# DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Electronic Version v11

Stylesheet Version v10

T	itle	of
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MIRROR REFLECTIVE ELEMENT

As the below named inventor, I declare that:

This declaration is directed to the invention titled: "MIRROR REFLECTIVE ELEMENT"

I believe that I am the original and first inventor of the subject matter which is claimed and for which a patent is sought;

I have reviewed and understand the contents of the above-identified application, including the claims, as amended by any amendment specifically referred to above;

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT International filing date of the continuation-in-part application.

All statements made herein of my knowledge are true, all statements made herein on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and may jeopardize the validity of the application or any patent issuing thereon.

### FULL NAME OF INVENTOR:

Inventor: Niall R. Lynam	Inventor
Signature :	Citizen of : US

#### **DECLARATION AND POWER OF ATTORNEY**

As a below named inventor, I hereby declare:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor, if only one name is listed below, or an original, first and joint inventor, if plural names are listed below, of the subject matter which is claimed and for which a patent is sought on the invention entitled MIRROR REFLECTIVE ELEMENT, the specification of which is attached hereto.

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office (the Office), all information which is known by me to be material to patentability as defined in Title 37, Code of Federal Regulations (C.F.R.), Section 1.56.

#### CLAIM OF PRIORITY

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

U.S. Serial No. 60/471,872, filed on May 20, 2003.

#### POWER OF ATTORNEY

I hereby appoint the patent law firm of Van Dyke, Gardner, Linn & Burkhart, LLP, 2851 Charlevoix Drive, S.E., Suite 207, Grand Rapids, Michigan 49546, telephone number 616/975-5500, facsimile number 616/975-5505, and the individual patent attorneys and patent agents at such patent law firm, namely, Daniel Van Dyke, Reg. No. 25 046; Donald S. Gardner, Reg. No. 25 975; Terence J. Linn, Reg. No. 30 283; Frederick S. Burkhart, Reg. No. 29 288; Catherine S. Collins, Reg. No. 37 599; Timothy A. Flory, Reg. No. 42 540; and Karl T. Ondersma, Reg. No. 55 894 my attorney(s) or agent(s) with full power of substitution and revocation, to prosecute this application and to transact all business in and to receive all correspondence from the Patent and Trademark Office connected therewith.

All statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true, and further, these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that such willful false statements may jeopardize the validity of this application or any patent issued thereon.

Sole inventor	:	
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-		Date
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	United States of America	

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#### **FEE TRANSMITTAL**

#### Electronic Version v08

Stylesheet Version v08.0

Title of Invention

MIRROR REFLECTIVE ELEMENT

Application Number:

Date:

First Named Applicant: Niall R. Lynam
Attorney Docket Number: DON01 P-1152

## **TOTAL FEE AUTHORIZED \$ 788**

Patent fees are subject to annual revisions on or about October 1st of each year.

Filing as large entity

#### **BASIC FILING FEE**

Fee Description	Fee Code	Amount \$	Fee Paid \$
Utility Filing Fee	1001	770	770
		Subtotal Fo	r Basic Filing Fees: \$ 770

#### **EXTRA CLAIM FEES**

Fee Description	Extra Claim	Fee Code	Amount \$	Fee Paid \$
Total Claims : 21	1	1202	18	18
Independent Claims : 2	0	1201	86	0
			Subtotal For Extra	ι Claims Fees: \$ 18

#### **AUTHORIZED BILLING INFORMATION**

The commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

Deposit account number: 220190
Access Code \*\*\*\*

Deposit name: Van Dyke, Gardner, Linn and Burkhart, LLP

Deposit authorized name: Timothy A. Flory

Signature: /taf/

Date (YYYYMMDD): 2004-05-05

Charge Any Additional Fee Required Under 37 C.F.R. Sections 1.16 and 1.17.

#### **APPLICATION DATA SHEET**

## Electronic Version v14

Stylesheet Version v14.0

Title of Invention   MIRROR REFLECTIVE ELEM
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Application Type : regular, utility
Attorney Docket Number : DON01 P-1152

Correspondence address:

Customer Number: 28101



Continuing Data:

This is a Non-Provisional of US application number 60/471,872, filed 2003-05-20, now pending.

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practitioner(s) at Customer Number:

28101



as my attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.

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#### **TRANSMITTAL**

### Electronic Version v1.1

Stylesheet Version v1.1.0

MIRROR REFLECTIVE ELEMENT
:: Niall R. Lynam
per: DON01 P-1152
:

I hereby certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.

I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.

Submitted By:	Elec. Sign.	Sign. Capacity
Timothy A. Flory	/taf/	Attorney
Registered Number: 42 540		

Files Documents being submitted: DON01P1152-usdecl.xml us-declaration us-declaration.dtd us-declaration.xsl DON01P1152-usfees.xml us-fee-sheet us-fee-sheet.xsl us-fee-sheet.dtd us-request DON01P1152-usrequ.xml us-request.dtd us-request.xsl SpecificationDON01P1152-trans.xml application-body us-application-body.xsl application-body.dtd wipo.ent mathml2.dtd mathml2-qname-1.mod isoamsa.ent isoamsb.ent isoamsc.ent isoamsn.ent isoamso.ent isoamsr.ent isogrk3.ent isomfrk.ent isomopf.ent isomscr.ent isotech.ent isobox.ent isocyr1.ent isocyr2.ent isodia.ent isolat1.ent isolat2.ent isonum.ent isopub.ent mmlextra.ent mmlalias.ent soextblx.dtd FIG1.tif FIG2.tif FIG3.tif us-declaration DeclarationPOA.tif Comments

## Description

## MIRROR REFLECTIVE ELEMENT

## CROSS REFERENCE TO RELATED APPLICATIONS

[0001] The present application claims the benefit of U.S. provisional application, Ser. No. 60/471,872, filed May 20, 2003 (Attorney Docket DON01 P-1092), which is hereby incorporated herein by reference in its entirety.

## FIELD OF THE INVENTION

[0002] The present invention relates generally to rearview mirror elements for a rearview mirror assembly of a vehicle and, more particularly, to exterior rearview mirror elements comprising multi-radius reflective elements.

## **BACKGROUND OF THE INVENTION**

[0003] Typically, mirror reflective elements are formed of glass and have a reflective coating deposited thereon, such as via vacuum deposition or wet chemical silvering or the like, such as on a silver line, such as described in U.S. Pat. No. 4,737,188, which is hereby incorporated herein by reference. Polymeric reflective elements are also known,

such as are described in U.S. Pat. Nos. 6,601,960; 6,409,354; 4,944,581; 4,385,804; 4,193,668; 4,666,264; and 5,483,386, which are hereby incorporated herein by reference. For such polymeric mirror reflective elements, the need exists for a hard coat or surface on the first or outer or exterior surface of the element which is contacted by the exterior elements, such as rain, road debris, or the like, or contacted, for example, by a person scraping ice or wiping snow or condensation off the mirror element outer surface, such as during winter. A variety of hard coats have been proposed in the art, typically applied by dip coating or vacuum deposition techniques. However, a need exists for an automotive mirror reflective element which has the properties of plastic (i.e., a specific gravity roughly half that of glass), and which has a glass-like exterior surface.

[0004] Also, exterior rearview mirror reflective elements may be aspheric or multi-radius, and may typically have a less curved or substantially flat (around 2000 mm radius or thereabouts) inboard portion or surface at the inboard side of the reflective element (i.e., closer to the side body of the vehicle when the mirror assembly is mounted to the vehicle), and a more curved multi-radius portion or sur-

face at the outboard side of the reflective element (i.e., further from the side body of the vehicle when the mirror assembly is mounted to the vehicle), in order to provide an extended field of view. It is typically desirable to have the reflective elements or substrates of such exterior mirror elements to be formed of a glass material because glass material typically provides an enhanced scratch resistance over conventional optical resins and the like.

[0005] Therefore, there is a need in the art for a mirror reflective element that overcomes the shortcomings of the prior art elements and substrates.

## SUMMARY OF INVENTION

[0006] The present invention provides a molded wide angle or multi-radius substrate for a reflective element. The molded substrate comprises a polymeric optical resin transparent material and has a curved exterior surface, which may have a less curved/flatter or substantially flat inboard portion or surface and a more curved outboard portion or surface. The molded substrate may have an anti-abrasion film or layer, such as an ultrathin glass film, applied over the exterior surface or first surface to provide substantial protection against scratches occurring to the molded substrate. The inner surface or second surface

of the reflective element substrate may have a reflective coating or layer, such as a polymeric reflective film, laminated or adhered or otherwise applied thereto.

[0007]

According to an aspect of the present invention, a wide angle reflective element for a mirror assembly for a vehicle includes a wide angle substrate having an exterior surface and a glass film disposed at the exterior surface. The exterior surface of the substrate has a less curved inboard portion or surface and a more curved outboard portion or surface. The substrate comprises a polymeric resin material. The glass film is adapted to substantially conform to the exterior surface of the wide angle substrate. The glass film comprises a glass material and has a thickness of less than approximately 0.8 mm.

[8000]

According to another aspect of the present invention, a reflective element for a mirror assembly for a vehicle comprises a substrate having an exterior surface, and an anti-abrasion film applied to the exterior surface. The substrate comprises a polymeric resin material, such as a transparent optical polymeric resin material. The anti-abrasion film preferably comprises a glass material (such as a soda lime glass or a borosilicate or the like) and has a thickness of less than approximately 0.8 mm, and is flexi-

ble to conform to the exterior surface.

The substrate may be cut from a strip or sheet of molded or extruded or cast substrate material (or less preferably, may be cut from an injected molded strip or sheet). The flexible glass film may be unrolled from a reel or roll and applied to the exterior surface of the elongated strip or sheet of substrate material. The substrate, including the glass film or layer, may then be cut or otherwise formed from the elongated strip or sheet.

[0010] The substrate may comprise a wide angle substrate and/ or may comprise a multi-radius exterior surface having a less curved inboard portion or surface and a more curved outboard portion or surface.

[0011] A reflective film or layer may be applied to the inner surface or side of the substrate or strip opposite the exterior surface. The reflective film may comprise a polymeric reflective film laminated or otherwise adhered or applied to the inner side of the substrate or strip. The reflective film may comprise an all polymer-thin-film multilayer, high reflective mirror film comprising multiple coextrusion of many plastic layers to form a highly reflective mirror film.

[0012] Optionally, a reflective film or layer may be applied to the exterior surface of the substrate or sheet or strip, and the

glass film or layer or sheet may be applied over the reflective film layer. In such an application, the substrate acts as a support or backing plate for the reflective film or layer and the glass film or layer, whereby optical clarity / transparency of the substrate material is not necessary.

[0013]

According to another aspect of the present invention, a method for forming a reflective element substrate for a mirror assembly of a vehicle comprises generally continuously forming an elongated strip or sheet of substrate material and applying a substantially transparent functional film, such as an anti-abrasion film or a hydrophilic film or a hydrophobic film or the like, to a surface of the elongated strip sheet. The substrate material may comprise a transparent optical polymeric resin. The functional film is preferably unrolled from a reel or roll of film and applied to the surface of the elongated strip or sheet generally continuously as the strip or sheet is formed or extruded or cast or molded. Preferably, multiple mirror element shapes or mirror element substrates may be cut or otherwise formed from the elongated sheet after the functional film is applied to the surface of the strip or sheet.

[0014] The functional or anti-abrasion film may comprise an ul-

trathin glass material which is sufficiently flexible to be provided in a reel or roll (or in a sheet that is flexible and conformable to a bent substrate). The substrates may be formed with a wide angle exterior surface or a multi-radius exterior surface. The anti-abrasion film may be sufficiently flexible to conform to the wide angle or multi-radius or curved exterior surface.

- [0015] A reflective film, such as a polymeric reflective film or the like, may be applied to the opposite surface of the substrate or sheet or strip. The reflective film may be sufficiently flexible to be provided in a reel or roll form (or in a sheet that is flexible and conformable to a bent substrate) for unrolling the reflective film as the film is generally continuously applied to the surface of the generally continuously formed sheet or strip.
- Therefore, the present invention provides a molded wide angle or multi-radius single substrate for a rearview mirror assembly which has an anti-abrasion or anti-scratch film or layer applied to the curved, wide angle or multi-radius exterior surface of the substrate. The anti-abrasion film preferably comprises an ultrathin glass film or sheet to provide enhanced scratch resistance. The molded substrate may have a reflective film or layer laminated or ap-

plied to the inner surface opposite the exterior surface.

[0017] These and other objects, advantages, purposes and features of the present invention will become apparent upon review of the following specification in conjunction with the drawings.

## **BRIEF DESCRIPTION OF DRAWINGS**

- [0018] FIG. 1 is a perspective view of an exterior rearview mirror assembly in accordance with the present invention;
- [0019] FIG. 2 is a perspective view of a wide angle or multi-ra-dius reflective element in accordance with the present invention;
- [0020] FIG. 3 is a sectional view of the wide angle or multi-radius reflective element taken along the line III-III in FIG. 2;
- [0021] FIG. 4 is a sectional view similar to FIG. 3, showing a wide angle or multi-radius reflective element in accordance with the present invention with a reflective film or layer applied to the exterior surface of the element and an anti-abrasion film or layer applied over the reflective film or layer;
- [0022] FIG. 5 is a diagram showing the extruding, coating and cutting processes for manufacturing a prismatic mirror reflective element in accordance with the present invention;

- [0023] FIG. 5A is an elevation of the extruder of FIG. 5, showing the wedge shape of the extruded strip and reflective element substrate;
- [0024] FIG. 6 is a plan view of the extruded strip showing the cut out shapes of the reflective element cut from the extruded strip;
- [0025] FIG. 7 is a sectional view of the reflective element formed by the process shown in FIG. 5; and
- [0026] FIG. 8 is a diagram showing an alternate process for manufacturing a prismatic mirror reflective element in accordance with the present invention, where a strip of substrate material is cast and formed via a caster and float section.

## **DETAILED DESCRIPTION**

[0027] Referring now to the drawings and the illustrative embodiments depicted therein, an exterior rearview mirror assembly 10 includes a reflective element 12 mounted at a casing 14, which is mounted at an exterior portion of a vehicle 16 (FIG. 1). Reflective element 12 may provide an enhanced field of view or wide angle field of view to a driver or occupant of the vehicle and may comprise a single reflective element substrate 18 having an inner surface 18a and an opposite exterior surface 18b (FIGS. 2 and 3).

The exterior surface 18b comprises a less curved or substantially flat inboard portion or surface 18c and a more curved outboard portion or surface 18d, as discussed below. The substrate 18 may have an anti-abrasion coating or layer or film 20, such as an ultrathin glass coating or layer or film, laminated or deposited or otherwise applied to the exterior surface 18b, and may have a reflective coating or layer 22 laminated or applied to the inner surface 18a, as also discussed below. Aspects of the reflective element of the present invention may be suitable for use in a reflective element for an exterior rearview mirror assembly (as shown in FIG. 1) and/or a reflective element for an interior rearview mirror assembly (not shown).

[0028] Reflective element 12 may comprise an aspheric or multiradius or wide angle single element reflective element
substrate. The reflective element 12 may provide a field of
view similar to the plano-auxiliary reflective element assembly disclosed in U.S. Pat. Nos. 6,522,451 and
6,717,712, which are hereby incorporated herein by reference.

[0029] The substrate 18 of the reflective element 12 of the present invention may be formed (such as by casting, extrusion or injection molding) of a polymeric optical resin

material, such as an acrylic or polycarbonate resin, a polyolefin, a cyclic olefin copolymer, such as a COC resin known as "TOPAS" and available from Ticona of Summit, NJ (such as a resin of the type described in U.S. pat. application, Ser. No. 09/946,228, filed Sep. 5, 2001 for IM-PROVED PLASTIC SUBSTRATE FOR INFORMATION DEVICE AND METHOD FOR MAKING SAME (Attorney Docket DON03 P-910), which is hereby incorporated herein by reference) or the like. Because the substrate can be, for example, injection molded from an optical resin, the substrate may be molded or formed to a desired shape having a wide angle or multi-radius surface, which is typically challenging to accomplish with glass sheets. This is because any prescription or form for the substrate can be established in an injection mold by machining, such that when the injection mold is filled with molten injected optical resin material, the optical resin material takes the shape of the mold. Thus, for example, a substrate having a substantially or fully flat inboard region for a multi-radius (often referred to as an aspheric) exterior mirror element is fully practical.

[0030] As shown in FIGS. 1-3, inboard portion or surface 18c of exterior surface 18b is positioned at or toward the side of

the reflective element that is toward the side body of the vehicle when the mirror assembly is mounted to or attached to the vehicle. The inboard portion 18c of surface 18b of substrate 18 may comprise a substantially flat or slightly curved or less curved surface, such as a surface having a radius of curvature of preferably greater than at least approximately 4000 mm, more preferably greater than at least approximately 9000 mm, and most preferably greater than at least approximately 12000 mm. The inboard surface 18c may provide a field of view of up to approximately 10 degrees, preferably up to approximately 15 degrees, and more preferably up to approximately 20 degrees.

[0031] Outboard portion or surface 18d of exterior surface 18b of substrate 18 is positioned outward from inboard portion and is thus further away from the side body of the vehicle when the mirror assembly is mounted to or attached to the vehicle. Outboard portion 18d of exterior surface 18b may be a more convex or curved surface, such that the substrate comprises a wide angle or multiradius exterior surface substrate. The more curved outboard surface 18d of the substrate may have radii of curvature in the range of less than about 4000 mm to about

100 mm or lower. The more curved outboard portion or surface 18d may provide an extended field of view when combined with the less curved inboard portion or surface 18c. For example, the combined field of view of the mirror reflective element 12 may be preferably greater than at least approximately 25 degrees, more preferably greater than at least approximately 35 degrees, and most preferably greater than at least approximately 45 degrees. The substrate may be formed to have curves or shapes or to provide other field of views, without affecting the scope of the present invention.

[0032]

The exterior surface 18b of substrate 18 may be coated or covered with a substantially transparent functional film or layer 20, such as an anti-abrasion film or layer, such as an ultrathin glass film or layer or sheet having a thickness of preferably less than or equal to approximately 0.8 mm, more preferably less than or equal to approximately 0.5 mm, and most preferably less than or equal to approximately 0.3 mm. The ultrathin glass film or layer or sheet 20 provides a flexible glass film which can be conformed to the exterior surface of the molded substrate (for example, such as described in U.S. Pat. No. 5,085,907, which is hereby incorporated herein by reference) after the sub-

strate is molded. The ultrathin glass film or layer may provide substantial protection against scratches on the outboard surface, such as may occur due to impact by debris at the outside of the vehicle (for exterior mirror assembly applications) or by use of ice scrapers and the like on the glass surface and the like. The ultrathin glass film or layer may be applied to a molded or extruded strip (such as described below with respect to FIGS. 5-8) or may be applied to the surface or surfaces of a formed or cut substrate, without affecting the scope of the present invention. The flexible ultrathin glass film or layer of the present invention allows the wide angle or multi-radius substrate to be molded in the desired shape out of a transparent acrylic resin material, yet may conform to the curved or multi-radius or aspheric shape and provide enhanced protection or scratch resistance to the substrate. It is envisioned that other functional films or hard coats or anti-abrasion films or the like may be applied to the exterior surface of the molded substrate, such as via adhering or applying a film to the exterior surface or via dip coating

or vacuum deposition or the like. Optionally, a hydropho-

also or otherwise be applied to the exterior surface 18b of

bic film or hydrophilic film or element or property may

[0033]

the substrate. Optionally, the functional film may comprise a non-glass or polymeric film, such as a polymeric material that is a harder and/or different property material than the substrate itself. Optionally, the anti-abrasion film may be formed of the same resin material as the substrate to match the coefficients of thermal expansion and thus reduce thermal expansion/contraction mismatches between the materials.

[0034]

Optionally, the inner or rear surface 18a of the substrate 18 may have a reflective layer or coating or film or sheet 22 laminated or otherwise applied thereto. For example, the reflective layer or film 22 may comprise a polymeric reflective film 22 laminated or otherwise adhered or applied to the rear or inner surface 18a of a molded or extruded or cast strip (such as described below with respect to FIGS. 5-8) or of the molded or formed substrate 18. Reflective film 22 may comprise a polymeric reflective film, such as an all polymer-thin-film multilayer, high reflective mirror film, such as a multilayer, non-metallic reflective film which may comprise multiple coextrusion of many plastic layers to form a highly reflective mirror film, such as described in U.S. Pat. Nos. 3,773,882; 3,884,606; and 3,759,647, which are hereby incorporated herein by

reference. Such a reflective film thus may comprise multilayers of polymer materials to form a highly reflective mirror film, such as a Radiant Light Film, a Radiant Mirror Film or a Radiant Color Film, such as commercially available from 3M of St. Paul, Minn., such as a Radiant Color Film CM590 or CM500. Also, a durable metallized polymeric mirror layer can be used, such as described in U.S. Pat. No. 5,361,172, which is hereby incorporated herein by reference.

[0035]

As shown in FIG. 4, it is envisioned that a substrate or substrate shape or sheet or strip of substrate material 118 may have a reflective film or layer 122 adhered or laminated or otherwise applied to the exterior surface 118b of the substrate material. An anti-abrasion film or layer 120 (which may comprise an ultrathin glass film or layer as described above) may be adhered or laminated or otherwise applied to the reflective film or layer 122. In such an application, with the reflective layer on the front or exterior surface of the substrate, the substrate material may be molded or formed of a polymeric material that does not provide optical clarity and need not be transparent. The substrate material may act only as a support or backing plate for the reflective film or layer and the anti-

abrasion film or layer and thus may be opaque or non-transparent. The exterior surface 118b of substrate material 118 may comprise a wide angle exterior surface or a multi-radius exterior surface having a less curved inboard portion or surface 118c and a more curved outboard portion or surface 118d, such as discussed above with respect to substrate 18.

- [0036] Optionally, and such as shown in FIGS. 5, 6 and 8, the optical resin material may be molded or extruded or cast into a generally continuous strip 19 having the desired curved or multi-radius surfaces, and may be cut to form the substrates. The substrates may be cut from the strip via any known cutting process, such as via a laser cutting process or a water-jet cutting process or the like, without affecting the scope of the present invention.
- [0037] As shown in FIGS. 5-8, the molding processes and film or layer application processes of the present invention may be used to form a prismatic or wedge-shaped strip for forming prismatic or wedge-shaped substrates 18' (FIG. 7) for use in an interior rearview mirror assembly of a vehicle.
- [0038] As also shown in FIGS. 5-8, the substrate material or optical resin material may be extruded or cast to form the

continuous strip or sheet 19. For example, and as shown in FIGS. 5 and 5A, the strip 19 may be extruded by an extruder 24, which, preferably continuously, extrudes the optical resin material through an extrusion nozzle 26. The extruded material may be moved through an annealing lehr 28 to reduce or substantially eliminate birefringence, striation, stress and/or distortion in the strip or substrates. The coatings or layers or films 20 and/or 22 may be applied to one or both surfaces of the strip or substrate after the annealing process. The strip 19 may then be cut, such as via laser cutting or water–jet cutting devices or processes 30, or via other forming processes, to form the substrates 18' after the films or coatings have been applied thereto.

polymeric resin material may be cast by a caster 32, which deposits the molten polymer or resin material onto a float section 34, such as a heated plate or heated melt. The float section 34 may be angled to form the wedge-shaped strip as the strip or ribbon of cast molten polymer solidifies as it passes across the hot float section (it is also en-

visioned that the float may provide a curved surface to

form the curved outboard surface of the substrate). The

Optionally, and as shown in FIG. 8, the strip 19 of optical

[0039]

coatings or layers or films 20, 22 may be applied to the solidified strip and the strip may be cut to form the substrates after the coatings or layers or films have been applied thereto.

[0040] Because the films or layers are flexible, it is envisioned that the anti-abrasion film or ultrathin glass film and/or the reflective polymeric film may be unwound or unrolled and applied along the generally continuously extruded or cast substrate material or strip 19. For example, and as shown in FIGS. 5-8, the ultrathin glass film (or other outer layer anti-abrasion coating or film) 20 may be provided in a reel or roll form or strip 20a and may be unwound or unrolled and laminated or otherwise adhered or applied along the exterior surface 19b of the extruded or cast strip 19 of substrate material. Likewise, the reflective polymeric film 22 may be provided in a reel or roll form or strip 22a and may be attached or applied to the inner surface 19a of the substrate material strip 19, such as via laminating or adhering or otherwise applying the film to the substrate material, such as by using optical adhesive and/or via rolling or ironing the film or sheet (preferably

at an elevated temperature and with vacuum assist) onto

the substrate or strip surface, to secure the reflective film

to the substrate or extruded or cast strip or sheet.

[0041] Optionally, the glass film or layer or sheet (or reel or roll of glass sheet or strip) may be coated with a highly reflective metallic layer, such as silver or aluminum or the like, deposited on or applied to its inner surface (i.e., the surface which is adhered to or otherwise applied to the substrate or substrate sheet or strip). The reflective layer or coating may be applied to the glass film or layer with or without transparent overcoats. The glass film thus may provide the reflective layer at the exterior surface of the substrate, such that the reflective layer provides the second layer or surface, with the substrate behind the reflective layer. The glass sheet or film may thus be provided with the reflective mirror coating already applied thereto. The glass layer with reflective layer or coating applied thereto may be provided in a reel or roll form for applying both the reflective layer and the anti-abrasion layer to the exterior surface of the substrate or substrate strip or sheet in one application process. In such an application, the substrate material need not comprise a transparent optical resin material, and a separate reflective layer or film or coating would not be necessary at the inner or rear surface of the substrate.

[0042]

It is envisioned that other hard coats or films or the like may be applied to one or more surfaces of the molded substrate strip or to the molded and cut substrates, such as via dip coating or vacuum deposition or the like, without affecting the scope of the present invention. The other hard coats or films may be substantially flexible and may be applied via unrolling of a reel of an anti-abrasion film or sheet and applying the film or sheet to a surface of an extruded or cast strip of transparent acrylic resin or the like, as discussed above. Optionally, a hydrophobic film or hydrophilic film or element or property may also or otherwise be applied to (or sprayed on) one or both surfaces 18a, 18b of the substrate or strip or sheet. Optionally, one or both of the reflective polymeric film 22 and the antiabrasion film 20 may be formed of the same resin material as the substrate 18, 18' or substrate strip 19 to match the coefficients of thermal expansion and thus reduce thermal expansion/contraction mismatches between the materials.

[0043]

Optionally, it is envisioned that such ultrathin glass films, anti-abrasion films, reflective films or reflective systems may be used for electrochromic mirror reflective elements or cells as well. For example, the interior or exterior

rearview mirror assembly of the present invention may comprise an electrochromic mirror, such as an electrochromic mirror assembly and electrochromic element utilizing principles disclosed in commonly assigned U.S. Pat. Nos. 5,140,455; 5,151,816; 6,690,268; 6,178,034; 6,154,306; 6,002,544; 5,567,360; 5,525,264; 5,610,756; 5,406,414; 5,253,109; 5,076,673; 5,073,012; 5,117,346; 5,724,187; 5,668,663; 5,910,854; 5,142,407 and/or 4,712,879, which are hereby incorporated herein by reference, and/or as disclosed in the following publications: N. R. Lynam, "Electrochromic Automotive Day/Night Mirrors", SAE Technical Paper Series 870636 (1987); N. R. Lynam, "Smart Windows for Automobiles", SAE Technical Paper Series 900419 (1990); N. R. Lynam and A. Agrawal, "Automotive Applications of Chromogenic Materials", Large Area Chromogenics: Materials and Devices for Transmittance Control, C.M. Lampert and C.G. Granquist, EDS., Optical Engineering Press, Wash. (1990), which are hereby incorporated by reference herein. The mirror assembly may comprise an interior rearview mirror assembly, and may include an accessory module or may be mounted to an accessory module, such as an accessory module of the types disclosed in U.S. pat. application, Ser. No.

10/355,454, filed Jan. 31, 2003 for VEHICLE ACCESSORY MODULE (Attorney Docket DON01 P-1050), which is hereby incorporated herein by reference.

[0044] Optionally, the mirror assembly may include one or more displays for displaying information to a driver of the vehicle at or through the reflective element of the mirror assembly. For example, the mirror assembly may include one or more displays of the types described in U.S. Pat. Nos. 6,329,925; 6,501,387; 6,690,268; 5,910,854; 6,420,036; 5,668,663; and 5,724,187, and/or in U.S. pat. applications, Ser. No. 10/054,633, filed Jan. 22, 2002 by Lynam et al. for VEHICULAR LIGHTING SYSTEM (Attorney Docket DON01 P-962); and Ser. No. 10/456,599, filed Jun. 6, 2003 by Weller et al. for INTERIOR REARVIEW MIR-ROR SYSTEM WITH COMPASS (Attorney Docket DON01 P-1076), and/or in PCT Application No. PCT/US03/29776, filed Sep. 19, 2003 by Donnelly Corporation et al. for **ELECTROCHROMIC MIRROR ASSEMBLY (Attorney Docket** DON01 FP-1109(PCT)); PCT Application No. PCT/ US03/35381, filed Nov. 5, 2003 by Donnelly Corporation et al. for ELECTRO-OPTIC REFLECTIVE ELEMENT ASSEMBLY (Attorney Docket DON01 FP-1116(PCT)); and/or PCT Application No. PCT/US03/40611, filed Dec. 19, 2003 by

Donnelly Corporation et al. for ACCESSORY SYSTEM FOR VEHICLE (Attorney Docket DON01 FP-1123(PCT)), and/or in U.S. provisional applications, Ser. No. 60/508,086, filed Oct. 2, 2003 by Schofield for MIRROR REFLECTIVE ELE-MENT ASSEMBLY INCLUDING ELECTRONIC COMPONENT (Attorney Docket DON01 P-1113); Ser. No. 60/525,952, filed Nov. 26, 2003 by Lynam for MIRROR REFLECTIVE EL-EMENT FOR A VEHICLE (Attorney Docket DON01 P-1130); Ser. No. 60/471,546, filed May 19, 2003 (Attorney Docket DON01 P-1093); Ser. No. 60/525,537, filed Nov. 26, 2003 (Attorney Docket DON01 P-1129); and Ser. No. 60/556,259, filed Mar. 25, 2004 (Attorney Docket DON01 P-1147), which are all hereby incorporated herein by reference, without affecting the scope of the present invention.

