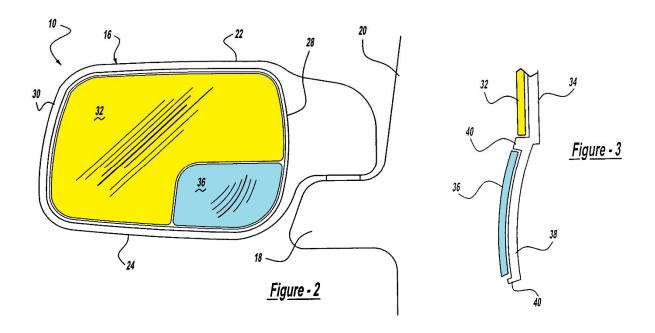
# 2. [c] Electrically-operated actuator

Henion discloses attaching the sideview mirror's reflective element to an electrically operated actuator to position the mirror as recited in claim element 1[c]. Henion 1:5-9, 7:6-10, 9:18-22; Sasian Decl. ¶¶ 246-52.

# 3. [d] Plano-auxiliary assembly

Henion discloses that the reflective element has a plano-auxiliary reflective element assembly comprising a planar (flat) reflective element with unit magnification and a curved auxiliary element as recited in claim element 23[d].

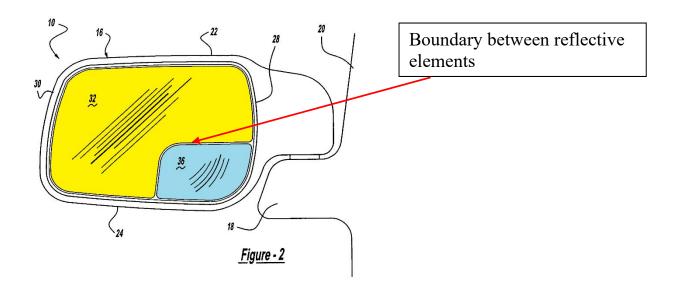
Henion describes Figures 2 and 3 below as containing a first "reflective element 32" that is "preferably a flat mirror to provide a generally unaltered field of view to the user." Henion 5:22-6:1. A POSA would have understood that the physical characteristics of flat reflective surfaces, such as the flat reflective element 32 described in Henion would result in unit magnification. Sasian Decl. ¶ 253. Henion further describes "second reflective element 36" as "preferably a convex shape to provide the desired wide angle field of view." Henion 6:16-17. Reflective elements 32 and 36 are shown below. Sasian Decl. ¶¶ 252-56.



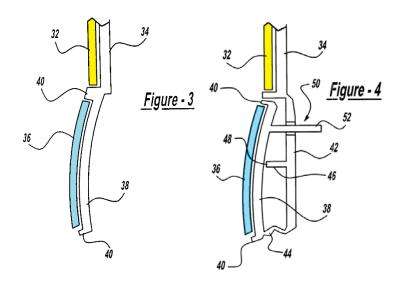
## 4. [e] Mounted adjacently, side-by-side, and not superimposed

Under the "broadest reasonable construction" of "side-by-side," Henion discloses mounting the planar and auxiliary elements adjacently, side-by-side, and not superimposed as recited in claim element 23[e]. Figure 2 shows the plano-

reflective element (32) and the auxiliary reflective element (36) are adjacent and side-by-side.



Henion Figure 2 (annotated). Figure 2 likewise contains a boundary between the two reflective elements, showing that the elements are not superimposed. Figures 3 and 4 show separation between the reflective elements via "ears" 40. Sasian Decl. ¶¶ 257-64



Henion 6:18-7:2, Figures 3, 4 (annotated).

Furthermore, even under a narrower construction of "side by side" in which the two mirrors have only one edge facing each other, this limitation would be obvious. Various orientations for primary and secondary mirrors in sideview mirrors have long been known, including having the two mirrors face each other along only a single edge. Sasian Decl. ¶ 262 (citing examples). A POSA would have been motivated to try such an arrangement because it was a known variation on the "corner" arrangement shown in Figure 2 of Henion and because such an arrangement could have benefits for the driver, such as letting the driver have a larger view of the blind spot. Sasian Decl. ¶¶ 257-64.

## 5. [f] Backing plate mounted to actuator

Henion discloses mounting the backing plate that supports the planar and auxiliary elements to the actuator so that they move simultaneously and similarly, as recited the claim. Henion teaches two different types of backing plates – one in which the orientation of the auxiliary mirror is adjustable relative to the primary mirror (corresponding to Figures 4 and 5), and one where it is not (corresponding to Figure 3). *See* Henion 6:19-21, 7:11-13. Both of these backing plates have support portions for both the primary and auxiliary mirrors. *See* Henion 6:1-4, 6:7-8 6:21-7:2, 7:5-6, 7:11-15 (element 34 in both embodiments supports "first reflective element 32" and has "spotter support section 38"); Sasian Decl. ¶¶ 265-

68. Henion also teaches that the backing plate in both embodiments is mounted to an actuator such that movement of the backing plate simultaneously and similarly moves the plano-reflective and auxiliary elements. Referring to Figure 13, Henion notes that "multi-function backing plate 124" supports "reflective element 126" that "may be arranged in accordance with the reflective elements described above with respect to Figures 1-12." Henion 13:3-6. This multi-function backing plate of Henion may be mounted to one or more drive motors that operate to adjust the backing to which the reflective elements are attached. Henion 13:6-7. A POSA would have understood that a single actuator moving the backing plate would have moved the two mirrors similarly and simultaneously because both are secured to the backing plate. Sasian Decl. ¶¶ 269-71.

