# EXHIBIT B - INVALIDITY CLAIM CHART FOR ALL ASSERTED CLAIMS BASED ON MAGNA 2001 DODGE RAM TRAILER TOWING MIRROR ALONE OR IN VIEW OF ONE OR MORE OF THE NOTED SECONDARY REFERENCES

#### A. <u>U.S. Patent No. 7,934,843</u>

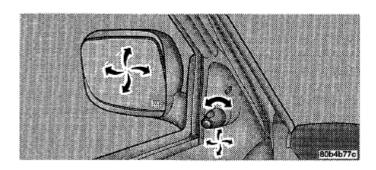
	Claim 15 (depends on claim 1)	2001 Dodge Ram Mirror
a.	1. An exterior sideview mirror system suitable for use on an automobile, said exterior sideview mirror system comprising:	The 2001 Dodge Ram Mirror is an exterior sideview mirror system suitable for use on an automobile. See, e.g., 2001 Dodge Ram Owner's Manual ("Ram Manual") at p. 64
b.	an exterior sideview mirror assembly adapted for attachment to a side of an automobile;	The 2001 Dodge Ram Mirror is an exterior sideview mirror assembly adapted for attachment to a side of an automobile. <i>See</i> , <i>e.g.</i> , Ram Manual p. 64.

		BDC41506
c.	said exterior sideview mirror assembly including a reflective element having a rearward field of view when attached to the side of the automobile;	The 2001 Dodge Ram Mirror includes a reflective element having a rearward field of view when attached to the side of the automobile. See, e.g., Ram Manual p. 64.
d.	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	The 2001 Dodge Ram Mirror includes 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. <i>See</i> , <i>e.g.</i> , Ram Manual at 63.

of view to a driver-desired position when said exterior sideview mirror assembly is attached to the side of the automobile;

#### Electronic Power Mirrors — Optional

The mirror control is mounted on the inside driver's door panel. Rotate the control clockwise to adjust the right-side mirror and counterclockwise to adjust the left-side mirror. The control can be tilted up or down, and left or right, to adjust the view obtained in the outside mirrors.



To the extent the 2001 Dodge Ram Mirror does not disclose 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, a POSITA would have found this obvious in view of the Magna 2001 Dodge Ram Trailer Towing Mirror alone or in combination with one or more other references.

See discussion of element d in the claim chart for the 2001 Dodge Ram mirror.

See discussion of element d in the claim chart for the 2001 GMT800 mirror.

See discussion of element d in the claim chart for Platzer 956.

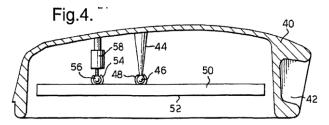
See discussion of element d in the claim chart for Platzer 731.

See discussion of element d in the claim chart for Henion 013.

See discussion of this element in the claim chart for Lynam 026.

See EP0864465B1:

"The reflective member 50 has a second integrally moulded socket formation 54 which engages with a spherical formation 56 of a screw jack drive unit 58, which may, for example, be as described in EP-A-0272047, and which includes an electric motor to enable the reflective member 50 to be pivoted relative to the housing 40 about an axis through the spherical formation 46 perpendicular to the plane of the drawing. A similar screw jack drive unit (not shown) has its jacking screw engaging with a third spherical socket (not shown) which is integrally moulded with the reflective member 50 to permit adjustment about an axis through the spherical formation 46 orthogonal to the first mentioned axis." EP0864465B1 at [0011].



EP0864465B1 at Fig. 4.

See 49 C.F.R. § 571.111 (October 1, 1999):

"The mirror shall not be obscured by the unwiped portion of the windshield, and shall be adjustable by tilting in both horizontal and vertical directions from the driver's seated position." 49 C.F.R. § 571.111 (October 1, 1999) at 318.

See U.S. Pat. No. 6,328,451 at Figs. 1-4; 2:52-3:9.

See U.S. Pat. No. 5,721,646 at Figs. 13-21 and accompanying text.

See U.S. Pat. No. 6,984,048 at Figs. 1-4, 9 and accompanying text.

See also U.S. Pat. No. 5,579,133 at Fig. 12 and accompanying text.

See also U.S. Pat. No. 3,826,563 at Fig. 6 and accompanying text; 3:10-14.

The Asserted Patents admit that an electrically actuated actuator is known in the automotive mirror art. *See, e.g.:* 

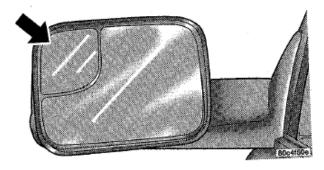
"Alternately, when actuator 136 comprises an electrically actuated actuator that is electrically operable incorporating at least one motor, control 137 can comprise a switch (which, preferably, is operable under control of the driver seated in cabin 125) or control 137 can

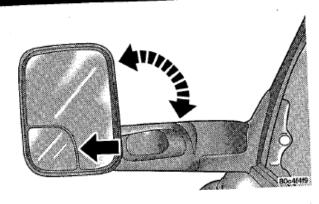
comprise a memory controller, as known in the automotive mirror art, that controls actuator 136 to move the position of plano-multiradius reflective element assembly 130 to a pre-set orientation that suits the rearward field of view preference of an individual driver." (US 9,694,750 at 6:28-37) The applicants conceded that this limitation was known in the art and/or obvious during the prosecution of the '750 Patent. See 11/25/2016 Office Action pp. 5, 12, 18. wherein said reflective The 2001 Dodge Ram Mirror comprises a plano-auxiliary reflective element assembly, said planoe. auxiliary reflective element assembly comprising a plano reflective element having unit magnification element comprises a planoand a separate auxiliary reflective element having a curvature. auxiliary reflective element assembly, said planoauxiliary reflective element assembly comprising a plano reflective element having unit magnification Auxiliary reflective and a separate auxiliary element having reflective element having a curvature curvature; Plano reflective element having unit magnification See also Ram Manual p. 64:

### UNDERSTANDING THE FEATURES OF YOUR VEHICLE

### Trailer Towing Mirrors — Optional

These mirrors are designed with an adjustable mirror head to provide a greater vision range when towing extra-wide loads. To change position inboard or outboard, the mirror head should be rotated (flipped Out or In). A small blindspot mirror is integrated onto the main mirror surface.



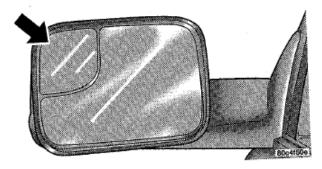


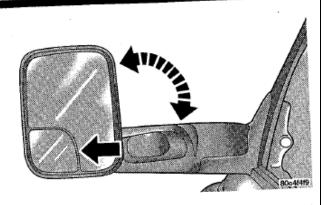
said plano reflective element and said auxiliary reflective element of said plano-auxiliary reflective element assembly mounted adjacently at said planoauxiliary reflective element assembly in a side-by-side relationship and not superimposed with one reflective element on top of the other reflective element; The 2001 Dodge Ram Mirror includes 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. See, e.g., Ram Manual p. 64.

#### UNDERSTANDING THE FEATURES OF YOUR VEHICLE

### Trailer Towing Mirrors — Optional

These mirrors are designed with an adjustable mirror head to provide a greater vision range when towing extra-wide loads. To change position inboard or outboard, the mirror head should be rotated (flipped Out or In). A small blindspot mirror is integrated onto the main mirror surface.





To the extent the 2001 Dodge Ram Mirror does not disclose 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, a POSITA would have found this obvious in view of the Magna 2001 Dodge Ram Trailer Towing Mirror alone or in combination with one or more other references.

See discussion of element f in the claim chart for Platzer 956.

See discussion of element f in the claim chart for Platzer 731.

See discussion of element f in the claim chart for Van Nostrand.

See discussion of element f in the claim chart for Tobin.

See discussion of element f in claim chart for Kondo.

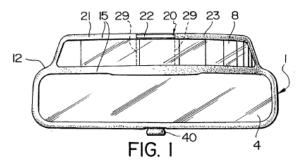
See discussion of this element in the claim chart for Lynam 026.

See U.S. Pat. No. 5,557,467:

"With reference now to FIG. 1, present mirror 1 combines a conventional first flat reflective surface 4 and a second longitudinally convex reflective surface 8. Mirror 4 provides the usual undistorted but limited field of rearward vision whereas mirror 8, being convex, provides a much wider rearward field of vision which overlaps to both sides with most persons natural peripheral vision, thereby all but eliminating the blind spots in the field of view afforded by mirror 4 alone." U.S. Pat. No. 5,557,467 at 2:39-47.

"Surrounding both of mirrors 4 and 8 is a frame 12 including a backing 13 and relatively thin raised edges 15 which overlap the adjacent edges of mirrors 4 and 8 to retain the mirrors firmly in place in fixed positions relative to each other. As shown, both mirrors as retained by frame 12 are in parallel longitudinal alignment with mirror 8 preferably, but not necessarily, located vertically above mirror 4." U.S. Pat. No. 5,557,467 at 2:48-55.

"Frame 12 is formed integrally about both mirrors to provide a unitary, seamless, aesthetically pleasing appearance while at the same time making the mirror as a whole compact, unobtrusive, easy to adjust and rigid. As shown, to provide a relatively low profile, the vertical height of mirror 8 is less than that of mirror 4." U.S. Pat. No. 5,557,467 at 2:56-61.



U.S. Pat. No. 5,557,467 at Fig. 1.

See U.S. Pat. No. 6,328,451 at Figs. 1-4; 2:52-3:9.

See U.S. Pat. No. 5,721,646 at Figs. 13-21 and accompanying text.

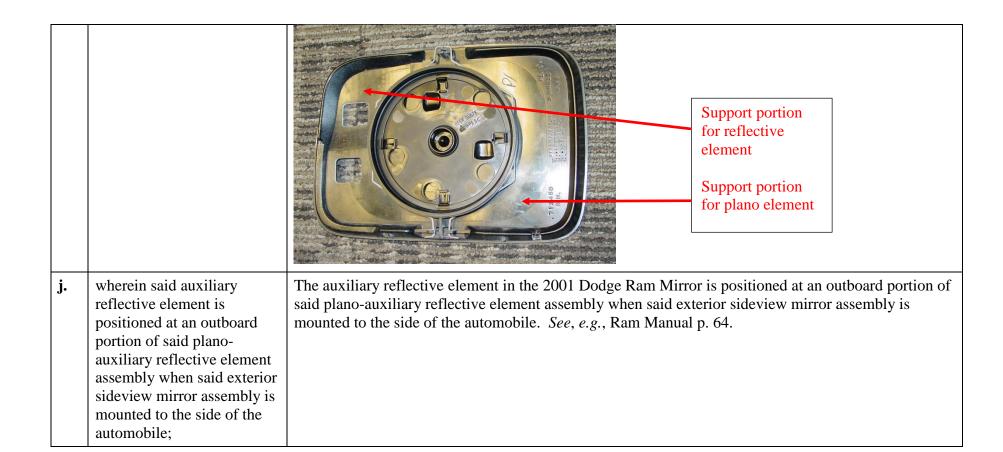
See U.S. Pat. No. 6,984,048 at Figs. 1-4, 9 and accompanying text.

See U.S. Appl. Pub. No. 2003/0039039 at [0013], Fig. 2 and accompanying text.

See U.S. Pat. No. 3,501,227 at Figs. 1-6 and accompanying text.

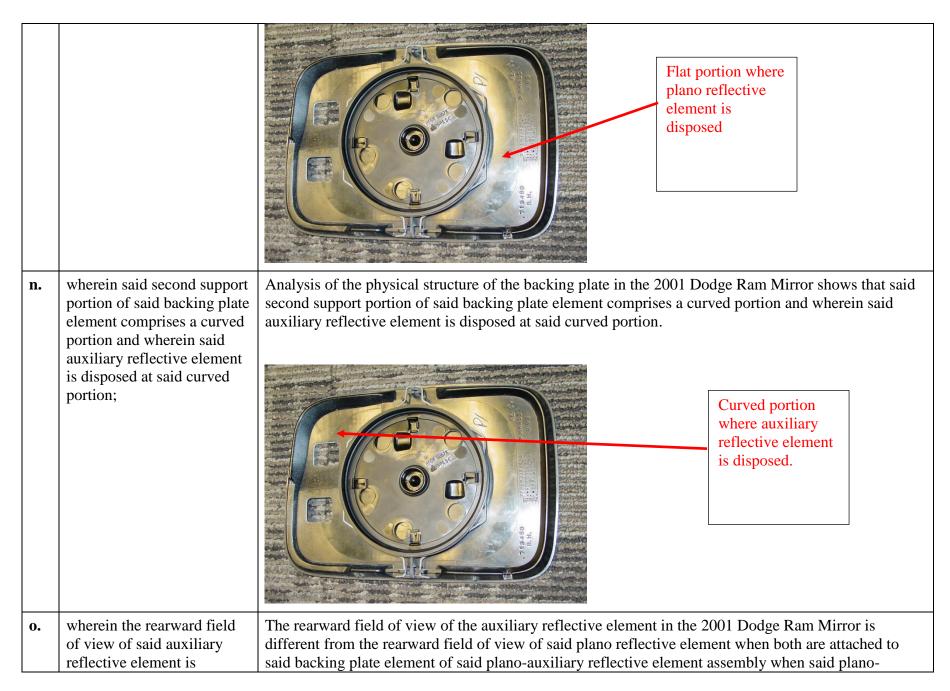
	T	See GB1133005 at Figs. 1-4 and accompanying text.
		In addition, the applicants conceded that this limitation was known in the art and/or obvious during
		prosecution of the '750 Patent. See, e.g., 11/25/2016 Office Action pp. 8, 15, 22.
g.	said plano reflective element and said auxiliary reflective 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;	Analysis of the physical structure of the 2001 Dodge Ram Mirror shows that 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. The photograph below shows the common backing plate for the plano and auxiliary reflective elements of the passenger-side 2001 Dodge Ram Trailer Towing Mirror. The driver's side backing plate has a symmetrical structure.  Common backing plate for plano and auxiliary reflective elements
h.	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	The auxiliary reflective element in the 2001 Dodge Ram Mirror has 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.  See, e.g., Ram Manual p. 64:

	1	F
	which said exterior sideview mirror assembly is attached;	Trailer Towing Mirrors — Optional These mirrors are designed with an adjustable mirror head to provide a greater vision range when towing extra-wide loads. To change position inboard or outboard, the mirror head should be rotated (flipped Out or In). A small blindspot mirror is integrated onto the main mirror surface.  Analysis of the physical structure of the 2001 Dodge Ram Mirror shows that the auxiliary mirror is curved.
i.	said backing plate element having a first support portion supporting said plano reflective element and a second support portion supporting said auxiliary reflective element;	Analysis of the physical structure of the 2001 Dodge Ram Mirror shows that the backing plate element has a first support portion supporting said plano reflective element and a second support portion supporting said auxiliary reflective element.



## UNDERSTANDING THE FEATURES OF YOUR VEHICLE I Trailer Towing Mirrors — Optional These mirrors are designed with an adjustable mirror head to provide a greater vision range when towing extra-wide loads. To change position inboard or outboard, the mirror head should be rotated (flipped Out or In). A small blindspot mirror is integrated onto the main mirror surface. wherein said backing plate Analysis of the physical structure of the backing plate in the 2001 Dodge Ram Mirror shows that it comprises a polymeric substrate that is formed as a single element by injection molding of a polymeric element comprises a polymeric substrate that is resin. This is further shown by the marking of the backing plate with the letters "HHABS," which formed as a single element indicates that the backing plate is formed of a polymeric resin. by injection molding of a polymeric resin;

		REV GAINS MINIS
1.	wherein said backing plate element is capable of supporting said plano reflective element and said auxiliary reflective element;	The backing plate element in the 2001 Dodge Ram Mirror supports, and hence is capable of supporting, said plano reflective element and said auxiliary reflective element.
m.	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;	Analysis of the physical structure of the backing plate in the 2001 Dodge Ram Mirror shows that 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.