Optionally, the mirror assembly may include or be associated with electronic accessories, such as, for example, antennas, including global positioning system (GPS) or cellular phone antennas, such as disclosed in U.S. Pat. No. 5,971,552, a communication module, such as disclosed in U.S. Pat. No. 5,798,688, a blind spot detection system, such as disclosed in U.S. Pat. Nos. 5,929,786 and/or 5,786,772, a high/low headlamp controller, such as dis-

closed in U.S. Pat. Nos. 5,796,094 and/or 5,715,093, transmitters and/or receivers, such as a garage door opener or the like, a digital network, such as described in U.S. Pat. No. 5,798,575, a memory mirror system, such as disclosed in U.S. Pat. No. 5,796,176, a hands-free phone attachment, a video device for internal cabin surveillance and/or video telephone function, such as disclosed in U.S. Pat. Nos. 5,760,962 and/or 5,877,897, a remote keyless entry receiver or system or circuitry and/or a universal garage door opening system or circuitry (such as the types disclosed in U.S. Pat. Nos. 6,396,408; 6,362,771; 5,798,688 and 5,479,155, and/or U.S. pat. application, Ser. No. 10/770,736, filed Feb. 3, 2004 by Baumgardner et al. for GARAGE DOOR OPENING SYSTEM FOR VEHICLE (Attorney Docket DON01 P-1135)), lights, such as map reading lights or one or more other lights or illumination sources, such as disclosed in U.S. Pat. Nos. 6,690,268; 5,938,321; 5,813,745; 5,820,245; 5,673,994; 5,649,756; 5,178,448; 5,671,996; 4,646,210; 4,733,336; 4,807,096; 6,042,253; and/or 5,669,698, and/or U.S. pat. application, Ser. No. 10/054,633, filed Jan. 22, 2002 by Lynam et al. for VEHICULAR LIGHTING SYSTEM (Attorney Docket DON01 P-962), microphones, such as disclosed in U.S.

Pat. Nos. 6,243,003; 6,278,377; and/or 6,420,975, and/ or PCT Application No. PCT/US03/30877, filed Oct. 1, 2003 (Attorney Docket DON01 FP-1111(PCT)), speakers, a compass or compass system, such as disclosed in U.S. Pat. Nos. 5,924,212; 4,862,594; 4,937,945; 5,131,154; 5,255,442; and/or 5,632,092, and/or U.S. pat. application, Ser. No. 10/456,599, filed Jun. 6, 2003 by Weller et al. for INTERIOR REARVIEW MIRROR SYSTEM WITH COM-PASS (Attorney Docket DON01 P-1076), a navigation system, such as described in U.S. Pat. No. 6,477,464, and U.S. pat. applications, Ser. No. 10/456,599, filed Jun. 6, 2003 by Weller et al. for INTERIOR REARVIEW MIRROR SYS-TEM WITH COMPASS (Attorney Docket DON01 P-1076); Ser. No. 10/287,178, filed Nov. 4, 2002 by McCarthy et al. for NAVIGATION SYSTEM FOR A VEHICLE (Attorney Docket DON01 P-1051); Ser. No. 10/645,762, filed Aug. 20, 2003 by Taylor et al. for VEHICLE NAVIGATION SYSTEM FOR USE WITH A TELEMATICS SYSTEM (Attorney Docket DON01 P-1103); and Ser. No. 10/422,378, filed Apr. 24, 2003 (Attorney Docket DON01 P-1074); and/or PCT Application No. PCT/US03/40611, filed Dec. 19, 2003 by Donnelly Corporation et al. for ACCESSORY SYSTEM FOR VEHICLE (Attorney Docket DON01 FP-1123(PCT)), a tire

pressure monitoring system, such as the types disclosed in U.S. Pat. Nos. 6,294,989; 6,445,287; and/or 6,472,979, and/or in U.S. pat. application, Ser. No. 10/206,495, filed Jul. 26, 2002 by Schofield et al. for SELF TRAINING TIRE PRESSURE MONITORING SYSTEM (Attorney Docket DON01 P-992), a seat occupancy detector, a trip computer, a telematics system, such as an ONSTAR system or the like, and/or any other desired accessory or system or the like (with all of the above-referenced patents and patent applications and PCT applications being commonly assigned to Donnelly Corporation, and with the disclosures of all of the above referenced patents and patent applications and PCT applications being hereby incorporated herein by reference in their entireties).

[0046] Optionally, a vehicle compass or compass system may comprise a printed circuit board and may be positioned within a pod or the like that may be fixedly mounted in the vehicle. The compass may be initially calibrated (such as at the assembly plant or the like) via a small Helmholtz coil that may accommodate the small circuit board or pod. The coil induces a field to calibrate the compass, such as described in U.S. provisional application, Ser. No. 60/467,899, filed May 5, 2003 (Attorney Docket DON01

P-1090), which is hereby incorporated herein by reference in its entirety. The induced field in the miniature Helmholtz coil may be controlled via the use of a highly permeable magnetic shielding material that may enclose the miniature Helmholtz coil with only a small slot for the circuit board or compass pod to enter through. Such a set up may allow the compass pod manufacturer to automate and magnetically shield the calibration and test stage of a microprocessor-based compass. The calibration process may utilize an indexing rotary table that may rotate to move a compass pod from a loading bay to a calibration bay. The shielded Helmholtz coil may be adjacent to the rotary table and may be shuttled back and forth to align with the rotary table to receive a compass pod therefrom. The rotary table may rotate to move a calibrated compass pod (after it leaves the miniature Helmholtz coil) from the calibration bay to a final functional test station to test the calibrated compass pod.

[0047] Therefore, the present invention provides a wide angle or multi-radius single substrate or reflective element which may provide an enhanced field of view for an interior or exterior rearview mirror assembly. The wide angle or multi-radius single element reflector may have an anti-

abrasion coating or ultrathin glass film conformed to and applied to the exterior curved surface of the substrate. The substrate may be molded or extruded into the desired shape and may be formed into an elongated strip or sheet, whereby the anti-abrasion coating or film may be applied along the strip before the strip is cut into the desired substrates. The present invention thus provides a single element wide angle or multi-radius substrate which has enhanced scratch resistance. A polymeric reflective film may be laminated, adhered or otherwise applied to the opposite inner surface of the substrate or extruded strip while the anti-abrasion coating or film is applied to the exterior surface. Optionally, a reflective film or layer may be applied to the exterior surface of the substrate and an anti-abrasion film or layer may be applied to the reflective film or layer.

[0048] Changes and modifications in the specifically described embodiments can be carried out without departing from the principles of the present invention, which is intended to be limited only by the scope of the appended claims, as interpreted according to the principles of patent law.

# Claims

- [c1] A wide angle reflective element for a mirror assembly for a vehicle comprising:

  a wide angle substrate having an exterior surface comprising a less curved inboard portion or surface and a more curved outboard portion or surface, said substrate comprising a polymeric resin material; and a glass film disposed at said exterior surface, said glass film adapted to substantially conform to said exterior surface of said wide angle substrate, said glass film comprising a glass material and having a thickness of less than approximately 0.8 mm.
- [c2] The wide angle reflective element of claim 1, wherein said glass film comprises a flexible glass film.
- [c3] The wide angle reflective element of claim 1, wherein said substrate is cut from a molded or extruded or cast strip or sheet, said glass film being applied to said strip or sheet, at least two substrates being cut from said strip or sheet.
- [c4] The wide angle reflective element of claim 3 including a reflective film applied to said strip or sheet on an inner

- surface of said substrates opposite said exterior surface.
- [c5] The wide angle reflective element of claim 1 including a reflective film applied to an inner surface of said substrate opposite said exterior surface.
- [c6] The wide angle reflective element of claim 5, wherein said reflective film comprises a polymeric reflective film laminated or otherwise adhered or applied to said inner surface of said substrate.
- [c7] The wide angle reflective element of claim 6, wherein said reflective film comprises an all polymer-thin-film multilayer, high reflective mirror film comprising multiple coextrusion of many plastic layers to form a highly reflective mirror film.
- [c8] The wide angle reflective element of claim 1 including a reflective film applied to said exterior surface of said substrate, said glass film being applied to an exterior surface of said reflective film.
- [c9] The wide angle reflective element of claim 8, wherein said reflective film comprises a polymeric reflective film laminated or adhered or otherwise applied to said exterior surface of said substrate.
- [c10] The wide angle reflective element of claim 9, wherein

said reflective film comprises an all polymer-thin-film multilayer, high reflective mirror film comprising multiple coextrusion of many plastic layers to form a highly reflective mirror film.

- [c11] The wide angle reflective element of claim 1, wherein said reflective element is adapted for one of an interior rearview mirror assembly and an exterior rearview mirror assembly.
- [c12] A method for forming a reflective element substrate for a mirror assembly of a vehicle comprising: generally continuously forming an elongated sheet of substrate material, said substrate material comprising a polymeric resin material; applying a substantially transparent functional film to a surface of said elongated sheet; unrolling said substantially transparent functional film from a reel or roll of said film and applying said unrolled film to said surface of said elongated sheet generally continuously as said sheet is formed or extruded or cast; and

forming two or more mirror substrates from said elongated sheet after said film is applied to said surface of said sheet.

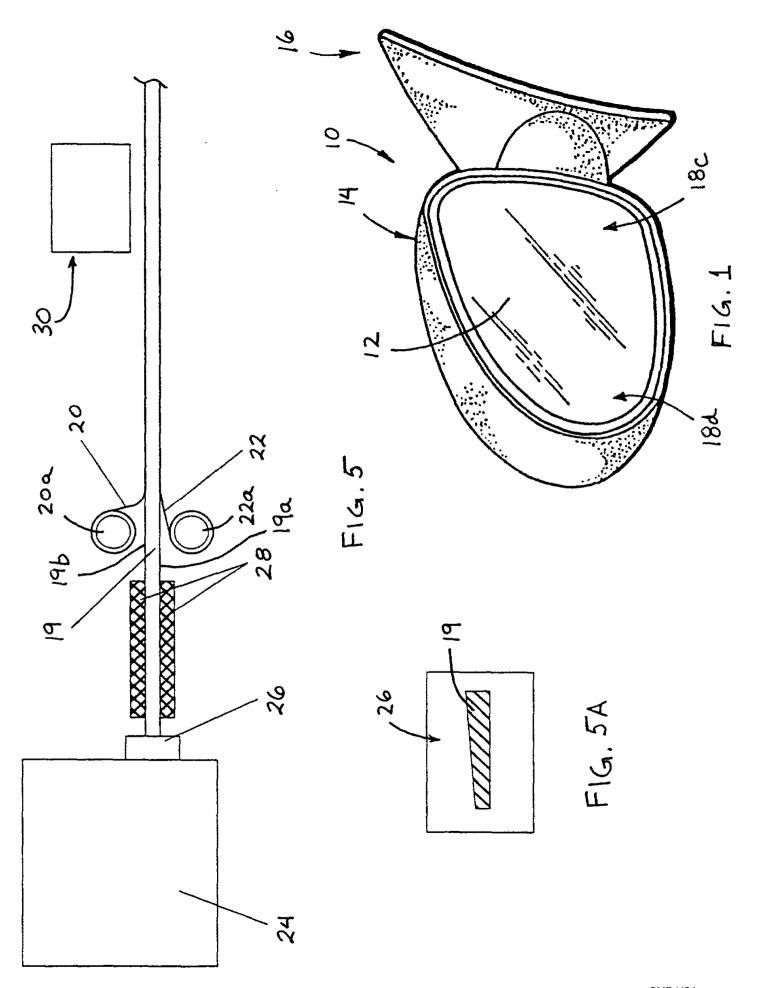
[c13] The method of claim 12, wherein said substantially

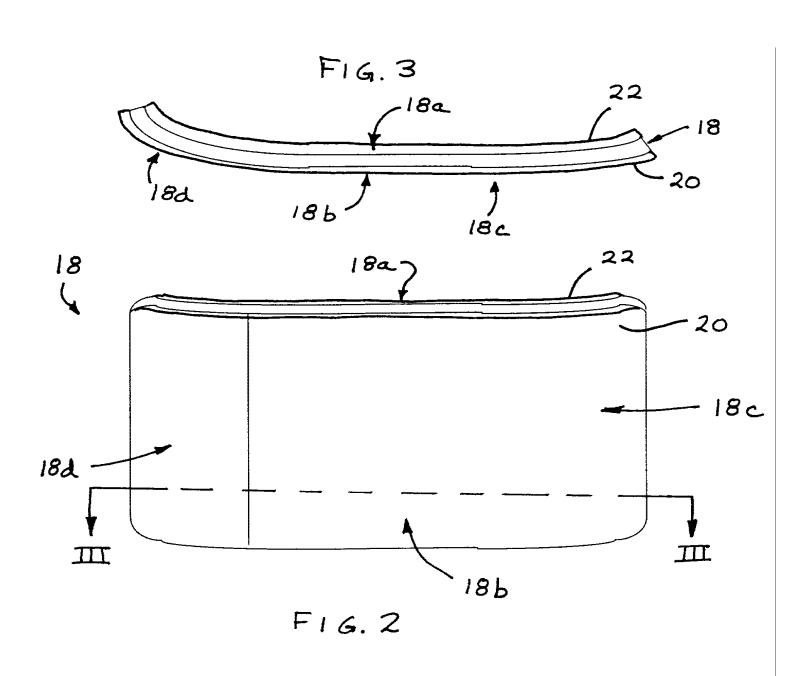
- transparent functional film provides an anti-abrasion function.
- [c14] The method of claim 12, wherein said substantially transparent functional film provides a hydrophobic function or a hydrophilic function.
- [c15] The method of claim 12, wherein said functional film comprises an ultrathin glass material which is sufficiently flexible to be provided in a reel or roll.
- [c16] The method of claim 12, wherein said substrates are formed with a wide angle or multi-radius exterior surface, said functional film being sufficiently flexible to conform to said wide angle or multi-radius curved surface.
- [c17] The method of claim 12 including applying a reflective film, such as a polymeric reflective film or the like, to an opposite surface of said sheet.
- [c18] The method of claim 17, wherein said reflective film is sufficiently flexible to be provided in a reel or roll form, said method including unrolling said reflective film and generally continuously applying said reflective film to said opposite surface of said generally continuously formed sheet.

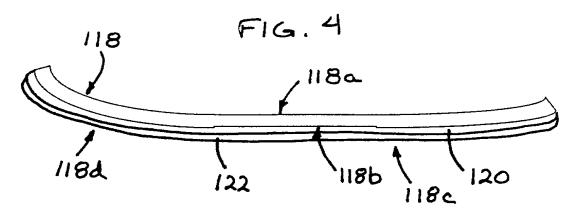
- [c19] The method of claim 12 including applying a reflective film, such as a polymeric reflective film or the like, to said surface of said sheet, wherein applying said functional film comprises applying said functional film to said reflective film.
- [c20] The method of claim 19, wherein said reflective film is sufficiently flexible to be provided in a reel or roll form, said method including unrolling said reflective film and generally continuously applying said reflective film to said surface of said generally continuously formed sheet.
- [c21] The method of claim 12 including forming a vehicle mirror assembly with one of said two or more mirror substrates.

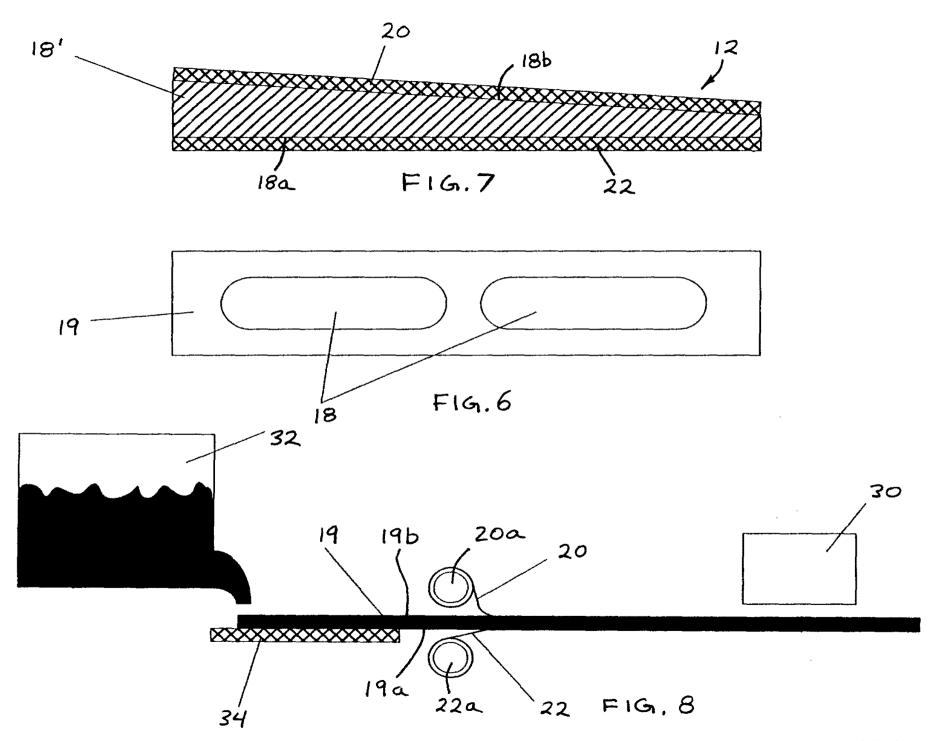
# MIRROR REFLECTIVE ELEMENT Abstract

A reflective element for a mirror assembly for a vehicle includes a substrate and a functional or anti-abrasion film applied to an exterior surface of the substrate. The substrate comprises a polymeric resin material, such as a transparent optical polymeric resin material. The functional or anti-abrasion film may comprise a glass material and may have a thickness of less than approximately 0.8 mm. The anti-abrasion film is flexible to conform to the exterior surface of the substrate. The flexible film may be unrolled from a reel or roll and applied to the exterior surface of an elongated strip or sheet of substrate material. The substrate, including the glass film or layer, may then be cut or otherwise formed from the elongated strip or sheet of molded or extruded or cast substrate material.









# **ACKNOWLEDGEMENT RECEIPT**

**Electronic Version** 

Stylesheet Version v01

Title of Invention

MIRROR REFLECTIVE ELEMENT

Submision Type: Utility Patent Filing

Application Number:

10/709434

EFS ID: 60389

Server Response:

Confirmation Code	Message
	Submission was successfully submitted - Even if Informational or Warning Messages appear below, please do not resubmit this application
ICON1	3433

First Named Applicant: Niall Lynam
Attorney Docket Number: DON01 P-1152

Timestamp: 2004-05-05 11:05:35 EDT

From: us

File Listing:

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			(yyyymmdd)			
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APPLICATION NUMBER FILING OR 371 (c) DATE FIRST NAMED APPLICANT ATTORNEY DOCKET NUMBER

10/709,434 05/05/2004

Niall R. Lynam DON01 P-1152

**CONFIRMATION NO. 3433** 

28101 VAN DYKE, GARDNER, LINN AND BURKHART, LLP 2851 CHARLEVOIX DRIVE, S.E. P.O. BOX 888695 GRAND RAPIDS, MI 49588-8695 FORMALITIES LETTER

\*OC000000013118965\*

Date Mailed: 07/01/2004

# NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

# **Items Required To Avoid Abandonment:**

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- · The oath or declaration is unsigned.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.

#### **SUMMARY OF FEES DUE:**

Total additional fee(s) required for this application is \$130 for a Large Entity

\$130 Late oath or declaration Surcharge.

Replies should be mailed to:

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

Art Unit

3612

Applicant Serial No.

Niall R. Lynam 10/709,434

Filing Date

May 5, 2004

For

MIRROR REFLECTIVE ELEMENT

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Dear Sir or Madam:

# RESPONSE TO NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

Responsive to the Notice To File Missing Parts Of NonProvisional Application mailed July 1, 2004, enclosed herewith are the required parts of the above identified application which were not available at the time of filing:

- 1. Declaration and Power of Attorney (1 page, signed).
- 2. Assignment Recordation Form Cover Sheet (1 page, in duplicate), Assignment (1 page, signed) and Assignment Recording Fee (\$40.00).

Also enclosed is the required copy of the NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION and a check in the amount of \$170.00 to cover the surcharge and recording fee.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Account 22-0190. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

NIALL R. LYNAM

By: Van Dyke, Gardner, Linn & Burkhart, LLP

Date: August 19, 2004

Timothy A. Flory

Registration No. 42 540

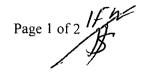
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APPLICATION NUMBER

FILING OR 371 (c) DATE

FIRST NAMED APPLICANT

ATTORNEY DOCKET NUMBER

10/709,434

05/05/2004

Niall R. Lynam

DON01 P-1152

28101 VAN DYKE, GARDNER, LINN AND BURKHART, LLP 2851 CHARLEVOIX DRIVE, S.E.

P.O. BOX 888695

GRAND RAPIDS, MI 49588-8695

**CONFIRMATION NO. 3433** 

**FORMALITIES LETTER** 

\*OC000000013118965\*

Date Mailed: 07/01/2004

# NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

# **Items Required To Avoid Abandonment:**

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given TWO MONTHS from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is unsigned.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.

#### **SUMMARY OF FEES DUE:**

Total additional fee(s) required for this application is \$130 for a Large Entity

• \$130 Late oath or declaration Surcharge.

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08/24/2004 FFANAIA2 00000073 10709434

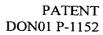
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# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

3612

Applicant Serial No.

Niall R. Lynam 10/709,434

Filing Date

May 5, 2004

For

MIRROR REFLECTIVE ELEMENT

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Dear Sir or Madam:

#### **CERTIFICATE OF MAILING**

I hereby certify that the attached return postal card, a check in the amount of \$170.00 (\$130 – missing parts surcharge and \$40 – assignment recordation), Response to Notice to File Missing Parts of NonProvisional Application (1 page, in duplicate), Declaration and Power of Attorney (1 page, signed), Assignment Recordation Form Cover Sheet (1 page, in duplicate), Assignment (1 page, signed) and the required copy of the Notice to File Missing Parts of NonProvisional Application (2 pages) are being deposited with the United States Postal Service as first class mail in an envelope addressed to:

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on August 19, 2004.

Susan L. Gasper

Van Dyke, Gardner, Linn & Burkhart, LLP 2851 Charlevoix Drive, S.E., Suite 207

P.O. Box 888695

Grand Rapids, Michigan 49588-8695

(616) 975-5500

TAF:slg

DON01 P-1152



#### DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor, if only one name is listed below, or an original, first and joint inventor, if plural names are listed below, of the subject matter which is claimed and for which a patent is sought on the invention entitled MIRROR REFLECTIVE ELEMENT, the specification of which was filed on May 5, 2004 as application Serial No. 10/709,434.

I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose to the United States Patent and Trademark Office (the Office), all information which is known by me to be material to patentability as defined in Title 37, Code of Federal Regulations (C.F.R.), Section 1.56.

#### **CLAIM OF PRIORITY**

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

U.S. Serial No. 60/471,872, filed on May 20, 2003.

# POWER OF ATTORNEY

I hereby appoint the patent law firm of Van Dyke, Gardner, Linn & Burkhart, LLP, 2851 Charlevoix Drive, S.E., Suite 207, Grand Rapids, Michigan 49546, telephone number 616/975-5500, facsimile number 616/975-5505, and the individual patent attorneys and patent agents at such patent law firm, namely, Daniel Van Dyke, Reg. No. 25 046; Donald S. Gardner, Reg. No. 25 975; Terence J. Linn, Reg. No. 30 283; Frederick S. Burkhart, Reg. No. 29 288; Catherine S. Collins, Reg. No. 37 599; Timothy A. Flory, Reg. No. 42 540; and Karl T. Ondersma, Reg. No. 55 894 my attorney(s) or agent(s) with full power of substitution and revocation, to prosecute this application and to transact all business in and to receive all correspondence from the Patent and Trademark Office connected therewith.

All statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true, and further, these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 U.S.C. § 1001, and that such willful false statements may jeopardize the validity of this application or any patent issued thereon.

Sole inventor:

Citizenship: U.S.A.

Niall R. Lynam

Residence: 248 Foxdown

Holland, Michigan 49424 United States of America

Post Office Address: Same as above.

# **ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

# Electronic Version v18

Stylesheet Version v18.0

Title of Invention

MIRROR REFLECTIVE ELEMENT

Application Number: 10/709434

Confirmation Number: 3433

First Named Applicant: Niall Lynam
Attorney Docket Number: DON01 P-1152

Art Unit: 3612

Examiner:

Search string: (6522451 or 6409354 or 5483386 or 5361172 or 5085907 or 4944581 or 4737188

or 4666264 or 4385804 or 4193668 or 3884606 or 3773882 or 3759647 ).pn

### **US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	6522451	2003-02-18	Lynam		359	265
	2	6409354	2002-06-25	Richard		359	883
	3	5483386	1996-01-09	Carson		359	883
	4	5361172	1994-11-01	Schissel et al.		359	883
	5	5085907	1992-02-04	Smith		428	40
	6	4944581	1990-07-31	Ichikawa		350	641
	7	4737188	1988-04-12	Bahls		106	1.23
	8	4666264	1987-05-19	Yamabe		350	641
	9	4385804	1983-05-31	Tamura et al.		350	310
	10	4193668	1980-03-18	Skinner		350	281
	11	3884606	1975-05-20	Schrenk		425	133.5
	12	3773882	1973-11-20	Schrenk		264	171
	13	3759647	1973-09-18	Schrenk et al.		425	131

# Remarks

Note: Remarks are not for responding to an office action.

In accordance with 37 CFR 1.51, 1.56, 1.97 and 1.98, Applicant submits herewith patents for consideration by the Examiner in connection with examination of the present application. This Information Disclosure Statement is not intended to constitute an admission that any patent, publication or other information referred to herein is "prior art" for this invention unless specifically designated as such. The present application and U.S. Patent No. 6,522,451 are

Examiner	Nama	Date	
Lxammer	Ivaille	Date	

#### **TRANSMITTAL**

# Electronic Version v1.1

# Stylesheet Version v1.1.0

Title of Invention

Application Number: 10/709434
Date: 2004-05-05
First Named Applicant: Lynam Niall R.
Confirmation Number: 3433
Attorney Docket Number: DON01 P-1152

I hereby certify that the use of this system is for OFFICIAL correspondence between patent applicants or their representatives and the USPTO. Fraudulent or other use besides the filing of official correspondence by authorized parties is strictly prohibited, and subject to a fine and/or imprisonment under applicable law.

I, the undersigned, certify that I have viewed a display of document(s) being electronically submitted to the United States Patent and Trademark Office, using either the USPTO provided style sheet or software, and that this is the document(s) I intend for initiation or further prosecution of a patent application noted in the submission. This document(s) will become part of the official electronic record at the USPTO.

Submitted By:	Elec. Sign.	Sign. Capacity
Timothy A. Flory	/taf/	Attorney
Registered Number: 42 540		

Documents being submitted:	Files	
us-ids	DON01P1152IDS-usidst.xml us-ids.dtd us-ids.xsl	
Comments		

# **ACKNOWLEDGEMENT RECEIPT**

# Electronic Version 1.1

Stylesheet Version v1.1.1

Title of Invention

# MIRROR REFLECTIVE ELEMENT

Submision Type: Information Disclosure

Statement

Application Number:

Server Response:

10/709434

67335 EFS ID:

> Confirmation Message Code ISVR1 Submission was successfully submitted -Even if Informational or Warning Messages appear below, please do not resubmit this application ICON1 3433 USPTOEFSNot Eer assistance with e-filing a patent

application, contact the Patent Electronic Business Center: Toll-Free Number:1(866) 217-9197 Website:

http://www.uspto.gov/ebc/

First Named Applicant: Niall Lynam

DON01 P-1152 Attorney Docket Number:

Timestamp: 2004-08-25 09:52:43 EDT

From: us

File Listing:

Doc. Name	File Name	Size (Bytes)	Date
		1 ' '	Produced
			(yyyymmdd)
us-ids	DON01P1152IDS-usidst.xml	4280	2004-08-25
us-ids	us-ids.dtd	7763	2004-08-25
us-ids	us-ids.xsl	12026	2004-08-25
package-data	DON01P1152IDS-pkda.xml	1724	2004-08-25
package-data	package-data.dtd	27025	2004-08-25
package-data	us-package-data.xsl	19263	2004-08-25
	Total files size	72081	

Message Digest: ba436ea7ba6c2f753d7531a98e67538a5fa46e81

Digital Certificate Holder

Name:

cn=Timothy A. Flory,ou=Registered

Attorneys,ou=Patent and

Trademark

Office,ou=Department of Commerce, o=U.S. Government,c=US

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	28	("6522451" or "6409354" or "5483386" or "5361172" or "5085907" or "4944581" or "4737188" or "4666264" or "4385804" or "4193668" or "3884606" or "3773882" or "3759647").pn.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/16 09:10
S2	8236	(rearview or rear-view or sideview or side-view) adj mirror	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/15 16:18
S3	562	S2 and (wide ad) angle or multiradius or aspheric)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/15 16:19
S4	196	S3 and polymer\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/16 10:04
S5	20	S4 and (scratch-resistant or scratch adj resistant or anti-abrasive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/15 16:46
S6	69	S3 and (polymer\$2 with substrate)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/15 16:37
S7	6	S6 and (scratch-resistant or scratch adj resistant or anti-abrasive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/15 16:21
S8	2	("6409354").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/11/15 16:38
59	374	(359/866,868).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/11/15 16:39

S10	12	S9 and polymer\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/15 16:39
511	73	S2 and (scratch-resistant or scratch adj resistant or anti-abrasive)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/15 16:46
S12	71	S11 and glass	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/15 16:46
S13	16	S11 and (glass with scratch)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/15 16:47
S14	1105	(359/866,868,869,883).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/11/16 10:42
S15	146	S14 and polymer\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/16 09:12
S16	130	S15 and (glass or SiO2 or silicon adj oxide or silicon adj dioxide)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/16 09:12
S17	8236	(rearview or rear-view or sideview or side-view) adj mirror	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/16 10:04
S18	562	S17 and (wide adj angle or multiradius or aspheric)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/16 10:04
S19	196	S18 and polymer\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/16 10:05

\$20	1	S19 and coextrusion	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2005/11/16 10:05
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# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,434	05/05/2004	Niall R. Lynam	DON01 P-1152	3433
28101 7	590 11/28/2005		EXAM	INER
•	•	AND BURKHART, LLP	AMARI, ALE	SSANDRO V
	EVOIX DRIVE, S.E.		ART UNIT	PAPER NUMBER
P.O. BOX 888	== =			THERNOMBER
GRAND RAPI	DS, MI 49588-8695		2872	
			DATE MAILED: 11/28/2009	5

Please find below and/or attached an Office communication concerning this application or proceeding.