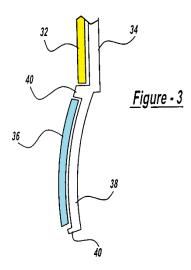
# 6. [g], [p] Planar and auxiliary mirror field of view, blind spot

Henion discloses that the auxiliary element has a wide field of view that includes a blind spot in the adjacent lane, as recited in claim element 23[g]. Sasian Decl. ¶¶ 273-79. Henion teaches that the auxiliary element is a "spotter" or "fisheye" mirror and has a "convex" shape. Henion 6:13-17. A POSA would have understood that a convex mirror provides a wide-angle FOV by virtue of its geometry. Sasian Decl. ¶ 276. Further, a POSA would have appreciated that a flat exterior sideview mirror would not have covered all portions of the vehicle to the side and rear of the vehicle, thus leaving a blind spot outside of the driver's field of

view in the main planar mirror, as recited in claim element 23[p]. Sasian Decl. ¶¶ 273-79. A POSA would have understood that a "spotter" or "fisheye" mirror would allow the driver to view into that blind spot. Sasian Decl. ¶ 278.

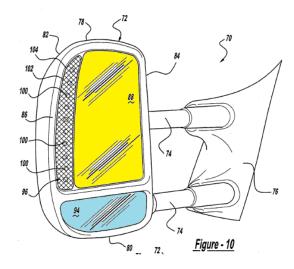
## 7. [h], [k], [l], [m] Support portions and capable of supporting

Henion discloses the backing plate having first and second support portions capable of and actually supporting the planar and auxiliary elements, respectively, as recited in claim elements 23[h], [k]. Henion discloses the backing plate element having separate support portions that support – and thus are capable of supporting – each mirror. Henion 6:1-4, 6:7-8 ("In addition to first reflective element 32, support member or multi-function backing plate 34 also supports a second reflective element 36.") & Figure 3 (below). Furthermore, the first support portion is flat to match the planar (flat) main element and the second support portion is curved to match the auxiliary element, as recited in claim elements 23[1] and [m] respectively. Henion 5:22-6:6 & Figure 3; Sasian Decl. ¶¶ 280-85.

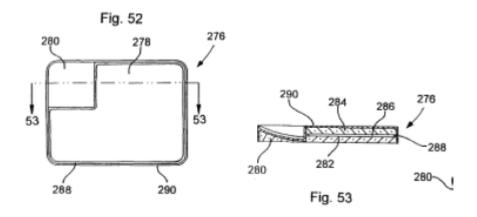


# 8. [i] Auxiliary mirror outboard

Henion discloses an embodiment in which the auxiliary mirror is positioned outboard of the primary mirror, as shown in Figure 10 below. Henion Figure 3, 3:4-8; Sasian Dec. ¶ 287. As shown in Figure 10, the primary reflective element is placed beside the light element, and the spotter element at the bottom of the assembly extends outboard of the primary mirror.

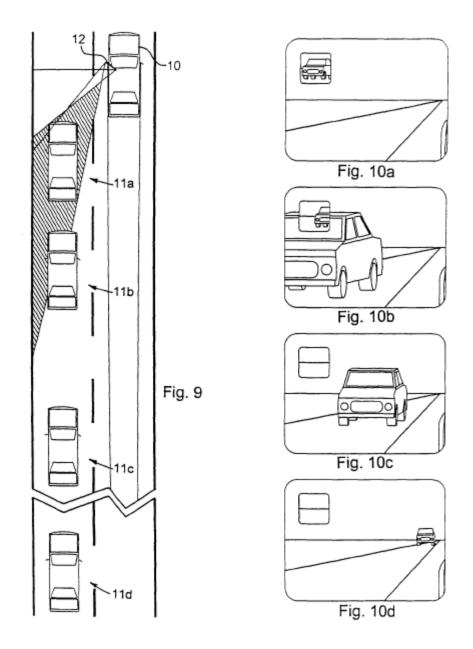


Platzer discloses an exterior rearview mirror assembly with an outboard curved auxiliary element. Platzer 15:16-17 ("the auxiliary mirror is placed in the upper and outer quadrant of the rearview mirror"), 37:18-28 & Figures 52, 53 (Ex. 1013).



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. Sasian Decl. ¶¶ 286-98.