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 planoauxiliary reflective element assembly when said planoauxiliary 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; 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. The auxiliary reflective element is curved, rather than planar, and hence provides a different field of view.

To the extent the 2001 Dodge Ram Mirror does not disclose that the rearward field of view of said auxiliary reflective element is angled to the rearward field of view of said plano reflective element, a POSITA would have found this obvious in view of the Magna 2001 Dodge Ram Trailer Towing Mirror alone or in combination with one or more other references.

See discussion of element o in the claim chart for the 2001 Dodge Ram mirror.

See discussion of element o in the claim chart for the 2001 GMT800 mirror.

See discussion of element o in the claim chart for Platzer 956.

See discussion of element o in the claim chart for Platzer 731.

See discussion of element o in the claim chart for Van Nostrand.

See discussion of element o in the claim chart for Hagiri 534.

See discussion of element o in the claim chart for Tobin.

See discussion of this element in the claim chart for Lynam 026.

See U.S. Pat. No. 5,557,467:

"With reference to FIGS. 6 to 10, there is shown a modified combination mirror in which the same reference numerals as used in FIGS. 1 to 5 have been used to identify like elements. As will be seen particularly from FIG. 6, upper lens 8, in addition to curving rearwardly to provide a convexity, also curves downwardly at its opposite ends to emulate a "droop" at its ends. This droop has been found to provide enhanced rearward vision in the vertical plane without the excessive distortion associated with a spherical lens. The droop therefore allows children located in the vehicle's rear seat to be readily observed and also to facilitate better sighting of bicycles, scooters and motorcycles particularly in the driver's blind spots. If desired, lens 8 can be imparted with a slight spherical curvature in the vertical plane." U.S. Pat. No. 5,557,467 at 2:39-47.

		21, 15, 20, 22, 8
		FIG.6
		U.S. Pat. No. 5,557,467 at Fig. 6.
		See U.S. Pat. No. 6,328,451 at Figs. 1-4; 2:52-3:9.
		See U.S. Pat. No. 5,721,646 at Figs. 13-21 and accompanying text.
		See U.S. Pat. No. 3,501,227 at Figs. 1-6 and accompanying text.
		See GB1133005 at Figs. 1-4 and accompanying text; 1:53-2:15.
		See also U.S. Pat. No. 5,579,133 at Fig. 12 and accompanying text.
		See also U.S. Pat. No. 2,279,751 at Figs. 2-5 and accompanying text.
		See also U.S. Pat. No. 3,826,563 at Figs. 5-7 and accompanying text.
		See also U.S. Pat. No. 5,005,962 at Fig. 4 and accompanying text.
		See also DE1405836 at Fig. 3 and accompanying text.
		See also DE1921076 at Fig. 2b and accompanying text.
		See also DE1921384 at Figs. 1, 5, and accompanying text.
		See also DE2207208 at Figs. 1-2 and accompanying text.
		See also EP0864465B1 at Fig. 6 and accompanying text.
		See also DE2537876 at Figs. 1, 8, and accompanying text.
		See also US2778273 at Fig. 4 and accompanying text.
		In addition, the applicants conceded that this limitation was known in the art and/or obvious during prosecution of the '712 Patent. See '712 Patent File History, 2003-3-17 Office Action p. 4
р.	wherein angling of the rearward field of view of said auxiliary reflective	The 2001 Dodge Ram Mirror discloses that 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

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;

said auxiliary reflective element relative to said first support portion of said backing plate element supporting said plano reflective element. This can be shown from the photograph below, which indicates that the support portion for the spotter is angled.



Second support portion is angled

To the extent the 2001 Dodge Ram Mirror does not disclose that 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, a POSITA would have found this obvious in view of the Magna 2001 Dodge Ram Trailer Towing Mirror alone or in combination with one or more other references.

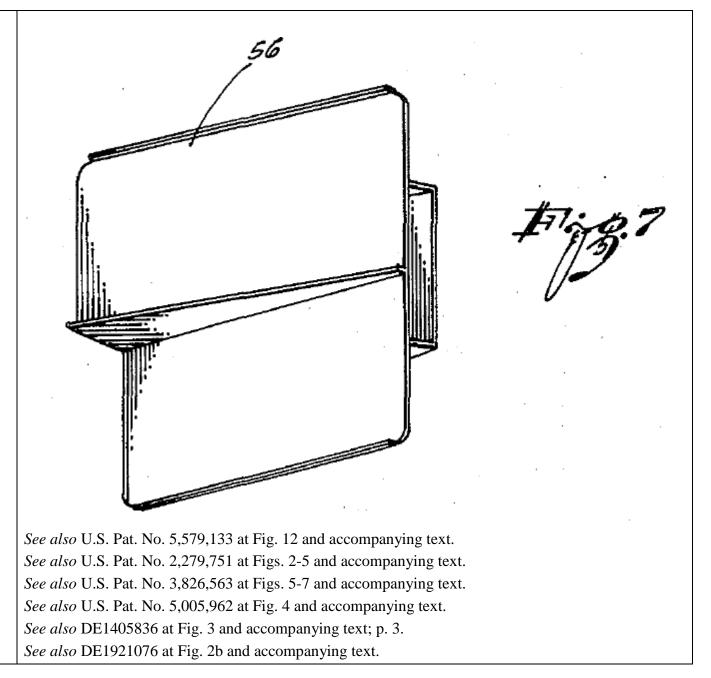
See discussion of element p in the claim chart for the 2001 GMT800 mirror.

See also discussion of element p in the claim chart for Henion 013.

See discussion of element p in the claim chart for Platzer 956.

See discussion of element p in the claim chart for Platzer 731.

See U.S. Patent No. 3,826,563 at Fig. 7



See also DE1921384 at Fig. 5 and accompanying text. See also DE2207208 at Figs. 1-2 and accompanying text. See also EP0864465B1 at Fig. 6 and accompanying text. See also DE2537876 at Figs. 1, 8, and accompanying text. See also US2778273 at Fig. 4 and accompanying text. In addition, the applicants conceded that this limitation was known in the art and/or obvious during prosecution of the '712 Patent. See '712 Patent File History, 2003-3-17 Office Action p. 4 wherein, when said exterior When the 2001 Dodge Ram Mirror is attached to the side of the automobile, the field of view of said sideview mirror assembly is 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 attached to the side of the automobile, the field of side of the automobile to which said exterior sideview mirror assembly is attached, said blind spot view of said plano reflective being generally outside the rearward field of view of said plano reflective element when said plano element generally views reflective element is viewed by a driver of the equipped automobile when said exterior sideview mirror rearwardly of the equipped assembly is attached to the side of the automobile. See, e.g., Ram Manual p. 64: 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; and

		Trailer Towing Mirrors — Optional These mirrors are designed with an adjustable mirror head to provide a greater vision range when towing extra-wide loads. To change position inboard or outboard, the mirror head should be rotated (flipped Out or In). A small blindspot mirror is integrated onto the main mirror surface.
r.	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.	Analysis of the physical structure of the 2001 Dodge Ram Mirror shows that the plano reflective element comprises a glass substrate having a surface coated with a metallic reflector coating.
s.	<b>15.</b> The exterior sideview mirror system of claim 1,	The rearward field of view of the auxiliary reflective element of the 2001 Dodge Ram Mirror is generally directed outwardly and downwardly with respect to the longitudinal axis of the equipped

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. automobile when said exterior sideview mirror assembly is attached to the side of the automobile. The mirror assembly in the 2001 Dodge Ram Mirror is mounted on an actuator that is capable of angling the assembly so that the rearward field of view of the auxiliary mirror is generally directed outwardly and downwardly with respect to the longitudinal axis when the mirror is attached to the vehicle.

To the extent the rearward field of view of the auxiliary reflective element of the 2001 Dodge Ram Mirror is not 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, a POSITA would have found this obvious in view of the Magna 2001 Dodge Ram Trailer Towing Mirror alone or in combination with one or more other references.

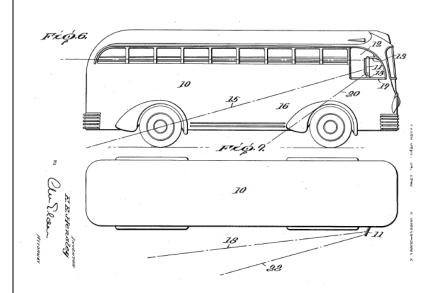
See discussion of element s in the claim chart for the 2001 Dodge Ram mirror.

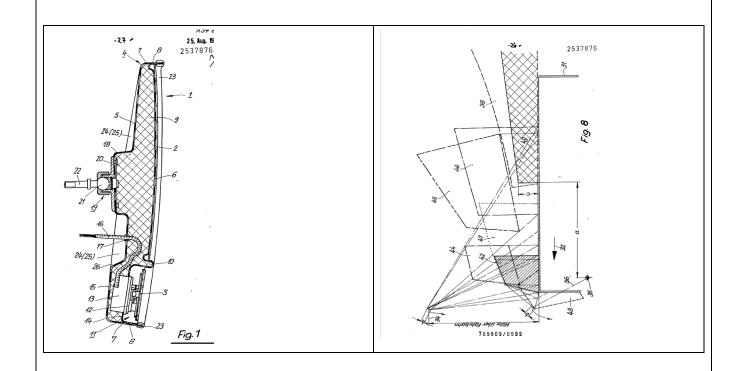
See discussion of element s in the claim chart for the 2001 GMT800 mirror.

See discussion of element s in the claim chart for Henion 013.

See discussion of this element in the claim chart for Lynam 026.

See U.S. Patent No. 2,279,751 at Fig. 6, 10:





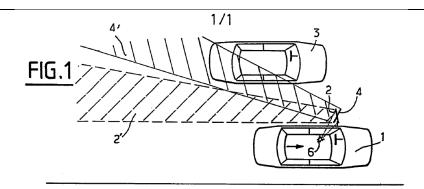
DE2537876 at Figs. 1 (left), 8

#### See FR2650982:

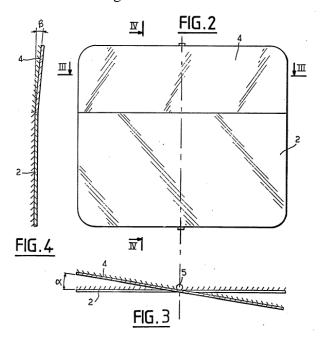
"FIG. 3 is a horizontal cross-section along III - III of FIG. 2. In this figure, it can be seen that the horizontal section of the auxiliary mirror 4 forms, with the horizontal section of the main mirror 2, an angle a, the value of which is set at the factory and which is between 8° and 10° according to the car models and preferably equal to 9°." FR2650982 (machine translation) at 3:37-4:4.

"FIG. 4 shows a vertical section of FIG. 2 by a line IV IV.

It can be seen in this figure that the cross-sections of the two mirrors 2 and 4 by a vertical plane form between them a constant angle ss. This angle is between  $1.50^{\circ}$  and  $3.50^{\circ}$  and preferably equal to  $2.50^{\circ}$ ." FR2650982 (machine translation) at 4:22-26.



FR2650982 at Fig. 1.

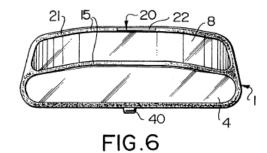


FR2650982 at Figs. 2-4.

See U.S. Pat. No. 5,557,467:

"As will be seen particularly from FIG. 6, upper lens 8, in addition to curving rearwardly to provide a convexity, also curves downwardly at its opposite ends to emulate a "droop" at its ends. This droop has been found to provide enhanced rearward vision in the vertical plane

without the excessive distortion associated with a spherical lens. The droop therefore allows children located in the vehicle's rear seat to be readily observed and also to facilitate better sighting of bicycles, scooters and motorcycles particularly in the driver's blind spots. If desired, lens 8 can be imparted with a slight spherical curvature in the vertical plane." U.S. Pat. No. 5,557,467 at 3:54-64.



U.S. Pat. No. 5,557,467 at Fig. 6.

See U.S. Pat. No. 6,062,699 at Figs. 2A-2D; 4:29-44.

See U.S. Pat. No. 5,721,646 at Figs. 13-21 and accompanying text.

See GB1133005 at Figs. 1-4 and accompanying text; 1:53-2:15.

See also U.S. Pat. No. 5,579,133 at Fig. 12 and accompanying text.

See also U.S. Pat. No. 2,279,751 at Figs. 2-7 and accompanying text.

See also U.S. Pat. No. 3,826,563 at 3:6-17.

See also U.S. Pat. No. 5,005,962 at Fig. 4 and accompanying text.

See also DE1921076 at Fig. 2b and accompanying text.

See also DE2207208 at Figs. 1-2 and accompanying text.

See also DE2537876 at Figs. 1, 8, and accompanying text.

See also US2778273 at Fig. 4 and accompanying text.

The applicants conceded that this limitation was known in the art and/or obvious during prosecution of the '712 patent. *See* 2003-3-17 Office Action at 4.

The applicants conceded that this limitation was known in the art and/or obvious during prosecution of

		the '294 Patent. See Jan. 12, 2005 Office Action at p. 5.
	Claim 33	2001 Dodge Ram Mirror
	(depends on claim 1)	
t.	33. 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 2.5.	The 2001 Dodge Ram Mirror discloses that the ratio of the width of said plano reflective element to the width of said auxiliary reflective element is greater than 2.5. The ratio of the width of the plano reflective element to the width of the auxiliary reflective element is roughly 3, which is greater than 2.5.2001 Dodge Ram Mirror 2001 Dodge Ram Mirror
	Claim 34	2001 Dodge Ram Mirror
	(depends on claim 1)	
u.	34. 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	The 2001 Dodge Ram Mirror is 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. Furthermore, the rearward field of view of said auxiliary reflective element generally views downwardly towards the road surface adjacent to the driver seating location to a distance of roughly 7 feet, which is in the range of about 1 foot to about 24 feet to the rear of the driver seating location.

about 24 feet to the rear of
the driver seating location.

#### B. <u>U.S. Patent No. 8,128,244</u>

Claim 24 (depends on claim 23)	
23. An exterior sideview mirror system suitable for use on an automobile, said exterior sideview mirror system comprising:	See discussion of element a above, which is incorporated herein by reference.
an exterior sideview mirror assembly adapted for attachment to a side of an automobile;	See discussion of element b above, which is incorporated herein by reference.
said exterior sideview mirror assembly including a reflective element having a rearward field of view when attached to the side of the automobile;	See discussion of element c above, which is incorporated herein by reference.
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	See discussion of element d above, which is incorporated herein by reference.

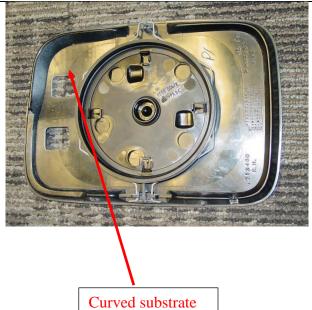
automobile;	
wherein said reflective element comprises a plano- auxiliary reflective element assembly, said plano- auxiliary reflective element assembly comprising a plano reflective element having unit magnification and a separate auxiliary reflective element having a curvature;	See discussion of element e above, which is incorporated herein by reference.
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;	See discussion of element f above, which is incorporated herein by reference.
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	See discussion of element g above, which is incorporated herein by reference.

by said actuator simultaneously and similarly moves said plano reflective element and said auxiliary reflective element	
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 sideviey mirror assembly is attached	v
said backing plate element having a first support portion supporting said plano reflective element and a second support portion supporting said auxiliary reflective element;	See discussion of element i above, which is incorporated herein by reference.
wherein said auxiliary reflective element is positioned at an outboard portion of said planoauxiliary reflective element assembly when said exterio sideview mirror assembly is mounted to the side of the automobile;	r
wherein said backing plate element comprises a polymeric substrate that is formed as a single element by injection molding of a	See discussion of element k above, which is incorporated herein by reference.

polymeric resin;	
wherein said backing plate element is capable of supporting said plano reflective element and said auxiliary reflective element;	See discussion of element l above, which is incorporated herein by reference.
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;	See discussion of element m above, which is incorporated herein by reference.
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;	See discussion of element n above, which is incorporated herein by reference.
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	See discussion of element o above, which is incorporated herein by reference.

a	exterior sideview mirror assembly is attached to the side of the automobile;	
re   sa   e   re   sa   e   re   sa   sa   sa   sa   sa   sa   sa   s	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;	See discussion of element p above, which is incorporated herein by reference.
si ai v el re ai v re v ir si w	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	See discussion of element q above, which is incorporated herein by reference.