		F.V
	Application No.	Applicant(s)
	10/709,434	LYNAM, NIALL R.
Office Action Summary	Examiner	Art Unit
	Alessandro V. Amari	2872
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on		
	action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4)⊠ Claim(s) <u>1-21</u> is/are pending in the application.		
4a) Of the above claim(s) <u>12-21</u> is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>1-11</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/or election requirement.		
Application Papers		
9)☐ The specification is objected to by the Examiner.		
10)⊠ The drawing(s) filed on <u>05 May 2004</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☐ None of:		
1. Certified copies of the priority documents have been received.		
2. Certified copies of the priority documents have been received in Application No		
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a list of the certified copies not received.		
Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P	ate atent Application (PTO-152)
Paper No(s)/Mail Date <u>8/25/2004</u> .	6) Other:	, , ,

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) Application/Control Number: 10/709,434 Page 2

Art Unit: 2872

#### **DETAILED ACTION**

#### Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-11, drawn to a wide angle reflective element, classified in class
     359, subclass 868.
  - II. Claims 12-21, drawn to a method for forming a reflective element, classified in class 359, subclass 900.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case a reflective element can be formed by lamination.
- 3. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.
- 4. During a telephone conversation with Mr. Timothy Flory on 14 November 2005 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-11. Affirmation of this election must be made by applicant in replying to this Office action. Claims 12-21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Application/Control Number: 10/709,434 Page 3

Art Unit: 2872

# Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-4, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynam US 6,522,451.

In regard to claim 1, Lynam discloses (see for example, Figure 3) a wide angle reflective element for a mirror assembly for a vehicle comprising a wide angle substrate (60) having an exterior surface comprising a less curved inboard portion (F -G) or surface and a more curved outboard portion (G-H) or surface as shown in Figure 3, said substrate comprising a polymeric resin material as described in column 9, lines 13-32, and a glass film (50, 55) disposed at said exterior surface as described in column 7, lines 4-5, said glass film adapted to substantially conform to said exterior surface of said wide angle substrate as shown in Figure 3, said glass film comprising a glass material as described in column 7, lines 4-5.

However, in regard to claim 1, Lynam does not teach that the glass film having a thickness of less than approximately 0.8 mm. It would have been obvious to one having ordinary skill in the art at the time the invention was made to adjust the thickness as claimed, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. One would have been motivated to adjust

the thickness for the purpose of improving overall stability/vibration performance of the mirror. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977)

Regarding claim 2, Lynam discloses that said glass film comprises a flexible glass film as described in column 7, lines 4-10. Since the applicant's specification does not define the term "flexible" in any terms of degree, the reference is taken to read on this feature.

Regarding claims 3 and 4, Lynam discloses that said substrate is cut from a molded or extruded or cast strip or sheet, said glass film being applied to said strip cut from said strip or sheet, at least two substrates being or sheet as described in column 9, lines 13-52 and regarding claim 4, Lynam discloses including a reflective film applied to said strip or sheet on an inner surface of said substrates opposite said exterior surface as described in column 7, lines 4-22 and column 9, lines 13-52. Applicant should note that claims 3 and 4 are product-by-process claims and in product-by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claim 8, Lynam discloses (see Figure 3) that a reflective film (67) applied to said exterior surface of said substrate, said glass film being applied to an exterior surface of said reflective film as shown in Figure 3 and as described in column 7, lines 18-26.

Regarding claim 11, Lynam discloses that said reflective element is adapted for use as an exterior rearview mirror assembly as shown in Figure 1.

7. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lynam US 6,522,451 in view of Wheatley et al US 5,262,894.

Regarding claims 9 and 10, Lynam teaches the invention as set forth above but regarding claim 9, does not teach that said reflective film comprises a polymeric reflective film laminated or adhered or otherwise applied to said exterior surface of said substrate and regarding claim 10 does not teach that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror.

Regarding claim 9, Wheatley et al teaches (see Figure 1) that a reflective film is a polymeric reflective film laminated or adhered or otherwise applied to said exterior surface of said substrate and regarding claim 10 teaches that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror as shown in Figure 1 and as described in column 6, lines 65-68, column 7, lines 45-68, column 11, lines 61-68 and column 12, lines 1-11.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the polymeric film of Wheatley et al for the reflective element of Lynam in order to provide for a reflective element which will not corrode or flake.

8. Claims 1-5, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt US 6,030,084 in view of Gillich et al US 6,709,119.

In regard to claim 1, Schmidt teaches (see for example, Figures 2, 3) a wide angle reflective element for a mirror assembly for a vehicle comprising a wide angle substrate (12) having an exterior surface comprising a less curved inboard portion or surface and a more curved outboard portion or surface as shown in Figures 2 and 3, said substrate comprising a polymeric resin material as described in column 3, lines 39-50.

However, in regard to claim 1, Schmidt does not teach a glass film disposed at said exterior surface, said glass film adapted to substantially conform to said exterior surface of said wide angle substrate, said glass film comprising a glass material and having a thickness of less than approximately 0.8 mm.

In regard to claim 1, Gillich et al teaches (see Figure 1) a glass film (101) disposed at said exterior surface, said glass film adapted to substantially conform to said exterior surface of said wide angle substrate, said glass film comprising a glass material as described in column 1, lines 56-67 and column 2, lines 1-5 and having a thickness of less than approximately 0.8 mm as described in column 2, lines 32-39. Regarding claim 2, Gillich et al discloses that said glass film comprises a flexible glass film as described in column as described in column 1, lines 56-67 and column 2, lines 1-5 and 32-39. Since the applicant's specification does not define the term "flexible" in any terms of degree, the reference is taken to read on this feature.

Page 6

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the glass film as taught by Gillich et al in the substrate of Schmidt in order to provide for a protective layer that protects the underlying layers from mechanical damage.

Regarding claims 3 and 4, Schmidt discloses that said substrate is cut from a molded or extruded or cast strip or sheet, said glass film being applied to said strip cut from said strip or sheet, at least two substrates being or sheet as described in column 3, lines 39-65 and regarding claim 4, Schmidt discloses including a reflective film applied to said strip or sheet on an inner surface of said substrates opposite said exterior surface as described in column 3, lines 39-65. Applicant should note that claims 3 and 4 are product-by-process claims and in product-by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claim 5, Schmidt teaches (see Figure 2) including a reflective film (15) applied to an inner surface (14) of said substrate opposite said exterior surface as described in column 51-57.

Regarding claim 11, Schmidt discloses that said reflective element is adapted for use as an exterior rearview mirror assembly as described in column1, lines 15-21.

Application/Control Number: 10/709,434 Page 8

Art Unit: 2872

Regarding claim 8, Schmidt in view of Gillich et al discloses the claimed invention as set forth above except for the rearrangement of the reflective film being applied to the exterior surface of the substrate, said glass film being applied to an exterior surface of the reflective film. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the reflective film to be applied to the exterior surface of the substrate, since it has been held that a mere rearrangement of elements without modification of the operation of the device involves only routine skill in the art. One would have been motivated to rearrange the reflective film to be applied to the exterior surface for the purpose of easier and more efficient manufacturing of the reflective element. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950)

9. Claims 6, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt US 6,030,084 in view of Gillich et al US 6,709,119 and further in view of Wheatley et al US 5,262,894.

Regarding claims 6, 7, 9 and 10, Schmidt in view of Gillich et al teaches the invention as set forth above but regarding claims 6 and 9, does not teach that said reflective film comprises a polymeric reflective film laminated or adhered or otherwise applied to said inner or exterior surface of said substrate and regarding claims 7 and 10 does not teach that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror.

Regarding claims 6 and 9, Wheatley et al teaches (see Figure 1) that a reflective film is a polymeric reflective film laminated or adhered or otherwise applied to said

exterior surface of said substrate and regarding claims 7 and 10 Wheatley et al teaches that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror as shown in Figure 1 and as described in column 6, lines 65-68, column 7, lines 45-68, column 11, lines 61-68 and column 12, lines 1-11.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the polymeric film of Wheatley et al for the reflective element of Schmidt in view of Gillich et al in order to provide for a reflective element which will not corrode or flake.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (571) 272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/709,434 Page 10

Art Unit: 2872

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ava (M) 16 November 2005

alessandu Amari

Alessandro Amari

Engainer AU 2872

### **ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

Electronic Version v18

Stylesheet Version v18.0

Title of Invention

MIRROR REFLECTIVE ELEMENT

Application Number:

10/709434

Confirmation Number:

3433

First Named Applicant:

Niali Lynam

Attorney Docket Number:

DON01 P-1152

Art Unit:

3612

Examiner:

Search string:

(6522451 or 6409354 or 5483386 or 5361172 or 5085907 or 4944581 or 4737188

or 4666264 or 4385804 or 4193668 or 3884606 or 3773882 or 3759647 ).pn

#### **US Patent Documents**

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
Qu	1	6522451	2003-02-18	Lynam		359	265
	2	6409354	2002-06-25	Richard		359	883
	3	5483386	1996-01-09	Carson		359	883
	4	5361172	1994-11-01	Schissel et al.		359	883
	5	5085907	1992-02-04	Smith		428	40
	6	4944581	1990-07-31	Ichikawa		350	641
	7	4737188	1988-04-12	Bahls		106	1.23
	8	4666264	1987-05-19	Yamabe		350	641
	9	4385804	1983-05-31	Tamura et al.		350	310
	10	4193668	1980-03-18	Skinner		350	281
	11	3884606	1975-05-20	Schrenk		425	133.5
	12	3773882	1973-11-20	Schrenk		264	171
a٩	13	3759647	1973-09-18	Schrenk et al.		425	131

#### Remarks

Note: Remarks are not for responding to an office action.

In accordance with 37 CFR 1.51, 1.56, 1.97 and 1.98, Applicant submits herewith patents for consideration by the Examiner in connection with examination of the present application. This Information Disclosure Statement is not intended to constitute an admission that any patent, publication or other information referred to herein is "prior art" for this invention unless specifically designated as such. The present application and U.S. Patent No. 6,522,451 are

commonly assigned. Under 37 CFR 1.97, the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. This Information Disclosure Statement is being filed before Applicant is aware of any mailing date of a first Office Action on the merits. An early and favorable action on the merits is respectfully requested.

## **Signature**

Examiner Name	Date
alassander Ameri	11/15/2015
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#### Applicant(s)/Patent Under Application/Control No. Reexamination 10/709,434 LYNAM, NIALL R. Notice of References Cited Examiner Art Unit Page 1 of 1 Alessandro V. Amari 2872 **U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	Α	US-5,262,894	11-1993	Wheatley et al.	359/586
*	В	US-6,030,084	02-2000	Schmidt, William P.	359/868
*	С	US-6,709,119	03-2004	Gillich et al.	359/883
	D	US-			
	Е	US-			
	F	US-			
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#### FOREIGN PATENT DOCUMENTS

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#### **NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

**Notice of References Cited** 

Part of Paper No. 11162005

Search Notes					

 Application/Control No.	Applicant(s)/Patent under Reexamination	
10/709,434	LYNAM, NIALL R.	
Examiner	Art Unit	
Alessandro V. Amari	2872	

SEARCHED				
Class	Subclass	Date	Examiner	
359	866 868 883 514	11/16/2005	AA	
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SEARCH NOTES (INCLUDING SEARCH STRATEGY)			
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# **Index of Claims**



10709434 LYNAM, NIALL R.	Application/Control No.	Applicant(s)/Patent under Reexamination
	10709434	LYNAM, NIALL R.

Examiner Art Unit

Amari, Alessandro V 2872

1	Rejected
=	Allowed

-	(Through numeral) Cancelled
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N	Non-Elected
_	Interference

Α	Appeal
0	Objected

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Bib Data Sheet

### **CONFIRMATION NO. 3433**

SERIAL NUMBER 10/709,434	FILING DATE 05/05/2004 RULE	C	CLASS 359	GRO	UP ART 2872	UNIT	ATTORNEY DOCKET NO. DON01 P-1152				
Niall R. Lynam, Holland, MI;  *** CONTINUING DATA ****************  This appln claims benefit of 60/471,872 05/20/200344  *** FOREIGN APPLICATIONS ************************************											
Foreign Priority claimed	s met yes no Met after  Manda Annu  Examiner's Signature Init	Allowance <b>44</b> tials	STATE OR COUNTRY MI		EETS AWING 3	CLA	TAL IMS	INDEPENDENT  CLAIMS  2			
2851 CHARLEVOIX P.O. BOX 888695 GRAND RAPIDS , M 49588-8695		Γ, LLP		·							
TITLE MIRROR REFLECTIVE ELEMENT											
FILING FEE RECEIVED 918  FEES: Authority has been given in Paper No to charge/credit DEPOSIT ACCOUNT No for following:    All Fees     1.16 Fees (Filing)     1.17 Fees (Processing Ext. of time)     1.18 Fees (Issue)     Other     Credit											

## RECEIVED CENTRAL FAX CENTER

FEB 2 7 2006

#### **VIA FACSIMILE: (571) 273-8300**

PATENT DON01 P-1152

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

Art Unit

: 2872

Examiner

Alessandro V. Amari

Applicant

: Niall R. Lynam

Scrial No.

: 10/709,434

Filing Date : May 5, 2004 For : MIRROR RE

MIRROR REFLECTIVE ELEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Via Facsimile: (571) 273-8300

Dear Sir or Madam:

#### CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following papers are being facsimile transmitted to the Patent and Trademark Office on the date shown below:

- 1. Claims As Amended Transmittal Sheet (1 page, in duplicate)
- 2. Response (12 pages)

YOU SHOULD RECEIVE A TOTAL OF 15 PAGES.

Date: February 27, 2006

Susan L. Gasper

Van Dyke, Gardner, Linn & Burkhart, LLP 2851 Charlevoix Drive, S.E., Suite 207

P.O. Box 888695

Grand Rapids, Michigan 49588-8695

(616) 975-5500

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TO: USPTO

P.2/15

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**PATENT** DON01 P-1152

FEB 2 7 2006

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

**Applicant** 

: Niall R. Lynam

Group Art Unit

: 2872

Serial No.

: 10/709.434

Examiner

: Alessandro V. Amari

Filed

: May 5, 2004

For

: MIRROR REFLECTIVE ELEMENT

Mail Stop Amendment Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450 Via Facsimile: 571-273-8300

Dear Sir or Madam:

Transmitted herewith is an amendment in the above identified application.

The fee has been calculated as shown below:

#### CLAIMS AS AMENDED

	Col. 1		Coi. 2	Col. 3	Small Entity		Other Than Small Entit	
	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Rate	Add'l Fee	Rate	Add'i Fee
Total Claims	* 11	Minus	** 21	= 0	x \$25	\$ .00	x \$50	\$ 0.00
Independent Claims	* }	Minus	*** 3	= 0	x \$100	\$ .00	x \$200	\$ 0.00
First Presentati	ion of Multiple Depend	ent Claims			\$180	\$ .00	x \$360	\$ .00
TOTAL ADDI	TIONAL FEE FOR T	HIS AMEN	IDMENT			\$ .00		\$ 0.00

- If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3
- If the "Highest No. Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.
- If the "Highest No. Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space. The "Highest No, Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.
- 1. Small entity status of this application has been established.
- 2. X No additional Fee is required.
- 3. A check in the amount of \$ \_\_\_\_ is attached.
- Please charge any additional fees or credit overpayment to Deposit Account No. 22-0190. 4. A duplicate copy of this sheet is attached.

VAN DYKE, GARDNER, LINN & BURKHART, LLP

Date: February 27, 2006

Timothy A. Flory, Registration No. 42 540

2851 Charlevoix Drive, S.E.

P.O. Box 888695

Grand Rapids, Michigan 49588-8695

PAGE 2/15 \* RCVD AT 2/27/2006 2:04:20 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-6/44 \* DNIS:2738300 \* CSID:6169885894 \* DURATION (mm-ss):03-28

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**PATENT** DON01 P-1152

FEB 2 7 2006

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

Applicant : Niall R. Lynam

Group Art Unit

: 2872

Serial No.

: 10/709,434

Examiner

: Alessandro V. Amari

Filed

: May 5, 2004

For

: MIRROR REFLECTIVE ELEMENT

Mail Stop Amendment Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450 Via Facsimile: 571-273-8300

Dear Sir or Madam:

Transmitted herewith is an amendment in the above identified application. The fee has been calculated as shown below:

#### **CLAIMS AS AMENDED**

					Small		Other Than	
	Col. 1		Col. 2	Col. 3	Entity		Small Entit	у
	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Rate	Add'l Fee	Rate	Add'l Fee
_Total Claims	* 11	Minus	** 21	= 0	x \$25	\$ .00	x \$50	\$ 0.00
Independent Claims	*_1	Minus	*** 3	= 0	x \$100	\$ .00	x \$200	\$ 0.00
First Presentati	ion of Multiple Depend	lent Claims			\$180	\$ .00	x \$360	\$ .00
TOTAL ADDI	TIONAL FEE FOR T	HIS AMEN	IDMENT			\$ .00		\$ 0.00

- If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3
- If the "Highest No. Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space. If the "Highest No. Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.
  - The "Highest No. Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.
- Small entity status of this application has been established. 1.
- 2. X No additional Fee is required.
- is attached. 3. A check in the amount of \$
- Please charge any additional fecs or credit overpayment to Deposit Account No. 22-0190. 4. A duplicate copy of this sheet is attached.

VAN DYKE, GARDNER, LINN & BURKHART, LLP

Date: February 27, 2006

TAF/slg

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**PATENT** DON01 P-1152

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

6169885894

Art Unit

: 2872

Examiner

: Alessandro V. Amari

Applicant : Niall R. Lynam

Filing Date : May 5, 2004

Serial No. : 10/709,434

For

: MIRROR REFLECTIVE ELEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Via Facsimile: 571-273-8300

Dear Sir or Madam:

#### RESPONSE

Responsive to the Office Action mailed November 28, 2005, Applicant wishes to amend the application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 6 of this paper.

Remarks begin on page 9 of this paper.

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#### Amendments to the Specification:

Please amend paragraph [0042] as follows:

[0042] Optionally, it is envisioned that such ultrathin glass films, anti-abrasion films, reflective films or reflective systems may be used for electrochromic mirror reflective elements or cells as well. For example, the interior or exterior rearview mirror assembly of the present invention may comprise an electrochromic mirror, such as an electrochromic mirror assembly and electrochromic element utilizing principles disclosed in commonly assigned U.S. Pat. Nos. 5,140,455; 5,151,816; 6,690,268; 6,178,034; 6,154,306; 6,002,544; 5,567,360; 5,525,264; 5,610,756; 5,406,414; 5,253,109; 5,076,673; 5,073,012; 5,117,346; 5,724,187; 5,668,663; 5,910,854; 5,142,407 and/or 4,712,879, which are hereby incorporated herein by reference, and/or as disclosed in the following publications: N. R. Lynam, "Electrochromic Automotive Day/Night Mirrors", SAE Technical Paper Series 870636 (1987); N. R. Lynam, "Smart Windows for Automobiles", SAE Technical Paper Series 900419 (1990); N. R. Lynam and A. Agrawal, "Automotive Applications of Chromogenic Materials", Large Area Chromogenics: Materials and Devices for Transmittance Control, C.M. Lampert and C.G. Granquist, EDS., Optical Engineering Press, Wash. (1990), which are hereby incorporated by reference herein. The mirror assembly may comprise an interior rearview mirror assembly, and may include an accessory module or may be mounted to an accessory module, such as an accessory module of the types disclosed in U.S. pat. application, Scr. No. 10/355,454, filed Jan. 31, 2003 for VEHICLE ACCESSORY MODULE, now U.S. Pat. No. 6,824,281 (Attorney Docket DON01 P-1050), which is hereby incorporated herein by reference.

Please amend paragraph [0043] as follows:

[0043] Optionally, the mirror assembly may include one or more displays for displaying information to a driver of the vehicle at or through the reflective element of the mirror assembly.

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Niall R. Lynam

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For example, the mirror assembly may include one or more displays of the types described in U.S. Pat. Nos. 6,329,925; 6,501,387; 6,690,268; 5,910,854; 6,420,036; 5,668,663; and 5,724,187, and/or in U.S. pat, applications, Ser. No. 10/054,633, filed Jan. 22, 2002 by Lynam et al, for VEHICULAR LIGHTING SYSTEM (Attorney Docket DON01 P-962); and Scr. No. 10/456,599, filed Jun. 6, 2003 by Weller et al. for INTERIOR REARVIEW MIRROR SYSTEM WITH COMPASS, now U.S. Pat. No. 7.004,593 (Attorney Docket DON01 P-1076), and/or in PCT Application No. PCT/US03/29776, filed Scp. 19, 2003 by Donnelly Corporation et al. for ELECTROCHROMIC MIRROR ASSEMBLY (Attorney Docket DON01 FP-1109(PCT)); PCT Application No. PCT/US03/35381, filed Nov. 5, 2003 by Donnelly Corporation et al. for ELECTRO-OPTIC REFLECTIVE ELEMENT ASSEMBLY (Attorney Docket DON01 FP-1116(PCT)); and/or PCT Application No. PCT/US03/40611, filed Dec. 19, 2003 by Donnelly Corporation et al. for ACCESSORY SYSTEM FOR VEHICLE (Attorney Docket DON01 FP-1123(PCT)), and/or in U.S. provisional applications, Scr. No. 60/508,086, filed Oct. 2, 2003 by Schofield for MIRROR REFLECTIVE ELEMENT ASSEMBLY INCLUDING ELECTRONIC COMPONENT (Attorney Docket DON01 P-1113); Ser. No. 60/525,952, filed Nov. 26, 2003 by Lynam for MIRROR REFLECTIVE ELEMENT FOR A VEHICLE (Attorney Docket DON01 P-1130); Ser. No. 60/471,546, filed May 19, 2003 (Attorney Docket DON01 P-1093); Scr. No. 60/525,537, filed Nov. 26, 2003 (Attorney Docket DON01 P-1129); and Scr. No. 60/556,259, filed Mar. 25, 2004 (Attorney Docket DON01 P-1147), which are all hereby incorporated herein by reference, without affecting the scope of the present invention.

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#### Please amend paragraph [0044] as follows:

[0044] Optionally, the mirror assembly may include or be associated with electronic accessories, such as, for example, antennas, including global positioning system (GPS) or cellular phone antennas, such as disclosed in U.S. Pat. No. 5,971,552, a communication module, such as disclosed in U.S. Pat. No. 5,798,688, a blind spot detection system, such as disclosed in U.S. Pat. Nos. 5,929,786 and/or 5,786,772, a high/low headlamp controller, such as disclosed in

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U.S. Pat. Nos. 5,796,094 and/or 5,715,093, transmitters and/or receivers, such as a garage door opener or the like, a digital network, such as described in U.S. Pat. No. 5,798,575, a memory mirror system, such as disclosed in U.S. Pat. No. 5,796,176, a hands-free phone attachment, a video device for internal cabin surveillance and/or video telephone function, such as disclosed in U.S. Pat. Nos. 5,760,962 and/or 5,877,897, a remote keyless entry receiver or system or circuitry and/or a universal garage door opening system or circuitry (such as the types disclosed in U.S. Pat. Nos. 6,396,408; 6,362,771; 5,798,688 and 5,479,155, and/or U.S. pat. application, Ser. No. 10/770,736, filed Feb. 3, 2004 by Baumgardner et al. for GARAGE DOOR OPENING SYSTEM FOR VEHICLE (Attorney Docket DON01 P-1135)), lights, such as map reading lights or one or more other lights or illumination sources, such as disclosed in U.S. Pat. Nos. 6,690,268; 5,938,321; 5,813,745; 5,820,245; 5,673,994; 5,649,756; 5,178,448; 5,671,996; 4,646,210; 4,733,336; 4,807,096; 6,042,253; and/or 5,669,698, and/or U.S. pat. application, Ser. No. 10/054,633, filed Jan. 22, 2002 by Lynam et al. for VEHICULAR LIGHTING SYSTEM (Attorney Docket DON01 P-962), microphones, such as disclosed in U.S. Pat. Nos. 6,243,003; 6,278,377; and/or 6,420,975, and/or PCT Application No. PCT/US03/30877, filed Oct. 1, 2003 (Attorney Docket DON01 FP-1111(PCT)), speakers, a compass or compass system, such as disclosed in U.S. Pat. Nos. 5,924,212; 4,862,594; 4,937,945; 5,131,154; 5,255,442; and/or 5,632,092, and/or U.S. pat. application, Ser. No. 10/456,599, filed Jun. 6, 2003 by Weller et al. for INTERIOR REARVIEW MIRROR SYSTEM WITH COMPASS, now U.S. Pat. No. 7,004,593 (Attorney Docket DON01 P-1076), a navigation system, such as described in U.S. Pat. No. 6,477,464, and U.S. pat. applications, Scr. No. 10/456,599, filed Jun. 6, 2003 by Weller et al. for INTERIOR REARVIEW MIRROR SYSTEM WITH COMPASS, now U.S. Pat. No. 7,004,593 (Attorney Docket DON01 P-1076); Scr. No. 10/287,178, filed Nov. 4, 2002 by McCarthy et al. for NAVIGATION SYSTEM FOR A VEHICLE, now U.S. Pat. No. 6,678,614 (Attorney Docket DON01 P-1051); Scr. No. 10/645,762, filed Aug. 20, 2003 by Taylor et al. for VEHICLE NAVIGATION SYSTEM FOR USE WITH A TELEMATICS SYSTEM (Automey Docket DON01 P-1103); and Ser. No. 10/422,378, filed Apr. 24, 2003, now U.S. Pat. No. 6,946,978 (Attorney Docket DON01 P-1074); and/or PCT Application No. PCT/US03/40611,

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Applicant : Niall R. Lynam

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filed Dec. 19, 2003 by Donnelly Corporation et al. for ACCESSORY SYSTEM FOR VEHICLE (Attorney Docket DON01 FP-1123(PCT)), a tire pressure monitoring system, such as the types disclosed in U.S. Pat. Nos. 6,294,989; 6,445,287; and/or 6,472,979, and/or in U.S. pat. application, Ser. No. 10/206,495, filed Jul. 26, 2002 by Schofield et al. for SELF TRAINING TIRE PRESSURE MONITORING SYSTEM (Attorney Docket DON01 P-992), a seat occupancy detector, a trip computer, a telematics system, such as an ONSTAR® system or the like, and/or any other desired accessory or system or the like (with all of the above-referenced patents and patent applications and PCT applications being commonly assigned to Donnelly Corporation, and with the disclosures of all of the above referenced patents and patent applications and PCT applications being hereby incorporated herein by reference in their entireties).

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#### Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the present application:

1 (currently amended): A wide angle reflective element for a mirror assembly for a vehicle comprising:

a wide angle-mirror substrate having an exterior surface comprising a less curved inboard portion or surface and a more curved outboard portion or surface, said substrate comprising formed by one of casting, extrusion or injection molding of a polymeric resin material, said substrate having a reflector disposed on a surface thereof to provide a reflective element for a vehicle mirror assembly; and

a thin at least partially flexible glass film-disposed sheet adhered to said exterior surface so as to provide an anti-abrasion layer at said outboard and inboard surfaces of said exterior surface, said thin at least partially flexible glass sheet film adapted to substantially conform conforming to said exterior surface of said wide angle substrate, said thin at least partially flexible glass sheet film comprising a glass material and having a thickness of less than approximately 0.8 rnm.

- 2 (currently amended): The wide angle reflective element of claim 1, wherein said-glass-film comprises a flexible glass film reflector is disposed at an inner surface of said substrate opposite said exterior surface.
- 3 (currently amended): The wide angle reflective element of claim 1, wherein said substrate is cut from a molded or extruded or east strip or sheet, said glass film sheet being applied laminated to said strip or sheet, at least two substrates being cut from said strip or sheet.

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4 (currently amended): The wide angle reflective element of claim 3, wherein said reflector comprises including a reflective film applied to said strip or sheet on an inner surface of said substrates opposite said exterior surface.