Further, a POSA would have been motivated to try the outboard position to achieve an improved driver experience. Figures 9 and 10a-10d of Platzer illustrate the effect of putting the mirror on the outboard portion. A vehicle overtaking a driver on the driver's side of the automobile would first appear at the inboard edge of the plano mirror. As the overtaking vehicle moves closer, it moves outward in the plano mirror's field of view, until it disappears from the outboard edge of the plano mirror and passes into the blind spot. At that point, it smoothly transitions into the auxiliary curved mirror. Sasian Decl. ¶¶ 292-95.



In contrast, placing the auxiliary mirror inboard, as in Henion, causes the overtaking automobile to move across the primary field of view toward the outboard edge, and then only appear in the inboard spotter mirror. Sasian Decl. ¶¶ 292-95. A POSA would have understood that such a disjointed view could be

confusing and have safety implications. Sasian Decl. ¶¶ 292-95. A POSA would have been motivated to modify Henion to avoid this. Sasian Decl. ¶¶ 287-95.

Further, a POSA would have understood that the inboard spotter mirror of Henion could obscure portions of the plano mirror's field of view, contrary to federal vehicle safety standards, and would thus have been motivated to move the auxiliary mirror outboard to avoid such issues. Sasian Decl. ¶¶ 296-97. Finally, as described above with respect to the motivation to combine prior art references, Henion and Platzer are directed to the same field of endeavor and use many of the same major functionalities and components, and a POSA would have found that their combination produced a predictable result. Sasian Decl. ¶¶ 289-98.

#### 9. [j] Polymeric substrate

Henion in view of Catlin renders obvious that the backing plate is a polymeric substrate formed as a single injection-molded unit.

Henion includes an embodiment in which the backing plate element is expressly formed as a single element. *See* Henion 6:1-7:2 & Figure 3 (showing backing plate 34 is a single element). Furthermore, in the alternate embodiment of the backing plate where the mirrors are adjustable relative to each other, Henion notes that "support member 34, support section 38, extension member 42, and hinge 44 may but need not, be integrally formed." *Id.* 7:17-19. Thus, Henion

discloses, or at a minimum renders obvious, that the backing plate can be a single element. Sasian Decl. ¶¶ 300-04.

A POSA would have understood that the "polymeric substrate" of the '244 patent included plastic compounds. Maxwell 115 (Ex. 1032) (noting the use of plastic compounds in automotive mirror support elements). Injection molding polymeric substrates such as plastic to craft mirror backing plates was common in the art. The '244 patent admits that this technique was known in the art. See '244 patent 21:51-61. And Catlin teaches a backing plate for mirrors that is "preferably injection molded from a resinous plastic." Catlin 5:22-28 (Ex. 1034). This limitation was therefore known in the art. Sasian Decl. ¶¶ 305-10.

A POSA would have been motivated to combine Catlin with Henion to arrive at claim 1's "injection molding" requirement. Sasian Decl. ¶¶ 305-10. Catlin and Henion are in the same technical field: sideview mirrors. A POSA reading Henion and attempting to manufacture the single-piece backing plate described therein would have been motivated to use techniques for making single-piece backing plates taught in other prior art references, such as Catlin. Furthermore, a POSA would have been motivated to use the specific technique taught in Catlin – injection molding using a polymeric resin – because doing so would lead to a predictable and desirable result, namely a backing plate formed from a single piece of material. Furthermore, a POSA would have understood that injection molding is

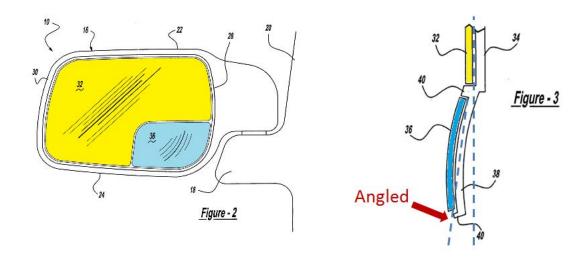
a preferred method for mass-production environments like automotive part manufacture. Sasian Decl. ¶ 309.

### 10. [n] Different, angled rearward field of view

Henion discloses that, when the sideview mirror is assembled and installed, the auxiliary mirror has a different field of view which is angled from that of the planar mirror, as recited in claim 23. Sasian Decl. ¶¶ 311-16.

As discussed above with respect to limitations [h], [k], [l], and [m], Henion discloses that the planar and auxiliary mirrors are both installed on backing plate 34. Henion also teaches that the backing plate is installed within the exterior sideview mirror assembly, which is itself attached to the side of the automobile. Henion 5:9-6:4 (Ex. 1012).

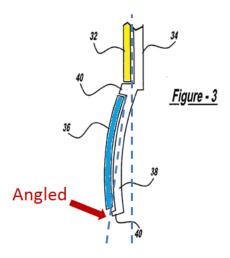
A POSA would understand that auxiliary reflective element 36 has a different field of view from main reflective element 32 because the former is curved while the latter is flat. Sasian Decl. ¶ 316. Moreover, Figure 3 of Henion shows that the FOVs of the two mirrors are angled relative to each other because the support structures are angled to each other. *See* Henion Figure 3 (annotated below); Sasian Decl. ¶¶ 313-15.