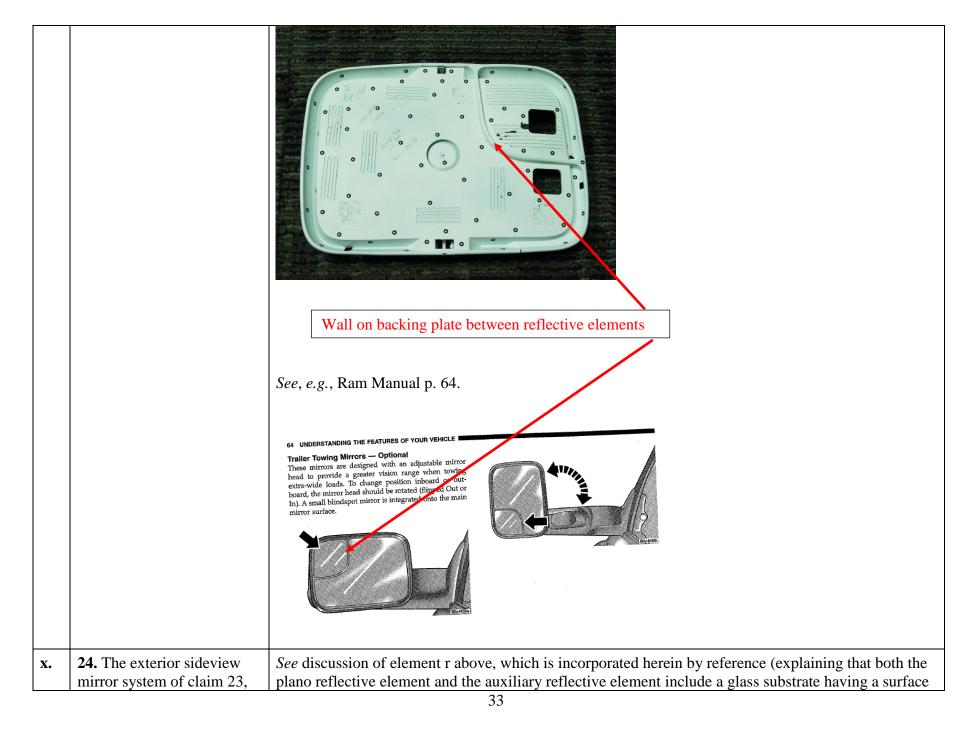
	generally outside the rearward field of view of said plano reflective element when said plano reflective element is viewed by a driver of the equipped automobile when said exterior sideview mirror assembly is attached to the side of the automobile;	
	wherein said plano reflective element comprises one 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;	See discussion of element r above, which is incorporated herein by reference.
v.	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	The auxiliary mirror in the 2001 Dodge Ram Mirror comprises a fixed reflectance mirror reflector and wherein said fixed reflectance mirror reflector comprises a curved substrate coated with a metallic reflector coating. Analysis of the physical structure of the 2001 Dodge Ram Mirror shows that the substrate for the auxiliary reflective element is fabricated of glass and the substrate is coated on its outermost (a.k.a. first) surface with a metallic reflector coating. It is understood and believed that the auxiliary reflective element includes a fixed reflectance mirror reflector; it is not electro-chromic. The curved nature of the substrate can be seen, for example, from the photograph below.



Curved substr

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.

The plano reflective element and auxiliary reflective element in the 2001 Dodge Ram Mirror 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. This can be seen, for example, in the photograph below. The photograph below shows the common backing plate for the plano and auxiliary reflective elements of the passenger-side 2001 Dodge Ram Trailer Towing Mirror. The driver's side backing plate has a symmetrical structure.



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,

coated with a metallic reflector coating).

Analysis of the physical structure of the 2001 Dodge Ram Mirror shows that the auxiliary mirror comprises a spherically bent glass substrate.

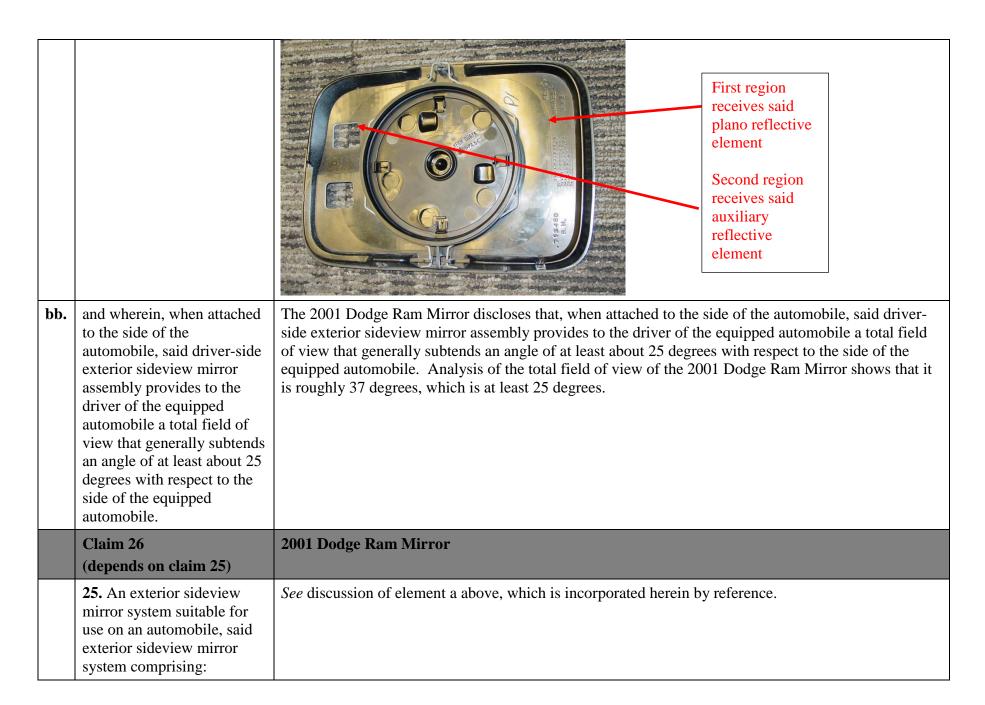
y. wherein said curved portion of said backing plate element comprises a curvature corresponding to a curvature of said auxiliary reflective element.

The curved portion of the backing plate element in the 2001 Dodge Ram Mirror comprises a curvature corresponding to a curvature of said auxiliary reflective element. The correspondence between the curvature of the auxiliary reflective element and the curvature of the curved portion of the backing plate element can be observed, for example, from the photograph below.



Curved portion with curvature corresponding to curvature of auxiliary reflective element wherein said wall at least The 2001 Dodge Ram Mirror discloses 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 partially partitions said backing plate element into a region where said auxiliary reflective element is disposed. This is shown from the photograph below. first region where said plano reflective element is disposed and a separate and adjacent second region where said auxiliary Wall reflective element is disposed, First region Second region See also Ram Manal p. 64

		Trailer Towing Mirrors — Optional These mirrors are designed with an adjustable mirror head to provide a greater vision range when towing extra-wide loads. To change position inboard or outboard, the mirror head should be rotated (flipped Out or In). A small blindspot mirror is integrated onto the main mirror surface.
aa.	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	The 2001 Dodge Ram Mirror discloses said first region is adapted to receive said plano reflective element and said second region is adapted to receive said auxiliary reflective element. This is shown from the photograph below.
	and 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,	See discussion of element c above, which is incorporated herein by reference (showing rearward field of view).  See discussion of element u above, which is incorporated herein by reference (showing that mirror system is adapted for attachment to the driver-side of the automobile).



an exterior sideview mirror assembly adapted for attachment to a side of an automobile;	See discussion of element b above, which is incorporated herein by reference.
said exterior sideview mirror assembly including reflective element having rearward field of view wh attached to the side of the automobile;	ı
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 fiel of view to a driver-desired position when said exterior sideview mirror assembly attached to the side of the automobile;	r ·
wherein said reflective element comprises a pland 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 curvature;	t t

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;	See discussion of element f above, which is incorporated herein by reference.
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;	See discussion of element g above, which is incorporated herein by reference.
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	See discussion of element h above, which is incorporated herein by reference.

mirror assembly is attached;	
said backing plate element having a first support portion supporting said plano reflective element and a second support portion supporting said auxiliary reflective element;	See discussion of element i above, which is incorporated herein by reference.
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;	See discussion of element j above, which is incorporated herein by reference.
wherein said backing plate element comprises a polymeric substrate that is formed as a single element by injection molding of a polymeric resin;	See discussion of element k above, which is incorporated herein by reference.
wherein said backing plate element is capable of supporting said plano reflective element and said auxiliary reflective element;	See discussion of element l above, which is incorporated herein by reference.
wherein said first support portion of said backing plate element comprises a flat portion and wherein said plano reflective element is	See discussion of element m above, which is incorporated herein by reference.

disposed at said flat portion;	
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;	See discussion of element n above, which is incorporated herein by reference.
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;	See discussion of element o above, which is incorporated herein by reference.
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	See discussion of element p above, which is incorporated herein by reference.

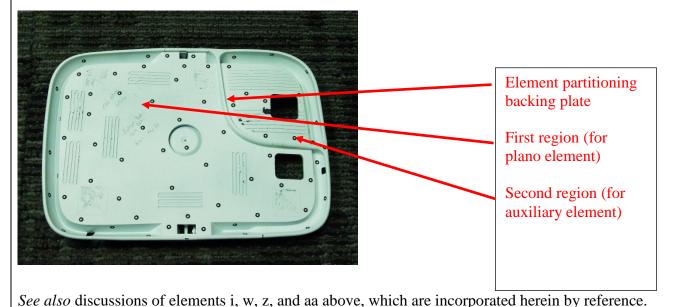
second support portion of said backing plate element supporting said auxiliary reflective element relative to said first support portion of said backing plate element supporting said plano reflective element;	
wherein, when said exterior sideview mirror assembly is attached to the side of the automobile, 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 is viewed by a driver of the equipped automobile when said exterior sideview mirror assembly is attached to the side of the automobile;	See discussion of element q above, which is incorporated herein by reference.

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;	See discussion of element r above, which is incorporated herein by reference.
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;	See discussion of element x above, which is incorporated herein by reference.
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	See discussion of element s above, which is incorporated herein by reference.
wherein said exterior	See discussion of element c above, which is incorporated herein by reference (showing rearward field

	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	of view).  See discussion of element u above, which is incorporated herein by reference (showing that mirror system is adapted for attachment to the driver-side of the automobile).
	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.	See discussion of element bb above, which is incorporated herein by reference.
	26. The exterior sideview mirror system of claim 25, wherein said plano reflective element comprises a glass substrate having a surface coated with a metallic reflector coating,	See discussion of element r above, which is incorporated herein by reference.
	wherein said curved portion of said backing plate element comprises a curvature corresponding to a curvature of said auxiliary reflective element, and	See discussion of element y above, which is incorporated herein by reference.
cc.	wherein an element of said	The 2001 Dodge Ram Mirror discloses that an element of said backing plate element at least partially

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 wherein said first region is adapted to receive said plano reflective element and said second region is adapted to receive said auxiliary reflective element.

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. This is shown from the photograph below.



#### C. <u>U.S. Patent No. 8,147,077</u>

Claim 22 (depends on claim 17)	2001 Dodge Ram Mirror
17. An exterior sideview mirror system suitable for use on an automobile, said exterior sideview mirror system comprising:	See discussion of element a above, which is incorporated herein by reference.
an exterior sideview mirror	See discussion of element b above, which is incorporated herein by reference.

assembly adapted for attachment to a side of an automobile;	
said exterior sideview mirror assembly including a reflective element having a rearward field of view when attached to the side of the automobile;	See discussion of element c above, which is incorporated herein by reference.
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;	See discussion of element d above, which is incorporated herein by reference.
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;	See discussion of element e above, which is incorporated herein by reference.
said plano reflective element and said auxiliary	See discussion of element f above, which is incorporated herein by reference.

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;	
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;	See discussion of element g above, which is incorporated herein by reference.
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;	See discussion of element h above, which is incorporated herein by reference.
said backing plate element	See discussion of element i above, which is incorporated herein by reference.

having a first support portion supporting said plano reflective element and a second support portion supporting said auxiliary reflective element;	
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;	r
wherein said backing plate element comprises a polymeric substrate that is formed as a single element by injection molding of a polymeric resin;	See discussion of element k above, which is incorporated herein by reference.
wherein said backing plate element is capable of supporting said plano reflective element and said auxiliary reflective element	See discussion of element l above, which is incorporated herein by reference.
wherein said first support portion of said backing plat element comprises a flat portion and wherein said plano reflective element is disposed at said flat portion	
wherein said second suppor	t See discussion of element n above, which is incorporated herein by reference.

portion of said backing plate element comprises a curved portion and wherein said auxiliary reflective element is disposed at said curved portion;	
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 planoauxiliary reflective element assembly when said planoauxiliary 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;	See discussion of element o above, which is incorporated herein by reference.
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	See discussion of element p above, which is incorporated herein by reference.

reflective element relative to said first support portion of said backing plate element supporting said plano reflective element;	
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 is viewed by a driver of the equipped automobile when said exterior sideview mirror assembly is attached to the side of the automobile;	See discussion of element q above, which is incorporated herein by reference.
wherein at least one of said plano reflective element and said auxiliary reflective element comprises one of	See discussion of element r above, which is incorporated herein by reference.

(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;	
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;	See discussion of element s above, which is incorporated herein by reference.
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	See discussion of element c above, which is incorporated herein by reference (showing rearward field of view).  See discussion of element u above, which is incorporated herein by reference (showing that mirror system is adapted for attachment to the driver-side of the automobile).  See discussion of element bb above, which is incorporated herein by reference (showing that total field of view subtends angle of at least 25 degrees).

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; and	
wherein said auxiliary reflective element comprises a fixed reflectance mirror reflector.	See discussion of element x above, which is incorporated herein by reference.
22. The exterior sideview mirror system of claim 17, wherein said auxiliary reflective element has a spherical curvature, and wherein said curved portion of said backing plate element has a spherical curvature.	See discussion of elements x and y above, which is incorporated herein by reference (showing that auxiliary reflective element and curved portion of backing plate element both have a spherical radius of curvature).
Claim 24	2001 Dodge Ram Mirror
24. An exterior sideview mirror system suitable for use on an automobile, said exterior sideview mirror system comprising:	See discussion of element a above, which is incorporated herein by reference.
an exterior sideview mirror assembly adapted for attachment to a side of an automobile;	See discussion of element b above, which is incorporated herein by reference.
said exterior sideview mirror assembly including a	See discussion of element c above, which is incorporated herein by reference.

reflective element having a rearward field of view when attached to the side of the automobile;	
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;	See discussion of element d above, which is incorporated herein by reference.
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;	See discussion of element e above, which is incorporated herein by reference.
said plano reflective element and said auxiliary reflective element of said plano-auxiliary reflective element assembly mounted adjacently at said plano- auxiliary reflective element	See discussion of element f above, which is incorporated herein by reference.

relations superimpreflective	y in a side-by-side hip and not posed with one e element on top of reflective element;	
element areflective at a back said back mounting such that backing said plan reflective by said a simultan similarly reflective	and said auxiliary e element supported ring plate element, ring plate element g to said actuator t movement of said plate element of rio-auxiliary e element assembly retuator eously and moves said plano e element and said reflective element;	See discussion of element g above, which is incorporated herein by reference.
element angle fie encompain the side of the which sa	iliary reflective having a wide- ld of view assing a blind spot le lane adjacent the ne automobile to aid exterior sideview ssembly is attached;	See discussion of element h above, which is incorporated herein by reference.
having a portion s plano ref a second	king plate element first support supporting said flective element and support portion ng said auxiliary	See discussion of element i above, which is incorporated herein by reference.

reflective element;	
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;	See discussion of element j above, which is incorporated herein by reference.
wherein said backing plate element comprises a polymeric substrate that is formed as a single element by injection molding of a polymeric resin;	See discussion of element k above, which is incorporated herein by reference.
wherein said backing plate element is capable of supporting said plano reflective element and said auxiliary reflective element;	See discussion of element l above, which is incorporated herein by reference.
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;	See discussion of element m above, which is incorporated herein by reference.
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	See discussion of element n above, which is incorporated herein by reference.

portion;	
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;	See discussion of element o above, which is incorporated herein by reference.
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	See discussion of element p above, which is incorporated herein by reference.

reflective element;	
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 is viewed by a driver of the equipped automobile when said exterior sideview mirror assembly is attached to the side of the automobile;	See discussion of element q above, which is incorporated herein by reference.
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	See discussion of element r above, which is incorporated herein by reference.