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- 5 (currently amended): The wide angle reflective element of claim 1, wherein said reflector comprises including a reflective film applied to an inner surface of said substrate opposite said exterior surface.
- 6 (currently amended): The wide angle reflective element of claim 5, wherein said reflective film comprises a polymeric reflective film at least one of laminated, or otherwise adhered and or applied to said inner surface of said substrate.
- 7 (original): The wide angle reflective element of claim 6, wherein said reflective film comprises an all polymer-thin-film multilayer, high reflective mirror film comprising multiple coextrusion of many plastic layers to form a highly reflective mirror film.
- 8 (currently amended): The wide angle reflective element of claim 1, wherein said reflector comprises including a reflective film applied to said exterior surface of said substrate, said glass film being applied to an exterior surface of said reflective film.
- 9 (currently amended): The wide angle reflective element of claim 8, wherein said reflective film comprises a polymeric reflective film at least one of laminated, or adhered or otherwise and applied to said exterior surface of said substrate.
- 10. The wide angle reflective element of claim 9, wherein said reflective film comprises an all polymer-thin-film multilayer, high reflective mirror film comprising multiple coextrusion of many plastic layers to form a highly reflective mirror film.

Applicant : Niall R. Lynam

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11 (original): The wide angle reflective element of claim 1, wherein said reflective element is adapted for one of an interior rearview mirror assembly and an exterior rearview mirror assembly.

12-21 (canceled).

Applicant: Niall R. Lynam

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#### Remarks:

The amendments and remarks presented herein are believed to be fully responsive to the Office Action dated November 28, 2005.

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Claims 1-11 are pending in the application. Claims 12-21 have been canceled herein without projudice and claims 1-6, 8 and 9 have been amended as set forth above. The specification has been amended to update incorporated patent applications that have now issued as United States patents. The amendments are fully supported in the specification and drawings as originally filed. No new matter has been added.

Claims 12-21 were withdrawn from consideration as being drawn to a non-elected invention, and are canceled herein without prejudice.

#### **CLAIM REJECTIONS**

Claims 1-4, 8 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lynam, U.S. Patent No. 6,522,451. Claims 9 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Lynam, in view of Wheatley et al., U.S. Patent No. 5,262,894. Claims 1-5, 8 and 11 were also rejected under 35 U.S.C. §103(a) as being unpatentable over Schmidt, U.S. Patent No. 6,030,084, in view of Gillich et al., U.S. Patent No. 6,709,119. Claims 6, 7, 9 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schmidt, in view of Gillich et al., and further in view of Wheatley et al.

Applicant respectfully traverses the rejections under 35 U.S.C. §103(a) for the reasons set forth below.

: Niall R. Lynam

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Applicant has amended independent claim 1 to clarify that a mirror substrate has an exterior surface that comprises a less curved inboard surface and a more curved outboard surface. The substrate is formed by one of casting, extrusion or injection molding of a polymeric resin material. The substrate has a reflector disposed on a surface thereof to provide a reflective element for a vehicle mirror assembly. A thin at least partially flexible glass sheet is adhered to the exterior surface so as to provide an anti-abrasion layer at the outboard and inboard surfaces of the exterior surface. The thin at least partially flexible glass sheet substantially conforms to the exterior surface of the substrate. The thin at least partially flexible glass sheet has a thickness of less than approximately 0.8 mm.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference or references when combined must teach or suggest all the claimed limitations. The teaching or suggestion to make the claim combination and reasonable expectation of success must both be found in the prior art and not based on Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). *See* MPEP § 2143.

Applicant respectfully submits that Lynam '451 does not disclose, teach, suggest or render obvious the present invention, particularly as set forth in independent claim 1 and in the claims depending therefrom. Lynam '451 discloses a plano-auxiliary reflective element assembly having a plano element 50 and a multiradius element 55 supported on a backing plate 60. In stark contrast to the claimed invention, Lynam '451 does not disclose or suggest a thin at least partially flexible glass sheet, particularly one that is adhered to and substantially conforms to the exterior surface of the substrate. Contrary to the statements in the Office Action, the backing plate 60 of Lynam '451 is not a mirror substrate with a reflector disposed at a surface thereof. Further, the elements 50 and 55 of Lynam '451 (cited in the Office Action as being glass film) are clearly

PAGE 13/15 \* RCVD AT 2/27/2006 2:04:20 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-6/44 \* DNIS:2738300 \* CSID:6169885894 \* DURATION (mm-ss):03-28

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disclosed in Lynam '451 as comprising a plano element 50, which is described as a flat glass substrate, and a multiradius element 55, which is described as a curved/bent mirrored glass substrate. There is no disclosure or suggestion in Lynam '451 that either element 50, 55 comprises a thin at least partially flexible glass sheet that is adhered to and that substantially conforms to a curved exterior surface of a mirror substrate.

With respect to the rejection of independent claim 1 in view of the combination of Schmidt and Gillich et al., Applicant submits that this combination does not disclose, teach, suggest or render obvious the present invention, particularly as set forth in independent claim 1 and in the claims depending therefrom. For example, and contrary to the statements in the Office Action, Gillich et al. does not disclose, teach or suggest a thin flexible glass sheet that is adhered to and that substantially conforms to a curved exterior surface of a mirror substrate. The protective layer 101 of Gillich et al. is clearly defined as comprising a silicon dioxide or aluminum oxide (column 1, lines 62-67 of Gillich et al.). The layers are applied to the body by deposition in vacuum or by thermal vaporization or by electron beam vaporization or by sputtering or by plasma polymerization or by chemical vapor deposition. See column 7, line 66 through column 8, line 12 of Gillich et al. Thus, there is no disclosure or suggestion in Gillich et al. of providing a glass sheet as a protective layer, and there is no disclosure or suggestion in Gillich et al. of providing a thin at least partially flexible glass sheet that is adhered to a substrate surface and that substantially conforms to a curved surface of the substrate.

Accordingly, Applicant respectfully submits that neither Lynam '451, Schmidt or Gillich et al., either alone or in combination with one another or with any other prior art of record, disclose, teach, suggest or render obvious the wide angle reflective element of the present invention, particularly as set forth in independent claim 1 and in the claims depending therefrom. Reconsideration and withdrawal of the rejections of claims 1-11 is respectfully requested.

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Claims 1-11 remain pending in the application. Applicant respectfully submits that claims 1-11 are in condition for allowance and a notice to that effect is earnestly and respectfully requested.

Respectfully submitted,

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Date: February 27, 2006.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,434	05/05/2004	Niall R. Lynam	DON01 P-1152	3433
28101 7	7590 05/08/2006		EXAM	INER
VAN DYKE,	, GARDNER, LINN A	AND BURKHART, LLP	AMARI, ALE	SSANDRO V
2851 CHARLE	EVOIX DRIVE, S.E.			
P.O. BOX 888	695		ART UNIT	PAPER NUMBER
GRAND RAPI	IDS, MI 49588-8695		2872	

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)
Office Action Summers	10/709,434	LYNAM, NIALL R.
Office Action Summary	Examiner	Art Unit
	Alessandro V. Amari	2872
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period wa - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).
Status		
1)⊠ Responsive to communication(s) filed on 27 Fe	ebruary 2006.	
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3) Since this application is in condition for allowar closed in accordance with the practice under E	·	
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Disposition of Claims		
4) Claim(s) <u>1-11</u> is/are pending in the application.		
4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed.	vn from consideration.	
6)⊠ Claim(s) <u>1-11</u> is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and/o	r election requirement.	
Application Papers		
9) The specification is objected to by the Examine	r.	
10)☐ The drawing(s) filed on is/are: a)☐ acce		Examiner.
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Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is ob	jected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:		)-(d) or (f).
<ul><li>1. Certified copies of the priority documents</li><li>2. Certified copies of the priority documents</li></ul>		ion No
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Attachment(s)		
1) Notice of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail D	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Informal F	Patent Application (PTO-152)
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U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) Application/Control Number: 10/709,434 Page 2

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#### **DETAILED ACTION**

#### Election/Restrictions

1. It is noted that a provisional election was made with traverse on 14 November 2005 to prosecute the invention of Group I, claims 1-11. The Applicant however, failed to affirm this election in replying to this office action. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). It is noted that claims 12-21 drawn to the other invention were canceled.

#### Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-5, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt US 6,030,084 in view of Gillich et al US 6,709,119.

In regard to claim 1, Schmidt teaches (see for example, Figures 2, 3) a wide angle reflective element for a mirror assembly for a vehicle comprising a mirror substrate (12) having an exterior surface comprising a less curved inboard surface or surface and a more curved outboard surface as shown in Figures 2 and 3, said substrate formed by one of casting, extrusion or injection molding comprising a polymeric resin material as described in column 3, lines 39-50, said substrate having a reflector (15) disposed on a surface thereof to provide a reflective element for a vehicle

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mirror assembly. Applicant should note that the recitation of the substrate being formed by one of casting ,extrusion or injection molding renders the claim product-by-process claims and in product-by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claim 2, Schmidt et al teaches that said reflector is disposed at an inner surface (14) of said substrate opposite said exterior surface as shown in Figure 2.

However, in regard to claim 1, Schmidt does not teach a thin at least partially flexible glass sheet adhered to said exterior surface so as to provide an anti-abrasion layer at said outboard and inboard surfaces of said exterior surface, said thin at least partially flexible glass sheet conforming to said exterior surface of said substrate, said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm.

In regard to claim 1, Gillich et al teaches (see Figure 1) a thin at least partially flexible glass sheet (101) adhered to said exterior surface so as to provide an antiabrasion layer at said outboard and inboard surfaces of said exterior surface, said thin at least partially flexible glass sheet conforming to said exterior surface of said substrate, as described in column 1, lines 56-67 and column 2, lines 1-5 and said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm having a thickness of less than approximately 0.8 mm as described in column 2, lines

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32-39. Since the applicant's specification does not define the term "partially flexible" in any terms of degree, the reference is taken to read on this feature.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the glass film as taught by Gillich et al in the substrate of Schmidt in order to provide for a protective layer that protects the underlying layers from mechanical damage.

Regarding claims 3 and 4, Schmidt discloses that said substrate is cut from a molded or extruded or cast strip or sheet, said glass sheet being laminated to said strip cut from said strip or sheet, at least two substrates being or sheet as described in column 3, lines 39-65 and regarding claim 4, Schmidt discloses wherein said reflector comprises a reflective film applied to said strip or sheet on an inner surface of said substrates opposite said exterior surface as described in column 3, lines 39-65.

Applicant should note that claims 3 and 4 are product-by-process claims and in product-by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claim 5, Schmidt teaches (see Figure 2) wherein said reflector comprises a reflective film (15) applied to an inner surface (14) of said substrate opposite said exterior surface as described in column 51-57.

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Regarding claim 11, Schmidt discloses that said reflective element is adapted for use as an exterior rearview mirror assembly as described in column1, lines 15-21.

Regarding claim 8, Schmidt in view of Gillich et al discloses the claimed invention as set forth above except for the rearrangement of the reflective film being applied to the exterior surface of the substrate, said glass film being applied to an exterior surface of the reflective film. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the reflective film to be applied to the exterior surface of the substrate, since it has been held that a mere rearrangement of elements without modification of the operation of the device involves only routine skill in the art. One would have been motivated to rearrange the reflective film to be applied to the exterior surface for the purpose of easier and more efficient manufacturing of the reflective element. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950)

4. Claims 6, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt US 6,030,084 in view of Gillich et al US 6,709,119 and further in view of Wheatley et al US 5,262,894.

Regarding claims 6, 7, 9 and 10, Schmidt in view of Gillich et al teaches the invention as set forth above but regarding claims 6 and 9, does not teach that said reflective film comprises a polymeric reflective film at least one of laminated, adhered and applied to said inner or exterior surface of said substrate and regarding claims 7 and 10 does not teach that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror.

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Regarding claims 6 and 9, Wheatley et al teaches (see Figure 1) that a reflective film is a polymeric reflective film at least one of laminated, adhered and applied to said exterior surface of said substrate and regarding claims 7 and 10 Wheatley et al teaches that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror as shown in Figure 1 and as described in column 6, lines 65-68, column 7, lines 45-68, column 11, lines 61-68 and column 12, lines 1-11.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the polymeric film of Wheatley et al for the reflective element of Schmidt in view of Gillich et al in order to provide for a reflective element which will not corrode or flake.

#### Response to Arguments

5. Applicant's arguments filed 27 February 2006 have been fully considered but they are not persuasive.

The Applicant argues that the combination of Schmidt and Gillich et al does not disclose, teach, suggest or render obvious the presently claimed invention. Specifically, the Applicant argues that Gillich does not teach a thin flexible glass sheet that adheres to and conforms to the curved exterior surface of a mirror substrate. Rather, the Applicant argues that the protective layer 101 of Gillich et al is defined as comprising silicon dioxide or aluminum oxide. Further, the Applicant argues that there is no disclosure or suggestion in Gillich et al of providing a glass sheet as a protective layer.

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In response to this argument, the Examiner would like to point out that Gillich et al does indeed teach a thin, partially flexible glass sheet adhered to the exterior surface which must conform to the curved surface of the substrate since the chemical compound, SiO<sub>2</sub> or silicon dioxide is a form of glass, therefore meeting the claim limitation. Further, the Examiner would like to point out that the Gillich et al does teach that the SiO<sub>2</sub> layer or sheet (i.e., glass) serves a protective layer as described in column 1, lines 57-67 and column 2, lines 1-4 and as described in the abstract.

#### Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (571) 272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

Application/Control Number: 10/709,434 Page 8

Art Unit: 2872

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

avaqu 02 May 2006

Alessandro Amari Examiner AUZ872

Search Notes											

Application/Control No.	Applicant(s)/Patent under Reexamination
10/709,434	LYNAM, NIALL R.
Examiner	Art Unit
Alessandro V. Amari	2872

SEARCHED					
Class	Subclass	Date	Examiner		
359	866 868 883 514	11/16/2005	AA		
Upđate	above	5/2/2006	AA		
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ubclass	Date	Examiner

SEARCH NOTES (INCLUDING SEARCH STRATEGY)				
	DATE	EXMR		
EAST search-see attached	11/16/2005	AA		

Index of Claims			Application/Control No. 10709434  Examiner  Amari, Alessandro V			Applicant(s)/Patent under Reexamination LYNAM, NIALL R.  Art Unit 2872			
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#### VIA FACSIMILE: 571-273-8300

# RESPONSE UNDER 37 CFR 1.116 EXPEDITED PROCEDURE EXAMINING GROUP 2872

PATENT DON01 P-1152

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

Group

2872

Examiner

: Alessandro V. Amari

Applicant

: Niall R. Lynam : 10/709,434

Serial No. Filing Date

: May 5, 2004

For

MIRROR REFLECTIVE ELEMENT

Mail Stop AF

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450 Via Facsimile: 571-273-8300

Dear Sir or Madam:

#### CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following papers are being facsimile transmitted to the Patent and Trademark Office on the date shown below:

- 1. Claims As Amended Transmittal Sheet (1 page, in duplicate)
- 2. Response (8 pages)

YOU SHOULD RECEIVE A TOTAL OF 11 PAGES.

Date: July 7, 2006

Susan L. Gasper

Van Dyke, Gardner, Linn & Burkhart, LLP 2851 Charlevoix Drive, S.E., Suite 207

P.O. Box 888695

Grand Rapids, Michigan 49588-8695

(616) 975-5500

TAF/sig

PAGE 1/11 \* RCVD AT 7/7/2006 11:49:16 AM [Eastern Daylight Time] \* SVR:USPTO-EFXRF-1/21 \* DNIS:2738300 \* CSID:6169885894 \* DURATION (mm-ss):02-56

P.2/11

JUL 0 7 2006

PATENT DON01 P-1152

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Niall R. Lynam Group Art Unit : 2872

Serial No.

: 10/709,434

Examiner

: Alessandro V. Amari

Filing Date: May 5, 2004

: MIRROR REFLECTIVE ELEMENT

Mail Stop AF

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450 Via Facsimile: 571-273-8300

Dear Sir or Madam:

Transmitted herewith is an amendment in the above identified application.

The fee has been calculated as shown below:

### **CLAIMS AS AMENDED**

	Col. 1		Col. 2	Col. 3	Small Entity		Other Than Small Entity	
	Claims Remaining - After Amendment		Highest No. Previously Paid For	Present Extra	Rate	Add'l Fee	Rate	Add'I Fee
Total Claims	* 11	Minus	** 21	= 0	x \$25	\$ .00	x \$50	\$ .00
Independent Claims	*1	Minus	*** 3	= 0	x \$100	\$ .00	x \$200	\$ .00
First Presentati	on of Multiple Depend	lent Claims			\$180	\$ .00	x \$360	\$ .00
TOTAL ADDI	TIONAL FEE FOR T	HIS AMEN	IDMENT			\$ .00		\$ .00

- If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3
- If the "Highest No. Previously Paid For" IN 'THIS SPACE is less than 20, write "20" in this space. If the "Highest No. Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.

The "Highest No. Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

- Small entity status of this application has been established.
- X No additional Fee is required.
- A check in the amount of \$\_\_\_ 3. is attached.
- X Please charge any additional fees or credit overpayment to Deposit Account No. 22-0190. 4. A duplicate copy of this sheet is attached.

VAN DYKE, GARDNER, LINN & BURKHART, LLP

Date: July 7, 2006

Timothy A. Flory, Registration No. 42 540

2851 Charlevoix Drive, S.E.

P.O. Box 888695

Grand Rapids, Michigan 49588-8695

PAGE 2/11\*RCVD AT 7/7/2006 11:49:16 AM [Eastern Daylight Time] \* SVR:USPTO-EFXRF-1/21 \* DNIS:2738300 \* CSID:6169885894 \* DURATION (mm-ss):02-56

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**PATENT** DON01 P-1152

JUL 0 7 2006

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Niall R. Lynam

Group Art Unit: 2872

Serial No. : 10/709,434

Examiner

: Alessandro V. Amari

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Mail Stop AF

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P.O. Box 1450

Alexandria, VA 22313-1450) Via Facsimile: 571-273-8300

Dear Sir or Madam:

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The fee has been calculated as shown below:

### **CLAIMS AS AMENDED**

	Col. 1		Col, 2	Col. 3	Small Entity		Other Than Small Entity	7
	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Rate	Add'l Fee	Rate	Add'l Fee
Total Claims	* 11	Minus	** 21	= 0	x \$25	\$ .00	x \$50	\$ .00
Independent Claims	* 1	Minus	*** 3	= 0	x \$100	\$ .00	x \$200	\$ .00
First Presentati	ion of Multiple Depend	lent Claims			\$180	\$ .00	x \$360	\$ .00
TOTAL ADDITIONAL FEE FOR THIS AMENDMEN'S								\$ .00

If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3

If the "Highest No. Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space.

If the "Highest No. Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space.

The "Highest No. Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.

- Small entity status of this application has been established. 1.
- X No additional Fee is required. 2.
- A check in the amount of \$ is attached.
- X Please charge any additional fees or credit overpayment to Deposit Account No. 22-0190. 4. A duplicate copy of this sheet is attached.

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PAGE 3/11 \* RCVD AT 7/7/2006 11:49:16 AM [Eastern Daylight Time] \* SVR:USPTO-EFXRF-1/21 \* DNIS:2738300 \* CSID:6169885894 \* DURATION (mm-ss):02-56

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## RESPONSE UNDER 37 CFR 1.116 EXPEDITED PROCEDURE EXAMINING GROUP 2872

PATENT

DON01 P-1152

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

2872

Examiner

: Alessandro V. Amari

Applicant Serial No. : Niall R. Lynam : 10/709,434

Serial No. : Filing Date :

May 5, 2004

For

: MIRROR REFLECTIVE ELEMENT

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Via Facsimile: 571-273-8300

Dear Sir or Madam:

### RESPONSE

Responsive to the Final Office Action mailed May 8, 2006, Applicant wishes to amend the application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 5 of this paper.

TO:USPTO 6169885894

Applicant

: Niall R. Lynam

Serial No.

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Page

### Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the present application:

1 (currently amended): A wide angle reflective element for a mirror assembly for a vehicle comprising:

a polymeric mirror substrate having an exterior surface comprising a less curved inboard surface and a more curved outboard surface, said polymeric mirror substrate formed by one of custing, extrusion or injection molding of comprising a polymeric resin material, said polymeric mirror substrate having a reflector disposed on a surface thereof to provide a reflective element for a vehicle mirror assembly; and

a thin at least partially flexible glass sheet, said thin at least partially flexible glass sheet having an attaching surface opposed to and adhered to said exterior surface of said polymeric mirror substrate so as to provide an anti-abrasion layer-sheet at said outboard and inboard surfaces of said exterior surface of said polymeric mirror substrate, said thin at least partially flexible glass sheet substantially conforming to said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm.

- 2 (previously presented): The wide angle reflective element of claim 1, wherein said reflector is disposed at an inner surface of said substrate opposite said exterior surface.
- 3 (previously presented): The wide angle reflective element of claim 1, wherein said substrate is cut from a molded or extruded or cast strip or sheet, said glass sheet being laminated to said strip or sheet, at least two substrates being cut from said strip or sheet.

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Applicant: Niall R. Lynam Serial No.: 10/709,434

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4 (previously presented): The wide angle reflective element of claim 3, wherein said reflector comprises a reflective film applied to said strip or sheet on an inner surface of said substrates opposite said exterior surface.

5 (previously presented): The wide angle reflective element of claim 1, wherein said reflector comprises a reflective film applied to an inner surface of said substrate opposite said exterior surface.

6 (previously presented): The wide angle reflective element of claim 5, wherein said reflective film comprises a polymeric reflective film at least one of laminated, adhered and applied to said inner surface of said substrate.

7 (original): The wide angle reflective element of claim 6, wherein said reflective film comprises an all polymer-thin-film multilayer, high reflective mirror film comprising multiple coextrusion of many plastic layers to form a highly reflective mirror film.

8 (previously presented): The wide angle reflective element of claim 1, wherein said reflector comprises a reflective film applied to said exterior surface of said substrate, said glass film being applied to an exterior surface of said reflective film.

9 (previously presented): The wide angle reflective element of claim 8, wherein said reflective film comprises a polymeric reflective film at least one of laminated, adhered and applied to said exterior surface of said substrate.

10 (original): The wide angle reflective element of claim 9, wherein said reflective film comprises an all polymer-thin-film multilayer, high reflective mirror film comprising multiple coextrusion of many plastic layers to form a highly reflective mirror film.

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Applicant : Niall R. Lynam Scrial No. : 10/709,434

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11 (original): The wide angle reflective element of claim 1, wherein said reflective element is adapted for one of an interior rearview mirror assembly and an exterior rearview mirror assembly.

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12-21 (canceled).

Applicant Serial No. : Niall R. Lynam : 10/709,434

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#### Remarks:

The amendments and remarks presented herein are believed to be fully responsive to the Final Office Action dated May 8, 2006.

Claims 1-11 are pending in the application. Claims 12-21 have been canceled without prejudice and independent claim 1 has been amended as set forth above. The amendments are fully supported in the specification and drawings as originally filed. No new matter has been added.

### CLAIM REJECTIONS

Claims 1-5, 8 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schmidt, U.S. Patent No. 6,030,084, in view of Gillich et al., U.S. Patent No. 6,709,119. Claims 6, 7, 9 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schmidt, in view of Gillich et al., and further in view of Wheatley et al., U.S. Patent No. 5,262,894.

Applicant respectfully traverses the rejections under 35 U.S.C. §103(a) for the reasons set forth below.

Applicant has amended independent claim 1 to clarify that the wide angle reflective element for a mirror assembly for a vehicle comprises a polymeric mirror substrate having an exterior surface comprising a less curved inboard surface and a more curved outboard surface. The polymeric mirror substrate comprises a polymeric resin material. The polymeric mirror substrate has a reflector disposed on a surface thereof to provide a reflective element for a vehicle mirror assembly. The thin at least partially flexible glass sheet has an attaching surface opposed to and adhered to the exterior surface of the polymeric mirror substrate so as to provide an antiabrasion sheet at the outboard and inboard surfaces of the exterior surface of the polymeric

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Applicant Serial No. Niall R. Lynam 10/709,434

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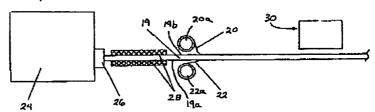
mirror substrate. The thin at least partially flexible glass sheet substantially conforms to the exterior surface of the polymeric mirror substrate when adhered thereto.

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With respect to the rejection of independent claim 1 in view of the combination of Schmidt and Gillich et al., Applicant submits that this combination does not disclose, teach, suggest or render obvious the wide angle reflective element of the present invention, particularly as set forth in independent claim 1 and in the claims depending therefrom. Schmidt discloses a combination curved and flat mirror that has a varying radius of curvature. There is no disclosure or suggestion of a thin flexible glass sheet that is adhered to and substantially conforms with a curved exterior surface of the mirror.

The combination of Gillich et al. and Schmidt also does not disclose or teach or suggest the claimed invention. For example, and contrary to the statements in the Office Action, Gillich et al. does not disclose, teach or suggest a thin flexible glass sheet as is disclosed and claimed in the present application. To the contrary, the protective layer 101 of Gillich et al. is a hard coat similar to the hard coats discussed and distinguished in the background section of the present invention. In stark contrast to the thin flexible glass sheet of the claimed invention, and as discussed in the background section of the present application (see page 1, paragraph [0002] of the present application), such hard coats are provided on the first or outer or exterior surface of the reflective element which is contacted by the exterior elements, and are typically applied by dip coating or vacuum deposition techniques. The hard coat of Gillich et al. is not a thin flexible

glass sheet, such as the thin flexible glass sheet 20 shown in Figure 5 of the present application (reproduced to the right), as is clearly evident by



the disclosure in Gillich et al. that the hard coat of Gillich et al. has a maximum thickness of 1,000 nanometers (see column 2, lines 32-36 of Gillich et al.). Such a hard coat thus is less than

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Applicant

Niall R. Lynam

Scrial No.

: 10/709,434

Page

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 $1 \times 10^{-9}$  millimeters thick and thus such a hard coat is not providable as a thin flexible sheet as disclosed and claimed in the present application. As stated in the background section of the present application, such a hard coat will not provide the benefits of the claimed invention.

The hard coat of Gillich et al. is applied to the body by deposition in vacuum or by thermal vaporization or by electron beam vaporization or by sputtering or by plasma polymerization or by chemical vapor deposition (see column 7, line 66 through column 8, line 12 of Gillich et al.). Such a hard coat thus does not have an attaching surface for adhering to an exterior surface of a polymeric mirror substrate so as to provide an auti-abrasion sheet at the outboard and inboard surfaces of the exterior surface of the polymeric mirror substrate. Thus, there is no disclosure or suggestion in Gillich et al. of a thin flexible glass sheet, and there is no disclosure or suggestion in Gillich et al. of providing a thin flexible glass sheet that has an attaching surface that is opposed to and adhered to a polymeric substrate surface and that substantially conforms to a curved surface of the substrate, such as is claimed in independent claim 1 of the present application.

With respect to the rejection of dependent claims 2-11, Applicant submits that the combination of Schmidt and Gillich et al., either alone or in further combination with Wheatley et al., does not disclose, teach or suggest the claimed invention for at least all of the reasons set forth above.

Accordingly, Applicant respectfully submits that neither Schmidt nor Gillich et al., either alone or in combination with one another or with any other prior art of record, disclose, teach, suggest or render obvious the wide angle reflective element of the present invention, particularly as set forth in independent claim 1 and in the claims depending therefrom. Reconsideration and withdrawal of the rejections of claims 1-11 is respectfully requested.

Applicant Serial No. : Niall R. Lynam : 10/709,434

Page

. 8

Claims 1-11 remain pending in the application. Applicant respectfully submits that claims 1-11 are in condition for allowance and a notice to that effect is earnestly and respectfully requested.

Respectfully submitted,

NIALL R. LYNAM

By: Van Dyke, Gardner, Linn & Burkhart, LLP

Date: July 7, 2006.

Timethy A. Flory

Registration No. 42 540

2851 Charlevoix Drive, S.E., Suite 207

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,434	05/05/2004	Niall R. Lynam	DON01 P-1152	3433
28101 7	590 07/18/2006		EXAM	INER
•	VAN DYKE, GARDNER, LINN AND BURKHAR		AMARI, ALE	SSANDRO V
2851 CHARLE	EVOIX DRIVE, S.E.			
P.O. BOX 888	695		ART UNIT	PAPER NUMBER
GRAND RAPI	IDS, MI 49588-8695		2872	
			DATE MAILED: 07/18/200	6

Please find below and/or attached an Office communication concerning this application or proceeding.

# **Advisory Action**

Application No.	Applicant(s)
10/709,434	LYNAM, NIALL R.
Examiner	Art Unit
Alessandro V. Amari	2872

Before the Filing of an Appeal Brief --The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 07. July 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. X The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: a) The period for reply expires \_\_\_ \_months from the mailing date of the final rejection. b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL \_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date 2. The Notice of Appeal was filed on of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). **AMENDMENTS** 3. X The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below); (b) They raise the issue of new matter (see NOTE below): (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): \_ 6. Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. X For purposes of appeal, the proposed amendment(s): a) X will not be entered, or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: 1-11. Claim(s) withdrawn from consideration: \_\_\_\_ AFFIDAVIT OR OTHER EVIDENCE 8. 🗌 The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet. 12. Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). 13. Other: \_\_\_\_\_. Alessandro Amari Chaminer AU2872

U.S. Patent and Trademark Office

PTOL-303 (Rev. 7-05) Advisory Action Before the Filing of an Appeal Brief Part of Paper No. 20060712

## Continuation Sheet (PTOL-303)

Application No.

Continuation of 3. NOTE: The new issue is directed to the proposed language further defining the mirror substrate as polymeric and that the thin at least partially flexible glass sheet has an attaching surface opposed to the exterior surface of said polymeric mirror substrate.

Continuation of 11. does NOT place the application in condition for allowance because: The claims as finally rejected do not distinguish the claimed wide angle reflective element from the prior art cited.

DO NOT ENTER

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JUL 0 7 2006

### VIA FACSIMILE: 571-273-8300

### **RESPONSE UNDER 37 CFR 1.116 EXPEDITED PROCEDURE EXAMINING GROUP 2872**

PATENT DON01 P-1152

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

Group

2872

Examiner Applicant : Alessandro V. Amari : Niall R. Lynam

Scrial No.