Furthermore, Henion discloses an embodiment "in which the orientation of second reflective element or spotter mirror 36 is adjustable with respect to first reflective element 32." Henion 7:11-13. A POSA would have understood that the angle of the FOV of the auxiliary mirror is different than that of the primary mirror. Sasian Decl. ¶ 315. Thus, Henion discloses this limitation.

# 11. [o] Angled second support portion

Henion discloses that the angling discussed above with respect to element 23[n] is achieved at least in part by angling the backing plate portion supporting the auxiliary mirror as recited in elements 23[h], [k], [l], and [m]. *See* Henion 7:11-13 & Figure 3; Sasian Decl. ¶¶ 280-85, 318-22. Further, Henion discloses that the backing plate for the mirrors is established such that the mirrors are angled, as in Figure 3. Sasian Decl. ¶¶311-316, 318-21.



Further, a POSA would have understood that drivers would not always be aware of the range of angles between the primary and secondary mirrors that encompass the blind spot, or that drivers may inadvertently reposition adjustable mirrors such that they lose blind spot coverage. Sasian Decl. ¶ 385. As such, it would have been obvious to a POSA to fix the angle between the primary and secondary mirrors such that users could not adjust it. Sasian Decl. ¶ 385. A POSA would thus have found it obvious to take the angled backing plate of Henion and fix the angle between the first and second support portions such that a driver could not adjust the mirrors. Sasian Decl. ¶ 385.

# 12. [q] Reflective element substrates

The claim requires one of two options for the primary and auxiliary mirror substrates. Henion discloses option (a), the main or auxiliary element having a glass substrate with a metallic reflector coating. *See* Henion 6:4-6 ("First reflective element 32 may be implemented upon a glass or plastic substrate, each substrate

receiving a reflective coating in accordance with techniques known to those skilled in the art ... "), 7:3-6, 10:7-9, 23:8-11, 23:17-21. A POSA would have understood the glass substrate of Henion's primary mirror, created per techniques known in the art, to be equally applicable to the auxiliary mirror. Sasian Decl. ¶¶ 324-30.

A POSA would have understood a metallized reflector coating to be a known technique for creating reflective elements. Sasian Decl. ¶ 326.

Henion further discloses that the reflector coating may be metallic. Henion describes a light assembly containing a metallized reflector element. Henion 17:12-13 ("reflector 170, the interior of which is preferably metallized or coated with a reflective material"), 18:10-16 ("Light pipe 178 of Fig. 17, on the other hand, is formed by placing a metallized coating on opposing surfaces of housing 172 and lens 178. In particular, a first metallized coating 184 is formed on housing 172, and a second metallized coating 186 is formed on lens 178 on a surface opposing metallized coating 184. Metallized coatings 184 and 186 cooperate to reflect light projected from globe 166 through to port 180."). A POSA reading Henion would have understood that the metallized reflectors of Henion's light assembly could likewise be used for Henion's disclosed plano and auxiliary elements, at least because such elements perform the same reflective function. Sasian Decl. ¶¶ 327-29.

### 13. [r] and [s] Reflectance and wall

Elements [r] and [s] require that the auxiliary mirror element comprise a fixed reflectance mirror reflector composed of a curved substrate coated with a metallic reflector coating, and that the plano and auxiliary elements be supported at a joint comprising a wall between them. As discussed above, Henion discloses a curved substrate. Henion 6:16-17, 6:19-21 ("Multi-function backing plate 34 preferably includes an integral spotter support section 38 which shaped to the desired shape of second reflective element 36."), 7:5-6 ("the plastic substrate is applied directly to multi-function backing plate 34 as a coating"), Sasian Decl. ¶ 335.

Henion further discloses that both the primary and auxiliary mirrors may have a fixed reflectance. Henion discloses a reflective element that may be flat or curved, and which may optionally adjust to reduce glare. Henion 9:14-16 ("Reflective element 88 may be any suitable type such as a flat, concave, convex, or other type which automatically adjusts to reduce glare."). A POSA would have understood Henion's discussion of an "other" type of mirror that adjusts to reduce glare to disclose a variable reflectance mirror as an optional variant on a fixed-reflectance mirror. A POSA would further have understood fixed reflectance to be standard for reflector elements, particularly for the reflector coatings disclosed by Henion. Sasian Decl. ¶¶ 331-39.

Henion discloses that a joint may be disposed between the primary and secondary mirrors, a required by element [s]. As discussed with respect to element 23[e] above, the primary and secondary elements are separated by an "ears" element. Further, the ears element is raised, comprising a wall between the two reflective elements, as discussed with respect to element 23[e] above. Sasian Decl. ¶¶ 257-60, 341.