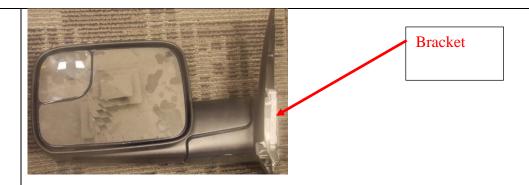
thereof and with an opposing surface thereof having a reflecting layer applied thereto; and	
wherein said auxiliary reflective element comprises a fixed reflectance mirror reflector and wherein said fixed reflectance mirror reflector comprises a spherically bent glass substrate coated with a metallic reflector coating.	See discussion of element x above, which is incorporated herein by reference.
Claim 27 (depends on claims 24, 25, and 26)	2001 Dodge Ram Mirror
25. The exterior sideview mirror system of claim 24, wherein said plano reflective element comprises a glass substrate having a surface coated with a metallic reflector coating and wherein said curved portion of said backing plate element comprises a curvature corresponding to a curvature of said auxiliary reflective element.	See discussion of element r above, which is incorporated herein by reference (explaining that the plano reflective element includes a glass substrate having a surface coated with a metallic reflector coating). See discussion of element y above, which is incorporated herein by reference (showing corresponding curvature between the curvature of the auxiliary reflective element and the curvature of the curved portion of the backing plate).
26. The exterior sideview mirror system of claim 25, wherein a demarcation element is disposed between said plano reflective	See discussion of element w above, which is incorporated herein by reference.

element and said auxiliary reflective element and wherein said demarcation element comprises a part of said backing plate element, and	
wherein said demarcation 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 wherein said first region is adapted to receive said plano reflective element and said second region is adapted to receive said auxiliary reflective element.	See discussion of element cc above, which is incorporated herein by reference.
27. The exterior sideview mirror system of claim 26, 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	See discussion of elements c and u above, which is incorporated herein by reference.

wherein, when attached to	See discussion of element bb above, which is incorporated herein by reference.
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.	

### D. <u>U.S. Patent No. 8,267,534</u>

	Claim 20 (depends on claim 13)	2001 Dodge Ram Mirror
	13. An exterior rearview mirror assembly for a motor vehicle, said exterior rearview mirror assembly comprising:	See discussion of element a above, which is incorporated herein by reference.
dd.	a bracket fixedly secured to the motor vehicle;	The 2001 Dodge Ram Mirror includes a bracket fixedly secured to the motor vehicle, as shown in the photograph below:



To the extent the 2001 Dodge Ram Mirror does not disclose a bracket fixedly secured to the motor vehicle, a POSITA would have found this obvious in view of the Magna 2001 Dodge Ram Trailer Towing Mirror alone or in combination with one or more other references.

The Asserted Patents admit that this limitation was known in the automotive mirror art. See, e.g.,

"The exterior sideview mirror assembly, on whose mirror reflector-positioning actuator the plano-multiradius reflective element assembly is mounted, can be a fixedly attached exterior sideview mirror assembly, a break-away exterior sideview mirror assembly and a powerfoid exterior sideview mirror assembly, as known in the automotive mirror art." (US 9,654,750 at 12:58-64)

See 49 C.F.R. § 571.111 (October 1, 1999):

"S5.2.2 Mounting. The mirror mounting shall provide a stable support for the mirror, and neither the mirror nor the mounting shall protrude farther than the widest part of the vehicle body except to the extent necessary to produce a field of view meeting or exceeding the requirements of S5.2.1. The mirror shall not be obscured by the unwiped portion of the windshield, and shall be adjustable by tilting in both horizontal and vertical directions from the driver's seated position. The mirror and mounting shall be free of sharp points or edges that could contribute to pedestrian injury." 49 C.F.R. § 571.111 (October 1, 1999) at 318.

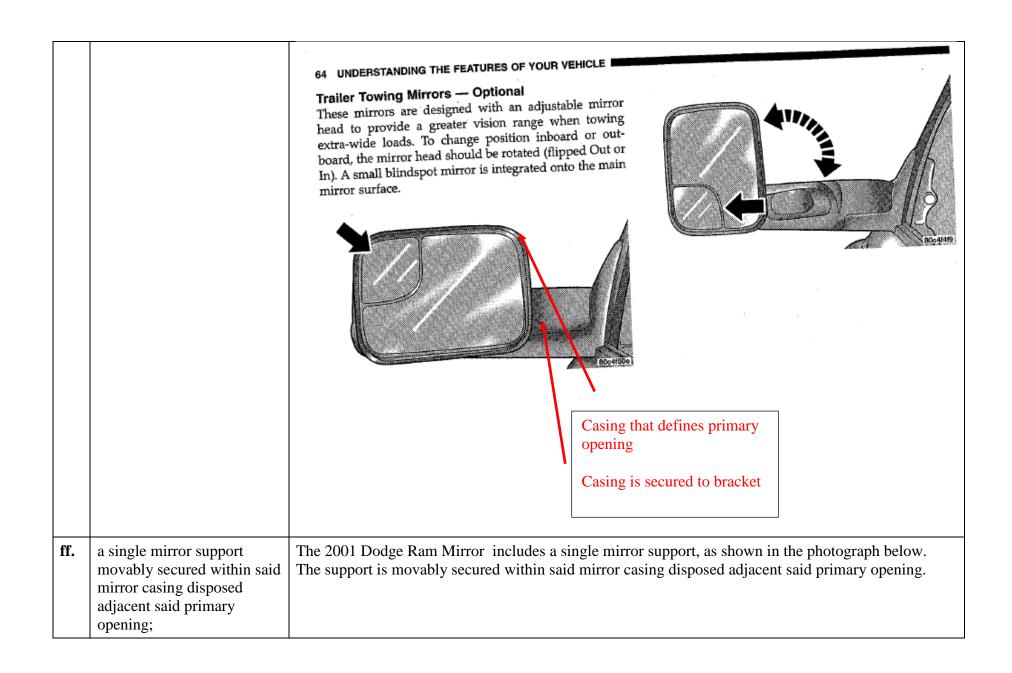
See U.S. Pat. No. 6,328,451 at Figs. 1-4; 2:52-3:9.

See U.S. Pat. No. 5,721,646 at Figs. 13-21 and accompanying text.

See U.S. Pat. No. 3,501,227 at Figs. 1-6 and accompanying text.

See GB1133005 at Figs. 1-4 and accompanying text.

		See also U.S. Pat. No. 5,579,133 at Fig. 12 and accompanying text.  See also U.S. Pat. No. 2,279,751 at Fig. 1 and accompanying text.  See also U.S. Pat. No. 3,826,563 at Fig. 5 and accompanying text.  See also DE1405836 at Fig. 1 and accompanying text.  See also DE1921076 at Fig. 2b and accompanying text.
		See also DE1921384 at Fig. 4 and accompanying text.  See also DE2207208 at Figs. 1-2 and accompanying text.  See also EP0864465 at Figs. 4 and accompanying text.  See also US2778273 at Figs. 3 and accompanying text.
ee.	a mirror casing secured to said bracket, said mirror casing defining a primary opening;	The 2001 Dodge Ram Mirror includes a mirror casing secured to said bracket, said mirror casing defining a primary opening.  See also Ram Manal p. 64





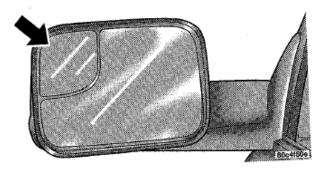
a primary mirror fixedly secured to said single mirror support and disposed within said primary opening for providing a view rearward of the motor vehicle through a primary field of view;

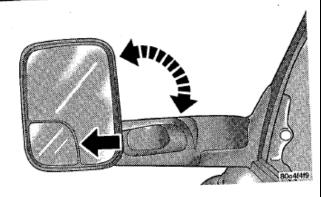
The 2001 Dodge Ram Mirror includes a primary mirror disposed within said primary opening for providing a view rearward of the motor vehicle through a primary field of view. *See*, *e.g.*, Ram Manual p. 64.

### UNDERSTANDING THE FEATURES OF YOUR VEHICLE

## Trailer Towing Mirrors — Optional

These mirrors are designed with an adjustable mirror head to provide a greater vision range when towing extra-wide loads. To change position inboard or outboard, the mirror head should be rotated (flipped Out or In). A small blindspot mirror is integrated onto the main mirror surface.



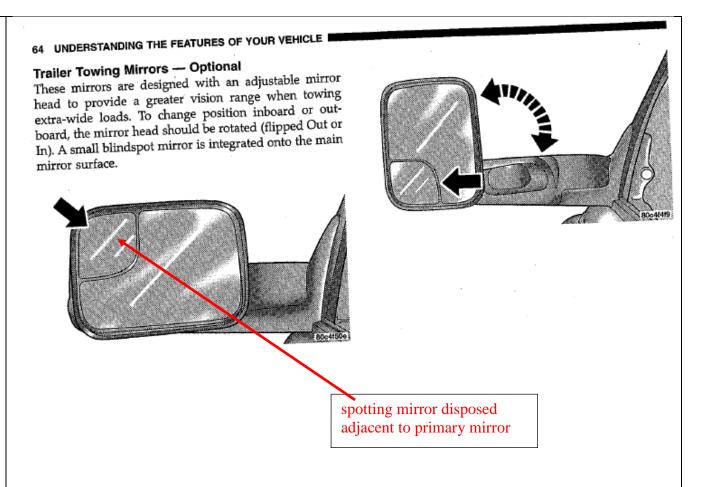


Analysis of the physical structure of the 2001 Dodge Ram Mirror shows that the primary mirror is fixedly secured to said single mirror support.

#### a spotting mirror fixedly hh. secured to said single mirror support and disposed adjacent said primary mirror, said spotting mirror defined by a single radius of curvature differing from said primary mirror such that said spotting mirror provides a second field of view rearward of the motor vehicle, such that said

The 2001 Dodge Ram Mirror includes a spotting mirror fixedly secured to said single mirror support and disposed adjacent said primary mirror. See, e.g., Ram Manual p. 88.

primary field of view of said primary mirror overlaps said second field of view of said spotting mirror;



Analysis of the physical structure of the 2001 Dodge Ram Mirror shows that the spotting mirror is defined by a single radius of curvature differing from said primary mirror.

An analysis of the fields of view of the primary and spotting mirrors in the 2001 Dodge Ram Mirror shows that the spotting mirror provides a second field of view rearward of the motor vehicle, such that said primary field of view of said primary mirror overlaps said second field of view of said spotting mirror. The fields of view of the primary and spotting mirrors overlap by roughly 31 degrees.

ii.	wherein said spotting mirror
	is at an angle relative to said
	primary mirror; and

The 2001 Dodge Ram Mirror discloses that the spotting mirror is at an angle relative to said primary mirror. *See* discussion of element p above, which is incorporated herein by reference (explaining that the support portion of the backing plate for the auxiliary mirror is angled relative to the support portion of the backing plate for the main element). The angling of the two support portions relative to each other causes an angling of the spotting mirror relative to the primary mirror.

To the extent the 2001 Dodge Ram Mirror does not disclose that the spotting mirror is at an angle relative to said primary mirror, a POSITA would have found this obvious in view of the Magna 2001 Dodge Ram Trailer Towing Mirror alone or in combination with one or more other references.

See discussion of element ii in the claim chart for the 2001 Dodge Ram mirror.

See discussion of element ii in the claim chart for the 2001 GMT800 mirror.

See discussion of element ii in the claim chart for Tobin.

See discussion of element ii in the claim chart for Henion 013.

See discussion of element ii in the claim chart for Platzer.

See discussion of element ii in the claim chart for Lynam 026.

See discussion of element ii in the claim chart for Van Nostrand.

See discussion of element ii in the claim chart for Marhauer.

See U.S. Pat. No. 6,328,451 at Figs. 1-4; 2:52-3:9.

See U.S. Pat. No. 5,721,646 at Figs. 13-21 and accompanying text.

See U.S. Pat. No. 3,501,227 at Figs. 1-6 and accompanying text.

See GB1133005 at Figs. 1-4 and accompanying text; 1:53-2:15.

See also U.S. Pat. No. 5,579,133 at Fig. 12 and accompanying text.

See also U.S. Pat. No. 2,279,751 at Figs. 2-5 and accompanying text.

See also U.S. Pat. No. 3,826,563 at Figs. 5-7 and accompanying text.

See also U.S. Pat. No. 5,005,962 at Fig. 4 and accompanying text.

See also DE1405836 at Fig. 3 and accompanying text.

See also DE1921076 at Fig. 2b and accompanying text.

See also DE1921384 at Fig. 5 and accompanying text.

		See also DE2207208 at Figs. 1-2 and accompanying text.
		See also EP0864465B1 at Fig. 6 and accompanying text.
		See also DE2537876 at Figs. 1, 8, and accompanying text.
		See also US2778273 at Fig. 4 and accompanying text.
		The applicants conceded that this limitation was known in the art and/or obvious during prosecution of the '712 Patent. <i>See</i> Mar. 17, 2003 Office Action at p. 4.
	wherein said primary mirror comprises one of (a) a	See discussion of element r above, which is incorporated herein by reference (explaining that primary mirror is a glass substrate having a surface coated with a metallic reflector coating).
	generally flat glass substrate having a surface coated with a metallic reflector coating and (b) a generally flat polymeric substrate having a thin glass element applied to a surface thereof and with an opposing surface thereof having a reflecting layer applied thereto.	See discussion of element e above, which is incorporated herein by reference (explaining that primary mirror is generally flat).
jj.	20. An exterior rearview mirror assembly as set forth in claim 13, wherein said spotting mirror is at an angle of at least about three dogrees relative to said.	To the extent that the 2001 Dodge Ram Mirror does not disclose that said spotting mirror is at an angle of at least about three degrees relative to said primary mirror, a POSITA would have found this obvious in view of the Magna 2001 Dodge Ram Trailer Towing Mirror alone or in combination with one or more other references.
	degrees relative to said primary mirror.	See discussion of element jj in the claim chart for Van Nostrand.
		See discussion of element jj in the claim chart for Platzer 956.
		See discussion of element jj in the claim chart for Van Nostrand.
		See U.S. Pat. No. 3,501,227 at Figs. 1-6 and accompanying text.
		See also U.S. Pat. No. 2,279,751 at Figs. 2-5 and accompanying text.
		See also U.S. Pat. No. 3,826,563 at 3:6-17.
		7

See also DE1405836 at Fig. 3 and accompanying text; p. 3.
See also DE2207208 at Figs. 1-2 and accompanying text.
See U.S. Pat. No. 5,721,646 at abstract, Figs. 13-21 and accompanying text.
See U.S. Pat. No. 6,984,048 at Figs. 1-4, 9 and accompanying text.
The applicants conceded that this limitation was known in the art and/or obvious during prosecution of the '712 Patent. <i>See</i> Mar. 17, 2003 Office Action at p. 4.