: 10/709,434

Filing Date

May 5, 2004

For

: MIRROR REFLECTIVE ELEMENT

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Via Facsimile: 571-273-8300

Dear Sir or Madam:

### CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following papers are being facsimile transmitted to the Patent and Trademark Office on the date shown below:

- 1. Claims As Amended Transmittal Sheet (1 page, in duplicate)
- 2. Response (8 pages)

YOU SHOULD RECEIVE A TOTAL OF 11 PAGES.

Date: July 7, 2006

Van Dyke, Gardner, Linn & Burkhart, LLP 2851 Charlevoix Drive, S.E., Suite 207

P.O. Box 888695

Grand Rapids, Michigan 49588-8695

(6.16) 975-5500

TAF/sig

PAGE 1/11 \* RCVD AT 7/1/2006 11:49:16 AM [Eastern Daylight Time] \* SVR:USPTO-EFXRF-1/21 \* DNIS:2738300 \* CSID:6169885894 \* DURATION (mm-ss):02-56

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AUG 2 9 2006

PTC/S8/30 (04-05)
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Under the Paperwork Reduction Act of 1995, no persons are requi	U.S. Patent and T tred to respond to a collection of inf	redemark Office; U. ormation unless it or	S. DEPARTMENT OF COMMERCE
Request	Application Number	10/709,434	
for (DOE)	Filing Date	May 5, 2004	
Continued Examination (RCE) Transmittal	First Named Inventor	Niall R. Lyna	ım
Address to:	Art Unit	2872	
Mail Stop RCE Commissioner for Patents	Examiner Name	Alessandro	V. Amari
P.O. Box 1450 Alexandria, VA 22313-1450	Attorney Docket Numb	er DON01 P-11	152
This is a Request for Continued Examination (RCE) Request for Continued Examination (RCE) practice under 37 C 1995, or to any design application. See Instruction Sheet for RC	FR 1.114 does not apply to an	y utility or plant ap	oplication filed prior to June 8,
Submission required under 37 CFR 1.114 No amendments enclosed with the RCE will be entered in the applicant does not wish to have any previously filed uner amendment(s).      Previously submitted. If a final Office action is considered as a submission even if this box is      Consider the arguments in the Appeal B.	e order in which they were filentered amendment(s) entered, outstanding, any amendments, not checked.	d unless applicant applicant must re filed after the fina	t instructs otherwise. If quest non-entry of such at Office action may be
li. Other Response dated July 7, 2006	ner or keply Brief previously ti	ea on	
b. Enclosed			
I Amendment/Reply	iii. Informa	ation Disclosure S	statement (IDS)
ii. Affidavit(s)/ Declaration(s)	N. Differ		
2. Miscellaneous			***************************************
8. Suspension of action on the above-identified period of months. (Period of suspension of months.)	sion shall not exceed 3 months; Fe		
3. Fees  The RCE fee under 37 CFR 1.17(e) is require The Director is hereby authorized to charge th Deposit Account No. 22-0190  RCE fee required under 37 CFR 1.17(e)	he following fees, any underpa I have enclosed a du	yment of fees, or	
ii. Extension of time fee (37 CFR 1.136 and 1	1.1 <b>7</b> )		
iii. Other			
b. Check in the amount of \$	endlos	e <b>d</b>	
c. Payment by credit card (Form PTO-2038 enclose	ed)		
WARNING: Information on this form may become public. C card information and authorization on PTO-2038.	redit card information should	d not be included	d on this form. Provide credit
	NT, ATTORNEY, OR AGENT		
Name (Printype) Timothy & Flory		Date Registration No.	August 29, 2006
Timodiy Pt. 1101y			42 540
CERTIFICATE O	F MAILING OR TRANSMISSI and States Postal Service with suffice		class mail in an envelope
addressed to: Mail Stop RCE, Commissioner for Patents, P. O. Box 1450 Office on the date shown below.			
Name (Print/Type)   Lypette M. S. Clark		Ate   August 20 2	000
This collection of information is required by 37 CFR 1.114. The information		Fridgust 20, E	
to process) an application. Confidentiality is governed by 35 U.S.C. 12: including gathering, preparing, and submitting the completed application the amount of time you require to complete this form and/or suggestion. Trademark Office, U.S. Department of Commerce. P.O. Box 1450, Al ADDRESS. SEND TO: Mall Stop RCE, Commissioner for Pate. If you need assistance in completing	z end 37 CFR 1.11 and 1.14. This form to the USPTO. Time will vary is for reducing this burden, should It lexandria, VA 22313-1450. DO N ents, P.O. Box 1450, Alexand	collection is estimal depending upon the sent to the Chief OT SEND FEES O'ria, VA 22313-14	ted to take 12 minutes to complete e individual case. Any comments of information Officer. U.S. Patent an R COMPLETED FORMS TO THI \$0.

PAGE 1/4 \* RCVD AT 8/29/2006 11:34:50 AM [Eastern Daylight Time] \* SVR:USPTO-EFXRF-2/12 \* DNIS:2738300 \* CSID:6169755505 \* DURATION (mm-ss):02-10 08/30/2006 EAREGAY1 00000015 220190 10709434

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PTO/SB/22 (07-06)
Approved for use through 09/30/2006, OMB 0651-0031

U.S. Patent and Trademark Office, U.S. DEPARMENT OF COMMERCE
Under the paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless if displays a valid OMB control number.

Application Number 10/709, 434 Filed May 5, 2004  Application Number 10/709, 434 Filed May 5, 2004  For MTRROR REFLECTIVE ELEMENT  Art Unit 2872 Examiner Alessandro V. Amar1  This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filling a reply in the above identified application.  The requested extension and fee are as follows (check time period desired and enter the appropriate fee below)  Fee Small Entity Fee  \[ \begin{array}{c} \text{ One month (37 CFR 1.17(a)(1))} \text{ \$120} \text{ \$80} \text{ \$5120} \\  \text{ Two months (37 CFR 1.17(a)(2))} \text{ \$450} \text{ \$225} \text{ \$5\$ \\  \text{ Three months (37 CFR 1.17(a)(3))} \text{ \$1020} \text{ \$810} \text{ \$5\$ \text{ \$5\$ \\  \text{ Four months (37 CFR 1.17(a)(4))} \text{ \$1590} \text{ \$5795} \text{ \$5\$ \\  \text{ Five months (37 CFR 1.17(a)(4))} \text{ \$1590} \text{ \$5795} \text{ \$5\$ \\  \text{ Applicant claims small entity status. See 37 CFR 1.27.} \text{ A check in the amount of the fee is enclosed.} \\  \text{ Payment by credit card. Form PTO-2038 is attached.} \\   The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 22-0190 I have enclosed a duplicate copy of this sheet.  \text{ WARNING: information and this form my become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.  I am the explicant/inventor.  \text{ assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 1.34. Registration number 42 540  \text{ attorney or agent under 37 CFR 1.34. Registration Number 42 540  \text{ attorney or agent under 37 CFR 1.34. Registration number 13 ccirc or 37 CFR 1.34. Registration number 13 ccirc or 37 CFR 1.34.  \text{ August 29, 2006 Oate 1.100 Text or 10 Text	PETITION F	OR EXTENSION OF TIME UNDER 37	CFR 1.136(a)	Docket Number (Optional)	
Application Number 10/709,434 Filed May 5, 2004  For MTRROR REFLECTIVE ELEMENT  Art Unit 2872 Examiner Alessandro V. Amart.  This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filling a reply in the above identified application.  The requested extension and fee are as follows (check time period desired and enter the appropriate fee below)  Fee Small Entity Fee  \[ \begin{array}{c} \text{ One month (37 CFR 1.17(a)(1))} \text{ \$120} \text{ \$50} \text{ \$50} \text{ \$120}.  \end{array}  Two months (37 CFR 1.17(a)(2)) \$450 \$225 \$ \text{ \$50} \\ Three months (37 CFR 1.17(a)(3)) \$1020 \$510 \$ \text{ \$50} \\ Four months (37 CFR 1.17(a)(4)) \$1590 \$795 \$ \text{ \$50} \\ Power months (37 CFR 1.17(a)(4)) \$1590 \$795 \$ \text{ \$50} \\ Applicant claims small entity status. See 37 CFR 1.27.  A check in the amount of the fee is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director has already been authorized to charge fees in this application to a Deposit Account.  The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 22-0190 I have enclosed a duplicate copy of this sheet.  WARNING: Information on this form my become public. Credit card information should not be included on this form.  Provide credit card information and authorization on PTO-2038.  I am the epplicant/inventor.  assignee of record of the entire interest. See 37 CFR 3.71.  Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).  \[ \begin{array}{c} \text{ August 29, 2006} \\ \text{ Date} \\ \text{ Signeturer } \text{ Oate 37 CFR 1.34}.  Registration number if acting under 37 CFR 1.34.  Registration number if acting under 37 CFR 1.34.  Signeture of a supplies of record. Registration Number 42 540  \[  Signeturer oate of the entire interest or their representatively are required. Submit multiple forms if more than one of the critic interest or their representatively are required.				DONO1 P-1152	
For MIRROR REFLECTIVE ELEMENT  Art Unit 2872				57. d #4 5 000	
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The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):    Fee	Art Unit 28	372		Examiner Alessand	co V. Amari
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Four months (37 CFR 1.17(a)(4)) \$1590 \$795 \$  Five months (37 CFR 1.17(a)(5)) \$2150 \$1080 \$  Applicant claims small entity status. See 37 CFR 1.27.  A check in the amount of the fee is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director has already been authorized to charge fees in this application to a Deposit Account.  The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 22-0190 I have enclosed a duplicate copy of this sheet.  WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.  I am the applicant/inventor.  assignee of record of the entire interest. See 37 CFR 3.71.  Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).  August 29, 2006  Signeture Date  Timothy A. Flory (616) 975-5500  Typed or printed name Telephone Number  NOTE Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one		Two months (37 CFR 1.17(a)(2))	\$450	\$225	\$
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assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed (Form PTO/SB/96).  X attorney or agent of record. Registration Number 42 540  attorney or agent under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34  August 29, 2006  Signature  Date  Timothy A. Flory  (616) 975–5500  Typed or printed name  NOTE Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one	Fionds	HOUR COLO INTOLINATION AND AGENCY POPULATION AND A	, O-2036.		
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attorney or agent under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34  August 29, 2006  Signature  Date  Timothy A. Flory  Typed or printed name  NOTE Signatures of all the inventors or assignaes of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one					
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signature is required, see bolow.			interest or their represent	ative(s) are required. Submit mu	itiple forms if more than one
X fotal of 1 forms are submitted.	-				

This collection of information is required by 37 CFR 1.136(a) The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any continents on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer. U.S. Petent and Trademark Office, U.S. Department of Commisco, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PAGE 3/4 \* RCVD AT 8/29/2006 11:34:50 AM [Eastern Daylight Time] \* SVR:USPTO-EFXRF-2/12 \* DNIS:2738300 \* CSID:6169755505 \* DURATION (mm-ss):02-10 08/30/2006 EAREGAY1 00000015 220190 10709434

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PTO/SB/22 (07-06)
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PETITION FOR EXTENSION OF TIME UNDER 37 CF	R 1.136(a) Docket Number (Optional)
FY 2005	DONO1 P-1152
(Fees pursuant to the Consolidated Appropriations Act, 2005 (H	
Application Number 10/709,434	Filed May 5, 2004
For MIRROR REFLECTIVE ELEMENT	
Art Unit 2872	Examiner Alessandro V. Amari
This is a request under the provisions of 37 CFR 1.136(a) to application.	extend the period for filing a reply in the above identified
The requested extension and fee are as follows (check time	period desired and enter the appropriate fee below):
	Fee Small Entity Fee
© One month (37 CFR 1.17(a)(1))	120 \$60 \$ <u>120</u>
Two months (37 CFR 1.17(a)(2))	450 \$225 \$
Three months (37 CFR 1.17(a)(3)) \$	020 \$510 \$
Four months (37 CFR 1.17(a)(4)) \$	590 \$795 \$
Five months (37 CFR 1.17(a)(5)) \$	160 \$1080 \$
Applicant claims small entity status. See 37 CFR 1.27.	
A check in the amount of the fee is enclosed.	
Payment by credit card. Form PTO-2038 is attached	d.
☐ The Director has already been authorized to charg	e fees in this application to a Deposit Account.
The Director is hereby authorized to charge any fe Deposit Account Number 22–0190	es which may be required, or credit any overpayment, to I have enclosed a duplicate copy of this sheet.
WARNING: Information on this form may become public. O Provide credit card information and authorization on PTO-	redit card information should not be included on this form. 038.
l am the applicant/inventor.	
assignee of record of the entire inter Statement under 37 CFR 3.73(b)	
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attorney or agent under 37 CFR 1.3  Registration number if acting under 37 CFR	
Test Lice	August 29, 2006
Signature	Date
Timothy A. Flory	(616) 975-5500
Typed or printed name	Telephone Number
NOTE: Signatures of all the inventors or assignees of record of the entire inte signature is required, see below.	est or their representative(s) are required. Submit multiple forms if more than one
X Total of 1 forms are subm	itted.

This collection of information is required by 37 CFR 1 138(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U S C 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 8 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer. U.S. Patent and Trademark Office, U.S. Oepartment of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETEO FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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PAGE 4/4 \* RCVD AT 8/29/2006 11:34:50 AM [Eastern Daylight Time] \* SVR:USPTO-EFXRF-2/12 \* DNIS:2738300 \* CSID:6169755505 \* DURATION (mm-ss):02-10

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P.1/11

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### VIA FACSIMILE: 571-273-8300

**RESPONSE UNDER 37 CFR 1.116 EXPEDITED PROCEDURE EXAMINING GROUP 2872** 

> PATENT **DON01 P-1152**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group

2872

Examiner

Alessandro V. Amari

Applicant

Niall R. Lynam 10/709,434

Scrial No.

May 5, 2004

Filing Date For

MIRROR REFLECTIVE ELEMENT

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Commissioner for Patents

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Alexandria, VA 22313-1450 Via Facsimile: 571-273-8300

Dear Sir or Madam:

#### CERTIFICATION OF FACSIMILE TRANSMISSION

I hereby certify that the following papers are being facsimile transmitted to the Patent and Trademark Office on the date shown below:

- Claims As Amended Transmittal Sheet (1 page, in duplicate)
- 2. Response (8 pages)

YOU SHOULD RECEIVE A TOTAL OF 11 PAGES.

Date: July 7, 2006

Susan L. Gaspor

Van Dyke, Gardner, Linn & Burkhart, LLP 2851 Charlevoix Drive, S.E., Suite 207

P.O. Box 888695

Grand Rapids, Michigan 49588-8695

(616) 975-5500

TAF/sig

PAGE 1/11 \* RCVD AT 7/17/2005 11:19:16 AM [Eastern Daylight Time] \* SVR.USPTO-EXXF-1/21 \* DAIS: 27:98300 \* CSID: 6169888894 \* DURATION (nur-ss): 47.56

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FORM PTO-875 (Roy, 10/04)

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,434	05/05/2004	Niall R. Lynam	DON01 P-1152	3433
28101	7590 11/06/2006		EXAM	INER
	•	AND BURKHART, LLP	AMARI, ALE	SSANDRO V
	EVOIX DRIVE, S.E.	·	ART UNIT	PAPER NUMBER
P.O. BOX 888 GRAND RAP	PIDS, MI 49588-8695	•	2872	

DATE MAILED: 11/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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,		Application No.	Applicant(s)	
		10/709,434	LYNAM, NIALL R.	
	Office Action Summary	Examiner	Art Unit	
	· ·	Alessandro Amari	2872	
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	orrespondence addres	:s
A SH WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANS IN THE MAIL	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timulated and some state of the state o	N. nely filed the mailing date of this commun D (35 U.S.C. § 133).	
Status				
1)	Responsive to communication(s) filed on 29 Au	ugust 200 <u>6</u> .		
		action is non-final.	•	
3)□	Since this application is in condition for allowar	nce except for formal matters, pro	secution as to the me	rits is
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	i3 O.G. 213.	
Disposit	ion of Claims			
5)□ 6)⊠ 7)□	Claim(s) 1-11 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-11 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	vn from consideration.		
Applicat	ion Papers		i	
9)[	The specification is objected to by the Examine	r.´	•	
10)[	The drawing(s) filed on is/are: a) acce	epted or b) objected to by the I	Examiner.	
	Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	∋ 37 CFR 1.85(a).	
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	· · · · · · · · · · · · · · · · · · ·		
Priority (	under 35 U.S.C. § 119			
12)[ a)	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority documents  application from the International Bureau  See the attached detailed Office action for a list	s have been received. s have been received in Applicativity documents have been received in (PCT Rule 17.2(a)).	on No ed in this National Stag	ge
2) Notice (3) Information	t(s)  e of References Cited (PTO-892)  e of Draftsperson's Patent Drawing Review (PTO-948)  mation Disclosure Statement(s) (PTO/SB/08)  r No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	nte	

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06) Art Unit: 2872

### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 29 August 2006 has been entered.

### Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-5, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt US 6,030,084 in view of Gillich et al US 6,709,119.

In regard to claim 1, Schmidt teaches (see for example, Figures 2, 3) a wide angle reflective element for a mirror assembly for a vehicle comprising a polymeric mirror substrate (12) having an exterior surface comprising a less curved inboard surface or surface and a more curved outboard surface as shown in Figures 2 and 3, said polymeric mirror substrate comprising a polymeric resin material as described in

column 3, lines 39-50, said substrate having a reflector (15) disposed on a surface thereof to provide a reflective element for a vehicle mirror assembly.

Regarding claim 2, Schmidt et al teaches that said reflector is disposed at an inner surface (14) of said substrate opposite said exterior surface as shown in Figure 2.

However, in regard to claim 1, Schmidt does not teach a thin at least partially flexible glass sheet, said thin at least partially flexible glass sheet having an attaching surface opposed to and adhered to said exterior surface of said polymeric mirror substrate so as to provide an anti-abrasion sheet at said outboard and inboard surfaces of said exterior surface of said polymeric mirror substrate, said thin at least partially flexible glass sheet conforming to said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm.

In regard to claim 1, Gillich et al teaches (see Figure 1) a thin at least partially flexible glass sheet (101) said thin at least partially flexible glass sheet having an attaching surface opposed to and adhered to said exterior surface so as to provide an anti-abrasion sheet at said outboard and inboard surfaces of said exterior surface of said polymeric mirror substrate, said thin at least partially flexible glass sheet conforming to said exterior surface of said polymeric mirror substrate when adhered thereto, as described in column 1, lines 56-67, column 2, lines 1-5 and column 8, lines 28-37, said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm having a thickness of less than approximately 0.8 mm as described in column 2, lines 32-39. Although the prior art does not specifically disclose

Page 3

Art Unit: 2872

the claimed partially flexible glass sheet, this is seen to be an inherent teaching of the device since glass sheets thinner than 100  $\mu m$  show bending properties and are therefore flexible. Furthermore, the applicant's specification does not define the term "partially flexible" in any terms of degree, so the reference is taken to read on this feature.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the glass film as taught by Gillich et al in the substrate of Schmidt in order to provide for a protective layer that protects the underlying layers from mechanical damage.

Regarding claims 3 and 4, Schmidt discloses that said substrate is cut from a molded or extruded or cast strip or sheet, said glass sheet being laminated to said strip cut from said strip or sheet, at least two substrates being or sheet as described in column 3, lines 39-65 and regarding claim 4, Schmidt discloses wherein said reflector comprises a reflective film applied to said strip or sheet on an inner surface of said substrates opposite said exterior surface as described in column 3, lines 39-65.

Applicant should note that claims 3 and 4 are product-by-process claims and in product-by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claim 5, Schmidt teaches (see Figure 2) wherein said reflector comprises a reflective film (15) applied to an inner surface (14) of said substrate opposite said exterior surface as described in column 51-57.

Regarding claim 11, Schmidt discloses that said reflective element is adapted for use as an exterior rearview mirror assembly as described in column1, lines 15-21.

Regarding claim 8, Schmidt in view of Gillich et al discloses the claimed invention as set forth above except for the rearrangement of the reflective film being applied to the exterior surface of the substrate, said glass film being applied to an exterior surface of the reflective film. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the reflective film to be applied to the exterior surface of the substrate, since it has been held that a mere rearrangement of elements without modification of the operation of the device involves only routine skill in the art. One would have been motivated to rearrange the reflective film to be applied to the exterior surface for the purpose of easier and more efficient manufacturing of the reflective element. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950)

4. Claims 6, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt US 6,030,084 in view of Gillich et al US 6,709,119 and further in view of Wheatley et al US 5,262,894.

Regarding claims 6, 7, 9 and 10, Schmidt in view of Gillich et al teaches the invention as set forth above but regarding claims 6 and 9, does not teach that said reflective film comprises a polymeric reflective film at least one of laminated, adhered and applied to said inner or exterior surface of said substrate and regarding claims 7

Art Unit: 2872

and 10 does not teach that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror.

Regarding claims 6 and 9, Wheatley et al teaches (see Figure 1) that a reflective film is a polymeric reflective film at least one of laminated, adhered and applied to said exterior surface of said substrate and regarding claims 7 and 10 Wheatley et al teaches that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror as shown in Figure 1 and as described in column 6, lines 65-68, column 7, lines 45-68, column 11, lines 61-68 and column 12, lines 1-11.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the polymeric film of Wheatley et al for the reflective element of Schmidt in view of Gillich et al in order to provide for a reflective element which will not corrode or flake.

### Response to Arguments

5. Applicant's arguments filed on 29 August 2006 have been fully considered but they are not persuasive.

The Applicant argues that the combination of Gillich et al and Schmidt does not teach the claimed invention, specifically, a thin flexible glass sheet. The Applicant asserts that the protective layer of Gillich et al is a hard coat in contrast to the thin flexible glass sheet of the claimed invention and such hard coats are provided on the

Application/Control Number: 10/709,434

Art Unit: 2872

first and outer or exterior surface of the reflective element which is contacted by exterior elements and typically applied by dip coating or vacuum deposition techniques. The Applicant further asserts that that hard coat of Gillich is not a thin flexible glass sheet as shown in Figure 5 of the present application and that the hard coat of Gillich et al has a maximum thickness of 1000 nanometers which is less than 1 x 10<sup>-9</sup> mm thick and thus such a hard coat is not providable as a thin flexible sheet as disclosed and claimed in the present invention.

In response to this argument, the Examiner would like to point out that the coat of Gilich et al is also taught as being a sheet which can be rolled. The Examiner directs the Applicant's attention to column 8, lines 28-37 of Gillich et al which is reproduced below:

The transparent layers, and here in particular the protective layer, can also be obtained by a flame pyrolytic method. It is also possible to use different processes for the individual layers of a sequence of layers. For example, in the case of rolled products, e.g. foils, strips or sheets, or in the case of laminates containing an aluminum layer, individual coatings or preferably all coatings are applied or deposited in a continuous process, usually the belt or continuous process, also known as coil coating.

Furthermore, the Examiner maintains that Gillich et al (in combination with Schmidt) does teach a thin flexible glass sheet which serves as a protective layer (as described in the abstract and column 1, lines 56-67 and column 2, lines 1-5). As pointed out by the Examiner (and reaffirmed by the Applicant in his arguments), the sheet of Gillich et al is described as having a maximum thickness of 1000 nanometers which is less than 1 x 10<sup>-9</sup> mm thick. Therefore, the glass sheet of Gillich which is less than 1 x 10<sup>-9</sup> mm thick is at least partially flexible because inherently ultra thin glass sheets show bending properties if they are thinner than 100 μm.

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The Applicant further argues that the hard coat of Gillich et al is applied to the body by deposition in vacuum or by thermal vaporization or by electron beam vaporization or by sputtering or by plasma vaporization or by chemical vapor deposition. Thus the Applicant argues the hard coat does not have an attaching surface for adhering to an exterior surface of a polymeric mirror substrate.

In response to this argument, the Examiner would again like to point out that the coat of Gilich et al is also taught as being a sheet which can be rolled (see column 8, lines 28-37 as reproduced above). Thus Gillich et al does teach a flexible glass sheet which would therefore have an attaching surface for adhering to an exterior surface of a mirror substrate.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro Amari whose telephone number is (571)272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Page 8

Application/Control Number: 10/709,434

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Page 9

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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October 2006

ALESSANDRO AMARI
PRIMARY PATENT EXAMINER

Index of Claims			Application/Control No. 10709434  Examiner  Amari, Alessandro					Applicant(s)/Patent under Reexamination LYNAM, NIALL R.  Art Unit 2872							
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Application/Control No.	Applicant(s)/Patent under Reexamination					
10/709,434	LYNAM, NIALL R.					
Examiner	Art Unit					
Alessandro V. Amari	2872					

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Class	Subclass	Date	Examiner		
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JAN 2 2 2007

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PATENT DON01 P-1152

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group

2872

Examiner

Alessandro V. Amari

Applicant

Niall R. Lynam

Serial No.

10/709,434

Filing Date

May 5, 2004

For

MIRROR REFLECTIVE ELEMENT

Mail Stop Amendment Commissioner For Patents P.O. Box 1450 Alexandria, VA 22313-1450 Via Facsimile (571) 273-8300

Dear Sir or Madam;

### **CERTIFICATE OF FACSIMILE TRANSMISSION**

I certify that the following papers are being facsimile transmitted to the Patent and

Trademark Office on the date shown below:

Request for Reconsideration (5 pages)

YOU SHOULD RECEIVE A TOTAL OF 6 PAGES

Dated: January 22, 2007.

Van Dyke, Gardner, Linn & Burkhart, LLP

P.O. Box 888695

Grand Rapids, MI 49588-8695

(616) 975-5500

TAF/cll

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JAN 2 2 2007

PATENT DON01 P-1152

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

2872

Examiner

: Alessandro V. Amari

Applicant

: Niall R. Lynam

Scrial No. Filing Date : 10/709,434 : May 5, 2004

For

: MIRROR REFLECTIVE ELEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450

Alexandria, VA 22313-1450 Via Facsimile: 571-273-8300

Dear Sir or Madam:

### REQUEST FOR RECONSIDERATION

Responsive to the Office Action mailed November 6, 2006, Applicant requests reconsideration of the rejections for the reasons set forth below.

Remarks begin on page 2 of this paper.

Applicant Serial No.

Niall R. Lynam 10/709,434

Page

2

### Remarks:

The amendments and remarks presented herein are believed to be fully responsive to the Office Action dated November 6, 2006. Claims 1-11 are pending in the application.

### **CLAIM REJECTIONS**

Claims 1-5, 8 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schmidt, U.S. Patent No. 6,030,084, in view of Gillich et al., U.S. Patent No. 6,709,119. Claims 6, 7, 9 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schmidt, in view of Gillich et al., and further in view of Wheatley et al., U.S. Patent No. 5,262,894.

Applicant respectfully traverses the rejections under 35 U.S.C. §103(a) for the reasons set forth below.

With respect to the rejection of independent claim 1 in view of the combination of Schmidt and Gillich et al., Applicant submits that this combination does not disclose, teach, suggest or render obvious the wide angle reflective element of the present invention, particularly as set forth in independent claim 1 and in the claims depending therefrom, for at least all of the reasons set forth in the previous response, the arguments of which are incorporated herein.

As previously stated, the combination of Gillich et al. and Schmidt also does not disclose or teach or suggest a thin flexible glass sheet as is disclosed and claimed in the present application. To the contrary, the protective layer 101 of Gillich et al. is a hard coat similar to the hard coats discussed and distinguished in the background section of the present invention. In stark contrast to the thin flexible glass sheet of the claimed invention, and as discussed in the background section of the present application (see page 1, paragraph [0002] of the present application), such hard coats are provided (such as via dip coating or vacuum deposition or the

PAGE 3/6 \* RCVD AT 1/22/2007 1:18:00 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-5/1 \* DNIS:2738300 \* CSID:6169885894 \* DURATION (mm-ss):01-20

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Applicant Serial No. Niall R. Lynam 10/709.434

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like) on the first or outer or exterior surface of the reflective element which is contacted by the exterior elements. The hard coat of Gillich et al. thus is <u>not</u> a thin flexible glass sheet, such as the thin flexible glass sheet 20 shown in Figure 5 of the present application, as is clearly evident by the disclosure in Gillich et al. that the hard coat of Gillich et al. has a maximum thickness of 1,000 nanometers (see column 2, lines 32-36 of Gillich et al.). Such a hard coat thus is less than  $1x10^{-9}$  millimeters thick and thus such a hard coat is not providable as a thin flexible sheet as disclosed and claimed in the present application. As stated in the background section of the present application, such a hard coat will not provide the benefits of the claimed invention.

Further, the hard coat of Gillich et al. is disclosed as being applied to the body by deposition in vacuum or by thermal vaporization or by electron beam vaporization or by sputtering or by plasma polymerization or by chemical vapor deposition (see column 7, line 66 through column 8, line 12 of Gillich et al.). Such a hard coat thus is not provided as a thin flexible sheet and thus does not have an attaching surface for adhering to an exterior surface of a polymeric mirror substrate so as to provide an anti-abrasion sheet at the outboard and inboard surfaces of the exterior surface of the polymeric mirror substrate.

The Office Action states that "the coat of Gillich et al. is also taught as being a sheet which can be rolled", and directs the Applicant's attention to column 8, lines 28-37 of Gillich et al., which states:

"The transparent layers, and here in particular the protective layer, can also be obtained by a flame pyrolytic method. It is also possible to use different processes for the individual layers of a sequence of layers.

For example, in the case of rolled products, e.g. foils, strips or sheets, or in the case of laminates containing an aluminum layer, individual coatings or preferably all coatings are applied or deposited in a continuous process, usually the belt or continuous process, also known as coil coating." (emphasis added).

Niall R. Lynam

Serial No.