#### E. Claim 24

# 1. Preamble and [a] fixed reflectance, spherically bent

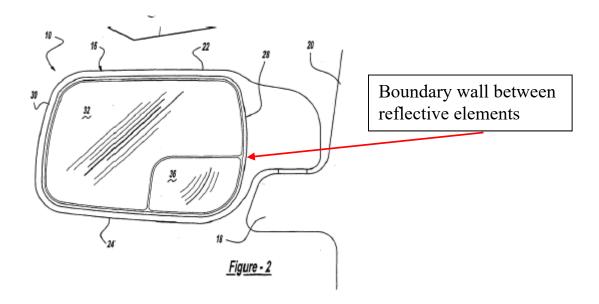
As discussed with respect to element 23[r] above, Henion discloses that the plano mirror may comprise a glass substrate with a metallic reflector coating. Henion also discloses that the auxiliary mirror may be comprised of a glass substrate coated with a metallic reflector coating, as discussed with respect to element 23[q] above. The use of a metallic reflector coating to create a fixed reflectance mirror would also have been obvious to a POSA as discussed with respect to element 23[r] above.

Henion also discloses that the auxiliary mirror reflector may comprise a spherically bent glass substrate. Henion 9:14-15 ("Reflective element 88 may be any suitable type such as a flat, concave, convex"), Henion 6:16-17 ("Second reflective element 36 is preferably a convex shape to provide the desired wide angle field of view."). A POSA reading Henion would understand that a variety of

"suitable" curvatures was available to provide the auxiliary mirror's "desired wide-angle field of view," including a spherical (constant radius) curvature. Sasian Decl. ¶¶ 343-44. Spherically curved mirrors have a wide-angle field of view by nature of their physical characteristics, and a POSA would have understood Henion's disclosure of a "fisheye" spotter mirror to refer to a spherical mirror. Sasian Decl. ¶ 351.

# 2. [b], [c], [d] Curved backing plate adapted to mirrors with wall

Henion discloses that the backing plate element may have a curved portion corresponding to the curvature of the auxiliary mirror. Henion 6:19-21 ("Multifunction backing plate 34 preferably includes an integral spotter support section 38 which is shaped to the desired shape of second reflective element 36."). As discussed above with respect to Claim 23[e] and [s], Henion teaches an "ears" element of the backing plate that comprises a wall between the primary and auxiliary mirrors when those mirrors are disposed at their respective portions of the backing plate. Further, as shown in Henion Figure 2, this wall fully partitions primary mirror 32 from adjacent auxiliary mirror 36.

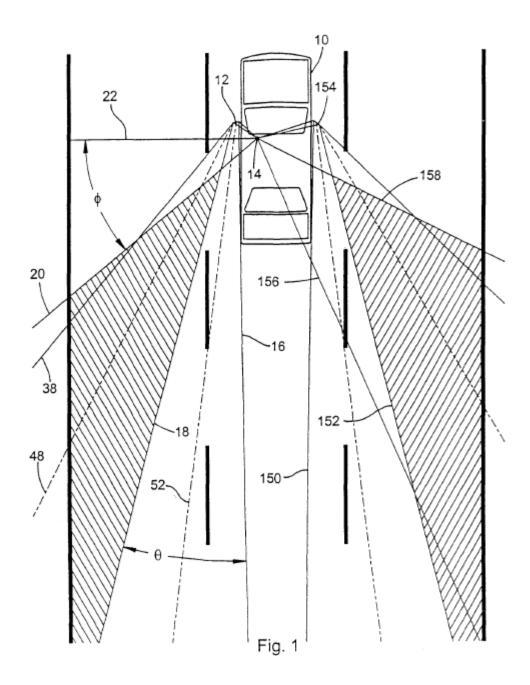


Further, as discussed with respect to Claim 23[a] above and Figures 1 and 2, Henion teaches an exterior sideview mirror assembly having a rearward field of view attached to the driver's side of the automobile. Sasian Decl. ¶¶ 356-64

# 3. [e] At least 25 degrees to side of automobile

Henion discloses a sideview mirror that attaches to the driver's side of an automobile and provides a rearward field of view. *See* Henion 5:9-16 & Figure 1; Sasian Decl. ¶¶ 365-75.

Henion in combination with Platzer teaches that the mirror assembly provides a total field of view subtending an angle of at least about 25 degrees with respect to the side of the equipped automobile. Platzer Figure 1 shows a vehicle with an attached mirror assembly providing the driver with certain rearward fields of view:



The driver's normal field of view absent a wide-angle auxiliary mirror is the area between lines 16 and 18, and the angle subtended by these lines "is in the order of 15° to 20°." Platzer 9:5 (Ex. 1013). The area between lines 18 and 38 is that encompassed by a spherically convex auxiliary mirror, and subtends an angle

of "about 25°." Platzer 12:26. The entire field of view of the full mirror assembly relative to the side of the automobile 16 – the area between lines 16 and 38 – is about 40 to 45 degrees. Platzer thus practices this limitation. Sasian Decl. ¶¶ 365-71.