### E. <u>U.S. Patent No. 8,550,642</u>

Claim 10 (depends on claim 7)	2001 Dodge Ram Mirror
7. An exterior rearview mirror assembly for a motor vehicle, said exterior rearview mirror assembly comprising:	See discussion of element a above, which is incorporated herein by reference.
a bracket fixedly secured to the motor vehicle;	See discussion of element dd above, which is incorporated herein by reference.
a mirror casing secured to said bracket, said mirror casing defining a primary opening;	See discussion of element ee above, which is incorporated herein by reference.
a primary mirror disposed within said primary opening for providing a view rearward of the motor vehicle through a primary field of view, said primary mirror defining a primary	See discussion of element gg above, which is incorporated herein by reference.

# plane; a spotting mirror spaced The spotting mirror in the 2001 Dodge Ram Mirror is spaced apart from the primary mirror. See, e.g., kk. Ram Manual p. 64. apart from said primary mirror, said spotting mirror extending through a secondary plane different 64 UNDERSTANDING THE FEATURES OF YOUR VEHICLE from said primary plane; Trailer Towing Mirrors — Optional These mirrors are designed with an adjustable mirror head to provide a greater vision range when towing extra-wide loads. To change position inboard or outboard, the mirror head should be rotated (flipped Out or In). A small blindspot mirror is integrated onto the main mirror surface. The photograph below shows that the plane of the spotting mirror is different from the primary plane.

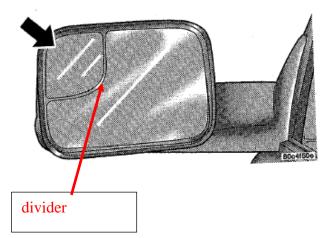
	wherein said spotting mirror	See also discussion of element ii above, which is incorporated herein by reference (showing that the 2001 Dodge Ram Mirror discloses or renders obvious that the spotting mirror is angled relative to primary mirror, which in turn indicates that the spotting mirror is in a separate plane).  See discussion of element ii above, which is incorporated herein by reference.
	is at an angle relative to said primary mirror;	see discussion of element if above, which is incorporated herein by reference.
	wherein said primary mirror and said spotting mirror are supported on a mirror backing plate, and wherein said primary mirror is supported at a first portion of said mirror backing plate and said spotting mirror is supported at a second portion of said mirror backing plate;	See discussion of element g above, which is incorporated herein by reference (showing backing plate supporting primary mirror and auxiliary, spotting mirror).  See discussion of element i above, which is incorporated herein by reference (showing backing plate with a first portion that supports the primary mirror and a second portion that supports the spotting mirror).
ll.	a divider of said backing	The 2001 Dodge Ram Mirror includes a divider of said backing plate extending between said primary

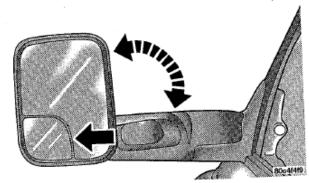
plate extending between said primary mirror and said spotting mirror to separate said primary and secondary mirrors visually; mirror and said spotting mirror to separate said primary and secondary mirrors visually. *See* Ram Manual p. 64.

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# Trailer Towing Mirrors — Optional

These mirrors are designed with an adjustable mirror head to provide a greater vision range when towing extra-wide loads. To change position inboard or outboard, the mirror head should be rotated (flipped Out or In). A small blindspot mirror is integrated onto the main mirror surface.





*See also* discussion of element cc above, which is incorporated herein by reference (showing divider element of backing plate that extends between the primary mirror and spotting mirror and that separates the primary mirror and secondary mirrors visually).

*See also* discussion of element w above, which is incorporated herein by reference (discussing divider/demarcation element).

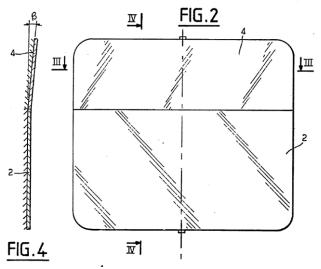
	wherein said primary mirror comprises one of (a) a generally flat glass substrate having a surface coated with a metallic reflector coating and (b) a generally flat polymeric substrate having a thin glass element applied to a surface thereof and with an opposing surface thereof having a reflecting layer applied thereto;	See discussion of element r above, which is incorporated herein by reference (explaining that primary mirror is a glass substrate having a surface coated with a metallic reflector coating).  See discussion of element e above, which is incorporated herein by reference (explaining that primary mirror is generally flat).
	wherein said divider extends from said mirror backing plate and demarcates said first portion of said mirror backing plate from said second portion of said mirror backing plate;	See discussion of elements w, z, and cc above, which is incorporated herein by reference (showing and divider element of backing plate that demarcates the first portion of the mirror backing plate from the second portion of the mirror backing plate).
mm.	wherein said first portion of said mirror backing plate, said second portion of said mirror backing plate and said divider are commonly injection molded to form said mirror backing plate; and	The 2001 Dodge Ram Mirror discloses said first portion of said mirror backing plate, said second portion of said mirror backing plate and said divider are commonly injection molded to form said mirror backing plate. The demarcation element is part of the packing plate. <i>See</i> discussion of element w above, which is incorporated herein by reference. As explained above, the backing plate, which includes the divider/demarcation and the first and second portions, is formed as a single element by injection molding of a polymeric material. <i>See</i> discussion of element k above, which is incorporated herein by reference.
nn.	wherein, when supported at said second portion of said mirror backing plate, said spotting mirror is tilted downwardly with respect to said primary mirror at an angle in a range of about	To the extent the 2001 Dodge Ram Mirror does not disclose that when supported at said second portion of said mirror backing plate, said spotting mirror is tilted downwardly with respect to said primary mirror at an angle in a range of about 0.75 degrees to about 5 degrees, a POSITA would have found this obvious in view of the Magna 2001 Dodge Ram Trailer Towing Mirror alone or in combination with one or more other references.

0.75 degrees to about 5 degrees.

FR2650982 discloses that said spotting mirror is tilted downwardly with respect to said primary mirror at an angle in a range of about 0.75 degrees to about 5 degrees.

"FIG. 4 shows a vertical section of FIG. 2 by a line IV IV.

It can be seen in this figure that the cross-sections of the two mirrors 2 and 4 by a vertical plane form between them a constant angle ss. This angle is between  $1.50^{\circ}$  and  $3.50^{\circ}$  and preferably equal to  $2.50^{\circ}$ ." FR2650982 (machine translation) at 4:22-26.



FR2650982 at Fig. 4 (left) and Fig. 2 (right).

See discussion of element nn in the claim chart for Van Nostrand.

See U.S. Pat. No. 5,721,646 at abstract, Figs. 13-21 and accompanying text.

See U.S. Pat. No. 6,984,048 at Figs. 1-4, 9 and accompanying text.

See discussion of element nn in the claim chart for Henion 013.

See U.S. Pat. No. 6,062,699 at Figs. 2A-2D; 4:29-44.

The applicants conceded that this limitation was known in the art and/or obvious during prosecution of the '712 Patent. *See* Mar. 17, 2003 Office Action at p. 4.

The applicants conceded that this limitation was known in the art and/or obvious during prosecution of the '294 Patent. *See* Jan. 12, 2005 Office Action at p. 5.

10. An exterior rearview mirror assembly as set forth in claim 7, wherein the second field of view of said spotting mirror is generally directed at least one of outwardly and downwardly with respect to the longitudinal axis of the motor vehicle when said exterior rearview mirror assembly is attached to the motor vehicle.	See discussion of element s above, which is incorporated herein by reference.
Claim 11 (depends on claim 7)	2001 Dodge Ram Mirror
11. An exterior rearview mirror assembly as set forth in claim 7, wherein said spotting mirror is at an angle of at least about three degrees relative to said primary mirror.	See discussion of element jj above, which is incorporated herein by reference.

## F. <u>U.S. Patent No. 8,591,047</u>

Claim 16 (depends on claims 1 and 15)	2001 Dodge Ram Mirror
1. An exterior sideview mirror assembly suitable for use on a vehicle, said exterior sideview mirror assembly comprising:	See discussion of element a above, which is incorporated herein by reference.

00.	a mirror housing;	The 2001 Dodge Ram Mirror includes a mirror housing. See Ram Manual p. 64.
		Trailer Towing Mirrors — Optional These mirrors are designed with an adjustable mirror head to provide a greater vision range when towing extra-wide loads. To change position inboard or outboard, the mirror head should be rotated (flipped Out or In). A small blindspot mirror is integrated onto the main mirror surface.  Mirror housing
	a mirror backing plate element;	See discussion of element g above, which is incorporated herein by reference.
	wherein said mirror backing plate element is movable within said mirror housing by an electrically-operable actuator;	See discussion of elements d and g above, which is incorporated herein by reference (showing and discussing mounting of backing plate to an electrically-operable actuator, which makes the backing plate element moveable within the mirror housing).
	a main plano mirror element fixedly disposed at a first portion of said mirror	See discussion of elements e, i, and m above, which is incorporated herein by reference (showing plano mirror element, first portion of the backing plate element, and that the plano mirror is disposed

backing plate element;	at the first portion of the backing plate element).
said main plano mirror element having a first primary field of view rearward of a vehicle equipped with said exterior sideview mirror assembly;	See discussion of elements e and gg above, which is incorporated herein by reference (showing plano mirror element and showing primary field of view provided by the primary mirror rearward of a vehicle equipped with the exterior sideview mirror assembly).
an auxiliary non-plano curved mirror element fixedly disposed at a second portion of said mirror backing plate element;	See discussion of elements e, i, and n above, which is incorporated herein by reference (showing an auxiliary mirror element with a curvature, second portion of the backing plate element, and that the auxiliary mirror is disposed at the second portion of the backing plate element).
wherein said main plano mirror element and said auxiliary non-plano curved mirror element are adjacently disposed at said mirror backing plate element in a side-by-side relationship and are not superimposed with one mirror element on top of the other mirror element;	See discussion of element f above, which is incorporated herein by reference.
wherein said mirror backing plate element comprises a polymeric molding;	See discussion of element k above, which is incorporated herein by reference.
said auxiliary non-plano curved mirror element having a second auxiliary field of view rearward of the equipped vehicle;	See discussion of elements e and hh above, which is incorporated herein by reference (showing auxiliary non-plano curved mirror element and showing second auxiliary field of view provided by the auxiliary mirror element rearward of a vehicle equipped with the exterior sideview mirror assembly).
wherein said first primary field of view of said main	See discussion of element hh above, which is incorporated herein by reference (showing overlap between first field of view of the primary, main plano mirror element and the second field of view of

plano mirror element overlaps said second auxiliary field of view of said auxiliary non-plano curved mirror element;	the auxiliary, non-plano curved mirror element).
wherein said auxiliary non- plano curved mirror element that is at said second portion of said mirror backing plate element is angled relative to said main plano mirror element that is at said first portion of said mirror backing plate element;	See discussion of element ii above, which is incorporated herein by reference (showing angling of auxiliary non-plano curved mirror element relative to main plano mirror element).  See also discussion of elements o and p above, which is incorporated herein by reference (showing angling of the field of view from the spotting mirror relative to the field of view from the primary mirror and showing angling of backing plate).
wherein said mirror backing plate element mounts to said actuator such that movement of said mirror backing plate element by said actuator simultaneously and similarly moves said main plano mirror element and said auxiliary non-plano curved mirror element;	See discussion of element g above, which in incorporated herein by reference.
wherein said main plano mirror element comprises one of (a) a generally flat glass substrate having a surface coated with a metallic reflector coating and (b) a generally flat polymeric substrate having a thin glass element applied to a surface thereof and with	See discussion of element r above, which is incorporated herein by reference (explaining that main plano mirror element is a glass substrate having a surface coated with a metallic reflector coating).  See discussion of element e above, which is incorporated herein by reference (explaining that main plano mirror is generally flat).

	an opposing surface thereof having a reflecting layer applied thereto; and	
pp.	wherein said first primary field of view of said main plano mirror element overlaps said second auxiliary field of view of said auxiliary non-plano curved mirror element by between about 2 degrees and about 20 degrees.	Analysis of the 2001 Dodge Ram Mirror shows that said first primary field of view of said main plano mirror element overlaps said second auxiliary field of view of said auxiliary non-plano curved mirror element by roughly 15 degrees, which is between about 2 degrees and about 20 degrees.  To the extent the 2001 Dodge Ram Mirror does not disclose that said first primary field of view of said main plano mirror element overlaps said second auxiliary field of view of said auxiliary non-plano curved mirror element by between about 2 degrees and about 20 degrees, a POSITA would have found this obvious in view of the Magna 2001 Dodge Ram Trailer Towing Mirror alone or in combination with one or more other references.  See discussion of element pp in the claim chart for the 2001 Dodge Ram mirror.  See discussion of element pp in the claim chart for Van Nostrand.  See U.S. Pat. No. 5,721,646 at abstract, Figs. 13-21 and accompanying text.  See U.S. Pat. No. 6,984,048 at Figs. 1-4, 9 and accompanying text.  See discussion of element pp in the claim chart for Platzer 956.  The applicants conceded that this limitation was known in the art and/or obvious during prosecution of the '750 Patent. See Nov. 25, 2016 Office Action at pp. 8-9, 23.
qq.	15. The exterior sideview mirror assembly of claim 1, wherein, when used in the exterior sideview mirror assembly of the equipped vehicle, said main plano mirror element has a rearward field of view that generally subtends an angle	The main plano mirror element of the 2001 Dodge Ram Mirror has a rearward field of view that generally subtends an angle of roughly 15 degrees, which is less than about 20 degrees, relative to the side of the equipped vehicle.

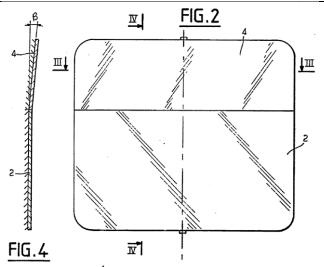
	of less than about 20 degrees relative to the side of the equipped vehicle.	
rr.	16. The exterior sideview mirror assembly of claim 15, wherein, when used in the exterior sideview mirror assembly of the equipped vehicle, said auxiliary nonplano curved mirror element has a rearward field of view that generally subtends an angle that is in the range from about 15 degrees relative to the side of the equipped vehicle to about 50 degrees relative to the side of the equipped vehicle.	The auxiliary non-plano curved mirror element of the 2001 Dodge Ram Mirror has a rearward field of view that generally subtends an angle of roughly 37 degrees relative to the side of the equipped vehicle, which is in the range from about 15 degrees relative to the side of the equipped vehicle to about 50 degrees relative to the side of the equipped vehicle.
	Claim 19 (depends on claims 1 and 18)	2001 Dodge Ram Mirror
	18. The exterior sideview mirror assembly of claim 1, wherein said second auxiliary field of view rearward of the equipped vehicle views into a blind spot in a side lane adjacent the side of the equipped vehicle at which said exterior sideview mirror assembly is attached, and wherein said blind spot is generally outside the	See discussion of element q above, which is incorporated herein by reference.

	rearward field of view of said main plano mirror element when said main plano mirror element is viewed by a driver of the equipped vehicle when said exterior sideview mirror assembly is attached at the side of the equipped vehicle.	
ss.	19. The exterior sideview mirror assembly of claim 18, wherein, when disposed at said second portion of said mirror backing plate element, at least one of (a) said auxiliary non-plano curved mirror element is tilted generally downward	To the extent the 2001 Dodge Ram Mirror does not disclose that when disposed at said second portion of said mirror backing plate element, at least one of (a) said auxiliary non-plano curved mirror element is tilted generally downward with respect to a Y-axis of said main plano mirror element by an angle that is the range from about 0.75 degrees to about 5 degrees and (b) said auxiliary non-plano curved mirror element is tilted generally forwardly with respect to an X-axis of said main plano mirror element by an angle that is the range from about 0.75 degrees to about 5 degrees, a POSITA would have found this obvious in view of the Magna 2001 Dodge Ram Trailer Towing Mirror alone or in combination with one or more other references.
	with respect to a Y-axis of said main plano mirror	See discussion of element ss in the claim chart for the 2001 GMT800 mirror.
	element by an angle that is	See discussion of element ss in the claim chart for Van Nostrand.
	the range from about 0.75 degrees to about 5 degrees	See discussion of element ss in the claim chart for Henion 013.
	and (b) said auxiliary non-	See U.S. Pat. No. 5,721,646 at abstract, Figs. 13-21 and accompanying text.
	plano curved mirror element	See U.S. Pat. No. 6,984,048 at Figs. 1-4, 9 and accompanying text.
	is tilted generally forwardly with respect to an X-axis of	See FR2650982:
	said main plano mirror	"FIG. 4 shows a vertical section of FIG. 2 by a line IV IV.
	element by an angle that is the range from about 0.75	It can be seen in this figure that the cross-sections of the two mirrors 2 and 4 by a vertical plane form between them a constant angle ss. This angle is between 1.50° and 3.50° and preferably

equal to 2.50°." FR2650982 (machine translation) at 4:22-26.

degrees to about 5 degrees.

form between them a constant angle ss. This angle is between 1.50° and 3.50° and preferably



FR2650982 at Fig. 4 (left) and Fig. 2 (right).