10/709,434

Page

The Office Action thus points to the statement "in the case of rolled products" and states that this provides a teaching of providing the hardcoat (disclosed as being less than 1,000 nanometers thick) as a "rolled product". However, Applicant submits that the statement quoted above is referring to the case of rolled substrates, and not rolled coatings. As evidence of this, Gillich et al. states that, in the case of rolled products, the individual coatings or preferably all coatings are applied or deposited in a continuous process. Moreover, in the sentences immediately following the above quoted portion of Gillich et al., Gillich et al. further states:

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"To produce the pretreatment layer, for example, processes for anodic oxidation of aluminum can be applied. The functional layer a) e.g. a sol-gel layer, can also be applied in a continuous process, in which the sol is applied to the surface to be treated by immersion, spraying, etc. or by coil-coating, and dried or hardened by subsequent radiation and/or heat treatment in a through-type furnace. Finally, the reflective layers b) can be deposited by vaporization, sputtering, etc., in both cases especially in a vacuum etc." See column 8, lines 37-45 of Gillich et al. (emphasis added).

Thus, Gillich et al. discloses providing a rolled substrate and coating the rolled substrate (such as via immersion, spraying, vaporization or sputtering) via a continuous coating process. Thus, Applicant submits that there is no disclosure or suggestion in Gillich et al. of a thin flexible glass sheet, and there is no disclosure or suggestion in Gillich et al. of providing a thin flexible glass sheet that has an attaching surface that is opposed to and adhered to a polymeric substrate surface, such as is claimed in independent claim 1 of the present application. Therefore, the combination of Schmidt and Gillich et al. does not disclose, suggest or render obvious the invention claimed herein.

With respect to the rejection of dependent claims 2-11, Applicant submits that the combination of Schmidt and Gillich et al., either alone or in further combination with Wheatley et al., does not disclose, teach or suggest the claimed invention for at least all of the reasons set forth above.

PAGE 5/6 \* RCVD AT 1/22/2007 1:18:00 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-5/1 \* DNIS:2738300 \* CSID:6169885894 \* DURATION (mm-ss):01-20

Niall R. Lynam 10/709,434

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Accordingly, Applicant respectfully submits that neither Schmidt nor Gillich et al., either alone or in combination with one another or with any other prior art of record, disclose, teach, suggest or render obvious the wide angle reflective element of the present invention, particularly as set forth in independent claim 1 and in the claims depending therefrom. Reconsideration and withdrawal of the rejections of claims 1-11 is respectfully requested.

Claims 1-11 remain pending in the application. Applicant respectfully submits that claims 1-11 are in condition for allowance and a notice to that effect is carnestly and respectfully requested. Should the Examiner have any questions regarding the above discussion, the Examiner is invited to contact the undersigned attorney to discuss this further.

Respectfully submitted,

NIALL R. LYNAM

By: Van Dyke, Gardner, Linn & Burkhart, LLP

Date: January 22, 2007.

Timothy A. Flory

Registration No. 42 540

2851 Charlevoix Drive, S.E., Suite 207

P.O. Box 888695

Grand Rapids, Michigan 49588-8695

(616) 975-5500

DON01 P-1152 TAF:ell

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APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/709,434	05/05/2004	Niall R. Lynam	DON01 P-1152	3433			
	7590 04/13/200 ARDNER, LINN AN		EXAMINER				
	VOIX DRÍVE, S.E.		AMARI, ALE	ESSANDRO V			
P.O. BOX 8886	95 DS, MI 49588-8695		ART UNIT	PAPER NUMBER			
	55, 1411 17500 0075		2872	<u> </u>			
SHORTENED STATUTORY	PERIOD OF RESPONSE	MAIL DATE	DELIVER	Y MODE			
3 MON	NTHS	04/13/2007	PAI	PER			

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
10/709,434 LYNAM, NIALL R.						
Office Action Summary	Examiner	Art Unit				
	Alessandro Amari	2872				
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address				
Period for Reply	/ IC CET TO EVDIDE 2 MONTH/	e) OD THIDTY (30) DAVE				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timulated and will expire SIX (6) MONTHS from cause the application to become ABANDONE!	1.  nety filed  the mailing date of this communication.  D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 22 Ja	nuary 2007.					
•=	action is non-final.					
3) Since this application is in condition for allowan	·					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	i3 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-11</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	vn from consideration.	•				
5) Claim(s) is/are allowed.	•					
6)⊠ Claim(s) <u>1-11</u> is/are rejected.						
7) Claim(s) is/are objected to.	a alastian manuisanaant					
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ acce	epted or b) objected to by the E	Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correcting 11) The oath or declaration is objected to by the Expression 11.		• • • • • • • • • • • • • • • • • • • •				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).				
1. Certified copies of the priority documents	s have been received.					
2. Certified copies of the priority documents	s have been received in Application	on No				
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau	• • • • • • • • • • • • • • • • • • • •					
* See the attached detailed Office action for a list of	of the certified copies not receive	d.				
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Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail Da					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal Pa					
Paper No(s)/Mail Date	6) Other:					

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

Page 2

Application/Control Number: 10/709,434

Art Unit: 2872

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-5, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt US 6,030,084 in view of Gillich et al US 6,709,119.

In regard to claim 1, Schmidt teaches (see for example, Figures 2, 3) a wide angle reflective element for a mirror assembly for a vehicle comprising a polymeric mirror substrate (12) having an exterior surface comprising a less curved inboard surface or surface and a more curved outboard surface as shown in Figures 2 and 3, said polymeric mirror substrate comprising a polymeric resin material as described in column 3, lines 39-50, said substrate having a reflector (15) disposed on a surface thereof to provide a reflective element for a vehicle mirror assembly.

Regarding claim 2, Schmidt et al teaches that said reflector is disposed at an inner surface (14) of said substrate opposite said exterior surface as shown in Figure 2.

However, in regard to claim 1, Schmidt does not teach a thin at least partially flexible glass sheet, said thin at least partially flexible glass sheet having an attaching surface opposed to and adhered to said exterior surface of said polymeric mirror substrate so as to provide an anti-abrasion sheet at said outboard and inboard surfaces

of said exterior surface of said polymeric mirror substrate, said thin at least partially flexible glass sheet conforming to said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm.

In regard to claim 1, Gillich et al teaches (see Figure 1) a thin at least partially flexible glass sheet (101) said thin at least partially flexible glass sheet having an attaching surface opposed to and adhered to said exterior surface so as to provide an anti-abrasion sheet at said outboard and inboard surfaces of said exterior surface of said polymeric mirror substrate, said thin at least partially flexible glass sheet conforming to said exterior surface of said polymeric mirror substrate when adhered thereto, as described in column 1, lines 56-67, column 2, lines 1-5 and column 8, lines 28-37, said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm having a thickness of less than approximately 0.8 mm as described in column 2, lines 32-39. Although the prior art does not specifically disclose the claimed partially flexible glass sheet, this is seen to be an inherent teaching of the device since glass sheets thinner than 100 µm show bending properties and are therefore flexible. Furthermore, the applicant's specification does not define the term "partially flexible" in any terms of degree, so the reference is taken to read on this feature.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the glass film as taught by Gillich et al in the substrate of

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Schmidt in order to provide for a protective layer that protects the underlying layers from mechanical damage.

Regarding claims 3 and 4, Schmidt discloses that said substrate is cut from a molded or extruded or cast strip or sheet, said glass sheet being laminated to said strip cut from said strip or sheet, at least two substrates being or sheet as described in column 3, lines 39-65 and regarding claim 4, Schmidt discloses wherein said reflector comprises a reflective film applied to said strip or sheet on an inner surface of said substrates opposite said exterior surface as described in column 3, lines 39-65.

Applicant should note that claims 3 and 4 are product-by-process claims and in product-by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production." In re Thorpe, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claim 5, Schmidt teaches (see Figure 2) wherein said reflector comprises a reflective film (15) applied to an inner surface (14) of said substrate opposite said exterior surface as described in column 51-57.

Regarding claim 11, Schmidt discloses that said reflective element is adapted for use as an exterior rearview mirror assembly as described in column1, lines 15-21.

Regarding claim 8, Schmidt in view of Gillich et al discloses the claimed invention as set forth above except for the rearrangement of the reflective film being applied to the exterior surface of the substrate, said glass film being applied to an exterior surface

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of the reflective film. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the reflective film to be applied to the exterior surface of the substrate, since it has been held that a mere rearrangement of elements without modification of the operation of the device involves only routine skill in the art. One would have been motivated to rearrange the reflective film to be applied to the exterior surface for the purpose of easier and more efficient manufacturing of the reflective element. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950)

3. Claims 6, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt US 6,030,084 in view of Gillich et al US 6,709,119 and further in view of Wheatley et al US 5,262,894.

Regarding claims 6, 7, 9 and 10, Schmidt in view of Gillich et al teaches the invention as set forth above but regarding claims 6 and 9, does not teach that said reflective film comprises a polymeric reflective film at least one of laminated, adhered and applied to said inner or exterior surface of said substrate and regarding claims 7 and 10 does not teach that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror.

Regarding claims 6 and 9, Wheatley et al teaches (see Figure 1) that a reflective film is a polymeric reflective film at least one of laminated, adhered and applied to said exterior surface of said substrate and regarding claims 7 and 10 Wheatley et al teaches that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror

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as shown in Figure 1 and as described in column 6, lines 65-68, column 7, lines 45-68, column 11, lines 61-68 and column 12, lines 1-11.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the polymeric film of Wheatley et al for the reflective element of Schmidt in view of Gillich et al in order to provide for a reflective element which will not corrode or flake.

## Response to Arguments

4. Applicant's arguments filed 22 January 2007 have been fully considered but they are not persuasive.

The Applicant argues that the protective layer 101 of Gillich et al is a hard coat as discussed and distinguished in the background section of the present invention. The Applicant further argues that the hard coat of Gillich is disclosed as having a thickness less than 1\*10<sup>-9</sup> millimeters and thus such a hardcoat is not providable as a thin flexible sheet as disclosed and claimed in the present invention.

In response to this argument, the Applicant is reminded that an inherency argument was presented with respect to the flexible glass sheet as taught by Gillich. The reasoning for a finding of inherency was that the glass sheet was seen to be flexible in that the glass sheets thinner than 100  $\mu$ m (for example, coating 101 in Gillich) show bending properties (i.e., are flexible). When an examiner presents evidence of inherency, the burden shifts to the Applicant to show an unobvious difference (see MPEP 2112). However, the Applicant has not provided any rebuttal in regard to the

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finding of inherency. Furthermore, the Examiner has reviewed the background section of the specification of the Applicant's invention and can find no reasoning or evidence distinguishing the hard coat of Gillich from the Applicant's claimed invention.

The Applicant further argues that Gillich et al discloses providing a rolled substrate (such as via immersion, spraying, vaporization, or sputtering) via a continuous coating process. Further, the Applicant contends that there is no disclosure or suggestion in Gillich et al of a thin flexible glass sheet that has an attaching surface that is opposed to and adhered to a polymeric substrate surface such as claimed in claim 1 of the present invention.

In response to this argument, the Examiner maintains that element 101 which is being read as the partially flexible glass sheet must have some surface, which is attached or joined to some other surface. For example in Figure 1 of Gillich et al coating 101 is attached to other layers 102. Therefore, whether the flexible glass sheet is provided by a continuous coating process or via rolled sheet is irrelevant in regard to the recited claimed language, which only requires that the partially flexible glass sheet have an attaching surface opposed to and adhered to another surface. Clearly, the 101 coating of Gillich must have some attaching surface in order for it to be adhered to another opposing surface, (i.e., other layers or a substrate layer) in order to provide for the device as shown. Therefore, the Examiner maintains that the Gillich et al reference provides the teaching of a partially flexible glass sheet have an attaching surface opposed to and adhered to another surface so as to provide the anti-abrasion sheet as recited in claim 1.

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# Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro Amari whose telephone number is (571)272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ava/( 02 April 2007

> ALESSANDRO AMARI PRIMARY PATENT EXAMINER

	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	10709434	LYNAM, NIALL R.
	Examiner	Art Unit
	Amari, Alessandro V	2872

<ul><li>Rejected</li><li>Allowed</li></ul>		-	- Cancelled		N	Non-Elected		A	Appeal
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U.S. Patent and Trademark Office Part of Paper No.: 20070402

Search Notes				

Application/Control No.	Applicant(s)/Patent under Reexamination
10/709,434	LYNAM, NIALL R.
Examiner	Art Unit
Alessandro V. Amari	2872

SEARCHED						
Class	Subclass	Date	Examiner			
359	866 868 883 514	11/16/2005	AA			
Update	above	5/2/2006	AA			
Update	above	10/30/2006	AA			
Update	above	4/2/2007	AA			
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SEARCH NOTES (INCLUDING SEARCH STRATEGY)					
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# **RESPONSE UNDER 37 CFR 1.116 EXPEDITED PROCEDURE EXAMINING GROUP 2872**

**PATENT** DON01 P-1152

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

: 2872

Examiner

: Alessandro V. Amari

Applicant

: Niall R. Lynam

Serial No. : 10/709,434

Filing Date : May 5, 2004

For

: MIRROR REFLECTIVE ELEMENT

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir or Madam:

## **RESPONSE**

Responsive to the Final Office Action mailed April 13, 2007, Applicant wishes to amend the application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 5 of this paper.

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## Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the present application:

1 (currently amended): A wide angle reflective element for a mirror assembly for a vehicle comprising:

a polymeric mirror substrate having an exterior surface comprising a less curved inboard surface and a more curved outboard surface, said polymeric mirror substrate comprising a polymeric resin material, said polymeric mirror substrate having a reflector disposed on a surface thereof to provide a reflective element for a vehicle mirror assembly; and

a thin at least partially flexible glass sheet, said thin at least partially flexible glass sheet existing as a pre-formed glass sheet that is separate from said polymeric mirror substrate, said thin at least partially flexible glass sheet having an attaching surface, said attaching surface being opposed to and adhered to said exterior surface of said polymeric mirror substrate when said thin at least partially flexible sheet is adhered to said exterior surface of said polymeric mirror substrate, said thin at least partially flexible sheet providing so as to provide an anti-abrasion sheet at said outboard and inboard surfaces of said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet substantially conforming to said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm.

- 2 (previously presented): The wide angle reflective element of claim 1, wherein said reflector is disposed at an inner surface of said substrate opposite said exterior surface.
- 3 (previously presented): The wide angle reflective element of claim 1, wherein said substrate is cut from a molded or extruded or cast strip or sheet, said glass sheet being laminated to said strip or sheet, at least two substrates being cut from said strip or sheet.

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4 (previously presented): The wide angle reflective element of claim 3, wherein said reflector comprises a reflective film applied to said strip or sheet on an inner surface of said substrates opposite said exterior surface.

5 (previously presented): The wide angle reflective element of claim 1, wherein said reflector comprises a reflective film applied to an inner surface of said substrate opposite said exterior surface.

6 (previously presented): The wide angle reflective element of claim 5, wherein said reflective film comprises a polymeric reflective film at least one of laminated, adhered and applied to said inner surface of said substrate.

7 (original): The wide angle reflective element of claim 6, wherein said reflective film comprises an all polymer-thin-film multilayer, high reflective mirror film comprising multiple coextrusion of many plastic layers to form a highly reflective mirror film.

8 (previously presented): The wide angle reflective element of claim 1, wherein said reflector comprises a reflective film applied to said exterior surface of said substrate, said glass film being applied to an exterior surface of said reflective film.

9 (previously presented): The wide angle reflective element of claim 8, wherein said reflective film comprises a polymeric reflective film at least one of laminated, adhered and applied to said exterior surface of said substrate.

10 (original): The wide angle reflective element of claim 9, wherein said reflective film comprises an all polymer-thin-film multilayer, high reflective mirror film comprising multiple coextrusion of many plastic layers to form a highly reflective mirror film.

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11 (original): The wide angle reflective element of claim 1, wherein said reflective element is adapted for one of an interior rearview mirror assembly and an exterior rearview mirror assembly.

12-21 (canceled).

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Remarks:

The amendments and remarks presented herein are believed to be fully responsive

to the Final Office Action dated April 13, 2007.

Claims 1-11 are pending in the application. Claims 12-21 have been canceled

without prejudice and independent claim 1 has been amended as set forth above. The

amendments are fully supported in the specification and drawings as originally filed. No new

matter has been added.

**CLAIM REJECTIONS** 

Claims 1-5, 8 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable

over Schmidt, U.S. Patent No. 6,030,084, in view of Gillich et al., U.S. Patent No. 6,709,119.

Claims 6, 7, 9 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schmidt,

in view of Gillich et al., and further in view of Wheatley et al., U.S. Patent No. 5,262,894.

Applicant respectfully traverses the rejections under 35 U.S.C. §103(a) for the

reasons set forth below.

Applicant has amended independent claim 1 to clarify that the thin at least partially

flexible glass sheet exists as a pre-formed glass sheet that is separate from the polymeric mirror

substrate. The attaching surface of the thin at least partially flexible glass sheet is opposed to and

adhered to the exterior surface of the polymeric mirror substrate when the thin at least partially

flexible sheet is adhered to the exterior surface of the polymeric mirror substrate. The thin at

least partially flexible sheet provides an anti-abrasion sheet at the outboard and inboard surfaces

of the exterior surface of the polymeric mirror substrate when adhered thereto.

SMR USA Exhibit 1028 Applicant Serial No.

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With respect to the rejection of independent claim 1 in view of the combination of Schmidt and Gillich et al., Applicant submits that this combination does not disclose, teach, suggest or render obvious the wide angle reflective element of the present invention, particularly as set forth in independent claim 1 and in the claims depending therefrom, for at least all of the reasons set forth in the previous responses, the arguments of which are incorporated herein, and for at least the reasons set forth below.

The combination of Gillich et al. and Schmidt does not disclose or teach or suggest a pre-formed, pre-existing thin flexible glass sheet as is disclosed and claimed in the present application. To the contrary, the protective layer 101 of Gillich et al. is a hard coat similar to the hard coats discussed and distinguished in the background section of the present invention. In stark contrast to the thin flexible glass sheet of the claimed invention, and as discussed in the background section of the present application (see page 1, paragraph [0002] of the present application), such hard coats are provided (such as via dip coating or vacuum deposition or the like) on the first or outer or exterior surface of the reflective element which is contacted by the exterior elements. The hard coat of Gillich et al. thus is not a thin flexible glass sheet that exists as a pre-formed glass sheet that is separate from a polymeric mirror substrate, such as the thin flexible glass sheet 20 shown in Figure 5 of the present application, as is clearly evident by the disclosure in Gillich et al. that the hard coat of Gillich et al. has a maximum thickness of 1,000 nanometers (see column 2, lines 32-36 of Gillich et al.). Such a hard coat thus is less than  $1 \times 10^{-9}$ millimeters thick and thus such a hard coat is not providable as a pre-formed thin flexible sheet that exists separate from the substrate as disclosed and claimed in the present application. Moreover, and as stated in the background section and Summary of the Invention section of the present application, such a hard coat will not provide the benefits of the claimed invention.

Further, the hard coat of Gillich et al. is disclosed as being applied to the body by deposition in vacuum or by thermal vaporization or by electron beam vaporization or by sputtering or by plasma polymerization or by chemical vapor deposition (see column 7, line 66

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through column 8, line 12 of Gillich et al.). Such a hard coat thus is not provided as a preformed, pre-existing thin flexible sheet and thus does not have an attaching surface for adhering the pre-formed, pre-existing thin flexible sheet to an exterior surface of a polymeric mirror substrate so as to provide an anti-abrasion sheet at the outboard and inboard surfaces of the exterior surface of the polymeric mirror substrate.

The Office Action states that the claimed partially flexible glass sheet is seen to be an inherent teaching of the Gillich et al. device since glass sheets thinner than 100 µm show bending properties and are therefore flexible. Applicant respectfully traverses. Such vacuum deposited (or otherwise deposited or coated) coatings are not inherently flexible sheets, since they are deposited as particles or a coating onto a substrate surface. While such a deposited coating may flex with the underlying substrate that gives the coating its form if the coating is deposited on a flexible substrate, it is not inherent that such deposited coatings are flexible sheets.

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993) (reversed rejection because inherency was based on what would result due to optimization of conditions, not what was necessarily present in the prior art); *In re Oelrich*, 666 F.2d 578, 581-82, 212 USPQ 323, 326 (CCPA 1981). "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' " *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted). "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex* 

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parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). See MPEP 2112.

Moreover, and as noted above, the deposited coatings described in Gillich et al. do not exist as pre-formed glass sheets that are separate from the targeted substrates and are not preformed flexible sheets with attaching surfaces for adhering to a surface of the targeted substrates. To establish a prima facie case of obviousness, the prior art reference or references when combined must teach or suggest or render obvious all the claimed limitations. The teaching or suggestion to make the claim combination and reasonable expectation of success must both be found in the prior art and not based on Applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP § 2143.

The Office Action states that the Gillich et al. coating "must have some surface, which is attached or joined to some other surface". Applicant respectfully traverses. The coating of Gillich et al. is deposited onto a substrate, such as via immersion, spraying, vaporization or sputtering, and is thus deposited or coated as particles or a liquid and not a pre-formed, preexisting thin flexible glass sheet having an attachment surface for adhering to a substrate surface.

Applicant submits that there is no disclosure or suggestion in Gillich et al. of a pre-formed, pre-existing thin flexible glass sheet, and there is no disclosure or suggestion in Gillich et al. of providing such a pre-formed, pre-existing thin flexible glass sheet that has an attaching surface that is opposed to and adhered to a polymeric substrate surface, such as is claimed in independent claim 1 of the present application. Therefore, the combination of Schmidt and Gillich et al. does not disclose, suggest or render obvious the invention claimed herein.

With respect to the rejection of dependent claims 2-11, Applicant submits that the combination of Schmidt and Gillich et al., either alone or in further combination with Wheatley

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et al., does not disclose, teach or suggest or render obvious the claimed invention for at least all of the reasons set forth above.

Accordingly, Applicant respectfully submits that neither Schmidt nor Gillich et al., either alone or in combination with one another or with any other prior art of record, disclose, teach, suggest or render obvious the wide angle reflective element of the present invention, particularly as set forth in independent claim 1 and in the claims depending therefrom. Reconsideration and withdrawal of the rejections of claims 1-11 is respectfully requested.

Claims 1-11 remain pending in the application. Applicant respectfully submits that claims 1-11 are in condition for allowance and a notice to that effect is earnestly and respectfully requested. Should the Examiner have any questions regarding the above discussion, the Examiner is invited to contact the undersigned attorney to discuss this further.

Respectfully submitted,

NIALL R. LYNAM

By: Van Dyke, Gardner, Linn & Burkhart, LLP

Date: July 11, 2007.

Timothy A. Flory

Registration No. 42 540

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DON01 P-1152 TAF:ell

Electronic Acknowledgement Receipt				
EFS ID:	1960876			
Application Number:	10709434			
International Application Number:				
Confirmation Number:	3433			
Title of Invention:	MIRROR REFLECTIVE ELEMENT			
First Named Inventor/Applicant Name:	Niall R. Lynam			
Customer Number:	28101			
Filer:	Timothy A. Flory/Elaine Leva			
Filer Authorized By:	Timothy A. Flory			
Attorney Docket Number:	DON01 P-1152			
Receipt Date:	11-JUL-2007			
Filing Date:	05-MAY-2004			
Time Stamp:	16:30:41			
Application Type:	Utility under 35 USC 111(a)			

# Payment information:

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# File Listing:

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	TransmittalForm.pdf	59125	no	1
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2	Fee Worksheet (PTO-06)	ClaimsAsAmended.pdf	47973	no	1			
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3	Amendment After Final	ResponseD.pdf	360550	no no	9			
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# New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/21 (04-07) Approved for use through 09/30/2007. OMB 0651-0031

Under the Paperwork R	eduction Act of 1995, no perso			Trademark Office; U.S. DEPARTMENT OF COMMERCE of ormation unless it displays a valid OMB control number.				
		Application Number	10/709,43					
TRANS	MITTAL	Filing Date	May 5, 20	004				
FO	RM	First Named Inventor	Niall R. Ly	ynam				
		Art Unit	2872	,				
(to be used for all corresp	oondence after initial filing)	Examiner Name	Alessand	ro V. Amari				
Total Number of Pages in		Attorney Docket Number	DON01 P	2-1152				
ENCLOSURES (Check all that apply)  After Allowance Communication to TC								
Fee Transmittal Fo		Drawing(s)		Appeal Communication to Board				
Fee Attach	ned L	Licensing-related Papers		of Appeals and Interferences				
Amendment/Reply	,   🗌	Petition		Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)				
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Firm Name Van Dyl	ke, Gardner, Linn & Burkha	rt, LLP						
Signature	EtDe							
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Date July 11,	2007		Reg. No.	42540				
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the date shown below: Signature	Plaine	X. Ken	)ı					
Typed or printed name	Elaine L. Leva	, <u>, , , , , , , , , , , , , , , , , , </u>		Date July 11, 2007				
Typed or printed name								

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 37 CFR 1.5. The information is required to obtain or retain a Benefit by the public which is to the (and by the OSP10 to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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

**Applicant** : Niall R. Lynam Group Art Unit : 2872

Serial No.

: 10/709,434

Examiner

: Alessandro V. Amari

Filed

: May 5, 2004

For

: MIRROR REFLECTIVE ELEMENT

Mail Stop AF

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

Transmitted herewith is an amendment in the above identified application.

The fee has been calculated as shown below:

# **CLAIMS AS AMENDED**

Col. 1 Col. 2 Col. 3 Small Other Than Small Entity Entity Claims Remaining Highest No. Present Rate Add'l Fee Rate Add'l After Amendment Previously Extra Fee Paid For Total Claims x \$50 11 Minus 21 =0x \$25 \$ .00 .00 Independent Claims 2 Minus 2 = 0x \$100 \$ .00 x \$200 .00 First Presentation of Multiple Dependent Claims \$180 \$ .00 x \$360 .00 TOTAL ADDITIONAL FEE FOR THIS AMENDMENT \$ .00 .00 \$

- If the entry in Col. 1 is less than the entry in Col. 2, write "0" in Col. 3
- If the "Highest No. Previously Paid For" IN THIS SPACE is less than 20, write "20" in this space. \*\*\*
- If the "Highest No. Previously Paid For" IN THIS SPACE is less than 3, write "3" in this space. The "Highest No. Previously Paid For" (Total or Independent) is the highest number found from the equivalent box in Col. 1 of a prior amendment or the number of claims originally filed.
- 1. Small entity status of this application has been established.
- X No additional Fee is required. 2.
- 3. A check in the amount of \$ is attached.
- X Please charge any additional fees or credit overpayment to Deposit Account No. 22-0190. 4.

VAN DYKE, GARDNER, LINN & BURKHART, LLP

Date: July 11, 2007.

Timothy A. Flory, Registration No. 42 540

2851 Charlevoix Drive, S.E.

P.O. Box 888695

Grand Rapids, Michigan 49588-8695

(616) 975-5500

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PTOYSBUG (12-04)

Approved for use through 7/3/1/2008, CMB 0651-0032

Approved for use through 7/3/1/2008, CMB 0651-0032

(U.B. Palent and Trademark Office; U.B. DEPARTMENT OF COMMERCE

NO Persons are required to respond to a collection of information unless it displays a yald OMB control number.

ON FEE THE THE WAY AND ADDRESS OF THE COLUMN AND ADDRESS PATENT APPLICATION FEE DETERMINATION RECORD **Substitute for Form PTO-876** APPLICATION AS FILED - PART I OTHER THAN **BMALL ENTITY** OR SMALL ENTITY (Column 1) (Column 2) NUMBER FILED NUMBER EXTRA FEE (\$) FOR RATE (\$) RATE (\$) FEE (S) (07 OFR 1,16(4), (b), or (d) BEAROH FEE EXAMINATION FEE (87 OFR 1.16(0, (b), or (d) TOTAL CLAIMS p7 CFR 1.16(1) 5 minus 20 = OB NDEPENDENT CLAIMS 00 07 CFR 4.16(U) If the specification and drawings exceed 100 the specific of paper, the application size fee due to \$250 (\$125 for small entity) for each additional sections of the state of the st APPLICATION SIZE ' FEE p) CFR 1.16(1)) antivating dheifieta MULTIPLE DEPENDENT CLAIM PRESENT (07 CFR 1.16(II) If the difference in column 1 is less than zero, enter "O" in column 2. TOTAL TOTAL APPLICATION AS AMENDED - PART II OTHER THAN (Column 1) (Column 2) (Column 3) 8MALL ENTITY SMALL ENTITY HIGHEST NUMBER PREVIOUSLY PAID FOR CLAIMS PRESENT REMAINING RATE (\$) ADDI-RATE (1) ADDI-AFTER MENDMENT TIONAL FEE (#) EXTRA TIONAL FEE (\$1 Minus CT OF TIME OR er che Life. OR Application Size Fee (37 CFR 1.16(e)) FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (97 CHR 1,160) : 8 ΟŔ TOTAL TOTAL ADD'L FEE ADD'L FEE OR (Column 3) (Column 1) (Ooluma 2) HIGHEST NUMBER PREVIOUSLY CLAIMS ADDI-TIONAL

Minus

Minus

FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (07 OFFI 1.16(1))

REMAINING

AFTER AMENDMENT

Application Size Fee (97 CFR 1:16(s))

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Total

Independent of CFR LINGS

\* If the entry in column 1 is less than the entry in column 2, write "o" in column 3.

"If the "Highest Number Previously Paid For" (IN THIS SPACE is less than 20, enter "20".