A POSA reading Henion would have been motivated to combine it with Platzer's disclosure of greater than about 25 degrees. First, as described above with respect to motivation to combine, Platzer and Henion concern the same field of endeavor and recite many of the same structures and components. Further, while Henion teaches that the auxiliary mirror element is intended to provide a wideangle field of view that improves the driver's ability to view sideward and rearward of the vehicle, it does not disclose an explicit angular range for the total field of view. Henion 1:7-9, 6:13-16. A POSA seeking a geometric derivation of an optimal rearward field of view of the mirror assembly would thus be motivated to use Platzer's disclosure of the greater-than-25-degrees total field of view, at least because it provides a mathematical explanation for the total field of view required to view a typical vehicle's blind spot. Sasian Decl. ¶¶ 365-75.

#### F. Claim 25

### 1. Elements [a]-[q]

Elements 25[a]-[q] are the same as Claim 23[a]-[q], and would have been obvious in view of Henion over Platzer and Catlin for the same reasons as described above. Sasian Decl. ¶ 376.

### 2. [r] Fixed reflectance, spherically bent

Henion teaches this limitation for the same reasons as described for claim element 24[a] above. Sasian Decl. ¶ 377.

# 3. [s] Outwardly and downwardly

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]. Henion discloses an embodiment "in which the orientation of second reflective element or spotter mirror 36 is adjustable with respect to first reflective element 32." Henion 7:11-13. In this embodiment, "[b]y simply pressing upon different positions of second reflective element 36, the operator may adjust the orientation of second reflective element 36 about a horizontal axis independently of first reflective element 32." *Id.* 8:9-12. Furthermore, Henion notes that "one skilled in the art will yet recognize that a similar configuration can be provided to enable adjustability in the horizontal field of view." *Id.* 8:17-19. A POSA would therefore understand this embodiment could be used to achieve a mirror configuration in which the auxiliary mirror is angled downward about the horizontal axis and

outward (i.e. away from the vehicle) in the vertical axis, which would in turn result in the field of view of the auxiliary mirror being angled outward and downward relative to the longitudinal axis of the vehicle. Sasian Decl. ¶ 379-86.

Further, a POSA reading Henion would have found it obvious that a mirror element adjustable through a range of horizontal and vertical positions could be adjusted outwardly and downwardly with respect to the equipped vehicle. A POSA seeking to meet Henion's goal of improved visibility via use of a wide-view spotter mirror would have realized that the mirror could be adjusted outward to increase the field of view sideward and rearward of the vehicle and downward to ensure coverage of the road surface. Sasian Decl. ¶¶ 379-86.

Furthermore, a POSA would have found it obvious to construct a sideview mirror with the auxiliary mirror angled outwardly and downwardly by attaching the primary and auxiliary mirrors to a backing plate formed as a single element. As discussed above with respect to limitation 23[j], Henion discloses an embodiment in which the backing plate is formed as a single element. Henion Figure 3. A POSA who had experimented with a particular relative angling of the two mirrors using the adjustable mirrors taught in Henion would further have been motivated to apply Henion's single-piece backing plate teaching to fix the two mirrors in a particular relationship for multiple reasons. For example, a POSA would have realized that once the two mirrors were adjusted to a particular optimal position,

fixing the mirrors at that position could be advantageous in order to maintain this optimal position and to reduce the number of settings the driver of the automobile had to adjust before driving, thus improving the user experience. *See* Sasian Decl. ¶¶ 384-86. Furthermore, Henion discloses that in the embodiment where the backing plate allows the mirror to be adjustable relative to each other, "support member 34, support section 38, extension member 42, and hinge 44 may but need not, be integrally formed." Henion 7:17-19. Thus, Henion discloses that even in the embodiment where the mirrors are adjustable, the backing plate can be formed as a single element. Sasian Decl. ¶ 384.

# 4. [t] Driver's-side mirror assembly

Henion teaches this limitation for the same reasons as described in Claim 23's preamble and claim elements 23[a], 23[b], and 23[d] above. Henion further discloses that the exterior sideview mirror assembly may be mounted on the driver's side. Henion Figure 1; Sasian Decl. ¶¶ 242-45, 387-90.

# 5. [u] At least 25 degrees to side of automobile

Henion in combination with Platzer teaches this limitation for the same reasons as described in Claim 24[e] above. Sasian Decl. ¶¶ 365-75, 390.

#### G. Claim 26

# 1. [a] Metallic reflector coating, curved backing plate

Henion teaches this limitation for the same reasons as described in Claims 24[a] and 24[b] above. Sasian Decl. ¶¶ 348-57, 391-93.

## 2. [b] Wall element

Henion teaches this limitation for the same reasons as described in Claim 24[c] above. Sasian Decl. ¶¶ 358-61, 396-97.

## 3. [c] Adapted backing plate

Henion teaches this limitation for the same reasons as described in Claim 23[1] and [m] above. Sasian Decl. ¶¶ 280-85, 396-97.