## See U.S. Pat. No. 3,826,563:

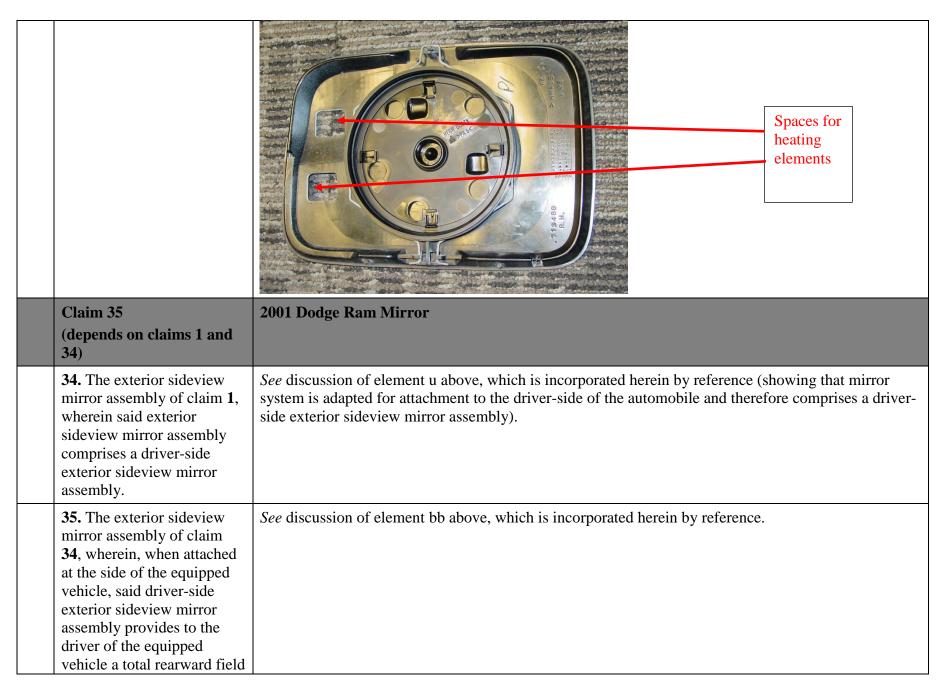
"For example, the bracket 56 supports the two mirrors so that they define with respect to one another a predetermined horizontal angle within a range, substantially extending from  $5^{\circ}$  to  $12^{\circ}$ , and at a vertical angle within a range extending substantially from  $2^{\circ}$  to  $4^{\circ}$ ." U.S. Pat. No. 3,826,563 at 3:6-10.

	U.S. Pat. No. 3,826,563 at Fig. 5.  See U.S. Pat. No. 6,062,699 at Figs. 2A-2D; 4:29-44.  See U.S. Pat. No. 3,501,227 at Figs. 1-6 and accompanying text.  See also U.S. Pat. No. 3,826,563 at 3:6-17.  See also DE2207208 at Figs. 1-2 and accompanying text.  The applicants conceded that this limitation was known in the art and/or obvious during prosecution of the '712 Patent. See Mar. 17, 2003 Office Action at p. 4.  The applicants conceded that this limitation was known in the art and/or obvious during prosecution of the '294 Patent. See Jan. 12, 2005 Office Action at p. 5.
Claim 25	2001 Dodge Ram Mirror
(depends on claims 1, 18, 19, 20, 22, 23, and 24)	
<b>20.</b> The exterior sideview mirror assembly of claim	See discussion of element r above, which is incorporated herein by reference (explaining that auxiliary

19, wherein said auxiliary non-plano curved mirror element comprises a reflector-coated convex-curved substrate.	non-plano mirror element is a glass substrate having a surface coated with a metallic reflector coating). <i>See</i> discussion of element v above, which is incorporated herein by reference (explaining the auxiliary non-plano mirror element is a curved substrate coated with a metallic reflector coating). The convex-curved nature of the substrate can be seen, for example, in the photographs included in the discussion of element v above.
22. The exterior sideview mirror assembly of claim 20, wherein said second portion of said mirror backing plate element is convex-curved.	See discussion of element y above, which is incorporated herein by reference (explaining that the second, curved portion of the mirror backing plate has a curvature corresponding to the curvature of the auxiliary mirror element).
23. The exterior sideview mirror assembly of claim 22, wherein said auxiliary non-plano curved mirror element has a spherical curvature.	See discussion of element x above, which is incorporated herein by reference (showing that the auxiliary non-plano curved mirror element has a spherical radius of curvature).
24. The exterior sideview mirror assembly of claim 23, wherein said second portion of said mirror backing plate element has a curvature at least partially matching said spherical curvature.	See discussion of elements x and y above, which is incorporated herein by reference (showing that auxiliary reflective element and curved portion of backing plate element both have a spherical radius of curvature and showing that the curvatures are at least partially matching).
25. The exterior sideview mirror assembly of claim 24, wherein the overall rearward field of view of said main plano mirror element combined with said auxiliary non-plano curved mirror element is at least about 25 degrees relative to	See discussion of element bb above, which is incorporated herein by reference.

	the side of the equipped vehicle.	
	Claim 26 (depends on claims 1, 18, 19, 20, 22, 23, 24, and 25)	2001 Dodge Ram Mirror
tt.	26. The exterior sideview mirror assembly of claim 25, wherein the overall rearward field of view of said main plano mirror element combined with said auxiliary non-plano curved mirror element is less than about 50 degrees relative to the side of the equipped vehicle.	The overall field of view of said main plano mirror element combined with said auxiliary non-plano curved mirror element in the 2001 Dodge Ram Mirror is roughly 37 degrees relative to the side of the equipped vehicle, which is less than about 50 degrees relative to the side of the equipped vehicle.
	Claim 27 (depends on claims 1, 18, 19, 20, 22, 23, 24, 25, and	2001 Dodge Ram Mirror
	26)	
uu.	27. The exterior sideview mirror assembly of claim 26, wherein said first primary field of view of said main plano mirror element overlaps said second auxiliary field of view of	To the extent the 2001 Dodge Ram Mirror does not disclose said first primary field of view of said main plano mirror element overlaps said second auxiliary field of view of said auxiliary non-plano curved mirror element by between about 5 degrees and about 15 degrees, a POSITA would have found this obvious in view of the Magna 2001 Dodge Ram Trailer Towing Mirror alone or in combination with one or more other references.
	said auxiliary non-plano	See discussion of element uu in the claim chart for Platzer 956.
	said auxiliary non-plano curved mirror element by between about 5 degrees	
	curved mirror element by	See discussion of element uu in the claim chart for Platzer 956.  See discussion of element uu in the claim chart for Van Nostrand.  See U.S. Pat. No. 5,721,646 at abstract, Figs. 13-21 and accompanying text.

		The applicants conceded that this limitation was known in the art and/or obvious during prosecution of the '750 Patent. <i>See</i> Nov. 25, 2016 Office Action at pp. 10-11, 25.
	Claim 33 (depends on claim 1)	2001 Dodge Ram Mirror
vv.	33. The exterior sideview mirror assembly of claim 1, wherein said auxiliary nonplano curved mirror element comprises a heater element operable to demist/deice the outmost surface of said auxiliary non-plano curved mirror element when said auxiliary non-plano curved mirror element is disposed at said mirror backing plate element and when said exterior sideview mirror assembly is attached and operated at the side of the equipped vehicle.	The 2001 Dodge Ram Mirror includes a heater element operable to demist/deice the outermost surface of said auxiliary non-plano curved mirror element. See Ram Manual at p. 63.  **UNDERSTANDING THE FEATURES OF YOUR VEHICLE 63**  Heated Mirrors — Optional Heated mirrors are activated by depressing the mirror button on the heater control with the ignition ON. Turning OFF the ignition will deactivate the heated mirror feature timer.  In addition, the photograph below shows that the backing plate contains spaces for heating elements to demist/deice both the plano and auxiliary mirrors.



of view that generally subtends an angle of at least about 25 degrees with respect to the side of the equipped vehicle.	
Claim 39 (depends on claim 1)	2001 Dodge Ram Mirror
39. The exterior sideview mirror assembly of claim 1, wherein said first primary field of view of said main plano mirror element overlaps said second auxiliary field of view of said auxiliary non-plano curved mirror element by between about 5 degrees and about 15 degrees.	See discussion of element uu above, which is incorporated herein by reference.

## G. <u>U.S. Patent No. 8,783,882</u>

Claim 3 (depends on claims 1 and 2)	2001 Dodge Ram Mirror
1. An exterior sideview mirror assembly suitable for use on a vehicle, said exterior sideview mirror assembly comprising:	See discussion of element a above, which is incorporated herein by reference.
a mirror housing;	See discussion of element oo above, which is incorporated herein by reference.
a mirror backing plate	See discussion of element g above, which is incorporated herein by reference.

element;	
wherein said mirror backing plate element is movable within said mirror housing by an electrically-operable actuator;	See discussion of elements d and g above, which is incorporated herein by reference (showing and discussing mounting of backing plate to an electrically-operable actuator, which makes the backing plate element moveable within the mirror housing).
a main plano mirror element fixedly disposed at a first portion of said mirror backing plate element;	See discussion of elements e, i, and m above, which is incorporated herein by reference (showing plano mirror element, first portion of the backing plate element, and that the plano mirror is disposed at the first portion of the backing plate element).
said main plano mirror element having a first primary field of view rearward of a vehicle equipped with said exterior sideview mirror assembly;	See discussion of elements e and gg above, which is incorporated herein by reference (showing plano mirror element and showing primary field of view provided by the primary mirror rearward of a vehicle equipped with the exterior sideview mirror assembly).
an auxiliary non-plano curved mirror element fixedly disposed at a second portion of said mirror backing plate element;	See discussion of elements e, i, m, and n above, which is incorporated herein by reference (showing an auxiliary mirror element with a curvature, second portion of the backing plate element, and that the auxiliary mirror is disposed at the second portion of the backing plate element).
wherein said main plano mirror element and said auxiliary non-plano curved mirror element are adjacently disposed at said mirror backing plate element in a side-by-side relationship and are not superimposed with one mirror element on top of the other mirror element;	See discussion of element f above, which is incorporated herein by reference.
said auxiliary non-plano	See discussion of elements e and hh above, which is incorporated herein by reference (showing

curved mirror element having a second auxiliary field of view rearward of the equipped vehicle;	auxiliary non-plano curved mirror element and showing second auxiliary field of view provided by the auxiliary mirror element rearward of a vehicle equipped with the exterior sideview mirror assembly).
wherein said first primary field of view of said main plano mirror element overlaps said second auxiliary field of view of said auxiliary non-plano curved mirror element;	See discussion of element gg and hh above, which is incorporated herein by reference (showing overlap between first field of view of the primary, main plano mirror element and the second field of view of the auxiliary, non-plano curved mirror element).
wherein said auxiliary non- plano curved mirror element that is at said second portion of said mirror backing plate element is angled relative to said main plano mirror element that is at said first portion of said mirror backing plate element;	See discussion of element ii above, which is incorporated herein by reference (showing angling of auxiliary non-plano curved mirror element relative to main plano mirror element).  See also discussion of elements o and p above, which is incorporated herein by reference (showing angling of the field of view from the spotting mirror relative to the field of view from the primary mirror and showing angling of backing plate).
wherein said mirror backing plate element mounts to said actuator such that movement of said mirror backing plate element by said actuator simultaneously and similarly moves said main plano mirror element and said auxiliary non-plano curved mirror element;	See discussion of element g above, which is incorporated herein by reference.
wherein said mirror backing plate element comprises a polymeric molding;	See discussion of element k above, which is incorporated herein by reference (discussing that backing plate element is formed by injection molding of a polymeric resin).

wherein said main plano mirror element comprises a generally flat glass substrate having a surface coated with a metallic reflector coating;	See discussion of element r above, which is incorporated herein by reference (explaining that main plano mirror element is a glass substrate having a surface coated with a metallic reflector coating).  See discussion of element e above, which is incorporated herein by reference (explaining that main plano mirror is generally flat).
wherein the overall rearward field of view of said main plano mirror element combined with said auxiliary non-plano curved mirror element is at least about 25 degrees relative to the side of the equipped vehicle; and	See discussion of element bb above, which is incorporated herein by reference.
wherein the overall rearward field of view of said main plano mirror element combined with said auxiliary non-plano curved mirror element is less than about 50 degrees relative to the side of the equipped vehicle.	See discussion of element tt above, which is incorporated herein by reference.
2. The exterior sideview mirror assembly of claim 1, wherein said auxiliary nonplano curved mirror element comprises a reflector-coated convex-curved substrate and wherein said second portion of said mirror backing plate element is convex-curved and wherein said auxiliary non-plano curved mirror	See discussion of element r above, which is incorporated herein by reference (explaining that auxiliary non-plano mirror element is a glass substrate having a surface coated with a metallic reflector coating). See discussion of element v above, which is incorporated herein by reference (explaining the auxiliary non-plano mirror element is a curved substrate coated with a metallic reflector coating). The convex-curved nature of the substrate can be seen, for example, in the photographs included in the discussion of element v above.  See discussion of element y above, which is incorporated herein by reference (explaining that the second, curved portion of the mirror backing plate has a curvature corresponding to the curvature of the auxiliary mirror element). Because the auxiliary mirror element has a convex curvature, as explained above, the second portion of the mirror backing plate is also convex-curved.