"If the "Highest Number Previously Paid For" (IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and, by the USPTO to process) an application, Confidentially is governed by 35 U.S.C. 122 and 37 OFR 1.14. This collection is estimated to take 12 minutes to complete. Control to process an application, control learn is governed by 35 0.8.0. (A. 1.22 and 3) CFR 1.14. This collection is estimated to take 12 minutes at Comments including pathering, preparing; and submitting the completed application form to the USPTO. This villivary depending upon the individual case. Any comments on the amount of time you require to complete this form add/or suggestions for reducing this burden, stoud be sent to the Chief Information Officer, U.S. Palent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FRES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Palents, P.O. Box 1450, Alexandria, VA 22313-1450.

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TOTAL

RATE (\$)

TOTAL ADD'L FEE

FEE (#)

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# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,434	05/05/2004	Niall R. Lynam	DON01 P-1152	3433
28101 VAN DYKE, (	7590 07/23/2007 GARDNER, LINN AND E	BURKHART. LLP	EXAN	IINER
SUITE 207	•	· · · · · · · · · · · · · · · · · · ·	AMARI, ALE	ESSANDRO V
	EVOIX DRIVE, S.E. IDS, MI 49546	ART UNIT	PAPER NUMBER	
	, ··· · ·		2872	
			<u>.                                    </u>	
		•	MAIL DATE	DELIVERY MODE
			07/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# **Advisory Action**

Application No.	Applicant(s)	
10/709,434	LYNAM, NIALL R.	
Examiner	Art Unit	
 Alessandro Amari	2872	

Before the Filing of an Appeal Brief --The MAILING DATE of this communication appears on the cover sheet with the correspondence address --THE REPLY FILED 11 July 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. 1. X The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods: a) The period for reply expires <u>3</u> months from the mailing date of the final rejection. b) 🗌 The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f). Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL 2. The Notice of Appeal was filed on \_ . A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a). 3. The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because (a) They raise new issues that would require further consideration and/or search (see NOTE below): (b) They raise the issue of new matter (see NOTE below): (c) They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or (d) They present additional claims without canceling a corresponding number of finally rejected claims. NOTE: See Continuation Sheet. (See 37 CFR 1.116 and 41.33(a)). 4. The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324). 5. Applicant's reply has overcome the following rejection(s): 6. Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s). 7. X For purposes of appeal, the proposed amendment(s): a) X will not be entered, or b) uill be entered and an explanation of how the new or amended claims would be rejected is provided below or appended. The status of the claim(s) is (or will be) as follows: Claim(s) allowed: Claim(s) objected to: Claim(s) rejected: 1-11. Claim(s) withdrawn from consideration: AFFIDAVIT OR OTHER EVIDENCE 8. The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e). 9. The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1). 10. The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached. REQUEST FOR RECONSIDERATION/OTHER 11. 

The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet. 12. Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). 13. ☐ Other: ALESSANDRO AMARI **PRIMARY PATENT EXAMINER** 

U.S. Patent and Trademark Office PTOL-303 (Rev. 08-06)

Advisory Action Before the Filing of an Appeal Brief

Part of Paper No. 20070720

#### Continuation Sheet (PTO-303)

Application No. 10/709,434

Continuation of 3. NOTE: The new issue is directed to the proposed language further defining said at least partially flexible glass sheet existing as a pre-formed glass sheet that is separate from said polymeric mirror substrate, said thin at least partially flexible glass sheet having an attaching surface, said attaching surface being opposed to and adhered to said exterior surface of said polymeric mirror substrate when said thin at least partially flexible sheet is adhered to said exterior surface of said polymeric mirror substrate.

Continuation of 11. does NOT place the application in condition for allowance because: The claims as finally rejected do not distinguish the claimed wide angle reflective element from the prior art cited.

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# RESPONSE UNDER 37 CFR 1.116 EXPEDITED PROCEDURE EXAMINING GROUP 2872

PATENT DON01 P-1152

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

Art Unit

2872

Examiner

Alessandro V. Amari

Applicant

: Niall R. Lynam

Serial No.

: 10/709,434

Filing Date

May 5, 2004

For

MIRROR REFLECTIVE ELEMENT

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir or Madam: .

#### RESPONSE

Responsive to the Final Office Action mailed April 13, 2007, Applicant wishes to amend the application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 5 of this paper.

PTO/SB/30 (04-05)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
o a collection of information unless it contains a valid OMB control production.

Request	Application Number	10/709,434
for	Filing Date	May 5, 2004
Continued Examination (RCE)  Transmittal	First Named Inventor	Niall R. Lynam
Address to: Mail Stop RCE	Art Unit	2872
Commissioner for Patents P.O. Box 1450	Examiner Name	Alessandro V. Amari
Alexandria, VA 22313-1450	Attorney Docket Number	DON01 P-1152

This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application. Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8,

1995	or	to any	design application. See Instruction Sheet for RCEs (not to be submitted to t	the USPTO) on page	2.			
1.	1. Submission required under 37 CFR 1.114 Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).							
	a. Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.							
		i.	Consider the arguments in the Appeal Brief or Reply Brief previously	y filed on				
		li.	Other					
	b.		Enclosed					
		ı.	Amendment/Reply iii. Infor	rmation Disclosure St	atement (IDS)			
		ii.	Affidavit(s)/ Declaration(s) iv. Othe	er				
2.	Mi	iscell	aneous					
	_	$\overline{\Box}$	Suspension of action on the above-identified application is requested und	der 37 CFR 1.103(c) f	or a			
	a.	Ш	period of months. (Period of suspension shall not exceed 3 months;	Fee under 37 CFR 1.17	(i) required)			
	b.		Other					
3.	F a.	ees ✓	The Director is hereby authorized to charge the following fees, any underpayment of fees, or credit any overpayments, to					
		i.	RCE fee required under 37 CFR 1.17(e)					
		ii.	Extension of time fee (37 CFR 1.136 and 1.17)					
		iii.	Other		·			
-	b.		Check in the amount of \$enclose	osed				
	c.	$\checkmark$	Payment by credit card (Form PTO-2038 enclosed)					
			ormation on this form may become public. Credit card information sho on and authorization on PTO-2038.	uld not be included	on this form. Provide credit			
			SIGNATURE OF APPLICANT, ATTORNEY, OR AGE	NT REQUIRED				
Signa			Text See		August 7, 2007			
Name	e (Pr	int/Type	Timothy A. Flory	Registration No.	42 540			
			CERTIFICATE OF MAILING OR TRANSMIS	SION				
addres Office	ssed on ti	to: Mai	at this correspondence is being deposited with the United States Postal Service with su I Stop RCE, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 or shown below.					
Signat								
	•	nt/Type	nformation is required by 37 CER 1.114. The information is required to obtain or retain	Date Date	which is to file (and by the USBTO			

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal							
Application Number:	10	10709434					
Filing Date:	05	05-May-2004					
Title of Invention:	MIRROR REFLECTIVE ELEMENT						
First Named Inventor/Applicant Name: Niall R. Lynam							
Filer:	Tiı	nothy A. Flory/Ela	ine Leva				
Attorney Docket Number:	DO	DN01 P-1152					
Filed as Large Entity							
Utility Filing Fees							
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)		
Basic Filing:							
Pages:							
Claims:							
Miscellaneous-Filing:							
Petition:							
Patent-Appeals-and-Interference:							
Post-Allowance-and-Post-Issuance:							
Extension-of-Time:							

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Request for continued examination	1801	1	790	790
Total in USD (\$)				

Electronic Acl	knowledgement Receipt
EFS ID:	2055068
Application Number:	10709434
International Application Number:	
Confirmation Number:	3433
Title of Invention:	MIRROR REFLECTIVE ELEMENT
First Named Inventor/Applicant Name:	Niall R. Lynam
Customer Number:	28101
Filer:	Timothy A. Flory/Elaine Leva
Filer Authorized By:	Timothy A. Flory
Attorney Docket Number:	DON01 P-1152
Receipt Date:	07-AUG-2007
Filing Date:	05-MAY-2004
Time Stamp:	16:13:21
Application Type:	Utility under 35 USC 111(a)

# Payment information:

Submitted with Payment	yes
Payment was successfully received in RAM	\$790
RAM confirmation Number	1124
Deposit Account	

# File Listing:

ſ	Document	Document Description	File Name	File Size(Bytes)	Multi	Pages
	Number	Document Description	File Name	/Message Digest	Part /.zip	(if appl.)

			58581		no 1  no 2
1	Miscellaneous Incoming Letter	TransmittalForm2.pdf	f1c162fe9145961b30fd34d0bb1786cc1 182d043	no	1
Warnings:					
Information	:				
2	Request for Continued Examination	RequestForContinuedExami	74180	no	1
2	(RCE)	nation2.pdf	fa772ccd3839a31ee24fc6640dfd831f2 72f5b8e	110	'
Warnings:					
This is not a U	JSPTO supplied RCE SB30 form.				
Information	:				
3	Fee Worksheet (PTO-06)	fee-info.pdf	8159	no	2
,	r ee worksheet (1 10-00)	ree-imo.pai	bfabc0f500b8fa55dc35c9c44ff96ab99a 8ea3c2	110	2
Warnings:					
Information	<u></u>				
		Total Files Size (in bytes)	14	10920	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/21 (04-07)
Approved for use through 09/30/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Unider the Paperwork Reduction Act of 1995	Application Number	10/709,43	formation unless it displavs a valid OMB control number.
TRANSMITTAL	Filing Date	May 5, 200	
FORM	First Named Inventor	Niall R. Ly	· · · · · · · · · · · · · · · · · · ·
PORIVI	Art Unit	2872	nan
	Examiner Name	-	a V. Amari
(to be used for all correspondence after initial	filing)	Alessandro	o V. Amari
Total Number of Pages in This Submission	Attorney Docket Number	DON01 P-	1152
	ENCLOSURES (Check all	that apply	)
Fee Transmittal Form	Drawing(s)  Licensing-related Papers		After Allowance Communication to TC  Appeal Communication to Board
Fee Attached  Amendment/Reply  After Final  Affidavits/declaration(s)  Extension of Time Request  Express Abandonment Request  Information Disclosure Statement	Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence A Terminal Disclaimer Request for Refund CD, Number of CD(s)	ddress	of Appeals and Interferences  Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  Proprietary Information  Status Letter Other Enclosure(s) (please Identify below):  Request For Continued Examination
Iniomation disclosure Statement	Landscape Table on CD		•
Certified Copy of Priority Document(s)  Reply to Missing Parts/ Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53	Remarks		·
SIGNA	TURE OF APPLICANT, ATTOR	RNEY, C	DR AGENT
Firm Name Van Dyke, Gardner, Linn	& Burkhart, LLP		
Signature Test ASC			
Printed name Timothy A. Flory			
Date August 7, 2007	R	Reg. No.	42540
I hereby certify that this correspondence is b		O or depos	LING ited with the United States Postal Service with P.O. Box 1450, Alexandria, VA 22313-1450 on
Signature	ne O. Keva		
Typed or printed name Elaine L. Leva			Date August 7, 2007

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/06 (07-06)

	Under the Pa	perwork Reduc	tion Act of 19	95, no persons are	required to respo			nd Trademark Off	ice; U.S	S. DĔPARTMI	ENT OF COMMERCE
P		ICATION F	EE DETI	ERMINATIO			pplication or l	Docket Number	Fil	ling Date	To be Mailed
	Al	PPLICATION	N AS FILE	D – PART I						ОТ	HER THAN
			(Column '	I) (	(Column 2)		SMALL	ENTITY 🗌	OR	SMA	ALL ENTITY
APPLICATION AS FILED – PART I (Column 1) (Column 2) SMALL ENTITY	FEE (\$)										
		or (c))	N/A		N/A	П	N/A			N/A	
		or (m))	N/A		N/A	П	N/A			N/A	
			N/A		N/A	П	N/A			N/A	
(37	CFR 1.16(i))		mir	nus 20 = *		П	x \$ =		OR	x \$ =	
		IS	m	inus 3 = *		П	x \$ =			x \$ =	
		sh is ad	eets of pap \$250 (\$125 ditional 50 s	er, the application for small entity) sheets or fraction	on size fee due for each n thereof. See						
	MULTIPLE DEPEN	NDENT CLAIM	PRESENT (3	7 CFR 1.16(j))		IJ			l		
* If t	he difference in col	umn 1 is less th	an zero, ente	r "0" in column 2.			TOTAL			TOTAL	
	APP						SMAL	L ENTITY	OR		
LN:	08/07/2007	REMAINING AFTER		NUMBER PREVIOUSLY		][	RATE (\$)			RATE (\$)	ADDITIONAL FEE (\$)
ME		* 11	Minus	** 21	= 0	] [	x \$ =		OR	X \$50=	0
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\ME	Application S	ize Fee (37 CFI	R 1.16(s))			] [					
`	FIRST PRESE	NTATION OF MUL	TIPLE DEPEN	DENT CLAIM (37 CF	R 1.16(j))	Ш					
						•	ADD'L		OR	ADD'L	0
		, ,		(Column 2)	(Column 3)						
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	Total (37 CFR 1.16(i))	### STATE   PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(0))  ### STATE   PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(0))  ### STATE   PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(0))  ### STATE   PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(0))  ### STATE   PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(0))  ### STATE   PRESENT   PRESENT									
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This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the ublimit is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,434	05/05/2004	Niall R. Lynam	DON01 P-1152 3433  EXAMINER  AMARI, ALESSANDRO V  ART UNIT PAPER NUMBER  2872	
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	,	•	ART UNIT	PAPER NUMBER
	10/709,434 05/05/2004 Niall R. Lynam  28101 7590 10/16/2007  VAN DYKE, GARDNER, LINN & BURKHART, LLP		2872	
			MAIL DATE	DELIVERY MODE
			10/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

,	·	Application No.	Applicant(s)
		Application No.	Applicant(s)
		10/709,434	LYNAM, NIALL R.
	Office Action Summary	Examiner	Art Unit
		Alessandro Amari	2872
Period fo	The MAILING DATE of this communication app or Reply	pears on the cover sheet with the c	correspondence address
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DX SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed .the mailing date of this communication. ED (35 U.S.C. § 133).
Status		•	
1)⊠	Responsive to communication(s) filed on 07 Au	ugust 2007.	
2a)	This action is <b>FINAL</b> . 2b)⊠ This	action is non-final.	
3)[	Since this application is in condition for allowar	nce except for formal matters, pro	osecution as to the merits is
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.
Disposit	on of Claims	•	
4)⊠	Claim(s) 1-11 is/are pending in the application.		
	4a) Of the above claim(s) is/are withdraw		
	Claim(s) is/are allowed.	,	
6)⊠	Claim(s) 1-11 is/are rejected.		
7)	Claim(s) is/are objected to.		
8)	Claim(s) are subject to restriction and/or	r election requirement.	
Applicat	ion Papers		•
9)	The specification is objected to by the Examine	er .	
	The drawing(s) filed on is/are: a) acce		Examiner.
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11)	The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.
Priority (	under 35 U.S.C. § 119		
	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:	priority under 35 U.S.C. § 119(a	)-(d) or (f).
a)	<ul><li>☐ All b) ☐ Some * c) ☐ None of:</li><li>1. ☐ Certified copies of the priority documents</li></ul>	s have been received	
	2. Certified copies of the priority documents		ion No
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	e of References Cited (PTO-892)	4) Interview Summary	(PTO-413)
2) Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate
	mation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date	5)  Notice of Informal F	atent Application

U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06) Application/Control Number: 10/709,434 Page 2

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#### **DETAILED ACTION**

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11 July 2007 has been entered.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-5, 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt US 6,030,084 in view of Gillich et al US 6,709,119.

In regard to claim 1, Schmidt teaches (see for example, Figures 2, 3) a wide angle reflective element for a mirror assembly for a vehicle comprising a polymeric mirror substrate (12) having an exterior surface comprising a less curved inboard surface or surface and a more curved outboard surface as shown in Figures 2 and 3, said polymeric mirror substrate comprising a polymeric resin material as described in column 3, lines 39-50, said substrate having a reflector (15) disposed on a surface thereof to provide a reflective element for a vehicle mirror assembly.

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Regarding claim 2, Schmidt et al teaches that said reflector is disposed at an inner surface (14) of said substrate opposite said exterior surface as shown in Figure 2.

However, in regard to claim 1, Schmidt does not teach a thin at least partially flexible glass sheet, said thin at least partially flexible glass sheet existing as a preformed glass sheet that is separate from said polymeric mirror substrate, said thin at least partially flexible glass sheet having an attaching surface, said attaching surface being opposed to and adhered to said exterior surface of said polymeric mirror substrate when said thin at least partially flexible sheet is adhered to said exterior surface of said polymeric mirror substrate, said thin at least partially flexible sheet providing an anti-abrasion sheet at said outboard and inboard surfaces of said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet conforming to said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm.

In regard to claim 1, Gillich et al teaches (see Figure 1) a thin at least partially flexible glass sheet (101), said thin at least partially flexible glass sheet existing as a pre-formed glass sheet that is separate from said polymeric mirror substrate as described in column 8, lines 28-37, said thin at least partially flexible glass sheet having an attaching surface, said attaching surface being opposed to and adhered to said exterior surface of said polymeric mirror substrate when said thin at least partially flexible sheet is adhered to said exterior surface of said polymeric mirror substrate, said thin at least partially flexible sheet providing an anti-abrasion sheet at said outboard and

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inboard surfaces of said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet conforming to said exterior surface of said polymeric mirror substrate when adhered thereto as described in column 1, lines 56-67, column 2, lines 1-5 and column 8, lines 28-37, said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm having a thickness of less than approximately 0.8 mm as described in column 2, lines 32-39. Although the prior art does not specifically disclose the claimed partially flexible glass sheet, this is seen to be an inherent teaching of the device since glass sheets thinner than 100  $\mu$ m show bending properties and are therefore flexible. Furthermore, the applicant's specification does not define the term "partially flexible" in any terms of degree, so the reference is taken to read on this feature.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the glass film as taught by Gillich et al in the substrate of Schmidt in order to provide for a protective layer that protects the underlying layers from mechanical damage.

Regarding claims 3 and 4, Schmidt discloses that said substrate is cut from a molded or extruded or cast strip or sheet, said glass sheet being laminated to said strip cut from said strip or sheet, at least two substrates being or sheet as described in column 3, lines 39-65 and regarding claim 4, Schmidt discloses wherein said reflector comprises a reflective film applied to said strip or sheet on an inner surface of said substrates opposite said exterior surface as described in column 3, lines 39-65.

Applicant should note that claims 3 and 4 are product-by-process claims and in product-

by-process claims, "once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection [is] made, the burden shifts to the applicant to show an unobvious difference." MPEP 2113. This rejection under 35 U.S.C. 102/103 is proper because the "patentability of a product does not depend on its method of production." *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985).

Regarding claim 5, Schmidt teaches (see Figure 2) wherein said reflector comprises a reflective film (15) applied to an inner surface (14) of said substrate opposite said exterior surface as described in column 51-57.

Regarding claim 11, Schmidt discloses that said reflective element is adapted for use as an exterior rearview mirror assembly as described in column1, lines 15-21.

Regarding claim 8, Schmidt in view of Gillich et al discloses the claimed invention as set forth above except for the rearrangement of the reflective film being applied to the exterior surface of the substrate, said glass film being applied to an exterior surface of the reflective film. It would have been obvious to one having ordinary skill in the art at the time the invention was made to rearrange the reflective film to be applied to the exterior surface of the substrate, since it has been held that a mere rearrangement of elements without modification of the operation of the device involves only routine skill in the art. One would have been motivated to rearrange the reflective film to be applied to the exterior surface for the purpose of easier and more efficient manufacturing of the reflective element. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950)

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4. Claims 6, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt US 6,030,084 in view of Gillich et al US 6,709,119 and further in view of Wheatley et al US 5,262,894.

Regarding claims 6, 7, 9 and 10, Schmidt in view of Gillich et al teaches the invention as set forth above but regarding claims 6 and 9, does not teach that said reflective film comprises a polymeric reflective film at least one of laminated, adhered and applied to said inner or exterior surface of said substrate and regarding claims 7 and 10 does not teach that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror.

Regarding claims 6 and 9, Wheatley et al teaches (see Figure 1) that a reflective film is a polymeric reflective film at least one of laminated, adhered and applied to said exterior surface of said substrate and regarding claims 7 and 10 Wheatley et al teaches that said reflective film comprises an all polymer thin film multilayer high reflective mirror comprising multiple coextrusion of many plastic layers to form a highly reflective mirror as shown in Figure 1 and as described in column 6, lines 65-68, column 7, lines 45-68, column 11, lines 61-68 and column 12, lines 1-11.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the polymeric film of Wheatley et al for the reflective element of Schmidt in view of Gillich et al in order to provide for a reflective element which will not corrode or flake.

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#### Response to Arguments

5. Applicant's arguments filed 11 July 2007 have been fully considered but they are not persuasive.

The Applicant argues that the Schmidt-Gillich et al combination does not teach a pre-formed thin flexible glass sheet as disclosed and currently recited. The Applicant further contends that Gillich et al teaches that the protective layer of Gillich et al is a hard coat and is therefore not a thin flexible glass sheet that exists as a pre-formed glass sheet that is separate from a polymeric mirror substrate.

In response to this argument, the Examiner wishes to direct the Applicant's attention to column 6, lines 28-37 of Gillich et al reproduced below which states:

The transparent layers, and here in particular the protective layer, can also be obtained by a flame pyrolytic method. It is also possible to use different processes for the individual layers of a sequence of layers. For example, in the case of rolled products, e.g. foils, strips or sheets, or in the case of laminates containing an aluminum layer, individual coatings or preferable all coatings are applied or deposited in a continuous process, also known as coil-coating.

So, it is apparent that the protective layer can be formed as a pre-existing, pre-formed glass sheet that is separate from the mirror substrate (i.e., rolled products, coil coating) as currently recited in claim 1.

The Applicant further argues that the hard coat of Gillich et al is applied to the body by vacuum, thermal or other vapor deposition methods, and therefore cannot be provided as a pre-formed, pre-existing thin flexible sheet and thus does not have an attaching surface for adhering the pre-formed, pre-existing thin flexible sheet to an exterior surface of a polymeric mirror substrate so as to provide an anti-abrasion sheet

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at the outboard and inboard surfaces of the exterior surface of the polymeric mirror substrate.

In response to this argument, the Examiner refers to the discussion above wherein the protective layer can be formed as a pre-existing, pre-formed, glass sheet that is separate from the mirror substrate and would therefore have an attaching surface for adhering the sheet to the surface of the mirror substrate as claimed.

The Applicant further argues that the glass sheet of Gillich et al are not inherently flexible sheets since they are deposited as particles or a coating onto a substrate surface. The Applicant adds that while such a deposited coating may flex with the underlying substrate that gives the coating its form if the coating is deposited on a flexible substrate, it is not inherent that such deposited coatings are flexible sheets.

In response to this argument, the Examiner again refers to the discussion above, which discloses that the protective layer can be a glass sheet separate from the mirror substrate. Since Gillich et al teaches that the protective layer can be formed as a glass sheet which is less than 1000 nm (or .001 mm) and since glass sheets thinner than 100  $\mu$ m show bending properties, there is sufficient basis in fact to reasonably support the determination that the inherent characteristic (i.e., flexibility of the glass sheet) flows from the teaching of Gillich et al.

The Applicant further argues that deposited coatings described in Gillich et al do not exist as pre-formed glass sheets that are separate from the targeted substrate and are not pre-formed glass sheets with attaching surfaces for adhering to a surface of the targeted substrates as recited in claim 1.

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In response to this argument, the Examiner refers to the discussion above wherein the protective layer can be formed as a pre-existing, pre-formed, glass sheet that is separate from the mirror substrate and would therefore have an attaching surface for adhering the sheet to the surfaces of the mirror substrate as claimed.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro Amari whose telephone number is (571)272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ava 11 October 2007

ALESSANDRO AMARI
PRIMARY PATENT EXAMINER

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	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	10709434	LYNAM, NIALL R.
	Examiner	Art Unit
	Amari, Alessandro V	2872

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U.S. Patent and Trademark Office

Part of Paper No.: 20071011

# Search Notes



	App	lication/	Contro	No.
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Applicant(s)/Patent Under Reexamination

10709434

LYNAM, NIALL R.

Examiner

Art Unit

Amari, Alessandro

2872

# SEARCHED

Class	Subclass	Date	Examiner
359	866,868,883,514	11/16/2005	AA
Update	above	5/2/2006	AA
Update	above	10/30/2006	. AA
Update	above	4/2/2007	AA
Update	above	10/11/2007	AA

## **SEARCH NOTES**

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Search Notes	Date	Examiner
EAST search - see attached	11/16/2005	AA

#### INTERFERENCE SEARCH

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Class	Subclass	Date	Examiner

U.S. Patent and Trademark Office

Part of Paper No.: 20071011

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

Art Unit

2872

Examiner

Alessandro V. Amari

**Applicant** 

Niall R. Lynam

Serial No.

10/709,434

Filing Date

May 5, 2004

For

MIRROR REFLECTIVE ELEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir or Madam:

## **RESPONSE**

Responsive to the Final Office Action mailed October 16, 2007, the period for response being extended via the attached petition and fee for a one month extension of time, Applicant wishes to amend the application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 5 of this paper.

Applicant Serial No.

Niall R. Lynam 10/709,434

Page

2

## **Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the present application:

1 (currently amended): A wide angle reflective element for a mirror assembly for a vehicle comprising:

a polymeric mirror substrate having an exterior surface comprising a less curved inboard surface and a more curved outboard surface, said polymeric mirror substrate comprising a polymeric resin material, said polymeric mirror substrate having a reflector disposed on a surface thereof to provide a reflective element for a vehicle mirror assembly; and

a thin at least partially flexible glass sheet, said thin at least partially flexible glass sheet existing as a pre-formed glass sheet that is separate from said polymeric mirror substrate, said thin at least partially flexible glass sheet having an attaching surface, said attaching surface being opposed to and adhered to said exterior surface of said polymeric mirror substrate when said thin at least partially flexible sheet is adhered to said exterior surface of said polymeric mirror substrate, said thin at least partially flexible sheet providing an anti-abrasion sheet at said outboard and inboard surfaces of said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet substantially conforming to said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet substantially conforming to said exterior surface of said polymeric mirror substrate when adhered thereto, said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm and greater than approximately 0.3 mm.

2 (previously presented): The wide angle reflective element of claim 1, wherein said reflector is disposed at an inner surface of said substrate opposite said exterior surface.

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3 (previously presented): The wide angle reflective element of claim 1, wherein said substrate is

cut from a molded or extruded or cast strip or sheet, said glass sheet being laminated to said strip

or sheet, at least two substrates being cut from said strip or sheet.

4 (previously presented): The wide angle reflective element of claim 3, wherein said reflector

comprises a reflective film applied to said strip or sheet on an inner surface of said substrates

opposite said exterior surface.

5 (previously presented): The wide angle reflective element of claim 1, wherein said reflector

comprises a reflective film applied to an inner surface of said substrate opposite said exterior

surface.

6 (previously presented): The wide angle reflective element of claim 5, wherein said reflective

film comprises a polymeric reflective film at least one of laminated, adhered and applied to said

inner surface of said substrate.

7 (original): The wide angle reflective element of claim 6, wherein said reflective film

comprises an all polymer-thin-film multilayer, high reflective mirror film comprising multiple

coextrusion of many plastic layers to form a highly reflective mirror film.

8 (previously presented): The wide angle reflective element of claim 1, wherein said reflector

comprises a reflective film applied to said exterior surface of said substrate, said glass film being

applied to an exterior surface of said reflective film.

9 (previously presented): The wide angle reflective element of claim 8, wherein said reflective

film comprises a polymeric reflective film at least one of laminated, adhered and applied to said

exterior surface of said substrate.

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10 (original): The wide angle reflective element of claim 9, wherein said reflective film comprises an all polymer-thin-film multilayer, high reflective mirror film comprising multiple coextrusion of many plastic layers to form a highly reflective mirror film.

11 (original): The wide angle reflective element of claim 1, wherein said reflective element is adapted for one of an interior rearview mirror assembly and an exterior rearview mirror assembly.

12-21 (canceled).

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#### Remarks:

The amendments and remarks presented herein are believed to be fully responsive to the Office Action dated October 16, 2007, the period for response being extended via the attached petition and fee for a one month extension of time.

Claims 1-11 are pending in the application. Claims 12-21 were previously canceled without prejudice and independent claim 1 has been amended as set forth above. The amendments are fully supported in the specification and drawings as originally filed. No new matter has been added.

#### TELEPHONE INTERVIEW CONDUCTED FEBRUARY 7, 2008

The undersigned would like to thank Examiner Amari for the courtesies extended during the telephone interview conducted on February 7, 2008. During the interview, the undersigned was given the opportunity to discuss the claimed invention and the cited art of record, particularly Gillich et al., U.S. Patent No. 6,709,119. During the interview, the above clarification of independent claim 1 was discussed, and the Examiner indicated that this overcomes the present claim rejection.

#### **CLAIM REJECTIONS**

Claims 1-5, 8 and 11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schmidt, U.S. Patent No. 6,030,084, in view of Gillich et al., U.S. Patent No. 6,709,119. Claims 6, 7, 9 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Schmidt, in view of Gillich et al., and further in view of Wheatley et al., U.S. Patent No. 5,262,894.

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Applicant respectfully traverses the rejections under 35 U.S.C. §103(a). However, and without acquiescing in the rejections in any manner and solely to expedite prosecution and allowance of the claims, Applicant has clarified independent claim 1 and submits that the present claims are in condition for allowance for at least the reasons set forth below.

Applicant has amended independent claim 1 to clarify that the thin at least partially flexible glass sheet has a thickness of less than approximately 0.8 mm and greater than approximately 0.3 mm.

The wide angle reflective element of the claimed invention of independent claim 1 thus includes a thin at least partially flexible glass sheet that exists as a pre-formed glass sheet that is separate from the polymeric mirror substrate. The thin at least partially flexible glass sheet has a thickness of less than approximately 0.8 mm and greater than approximately 0.3 mm. The attaching surface of the separate, pre-formed thin at least partially flexible glass sheet is opposed to and adhered to the exterior surface of the polymeric mirror substrate to form the wide angle reflective element.