#### IX. Secondary Considerations

There are no secondary considerations known to SMR that affect—let alone overcome—this strong case of obviousness. On January 10, 2018, Magna provided supplemental responses to SMR's invalidity contentions contending that commercial success supports non-obviousness. Magna marked those responses "Highly Confidential," so SMR is unable to discuss them in detail here, but SMR notes that Magna failed to offer any evidence of commercial success. Other than a conclusory statement alleging nexus, Magna did not attempt to establish a nexus despite having a full and fair opportunity to set forth its position in district court. That is because Magna cannot establish a nexus. To the extent that Magna's claims have a nexus to its products, those products are § 102(b) prior art. Exs. 1004, 1005.

Should Magna proffer any objective evidence in its preliminary response, SMR either should be given leave to file a reply to address that evidence or trial should be instituted so that SMR can test that evidence in the trial phase of the requested IPR proceeding.

#### X. Conclusion

For the reasons set forth above, SMR respectfully requests *inter partes* review of all claims of the '244 patent.

Respectfully submitted,

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#### **CLAIM LISTING**

The following claim listing adds letters ([a], [b], etc.) to the independent claims for clarity:

- 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;
- [1] 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 reflective 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.

- 2. The exterior sideview mirror system of claim 1, wherein the rearward field of view of said auxiliary reflective element is at an angle of at least about 3 degrees relative to the rearward field of view of said plano reflective element.
- 3. The exterior sideview mirror system of claim 2, wherein the rearward field of view of said auxiliary reflective element is angled downward and outward relative to the rearward field of view of said plano reflective element.
- 4. The exterior sideview mirror system of claim 1, wherein the rearward field of view of said auxiliary reflective element is generally directed at least one of outwardly and downwardly with respect to the longitudinal axis of the equipped automobile when said exterior sideview mirror assembly is attached to the side of the automobile.
- 5. The exterior sideview mirror system of claim 1, wherein the rearward field of view of said auxiliary reflective element is generally directed outwardly and downwardly with respect to the longitudinal axis of the equipped automobile when said exterior sideview mirror assembly is attached to the side of the automobile.
- 6. The exterior sideview mirror system of claim 1, wherein said plano reflective element is supported at said backing plate element by at least one of an adhesive attachment and a mechanical attachment and wherein said auxiliary reflective element is supported at said backing plate element by at least one of an adhesive attachment and a mechanical attachment, and wherein said auxiliary reflective element comprises a glass substrate having a surface coated with a metallic reflector coating and wherein said auxiliary reflective element comprises a bent glass substrate with a spherical curvature.
- 7. The exterior sideview mirror system of claim 1, wherein said plano reflective element comprises a flat glass substrate having a surface coated with a metallic reflector coating and wherein said auxiliary reflective element comprises a bent glass substrate having a surface coated with a metallic reflector coating, and wherein said bent glass substrate has a spherical curvature.
- 8. The exterior sideview mirror system of claim 1, wherein said plano reflective element comprises a flat glass substrate having a surface coated with a metallic reflector coating and wherein said auxiliary reflective element comprises a bent glass substrate having a surface coated with a metallic reflector coating, and wherein said bent glass substrate has a multiradius curvature.
- 9. The exterior sideview mirror system of claim 1, wherein said plano reflective element comprises a flat glass substrate having a surface coated with a metallic

reflector coating and wherein said auxiliary reflective element comprises a bent glass substrate having a surface coated with a metallic reflector coating, and wherein said bent glass substrate has an aspherical curvature.

- 10. The exterior sideview mirror system of claim 1, wherein said plano reflective element comprises a substrate having a surface coated with a metallic reflector coating and wherein said auxiliary reflective element comprises a substrate having a surface coated with a metallic reflector coating.
- 11. The exterior sideview mirror system of claim 10, wherein said curved portion of said backing plate element comprises a curvature corresponding to a curvature of said auxiliary reflective element, and wherein said curved portion of said backing plate element comprises at least one of (a) a spherical curvature, (b) an aspherical curvature and (c) a multiradius curvature.
- 12. The exterior sideview mirror system of claim 1, wherein said demarcation element comprises a wall structure that at least partially partitions said backing plate element into a first region where said plano reflective element is disposed and a separate and adjacent second region where said auxiliary reflective element is disposed, and wherein at least one of (a) said first region is adapted to receive said plano reflective element and (b) said second region is adapted to receive said auxiliary reflective element.
- 13. The exterior sideview mirror system of claim 12, wherein said auxiliary reflective element comprises a heater element operable to demist/deice the outmost surface of said auxiliary reflective element when said auxiliary reflective element is disposed at said backing plate element and when said exterior sideview mirror assembly is attached and operated on the side of the automobile.
- 14. The exterior sideview mirror system of claim 1, wherein said exterior sideview mirror assembly including said plano-auxiliary reflective element having a rearward field of view when attached to the side of the automobile comprises a driver-side exterior sideview mirror assembly, and wherein, when attached to the side of the automobile, 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.
- 15. The exterior sideview mirror system of claim 1, wherein said auxiliary reflective element has an aspherical curvature.