	ement has a spherical rvature.	<i>See</i> discussion of element x above, which is incorporated herein by reference (showing that the auxiliary non-plano curved mirror element has a spherical radius of curvature).
mir who of s eler leas sph aux	The exterior sideview rror assembly of claim 2, herein said second portion said mirror backing plate ement has a curvature at lest partially matching said herical curvature of said xiliary non-plano curved rror element.	See discussion of elements x and y above, which is incorporated herein by reference (showing that auxiliary reflective element and curved portion of backing plate element both have a spherical radius of curvature and showing that the curvatures are at least partially matching).
Cla	aim 18	2001 Dodge Ram Mirror
mir use ext	An exterior sideview rror assembly suitable for e on a vehicle, said terior sideview mirror sembly comprising:	See discussion of element a above, which is incorporated herein by reference.
a m	nirror housing;	See discussion of element oo above, which is incorporated herein by reference.
	nirror backing plate ement;	See discussion of element g above, which is incorporated herein by reference.
pla wit by	nerein said mirror backing the element is movable thin said mirror housing an electrically-operable cuator;	See discussion of elements d and g above, which is incorporated herein by reference (showing and discussing mounting of backing plate to an electrically-operable actuator, which makes the backing plate element moveable within the mirror housing).
fixe	nain plano mirror element edly disposed at a first rtion of said mirror cking plate element;	See discussion of elements e, i, and m above, which is incorporated herein by reference (showing plano mirror element, first portion of the backing plate element, and that the plano mirror is disposed at the first portion of the backing plate element).
	d main plano mirror ment having a first	See discussion of elements e and gg above, which is incorporated herein by reference (showing plano mirror element and showing primary field of view provided by the primary mirror rearward of a

		vehicle equipped with the exterior sideview mirror assembly).
an auxiliary curved mirr fixedly disp portion of s backing pla	or element bosed at a second aid mirror	See discussion of elements e, i, and n above, which is incorporated herein by reference (showing an auxiliary mirror element with a curvature, second portion of the backing plate element, and that the auxiliary mirror is disposed at the second portion of the backing plate element).
mirror elem reflectance auxiliary no	d main plano nent has a fixed and wherein said on-plano curved nent has a fixed	See discussion of element r above, which is incorporated herein by reference (explaining that both the plano reflective element and the auxiliary reflective element include a glass substrate having a surface coated with a metallic reflector coating).
mirror elemauxiliary no mirror elemadjacently of mirror back element in a relationship superimpos	disposed at said cing plate a side-by-side o and are not ed with one ent on top of the	See discussion of element f above, which is incorporated herein by reference.
curved mirr having a sec	cond auxiliary w rearward of the	See discussion of elements e and hh above, which is incorporated herein by reference (showing auxiliary non-plano curved mirror element and showing second auxiliary field of view provided by the auxiliary mirror element rearward of a vehicle equipped with the exterior sideview mirror assembly).
	d first primary w of said main	See discussion of element pp above, which is incorporated herein by reference

plano mirror element overlaps said second auxiliary field of view of said auxiliary non-plano curved mirror element by between about 2 degrees and about 20 degrees;	
wherein said auxiliary non- plano curved mirror element that is at said second portion of said mirror backing plate element is angled relative to said main plano mirror element that is at said first portion of said mirror backing plate element;	See discussion of element ii above, which is incorporated herein by reference (showing angling of auxiliary non-plano curved mirror element relative to main plano mirror element).  See also discussion of elements o and p above, which is incorporated herein by reference (showing angling of the field of view from the spotting mirror relative to the field of view from the primary mirror and showing angling of backing plate).
wherein said mirror backing plate element mounts to said actuator such that movement of said mirror backing plate element by said actuator simultaneously and similarly moves said main plano mirror element and said auxiliary non-plano curved mirror element;	See discussion of element g above, which is incorporated herein by reference
wherein said mirror backing plate element comprises a polymeric molding;	See discussion of element k above, which is incorporated herein by reference (discussing that backing plate element is formed by injection molding of a polymeric resin).
wherein said main plano mirror element comprises a generally flat glass substrate having a surface coated with a metallic reflector coating;	See discussion of element r above, which is incorporated herein by reference (explaining that main plano mirror element is a glass substrate having a surface coated with a metallic reflector coating).  See discussion of element e above, which is incorporated herein by reference (explaining that main plano mirror is generally flat).

wherein the overall rearward field of view of said main plano mirror element combined with said auxiliary non-plano curved mirror element is at least about 25 degrees relative to the side of the equipped vehicle; and	See discussion of element bb above, which is incorporated herein by reference.
wherein the overall rearward field of view of said main plano mirror element combined with said auxiliary non-plano curved mirror element is less than about 50 degrees relative to the side of the equipped vehicle.	See discussion of element tt above, which is incorporated herein by reference.
Claim 20 (depends on claim 18)	2001 Dodge Ram Mirror
20. The exterior sideview mirror assembly of claim 18, wherein said main plano mirror element has an X-axis and a Y-axis and wherein, when disposed at said second portion of said mirror backing plate element, said auxiliary nonplano curved mirror element is at least one of (a) tilted generally downward with respect to the Y-axis of said main plano mirror element	See discussion of element ss above, which is incorporated herein by reference.

by an angle that is in the range from about 0.75	
degrees to about 5 degrees and (b) tilted generally	
forwardly with respect to	
the X-axis of said main plano mirror element by an angle that is in the range	
from about 0.75 degrees to about 5 degrees.	

## H. <u>U.S. Patent No. 8,899,762</u>

Claim 8 (depends on claims 1, 2, 3, 5, and 7)	2001 Dodge Ram Mirror
1. An exterior sideview mirror system suitable for use on an automobile, said exterior sideview mirror system comprising:	See discussion of element a above, which is incorporated herein by reference.
an exterior sideview mirror assembly adapted for attachment to a side of an automobile equipped with said exterior sideview mirror system;	See discussion of element b above, which is incorporated herein by reference.
said exterior sideview mirror assembly including a reflective element having a rearward field of view when attached to the side of the equipped automobile;	See discussion of element c above, which is incorporated herein by reference.

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 fiel of view to a driver-desired position when said exterior sideview mirror assembly attached to and operated a the side of the equipped automobile;	d r is
wherein said reflective element comprises a pland auxiliary reflective element assembly, said plano- auxiliary reflective element assembly comprising a plano reflective element having substantially unit magnification and a separa auxiliary reflective element having a curvature;	at table to the state of the st
wherein said plano reflective element and said auxiliary reflective element are supported at a backing plate element, said backin plate element mounting to said actuator such that movement of said backing plate element by said actuator simultaneously an	

similarly moves said plano reflective element and said auxiliary reflective element;	
wherein said backing plate element comprises a polymeric substrate that is formed as a single element by injection molding of a polymeric resin;	See discussion of element k above, which is incorporated herein by reference.
said backing plate element having a first support portion supporting said plano reflective element and a second support portion supporting said auxiliary reflective element;	See discussion of element i above, which is incorporated herein by reference.
wherein said plano reflective element and said auxiliary reflective element of said plano-auxiliary reflective element assembly are supported adjacently at said backing plate element in a side-by-side relationship and not superimposed with one reflective element on top of the other reflective element;	See discussion of element f above, which is incorporated herein by reference.
said auxiliary reflective element having a wide- angle field of view encompassing a blind spot in the side lane adjacent the side of the equipped	See discussion of element h above, which is incorporated herein by reference.

automobile at which said exterior sideview mirror assembly is attached and operated;	
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 attached to the side of the equipped automobile;	See discussion of element j above, which is incorporated herein by reference.
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;	See discussion of element r above, which is incorporated herein by reference.
wherein, when said exterior sideview mirror assembly is attached to and operated at the side of the equipped automobile, the field of view of said auxiliary reflective element overlaps	See discussion of element hh above, which is incorporated herein by reference (showing overlap between the field of view of the plano reflective element and the field of view of the auxiliary reflective element).

with the field of view of said plano reflective element;	
wherein said exterior sideview mirror assembly comprises a driver-side exterior sideview mirror assembly;	See discussion of element u above, which is incorporated herein by reference (showing that mirror system is adapted for attachment to the driver-side of the automobile).
wherein said second support portion of said backing plate element is configured such that said auxiliary reflective element supported thereat is tilted forwardly at an angle α with respect to the X-axis of said plano reflective element supported at said first support portion of said backing plate element;	See discussion of element ss above, which is incorporated herein by reference.
wherein α is in the range from about 0.75 degrees to about 5 degrees;	See discussion of element ss above, which is incorporated herein by reference.
wherein said second support portion of said backing plate element is configured such that said auxiliary reflective element supported thereat is tilted downwardly at an angle β with respect to the Y-axis of said plano reflective element supported at said first support portion of said backing plate element; and	See discussion of element ss above, which is incorporated herein by reference.

	wherein β is in the range from about 0.75 degrees to about 5 degrees.	See discussion of element ss above, which is incorporated herein by reference.
ww.	2. The exterior sideview mirror system of claim 1, wherein said auxiliary reflective element is supported at said second support portion of said backing plate element by at least one of an adhesive attachment and a mechanical attachment.	The auxiliary reflective element in the 2001 Dodge Ram Mirror is supported at said second support portion of said backing plate element by at least one of an adhesive attachment and a mechanical attachment.
XX.	3. The exterior sideview mirror system of claim 2, wherein said auxiliary reflective element is supported at said backing plate element at a location such that, when said exterior sideview mirror assembly is attached to and operated at the side of the equipped automobile, at least a portion of said plano reflective element is disposed closer to that side of the equipped automobile than any portion of said auxiliary reflective element.	A portion of said plano reflective element in the 2001 Dodge Ram Mirror is disposed closer to the side of the equipped automobile than any portion of said auxiliary reflective element. See, e.g., Ram Manual p. 64.

	Trailer Towing Mirrors — Optional These mirrors are designed with an adjustable mirror head to provide a greater vision range when towing extra-wide loads. To change position inboard or outboard, the mirror head should be rotated (flipped Out or In). A small blindspot mirror is integrated onto the main mirror surface.  Portion of plano element closer to side of vehicle
5. The exterior sideview mirror system of claim 3, wherein said auxiliary reflective element comprises a spherical mirror element.	See discussion of element x above, which is incorporated herein by reference (explaining that auxiliary reflective element has a spherical radius of curvature).
7. The exterior sideview	See discussion of element r above, which is incorporated herein by reference (explaining that plano

mirror system of claim 5, wherein said plano reflective element comprise a glass substrate having a surface coated with a metallic reflector coating.	mirror element is a glass substrate having a surface coated with a metallic reflector coating).
8. The exterior sideview mirror system of claim 7, wherein said auxiliary reflective element comprise a glass substrate having a surface coated with a metallic reflector coating.	See discussion of element r above, which is incorporated herein by reference (explaining that auxiliary mirror element is a glass substrate having a surface coated with a metallic reflector coating).
Claim 15 (depends on claims 13 and 14)	2001 Dodge Ram Mirror
13. An exterior sideview mirror system suitable for use on an automobile, said exterior sideview mirror system comprising:	See discussion of element a above, which is incorporated herein by reference.
an exterior sideview mirror assembly adapted for attachment to a side of an automobile equipped with said exterior sideview mirror system;	See discussion of element b above, which is incorporated herein by reference.
said exterior sideview mirror assembly including reflective element having a rearward field of view whe attached to the side of the equipped automobile;	
said reflective element	See discussion of element d above, which is incorporated herein by reference.

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 and operated at the side of the equipped automobile;	
wherein said reflective element comprises a plano- auxiliary reflective element assembly, said plano- auxiliary reflective element assembly comprising a plano reflective element having substantially unit magnification and a separate auxiliary reflective element having a curvature;	See discussion of element e above, which is incorporated herein by reference.
wherein said plano reflective element and said auxiliary reflective element are supported at a backing plate element, said backing plate element mounting to said actuator such that movement of said backing plate element by said actuator simultaneously and similarly moves said plano reflective element and said	See discussion of element g above, which is incorporated herein by reference.

auxiliary reflective element;	
said backing plate element having a first support portion supporting said plano reflective element and a second support portion supporting said auxiliary reflective element;	See discussion of element i above, which is incorporated herein by reference.
wherein said backing plate element comprises a polymeric substrate that is formed as a single element by injection molding of a polymeric resin;	See discussion of element k above, which is incorporated herein by reference.
wherein said plano reflective element and said auxiliary reflective element of said plano-auxiliary reflective element assembly are supported adjacently at said backing plate element in a side-by-side relationship and not superimposed with one reflective element on top of the other reflective element;	See discussion of element f above, which is incorporated herein by reference.
said auxiliary reflective element having a wide- angle field of view encompassing a blind spot in the side lane adjacent the side of the equipped automobile at which said exterior sideview mirror	See discussion of element h above, which is incorporated herein by reference.

assembly is attached and operated;	
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 attached to the side of the equipped automobile;	See discussion of element j above, which is incorporated herein by reference.
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;	See discussion of element r above, which is incorporated herein by reference.
wherein, when said exterior sideview mirror assembly is attached to and operated at the side of the equipped automobile, said auxiliary reflective element has a rearward field of view with a principal axis and said plano reflective element has	See discussion of element hh above, which is incorporated herein by reference (showing fields of view that have a principal axis and showing overlap between the field of view of the plano reflective element and the field of view of the auxiliary reflective element).

with a prin wherein th said auxili element ov	field of view acipal axis and e field of view of ary reflective verlaps with the ew of said plano element;	
sideview n comprises	id exterior nirror assembly a driver-side deview mirror	See discussion of element u above, which is incorporated herein by reference (showing that mirror system is adapted for attachment to the driver-side of the automobile).
portion is a respect to a portion whe principal a rearward for said auxilial element is downward with respensively principal a rearward for said plano element which is sideview in attached to a portion of the principal a rearward for said plano element which is sideview in attached to a portion of the principal a rearward for said plano element which is sideview in attached to a portion of the principal area.	xis of said ield of view of ary reflective angled ly and outwardly ct to said xis of said ield of view of reflective hen said exterior nirror assembly is and operated at the equipped	See discussion of element ii above, which is incorporated herein by reference (showing angling of second support portion with respect to the first support portion).  See discussion of elements o and p above, which is incorporated herein by reference (showing angling of the field of view from the auxiliary reflective element relative to the field of view from the plano reflective element and showing angling of backing plate).  See discussion of element s above, which is incorporated herein by reference (showing downward and outward angling of the principal axis of the rearward field of view of the auxiliary reflective element with respect to the principal axis of the rearward field of view of the plano reflective element).
said plano	ield of view of	See discussion of element bb above, which is incorporated herein by reference (showing overall field of view of at least about 25 degrees).  See discussion of element tt above, which is incorporated herein by reference (showing overall field of view of less than about 50 degrees).

auxiliary reflective element is at least about 25 degrees, and wherein the overall rearward field of view of said plano reflective element combined with said auxiliary reflective element is less than about 50 degrees.	
14. The exterior sideview mirror system of claim 13, wherein said auxiliary reflective element is supported at said backing plate element at a location such that, when said exterior mirror assembly is attached to and operated at the side of the equipped automobile, at least a portion of said plano reflective element is disposed closer to that side of the equipped automobile than any portion of said auxiliary reflective element,	See discussion of element xx above, which is incorporated herein by reference.
and wherein said auxiliary reflective element is supported at said second support portion of said backing plate element by at least one of an adhesive attachment and a mechanical attachment.	See discussion of element ww above, which is incorporated herein by reference.
	See discussion of element r above, which is incorporated herein by reference (explaining that plano

mirror system of claim 14, wherein said plano	and auxiliary mirror elements are both a glass substrate having a surface coated with a metallic
	reflector coating).
reflective element comprises	See discussion of element x above, which is incorporated herein by reference (explaining that auxiliary
a glass substrate having a	reflective element has a spherical radius of curvature).
surface coated with a	
metallic reflector coating,	
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 spherical mirror element.	

## I. <u>U.S. Patent No. 9,694,750</u>

Claim 8 (depends on claims 1 and 7)	2001 Dodge Ram Mirror
1. An exterior sideview mirror assembly suitable for vehicular use, said exterior sideview mirror assembly comprising:	See discussion of element a above, which is incorporated herein by reference.
a mirror housing;	See discussion of element oo above, which is incorporated herein by reference.
a mirror backing plate element;	See discussion of element g above, which is incorporated herein by reference (showing backing plate).
wherein said mirror backing plate element is movable within said mirror housing by an electrically-operable actuator;	See discussion of elements d and g above, which is incorporated herein by reference (showing and discussing mounting of backing plate to an electrically-operable actuator, which makes the backing plate element moveable within the mirror housing).

a main plano mirror element fixedly disposed at a first portion of said mirror backing plate element;	See discussion of elements e, i, and m above, which is incorporated herein by reference (showing plano mirror element, first portion of the backing plate element, and that the plano mirror is disposed at the first portion of the backing plate element).
said main plano mirror element having a first primary field of view rearward of a vehicle equipped with said exterior sideview mirror assembly;	See discussion of elements e and gg above, which is incorporated herein by reference (showing plano mirror element and showing primary field of view provided by the primary mirror rearward of a vehicle equipped with the exterior sideview mirror assembly).
an auxiliary non-plano curved mirror element fixedly disposed at a second portion of said mirror backing plate element;	See discussion of elements e, i, and n above, which is incorporated herein by reference (showing an auxiliary mirror element with a curvature, second portion of the backing plate element, and that the auxiliary mirror is disposed at the second portion of the backing plate element).
wherein said auxiliary non- plano curved mirror element comprises a convex-curved substrate coated with a metallic reflector coating;	See discussion of element r above, which is incorporated herein by reference (explaining that auxiliary non-plano mirror element is a glass substrate having a surface coated with a metallic reflector coating).  See discussion of element v above, which is incorporated herein by reference (explaining the auxiliary non-plano mirror element is a curved substrate coated with a metallic reflector coating).
said auxiliary non-plano curved mirror element having a second auxiliary field of view rearward of the vehicle equipped with said exterior sideview mirror assembly;	See discussion of elements e and hh above, which is incorporated herein by reference (showing auxiliary non-plano curved mirror element and showing second auxiliary field of view provided by the auxiliary mirror element rearward of a vehicle equipped with the exterior sideview mirror assembly).
wherein said second auxiliary field of view rearward of the equipped vehicle views into a blind spot in a side lane adjacent the side of the equipped	See discussion of element q above, which is incorporated herein by reference.

vehicle at which said exterior sideview mirro assembly is attached, ar wherein the blind spot i outside the rearward fie view of said main pland mirror element when sa main plano mirror elem is viewed by a driver of equipped vehicle when exterior sideview mirro assembly is attached at side of the equipped vel	and so ld of look lid
wherein said main plane mirror element and said auxiliary non-plano cur mirror element are adjacently disposed at s mirror backing plate element in a side-by-sid relationship and are not superimposed with one mirror element on top of other mirror element;	ved aid
wherein said mirror bac plate element comprises polymeric molding;	
wherein said second poor of said mirror backing pelement is convex-curve	second, curved portion of the mirror backing plate has a curvature corresponding to the curvature of
wherein said reflector- coated convex-curved substrate of said auxilia	See discussion of elements x and y above, which is incorporated herein by reference (showing that auxiliary mirror element and curved portion of backing plate element both have a spherical radius of curvature and showing that the curvatures are at least partially matching).

non-plano curved mirror element has a spherical curvature, and wherein sa second portion of said mirror backing plate element has a curvature a least partially matching s spherical curvature;	t
wherein said first primary field of view of said main plano mirror element overlaps said second auxiliary field of view of said auxiliary non-plano curved mirror element;	
wherein a principal axis of said second auxiliary fiel of view of said auxiliary non-plano curved mirror element that is at said second portion of said mirror backing plate element is different from and angled relative to a principal axis of said first primary field of view of semain plano mirror element that is at said first portion said mirror backing plate element;	angling and difference between the principal axis of the field of view of the auxiliary reflective element and the principal axis of the first primary field of view of the main plano mirror element).
wherein the principal axis said second auxiliary fiel of view of said auxiliary non-plano curved mirror	

element is tilted downward with respect to the principal axis of said first primary field of view of said main plano mirror element;	
wherein said mirror backing plate element mounts to said actuator such that movement of said mirror backing plate element by said actuator simultaneously and similarly moves said main plano mirror element and said auxiliary non-plano curved mirror element;	See discussion of element g above, which in incorporated herein by reference.
wherein said main plano mirror element comprises one of (a) a generally flat glass substrate having a surface coated with a metallic reflector coating and (b) a generally flat polymeric substrate having a thin glass element applied to a surface thereof and with an opposing surface thereof having a reflecting layer applied thereto;	See discussion of element r above, which is incorporated herein by reference (explaining that main plano mirror element is a glass substrate having a surface coated with a metallic reflector coating).  See discussion of element e above, which is incorporated herein by reference (explaining that main plano mirror is generally flat).
wherein said first primary field of view of said main plano mirror element overlaps said second auxiliary field of view of said auxiliary non-plano	See discussion of element pp above, which is incorporated herein by reference.

curved mirror element by between about 2 degrees and about 20 degrees;	
wherein, when used in an exterior sideview mirror assembly of an equipped vehicle, said main plano mirror element has a rearward field of view that subtends an angle of less than about 20 degrees relative to the side of the equipped vehicle;	See discussion of element qq above, which is incorporated herein by reference.
wherein said main plano mirror element has a fixed reflectance;	See discussion of element r above, which is incorporated herein by reference (explaining that both the plano reflective element and the auxiliary reflective element include a glass substrate having a surface coated with a metallic reflector coating).
wherein said auxiliary non- plano curved mirror element has a fixed reflectance; and	<i>See</i> discussion of element r above, which is incorporated herein by reference (explaining that both the plano reflective element and the auxiliary reflective element include a glass substrate having a surface coated with a metallic reflector coating).
wherein said exterior sideview mirror assembly comprises a driver-side exterior sideview mirror assembly.	See discussion of element u above, which is incorporated herein by reference (showing that mirror system is adapted for attachment to the driver-side of the automobile and therefore comprises a driver-side exterior sideview mirror assembly).
7. The exterior sideview mirror assembly of claim 1, wherein the overall rearward field of view of said main plano mirror element combined with said auxiliary non-plano curved mirror element is at least about 25 degrees relative to	See discussion of element bb above, which is incorporated herein by reference (showing overall field of view of at least about 25 degrees).  See discussion of element tt above, which is incorporated herein by reference (showing overall field of view of less than about 50 degrees).

the side of the equipped vehicle, and wherein the overall rearward field of view of said main plano mirror element combined with said auxiliary nonplano curved mirror element is less than about 50 degrees relative to the side of the equipped vehicle.	
8. The exterior sideview mirror assembly of claim 7, wherein said first primary field of view of said main plano mirror element overlaps said second auxiliary field of view of said auxiliary non-plano curved mirror element by between about 5 degrees and about 15 degrees.	See discussion of element uu above, which is incorporated herein by reference.
Claim 14 (depends on claims 1, 10, 11, 12, and 13)	2001 Dodge Ram Mirror
10. The exterior sideview mirror assembly of claim 1, wherein said main plano mirror element is disposed at said mirror backing plate element by at least one of adhesive attachment and mechanical attachment and wherein said auxiliary nonplano curved mirror element	See discussion of element ww above, which is incorporated herein by reference (explaining that both auxiliary and plano mirror elements are disposed at the backing plate element by adhesive attachment).

is disposed at said mirror backing plate element by at least one of adhesive attachment and mechanical attachment.	
11. The exterior sideview mirror assembly of claim 10, wherein said auxiliary non-plano curved mirror element comprises a bent glass substrate.	See discussion of element x above, which is incorporated herein by reference.
12. The exterior sideview mirror assembly of claim 11, comprising a heater element operable to demist/deice the outmost surface of said auxiliary non-plano curved mirror element when said auxiliary non-plano curved mirror element is disposed at said mirror backing plate element and when said exterior sideview mirror assembly is attached and operated at the side of the equipped vehicle.	See discussion of element vv above, which is incorporated herein by reference.
13. The exterior sideview mirror assembly of claim 12, wherein, when attached at the side of the equipped vehicle, said driver-side exterior sideview mirror assembly provides to the	See discussion of element bb above, which is incorporated herein by reference (showing total rearward field of view that generally subtends an angle of at least about 25 degrees with respect to the side of the equipped vehicle).  See discussion of element rr above, which is incorporated herein by reference (showing that auxiliary non-plano mirror element has a rearward field of view that generally subtends an angle relative to the side of the equipped vehicle that is in the range from about 15 degrees relative to the side of the equipped vehicle to about 50 degrees).

the equipped vehicle that is in the range from about 15 degrees relative to the side of the equipped vehicle to about 50 degrees.  14. The exterior sideview mirror assembly of claim 13, wherein said first primary field of view of said main plano mirror element overlaps said second	See discussion of element uu above, which is incorporated herein by reference.
auxiliary field of view of said auxiliary non-plano curved mirror element by between about 5 degrees and about 15 degrees.  Claim 25 (depends on	2001 Dodge Ram Mirror
claims 22, 23, and 24)  22. An exterior sideview	See discussion of element a above, which is incorporated herein by reference.

mirror assembly suitable fo vehicular use, said exterior sideview mirror assembly comprising:	
a mirror housing;	See discussion of element oo above, which is incorporated herein by reference.
a mirror backing plate element;	See discussion of element g above, which is incorporated herein by reference (showing backing plate).
wherein said mirror backing plate element is movable within said mirror housing by an electrically-operable actuator;	See discussion of elements d and g above, which is incorporated herein by reference (showing and discussing mounting of backing plate to an electrically-operable actuator, which makes the backing plate element moveable within the mirror housing).
a main plano mirror elemer fixedly disposed at a first portion of said mirror backing plate element;	See discussion of elements e, i, and m above, which is incorporated herein by reference (showing plano mirror element, first portion of the backing plate element, and that the plano mirror is disposed at the first portion of the backing plate element).
said main plano mirror element having a first primary field of view rearward of a vehicle equipped with said exterior sideview mirror assembly;	See discussion of elements e and gg above, which is incorporated herein by reference (showing plano mirror element and showing primary field of view provided by the primary mirror rearward of a vehicle equipped with the exterior sideview mirror assembly).
an auxiliary non-plano curved mirror element fixedly disposed at a second portion of said mirror backing plate element;	See discussion of elements e, i, and n above, which is incorporated herein by reference (showing an auxiliary mirror element with a curvature, second portion of the backing plate element, and that the auxiliary mirror is disposed at the second portion of the backing plate element).
wherein said auxiliary non- plano curved mirror element comprises a convex-curved glass substrate coated with metallic reflector coating;	reflector coating).

said auxiliary non-plano curved mirror element having a second auxiliary field of view rearward of vehicle equipped with said exterior sideview mirror assembly;	
wherein said second auxiliary field of view rearward of the equipped vehicle views into a blind spot in a side lane adjacen the side of the equipped vehicle at which said exterior sideview mirror assembly is attached, and wherein the blind spot is outside the rearward field view of said main plano mirror element when said main plano mirror elemen is viewed by a driver of th equipped vehicle when sa exterior sideview mirror assembly is attached at the side of the equipped vehicle	of  e e e e e e e e e e e e e e e e e e e
wherein said main plano mirror element and said auxiliary non-plano curve mirror element are adjacently disposed at said mirror backing plate element in a side-by-side relationship and are not	

mirror el	posed with one lement on top of the rror element;	
plate ele	said mirror backing ment comprises a ic molding;	See discussion of element k above, which is incorporated herein by reference (discussing that backing plate element is formed by injection molding of a polymeric resin).
of said m	said second portion nirror backing plate is convex-curved;	See discussion of element y above, which is incorporated herein by reference (explaining that the second, curved portion of the mirror backing plate has a curvature corresponding to the curvature of the auxiliary mirror element). Because the auxiliary mirror element has a convex curvature, as explained above, the second portion of the mirror backing plate is also convex-curved.
coated co substrate non-plan element curvature second p mirror ba element least par	said reflector- onvex-curved e of said auxiliary no curved mirror has a spherical e, and wherein said portion of said acking plate has a curvature at tially matching said l curvature;	See discussion of elements x and y above, which is incorporated herein by reference (showing that auxiliary mirror element and curved portion of backing plate element both have a spherical radius of curvature and showing that the curvatures are at least partially matching).
field of v plano mi overlaps auxiliary said auxi	said first primary view of said main irror element said second r field of view of iliary non-plano nirror element;	See discussion of element hh above, which is incorporated herein by reference (showing overlap between first field of view of the primary, main plano mirror element and the second field of view of the auxiliary, non-plano curved mirror element).
said second of view of non-plan	a principal axis of ond auxiliary field of said auxiliary no curved mirror that is at said	See discussion of element o above, which is incorporated herein by reference (explaining and showing angling and difference between the principal axis of the field of view of the auxiliary reflective element and the principal axis of the first primary field of view of the main plano mirror element).

second portion of mirror backing pelement is differ and angled relat principal axis of primary field of main plano mirror that is at said fir said mirror back element;	clate rent from ive to a said first view of said or element st portion of	
wherein the prints aid second aux of view of said a non-plano curve element is tilted with respect to taxis of said first field of view of plano mirror ele	iliary field down with downward he principal primary said main	liscussion of element s above, which is incorporated herein by reference (explaining and showing award angling of the principal axis of the rearward field of view of the auxiliary mirror element respect to the principal axis of the first primary field of view of the main plano mirror element).
wherein said mit plate element mactuator such the movement of sa backing plate element maid actuator sin and similarly main plano mirrand said auxilian curved mirror element.	ounts to said at id mirror ement by nultaneously oves said or element ry non-plano	liscussion of element g above, which in incorporated herein by reference.
wherein said ma mirror element of generally flat glat having a surface a metallic reflect	comprises a pland ass substrate See de coated with pland	liscussion of element r above, which is incorporated herein by reference (explaining that main o mirror element is a glass substrate having a surface coated with a metallic reflector coating). liscussion of element e above, which is incorporated herein by reference (explaining that main o mirror is generally flat).

field of vie plano mirro overlaps sa auxiliary fi said auxilia curved mir between ab		See discussion of element pp above, which is incorporated herein by reference.
exterior sic assembly of vehicle, sai mirror elen rearward fi subtends an than about	eld of view that n angle of less 20 degrees the side of the	See discussion of element qq above, which is incorporated herein by reference.
	id main plano nent has a fixed ;	See discussion of element r above, which is incorporated herein by reference (explaining that both the plano reflective element and the auxiliary reflective element include a glass substrate having a surface coated with a metallic reflector coating).
plano curv	id auxiliary non- ed mirror element reflectance;	See discussion of element r above, which is incorporated herein by reference (explaining that both the plano reflective element and the auxiliary reflective element include a glass substrate having a surface coated with a metallic reflector coating).
comprises	nirror assembly a driver-side leview mirror	See discussion of element u above, which is incorporated herein by reference (showing that mirror system is adapted for attachment to the driver-side of the automobile and therefore comprises a driver-side exterior sideview mirror assembly).
	e overall eld of view of plano mirror	See discussion of element bb above, which is incorporated herein by reference (showing overall field of view of at least about 25 degrees).  See discussion of element tt above, which is incorporated herein by reference (showing overall field of

element combined with said auxiliary non-plano curved mirror element is at least about 25 degrees relative to the side of the equipped vehicle, and wherein the overall rearward field of view of said main plano mirror element combined with said auxiliary non-plano curved mirror element is less than about 50 degrees relative to the side of the equipped vehicle.	view of less than about 50 degrees).
23. The exterior sideview mirror assembly of claim 22, wherein said main plano mirror element is disposed at said mirror backing plate element by adhesive attachment and wherein said auxiliary non-plano curved mirror element is disposed at said mirror backing plate element by adhesive attachment.	See discussion of element ww above, which is incorporated herein by reference (explaining that both auxiliary and plano mirror elements are disposed at the backing plate element by adhesive attachment).
24. The exterior sideview mirror assembly of claim 23, comprising a heater element operable to demist/deice the outmost surface of said auxiliary non-plano curved mirror element when said auxiliary non-plano curved mirror	See discussion of element vv above, which is incorporated herein by reference.

element is disposed at said mirror backing plate element and when said exterior sideview mirror assembly is attached and operated at the side of the equipped vehicle.	
25. The exterior sideview mirror assembly of claim 24, wherein said main plano mirror element has an X-axis and a Y-axis and wherein, when disposed at said second portion of said mirror backing plate element, the principal axis of said second auxiliary field of view of said auxiliary non-plano curved mirror element is at least one of (a) tilted downward with respect to the Y-axis of said main plano mirror element by an angle that is the range from about 0.75 degrees to about 5 degrees and (b) tilted forwardly with respect to the X-axis of said main plano mirror element by an angle that is the range from about 0.75 degrees to about 5 degrees.	See discussion of element ss above, which is incorporated herein by reference.