- 16. The exterior sideview mirror system of claim 1, wherein said auxiliary reflective element has a spherical curvature.
- 17. The exterior sideview mirror system of claim 1, wherein the ratio of the width of said plano reflective element to the width of said auxiliary reflective element is greater than 1.5.
- 18. The exterior sideview mirror system of claim 1, wherein said exterior sideview mirror assembly comprises a door-mounted exterior sideview mirror assembly adapted for attachment to a side of the automobile adjacent a driver seating location of a driver of the automobile and wherein the rearward field of view of said auxiliary reflective element generally views downwardly towards the road surface adjacent to the driver seating location at least at a distance in the range of about 1 foot to about 24 feet to the rear of the driver seating location.
- 19. The exterior sideview mirror system of claim 1, wherein at least one of said plano reflective element and said auxiliary reflective element comprises a glass substrate having a surface coated with a metallic reflector coating, and wherein said metallic reflector coating is selected from the group consisting of (i) a chromium coating, (ii) a titanium coating, (iii) a rhodium coating, (iv) a metal-alloy coating, (v) a nickel alloy coating, (vi) an aluminum coating and (vii) a silver coating.
- 20. The exterior sideview mirror system of claim 19, wherein said plano reflective element comprises an electro-optic reflective element.
- 21. The exterior sideview mirror system of claim 1, wherein said auxiliary reflective element comprises a fixed reflectance mirror reflector and said fixed reflectance mirror reflector comprises a curved substrate coated with a metallic reflector coating.
- 22. The exterior sideview mirror system of claim 21, wherein said curved substrate comprises a spherically bent glass substrate.
- 23. 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 planoauxiliary 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;

- [1] 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 said plano 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 auxiliary reflective element comprises a fixed reflectance mirror reflector and wherein said fixed reflectance mirror reflector comprises a curved substrate coated with a metallic reflector coating; and

- [s] wherein said plano reflective element and said auxiliary reflective element are adjacently supported at said backing plate element at a joint and wherein said joint comprises a space between said plano reflective element and said auxiliary reflective element and wherein a wall located on said backing plate element at said joint is disposed between said plano reflective element and said auxiliary reflective element.
- 24. The exterior sideview mirror system of claim 23,
  - [a] wherein said plano reflective element comprises a glass substrate having a surface coated with a metallic reflector coating, wherein said auxiliary reflective element comprises a fixed reflectance mirror reflector and wherein said fixed reflectance mirror reflector comprises a spherically bent glass substrate coated with a metallic reflector coating,
  - [b] wherein said curved portion of said backing plate element comprises a curvature corresponding to a curvature of said auxiliary reflective element,
  - [c] wherein said wall at least partially partitions said backing plate element into a first region where said plano reflective element is disposed and a separate and adjacent second region where said auxiliary reflective element is disposed, and wherein said first region is adapted to receive said plano reflective element and said second region is adapted to receive said auxiliary reflective element and
  - [d] wherein said exterior sideview mirror assembly including said planoauxiliary reflective element having a rearward field of view when attached to the side of the automobile comprises a driver-side exterior sideview mirror assembly, and
  - [e] wherein, when attached to the side of the automobile, 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.
- 25. 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;
- [1] 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 said plano 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 auxiliary reflective element comprises a fixed reflectance mirror reflector and wherein said fixed reflectance mirror reflector comprises a spherically bent glass substrate coated with a metallic reflector coating;
- [s] wherein the rearward field of view of said auxiliary reflective element is generally directed at least one of outwardly and downwardly with respect to the longitudinal axis of the equipped automobile when said exterior sideview mirror assembly is attached to the side of the automobile; and
- [t] wherein said exterior sideview mirror assembly including said planoauxiliary reflective element having a rearward field of view when attached to the side of the automobile comprises a driver-side exterior sideview mirror assembly, and
- [u] wherein, when attached to the side of the automobile, 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.
- 26. The exterior sideview mirror system of claim 25,
  - [a] wherein said plano reflective element comprises a glass substrate having a surface coated with a metallic reflector coating, wherein said curved portion of said backing plate element comprises a curvature corresponding to a curvature of said auxiliary reflective element, and
  - [b] wherein an element of said backing plate element at least partially partitions said backing plate element into a first region where said plano reflective element is disposed and a separate and adjacent second region where said auxiliary reflective element is disposed and
  - [c] wherein said first region is adapted to receive said plano reflective element and said second region is adapted to receive said auxiliary reflective element.

## **CERTIFICATE OF SERVICE**

The undersigned certifies that a complete copy of this Corrected Petition for *Inter Partes* Review of U.S. Patent No. 8,128,244 was served on the official correspondence address for the patent shown in PAIR and a courtesy copy to Patent Owner's current litigation counsel:

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# **CERTIFICATE OF COMPLIANCE WITH 37 C.F.R. § 42.24**

I hereby certify that this Petition complies with the word count limitation of 37 C.F.R. § 42.24(a)(1)(i) because the Petition contains 13,866 words, excluding the cover page, signature block, and the parts of the Petition exempted by 37 C.F.R. § 42.24(a)(1).

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