With respect to the rejection of independent claim 1 in view of the combination of Schmidt and Gillich et al., Applicant submits that this combination does not disclose, teach, suggest or render obvious the wide angle reflective element of the present invention, particularly as set forth in independent claim 1 and in the claims depending therefrom, for at least the reasons set forth in the previous responses, the arguments of which are incorporated herein, and for at least the reasons set forth below.

The combination of Gillich et al. and Schmidt does not disclose or teach or suggest a pre-formed, pre-existing thin flexible glass sheet as is disclosed and claimed in the present application. To the contrary, the protective layer 101 of Gillich et al. is a hard coat similar to the hard coats discussed and distinguished in the background section of the present invention. In

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stark contrast to the thin flexible glass sheet of the claimed invention, and as discussed in the background section of the present application (see page 1, paragraph [0002] of the present application), such hard coats are provided (such as via dip coating or vacuum deposition or the like) on the first or outer or exterior surface of the reflective element which is contacted by the exterior elements. The disclosure of Gillich et al. clearly is limited to a hard coat or protective layer that is coated or deposited or formed on a separate substrate and that does not exist as a preformed glass sheet.

As can be seen with reference to Figure 1 of Gillich et al. (reproduced to the right), the reflector 100 includes a reflector body 108 that is coated by a plurality of layers 101-107, which include the protective layer 101. The reflector body may be provided as a rolled product, whereby some or all of the layers 101-107 may be deposited or

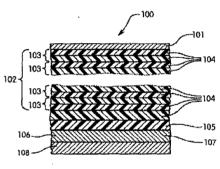


Fig. 1

applied on a surface of the rolled product in a continuous process. There is no disclosure or suggestion in Gillich et al. that any of the coatings or layers may be provided as a separately existing pre-formed sheet that is adhered to the surface of the reflector body. Moreover, Gillich et al. teaches away from such a configuration by teaching that the layers can be deposited via immersion, spraying, vaporization or sputtering or the like, all of which function to establish or form the layer on the surface and none of which utilize a pre-formed sheet of the applied materials. Gillich et al. further teaches away from such a configuration by teaching that the preferred thickness of the protective coating or layer is 3 nm to 400 nm and that the maximum thickness of the protective coating or layer is 1000 nm, as discussed below.

Thus, the protective layer of Gillich et al. is not a pre-formed thin flexible glass sheet. This is evidenced, for example, by the statement in Gillich et al. that "the minimum thickness of the protective layer is 3 nm. The maximum thickness of the protective layer may, for example, be 1000 nm and advantageously 400 nm. In another embodiment the thickness of

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the protected layer may preferably be 40 nm or less. The thickness of the protective layer may in particular be 3 to 20 nm. In the present description of the invention, the term nm means nanometer." See column 2, lines 32-39 of Gillich et al. Thus, Gillich et al. teaches away from the present invention by teaching that the *maximum* thickness of the deposited protective layer is 1000 nm, which is 0.001 mm, which is substantially less than the thickness (less than approximately 0.8 mm and greater than approximately 0.3 mm) of the pre-formed glass sheet of the claimed invention.

The hard coat of Gillich et al. thus is <u>not</u> a thin flexible glass sheet that exists as a pre-formed glass sheet that is separate from a polymeric mirror substrate, as is clearly evident by the disclosure in Gillich et al. that the hard coat of Gillich et al. has a maximum thickness of 1,000 nanometers (see column 2, lines 32-36 of Gillich et al.). Such a hard coat thus is less than 0.001 millimeters thick and thus such a hard coat is not providable as a pre-formed thin flexible sheet (i.e., a sheet existing by itself as a flexible sheet and <u>not</u> as a layer that is coated or deposited on a separate substrate) that exists separate from the substrate or reflector body. Moreover, and as stated in the background section and Summary of the Invention section of the present application, such a hard coat will not provide the benefits of the claimed invention.

Further, the hard coat of Gillich et al. is disclosed as being applied to the reflector body by deposition in vacuum or by thermal vaporization or by electron beam vaporization or by sputtering or by plasma polymerization or by chemical vapor deposition (see column 7, line 66 through column 8, line 12 of Gillich et al.). The Office Action states that the disclosure at column 8, lines 28-37 of Gillich et al. evidences that the protective layer can be formed as a pre-existing, pre-formed glass sheet that is separate from the mirror substrate of claim 1 (see page 7 of the Office Action).

Applicant respectfully traverses. The cited lines of Gillich et al. merely disclose that the *reflector body* (<u>not</u> the protective layer) may be provided as a rolled product, e.g. foils,

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strips or sheets, and that the coatings or layers (including the protective layer) may be applied or deposited on the rolled reflector body in a continuous process (such as by immersion, spraying, etc.). This is evidenced by the statement at column 3, lines 13-17 of Gillich et al. that "examples of reflector bodies are castings and forgings and in particular rolled products such as foils, strips, plates, sheets," and is further evidenced by the statement at column 2, lines 28-30 of Gillich et al. that "the protective layer is considered as one of the transparent layers in the sequence of reflective layers." As described throughout Gillich et al., the transparent layers are coated or deposited on the reflector body and do not exist as a pre-formed sheet separate from the reflector body and thus cannot have an attaching surface opposed to and adhered to an exterior surface of a polymeric mirror substrate, as set forth in independent claim 1 above.

Thus, Gillich et al. discloses that the protective layer is deposited on the surface of the reflector body via a suitable coating or forming process, such as vaporization, sputtering, immersion, spraying, sol-gel process and/or the like. Applicant submits that Gillich et al. is utterly devoid of any disclosure or suggestion that the protective layer may be provided as a thin at least partially flexible glass sheet existing as a pre-formed glass sheet that is separate from the reflector body and that has an attaching surface opposed to and adhered to an exterior surface of the reflector body when the thin at least partially flexible sheet is adhered to the exterior surface of the reflector body. Nor is there any disclosure or suggestion in Gillich et al. of such a thin glass sheet that has a thickness of less than approximately 0.8 mm and greater than approximately 0.3 mm. Therefore, the combination of Schmidt and Gillich et al. does not disclose, suggest or render obvious the invention claimed herein.

With respect to the rejection of dependent claims 2-11, Applicant submits that the combination of Schmidt and Gillich et al., either alone or in further combination with Wheatley et al., does not disclose, teach or suggest or render obvious the claimed invention for at least the reasons set forth above.

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Accordingly, Applicant respectfully submits that neither Schmidt nor Gillich et al., either alone or in combination with one another or with any other prior art of record, disclose, teach,

suggest or render obvious the wide angle reflective element of the present invention, particularly as set forth in independent claim 1 and in the claims depending therefrom. Reconsideration and

withdrawal of the rejections of claims 1-11 is respectfully requested.

Claims 1-11 remain pending in the application. Applicant respectfully submits that

claims 1-11 are in condition for allowance and a notice to that effect is earnestly and respectfully

requested. Should the Examiner have any questions regarding the above discussion, the Examiner

is invited to contact the undersigned attorney to discuss this further.

Respectfully submitted,

NIALL R. LYNAM

By: Van Dyke, Gardner, Linn & Burkhart, LLP

Date: February 13, 2008.

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DON01 P-1152

Electronic Patent Application Fee Transmittal					
Application Number:	10	709434			
Filing Date:	05	-May-2004			
Title of Invention:	MIRROR REFLECTIVE ELEMENT				
First Named Inventor/Applicant Name:	Niall R. Lynam				
Filer:	Timothy A. Flory/Kristen Buter				
Attorney Docket Number: DON01 P-1152					
Filed as Large Entity					
Utility Filing Fees					
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:					
Pages:					
Claims:					
Miscellaneous-Filing:					
Petition:					
Patent-Appeals-and-Interference:					
Post-Allowance-and-Post-Issuance:					
Extension-of-Time:					
Extension-of-lime:					

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
	Total in USD (\$)			120

Electronic Acl	knowledgement Receipt
EFS ID:	2853243
Application Number:	10709434
International Application Number:	
Confirmation Number:	3433
Title of Invention:	MIRROR REFLECTIVE ELEMENT
First Named Inventor/Applicant Name:	Niall R. Lynam
Customer Number:	28101
Filer:	Timothy A. Flory/Kristen Buter
Filer Authorized By:	Timothy A. Flory
Attorney Docket Number:	DON01 P-1152
Receipt Date:	13-FEB-2008
Filing Date:	05-MAY-2004
Time Stamp:	14:10:10
Application Type:	Utility under 35 USC 111(a)

# Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$120
RAM confirmation Number	7739
Deposit Account	220190
Authorized User	

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'	ivilscellareous incoming Letter Transmittal.pur		794b602c6637198717f240ee3ca8b8d4 b00578e4	no	I		
Warnings:							
Information:							
2	Extension of Time PetitionForExtensionOfT		81364	no	1		
2	Extension of Time	pdf	63f4d5e1b20febf2727aa21c8232cc2b5 2cc00dd	110	, 		
Warnings:							
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3	Amendment - After Non-Final Response.pdf		521617	no	10		
	Rejection	jection		Rejection		110	
Warnings:							
Information:							
4	Fee Worksheet (PTO-06)	fee-info.pdf	8140	no	2		
7	1 00 11011011011 (1 1 0 00)	100 mo.par	960a452d953fc429cfad357cb1aa27da 1109a6bc	110	<u>-</u>		
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#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/21 (12-07) Approved for use through 12/31/2007, OMB 0651-0031

Under the Paperwork R	eduction Act of 1995, no per					J.S. DEPARTMENT OF COMMERCE displays a valid OMB control number.
		Application Number	10/709,43	4		
TRANS	MITTAL	Filing Date	February	13, 2008		
FO	RM	First Named Inventor	Niall R. Ly	Niall R. Lynam		
		Art Unit	2872			
(to be used for all correst	oondence after initial filing)	Examiner Name	Alessandr	o V. Amar	i	
Total Number of Pages in		Attorney Docket Number	DON01 P-	-1152		
Total Hamber of Lugos at		IOLOGUEEO (C)				
	EN	ICLOSURES (Check a	ill that apply	<i>()</i>	After	Allowance Communication to TC
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Fee Attach	ned	Licensing-related Papers				l Communication to Board leals and Interferences
Amendment/Reply	,	Petition				Il Communication to TC Il Notice, Brief, Reply Brief)
I I		Petition to Convert to a		同		etary Information
After Final		Provisional Application Power of Attorney, Revocati	ion	H	-	-
Affidavits/d	leclaration(s)	Change of Correspondence	Address			Letter Enclosure(s) (please Identify
Extension of Time	Request	Terminal Disclaimer			below	
Express Abandoni	ment Request	Request for Refund				
Information Disclos	sure Statement	CD, Number of CD(s)				
		Landscape Table on C	D			
Certified Copy of F	Priority Ren	narks				
Reply to Missing F	Parts/					•
Incomplete Applica						•
	FR 1.52 or 1.53					
	SIGNATURE	OF APPLICANT, ATTO	DRNEY, C	R AGE	NT	
Firm Name VAN DY	/KE, GARDNER, LINN &	BURKHART LLP		·		
Signature 7	<u> </u>	-				
Printed name Timothy						
Date Februar	ry 13, 2008		Reg. No.	42540		
	CERTIF	FICATE OF TRANSMISS	SION/MAI	LING		`
I hereby certify that this co sufficient postage as first of the date shown below:						ited States Postal Service with Alexandria, VA 22313-1450 on
Signature	Kuster M	Butel				
Typed or printed name	Kristen M. Buter				Date	February 13, 2008

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PTO/SB/22 (12-07)
Approved for use through 12/31/2007. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARMENT OF COMMERCE
Under the paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless if displays a valid OMB control number.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)		Docket Number (Optional)				
	FY 2008		DON01 P-1152			
(Fees	pursuant to the Consolidated Appropriations Act, 200	05 (H.R. 4818).)	<del> </del>			
Application I			Filed May 5, 2004	/ <sub>+</sub>		
For MIRR	OR REFLECTIVE ELEMENT	·				
Art Unit 2	872		Examiner Alessand	Iro V. Amari		
This is a req application.	This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filling a reply in the above identified application.					
The request	ed extension and fee are as follows (check ti	ime period desired a		ee below):		
<u>.</u>		<u>Fee</u>	Small Entity Fee	120		
X	One month (37 CFR 1.17(a)(1))	\$120	\$60	\$		
	Two months (37 CFR 1.17(a)(2))	\$460	\$230	\$		
	Three months (37 CFR 1.17(a)(3))	\$1050	\$525	\$		
	Four months (37 CFR 1.17(a)(4))	\$1640	\$820	\$		
	Five months (37 CFR 1.17(a)(5))	\$2230	\$1115	\$		
Applicar	nt claims small entity status. See 37 CFR 1.2	27.				
A chec	k in the amount of the fee is enclosed.					
Payme	nt by credit card. Form PTO-2038 is atta	ached.				
The Dir	ector has already been authorized to ch	arge fees in this a	pplication to a Deposit	Account.		
The Dir Deposi	rector is hereby authorized to charge and taccount Number22-0190_		be required, or credit ar iclosed a duplicate copy			
WARNIN	G: Information on this form may become publiced to card information and authorization on P	ic. Credit card inform	, , , , , , , , , , , , , , , , , , , ,			
I am the	applicant/inventor.					
	assignee of record of the entire in	nterest. See 37 CF	FR 3.71.			
	Statement under 37 CFR 3.73	• •	42 540 '			
	attorney or agent of record. Regi	stration Number _	12 340	_		
	attorney or agent under 37 CFR Registration number if acting under 3					
	Tit Dee		February	13, 2008		
	Signature			e		
	Timothy A. Flory		(616) 975-55	500		
	Typed or printed name	Telephone	Number			
	es of all the inventors or assignees of record of the entire lired, see below.	interest or their represent	tative(s) are required. Submit mul	tiple forms if more than one		
X Total	1	ubmitted.				

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/06 (07-06)

Approved for use through 1/31/2007. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application or Docket Number Filing Date PATENT APPLICATION FEE DETERMINATION RECORD 10/709,434 05/05/2004 \_\_\_ To be Mailed Substitute for Form PTO-875 APPLICATION AS FILED - PART I OTHER THAN (Column 1) (Column 2) SMALL ENTITY | SMALL ENTITY NUMBER FILED NUMBER EXTRA RATE (\$) FEE (\$) RATE (\$) FEE (\$) FOR ☐ BASIC FEE N/A N/A N/A N/A SEARCH FEE N/A N/A N/A N/A (37 CFR 1.16(k), (i), or (m)) **EXAMINATION FEE** N/A N/A N/A N/A (37 CFR 1.16(o), (p), or (q) TOTAL CLAIMS OR minus 20 = X \$ X \$ (37 CFR 1.16(i)) INDEPENDENT CLAIMS X \$ X \$ minus 3 = (37 CFR 1.16(h)) If the specification and drawings exceed 100 sheets of paper, the application size fee due ☐ APPLICATION SIZE FEE is \$250 (\$125 for small entity) for each (37 CFR 1.16(s)) additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s) MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j)) \* If the difference in column 1 is less than zero, enter "0" in column 2. TOTAL TOTAL APPLICATION AS AMENDED - PART II OTHER THAN SMALL ENTITY OR SMALL ENTITY (Column 1) (Column 2) (Column 3) CLAIMS **HIGHEST** REMAINING PRESENT ADDITIONAL ADDITIONAL RATE (\$) 02/13/2008 RATE (\$) PREVIOUSLY **EXTRA** FEE (\$) FEE (\$) ENDMENT **AMENDMENT** PAID FOR Total (37 CFR \*\* 20 \* 11 Minus = 0 X \$ OR X \$50= 0 Independent (37 CFR 1.16(h) = 0 0 \*\*\*3 OR \* 1 Minus X \$210= X \$ Application Size Fee (37 CFR 1.16(s)) FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) OR TOTAL TOTAL 0 ADD'L OR ADD'L FEE (Column 2) (Column 3) (Column 1) CLAIMS HIGHEST REMAINING PRESENT ADDITIONAL ADDITIONAL NUMBER RATE (\$) RATE (\$) PREVIOUSLY **EXTRA** FEE (\$) **AFTER** FEE (\$) AMENDMENT AMENDMEN Total (37 CFR Minus X \$ OR X \$ \*\*\* X \$ OR X \$ Application Size Fee (37 CFR 1.16(s)) OR FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) TOTAL TOTAL ADD'L OR ADD'L **FFF** \* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. Legal Instrument Examiner: \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". /ANNIE c. SINGLETON/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1

\*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

PTO/SB/06 (07-06)

Approved for use through 1/31/2007. OMB 0651-0032 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Application or Docket Number Filing Date PATENT APPLICATION FEE DETERMINATION RECORD 10/709,434 05/05/2004 \_\_\_ To be Mailed Substitute for Form PTO-875 APPLICATION AS FILED - PART I OTHER THAN (Column 1) (Column 2) SMALL ENTITY | SMALL ENTITY NUMBER FILED NUMBER EXTRA RATE (\$) FEE (\$) RATE (\$) FEE (\$) FOR ☐ BASIC FEE N/A N/A N/A N/A SEARCH FEE N/A N/A N/A N/A (37 CFR 1.16(k), (i), or (m)) **EXAMINATION FEE** N/A N/A N/A N/A (37 CFR 1.16(o), (p), or (q) TOTAL CLAIMS OR minus 20 = X \$ X \$ (37 CFR 1.16(i)) INDEPENDENT CLAIMS X \$ X \$ minus 3 = (37 CFR 1.16(h)) If the specification and drawings exceed 100 sheets of paper, the application size fee due ☐ APPLICATION SIZE FEE is \$250 (\$125 for small entity) for each (37 CFR 1.16(s)) additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s) MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j)) \* If the difference in column 1 is less than zero, enter "0" in column 2. TOTAL TOTAL APPLICATION AS AMENDED - PART II OTHER THAN SMALL ENTITY OR SMALL ENTITY (Column 1) (Column 2) (Column 3) CLAIMS **HIGHEST** REMAINING PRESENT ADDITIONAL ADDITIONAL RATE (\$) 02/13/2008 RATE (\$) PREVIOUSLY **EXTRA** FEE (\$) FEE (\$) ENDMENT **AMENDMENT** PAID FOR Total (37 CFR \*\* 21 \* 11 Minus = 0 X \$ OR X \$50= 0 Independent (37 CFR 1.16(h) = 0 0 \*\*\*3 OR \* 1 Minus X \$210= X \$ Application Size Fee (37 CFR 1.16(s)) FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) OR TOTAL TOTAL 0 ADD'L OR ADD'L FEE (Column 2) (Column 3) (Column 1) CLAIMS HIGHEST REMAINING PRESENT ADDITIONAL ADDITIONAL NUMBER RATE (\$) RATE (\$) PREVIOUSLY **EXTRA** FEE (\$) **AFTER** FEE (\$) AMENDMENT AMENDMEN Total (37 CFR Minus X \$ OR X \$ \*\*\* X \$ OR X \$ Application Size Fee (37 CFR 1.16(s)) OR FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) TOTAL TOTAL ADD'L OR ADD'L **FFF** 

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner: /AJAY R. DAVID/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

<sup>\*</sup> If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

<sup>\*\*</sup> If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

<sup>\*\*\*</sup> If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

28101

7590

05/02/2008

VAN DYKE, GARDNER, LINN & BURKHART, LLP SUITE 207 2851 CHARLEVOIX DRIVE, S.E. GRAND RAPIDS, MI 49546 EXAMINER

AMARI, ALESSANDRO V

ART UNIT PAPER NUMBER

2872 DATE MAILED: 05/02/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709 434	05/05/2004	Niall R. Lynam	DONO1 P-1152	3433

TITLE OF INVENTION: MIRROR REFLECTIVE ELEMENT

١	APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
	nonprovisional	NO	\$1440	\$300	\$0	\$1740	08/04/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as

indicated unless correcte maintenance fee notificat		nerwise in Block 1, by (a	a) specifying a new corr	espondence address;	and/or (b) indicating a sep	arate "FEE ADDRESS" for			
CURRENT CORRESPONDI	ENCE ADDRESS (Note: Use Bl	ock 1 for any change of address)	N Fé pa ha	ote: A certificate of mailing can only be used for domestic mailings of the e(s) Transmittal. This certificate cannot be used for any other accompanying pers. Each additional paper, such as an assignment or formal drawing, must we its own certificate of mailing or transmission.					
28101	7590 05/02	/2008		Certificate of Mailing or Transmission					
SUITE 207 2851 CHARLEV	OIX DRIVE, S.E.	N & BURKHART,	LLP II	nereby certify that this ates Postal Service we dressed to the Mail ansmitted to the USPI	is Fee(s) Transmittal is bein ith sufficient postage for fir Stop ISSUE FEE address FO (571) 273-2885, on the G	g deposited with the United st class mail in an envelope above, or being facsimile date indicated below.			
GRAND RAPID	OS, MI 49546					(Depositor's name)			
						(Signature)			
						(Date)			
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	·R	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/709,434	05/05/2004		Niall R. Lynam		DON01 P-1152	3433			
TITLE OF INVENTION		VE ELEMENT	111111111111111111111111111111111111111		2011011 1102	5 155			
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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUI						
nonprovisional	NO	\$1440	\$300	\$0	\$1740	08/04/2008			
EXAM	INER	ART UNIT	CLASS-SUBCLASS	_					
AMARI, ALE	SSANDRO V	2872	359-884000						
1. Change of corresponde CFR 1.363).  Change of correspondence of		*	2. For printing on the patent front page, list  (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,						
☐ "Fee Address" indi	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach	" Indication form	(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.						
	ess an assignee is ident h in 37 CFR 3.11. Comp	A TO BE PRINTED ON ' ified below, no assignee pletion of this form is NO	•	patent. If an assigned assignment.		document has been filed for			
Please check the appropri	iate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🗖 Co	rporation or other private gr	oup entity Government			
4a. The following fee(s) a  Issue Fee  Publication Fee (N  Advance Order - #	o small entity discount [		A check is enclosed Payment by credit of	ard. Form PTO-2038	y previously paid issue fee is attached. ge the required fee(s), any de r(enclose a	,			
5. Change in Entity State  a. Applicant claims	<b>tus</b> (from status indicate s SMALL ENTITY state		☐ b. Applicant is no lo	onger claiming SMAI	L ENTITY status. See 37 C	EFR 1.27(g)(2).			
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than Office.	the applicant; a regi	stered attorney or agent; or t	he assignee or other party in			
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Alexandria, Virginia 223	13-1450.				ne public which is to file (an ninutes to complete, includi mments on the amount of ti Trademark Office, U.S. Dep . SEND TO: Commissioner lisplays a valid OMB contro	d by the USPTO to process) ng gathering, preparing, and me you require to complete eartment of Commerce, P.O. for Patents, P.O. Box 1450, 1 number.			



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/709,434	05/05/2004	DON01 P-1152 3433				
28101 75	90 05/02/2008		EXAM	INER		
VAN DYKE, GA	RDNER, LINN & B	URKHART, LLP	AMARI, ALESSANDRO V			
SUITE 207			ART UNIT	PAPER NUMBER		
2851 CHARLEVO GRAND RAPIDS,	*	2872 DATE MAILED: 05/02/200	8			

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 72 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 72 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)							
	10/709,434	LYNAM, NIALL R.							
Notice of Allowability	Examiner	Art Unit							
	ALESSANDRO AMARI	2872							
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiati of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.									
1. This communication is responsive to <u>amdt of 2/13/2008</u> .									
2. The allowed claim(s) is/are <u>1-11</u> .									
<ul> <li>3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* Certified copies not received:</li> </ul>									
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements							
4. A SUBSTITUTE OATH OR DECLARATION must be subminiformal PATENT APPLICATION (PTO-152) which give	itted. Note the attached EXAMINER's reason(s) why the oath or declarate	S AMENDMENT or NOTICE OF tion is deficient.							
5. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.								
(a) $\square$ including changes required by the Notice of Draftspers	= '	948) attached							
1)  hereto or 2)  to Paper No./Mail Date									
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or in the O	ffice action of							
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the	.84(c)) should be written on the drawin	gs in the front (not the back) of							
DEPOSIT OF and/or INFORMATION about the deposit of a position of the posi									
attached Examiner's comment regarding REQUIREMENT	FOR THE DEPOSIT OF BIOLOGICA	AL MATERIAL.							
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Informal Pa	atant Application							
<ol> <li>Notice of Neterences Cited (PTO-092)</li> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>	6. ☐ Interview Summary	• •							
3. ☐ Information Disclosure Statements (PTO/SB/08),	Paper No./Mail Date 7. ☐ Examiner's Amendm	è ^ ·							
Paper No./Mail Date  4.  Examiner's Comment Regarding Requirement for Deposit	8. <b>⊠</b> Examiner's Stateme	nt of Reasons for Allowance							
of Biological Material	9.								

Art Unit: 2872

#### **REASONS FOR ALLOWANCE**

1. Claims 1-11 are allowed.

2. The following is an examiner's statement of reasons for allowance:

Claim 1 is allowable for at least the reason, "said thin at least partially flexible glass sheet having a thickness of less than approximately 0.8 mm and greater than approximately 0.3 mm" as set forth in the claimed combination. Claims 2-11 are allowable due to their dependence on claim 1.

The Applicant's arguments on pages 7, 2<sup>nd</sup> and 3<sup>rd</sup> paragraphs and page 8, 1<sup>st</sup> paragraph were persuasive.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALESSANDRO AMARI whose telephone number is (571)272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on (571) 272-2434. The fax phone

Application/Control Number: 10/709,434

Art Unit: 2872

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ava

29 April 2008

/Alessandro Amari/

Primary Examiner, Art Unit 2872

SMR USA Exhibit 1028 Page 221

Page 3

# EAST Search History

Ref#	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1433	(359/866,868,869,883,514). CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/04/29 15:02
L2	483	(359/884).COLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/04/29 15:05
L3	2679708	polymer\$2	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/04/29 15:05
L4	90	2 and 3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/04/29 15:05
L5	75	4 and glass	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	ADJ	ON	2008/04/29 15:11
L6	15	(polymer\$2 mirror).clm.	US-PGPUB; USPAT	ADJ	ON	2008/04/29 15:21
L7	2	6 and glass.clm.	US-PGPUB; USPAT	ADJ	ON	2008/04/29 15:21
L8	90829	mirror.clm.	US-PGPUB; USPAT	ADJ	ON	2008/04/29 15:22
L9	307107	polymer\$2.clm.	US-PGPUB; USPAT	ADJ	ON	2008/04/29 15:22
L10	2436	8 and 9	US-PGPUB; USPAT	ADJ	ON	2008/04/29 15:22
L11	24	10 and glass sheet.clm.	US-PGPUB; USPAT	ADJ	ON	2008/04/29 15:23

4/29/2008 3:24:48 PM

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	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	10709434	LYNAM, NIALL R.
	Examiner	Art Unit
	Amari, Alessandro V	2872

<ul><li>✓ Rejected</li><li>= Allowed</li></ul>				- Ca	Cancelled N Non-Elected					A	Арр	oeal
			÷ Restricted			I	I Interference				Obje	ected
	☑ Claims renumbered in the same order as presented by applicant ☐ CPA										D. 🗆	R.1.47
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F	inal	Original	11/16/200	05/02/200	6 10/30/2006	04/02/2007	10/11/2007	04/29/2008				
		1	✓	✓	✓	<b>√</b>	✓	=				
		2	✓	✓	✓	✓	✓	=				
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U.S. Patent and Trademark Office Part of Paper No.: 20080429

# Search Notes



Application/Control No.	Applicant(s)/Patent Under Reexamination
10709434	LYNAM, NIALL R.
Examiner	Art Unit

2872

SEARCHED										
Class	Subclass	Date	Examiner							
359	866,868,883,514	11/16/2005	AA							
Update	above	5/2/2006	AA							
Update	above	10/30/2006	AA							
Update	above	4/2/2007	AA							
Update	above	10/11/2007	AA							
Update	above	4/29/2008	AA							
359	884	4/29/2008	AA							

Amari, Alessandro

SEARCH NOTES		
Search Notes	Date	Examiner
EAST search - see attached	11/16/2005	AA

	INTERFERENCE SEARCH		
Class	Subclass	Date	Examiner
	PG Pub text search	4/29/2008	AA

U.S. Patent and Trademark Office Part of Paper No.: 20080429

# Issue Classification

Application/Control No.	Applicant(s)/Patent Under Reexamination
10709434	LYNAM, NIALL R.
Examiner	Art Unit
ALESSANDRO AMARI	2872

ORIGINAL										INTERNATION	IAL CL	.ASS	IFIC	ATIO	N
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359			884			G	0	2	В	5 / 08 (2006.0	1.01)		T .		
						G	0	2	В	5 / 26 (2006.0					
	CR	OSS REFI	ERENCE(	S)		G	0	2	В	7 / 182 (2006.0	1.01)				
CLASS	SUB	CLASS (ON	SUBCLAS	S PER BLO	CK)										
359	883														
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/ALESSANDRO AMARI/					4/29/08					O.G. Print Claim(s) O.G. Print Figur			O.G. Print Figure		
(Primary E	xaminer)								1)	Date)		1			2,3

U.S. Patent and Trademark Office Part of Paper No. 20080429

FEB-27-2006 14:09 FROM: VGLB

6169885894

TO: USPTO

P. 5/15

Applicant Serial No. :

Niall R. Lynam

10/709,434

Page

2

#### Amendments to the Specification:

Please amend paragraph [0042] as follows:

5-15-08

[0042] Optionally, it is envisioned that such ultrathin glass films, anti-abrasion films, reflective films or reflective systems may be used for electrochromic mirror reflective elements or cells as well. For example, the interior or exterior rearview mirror assembly of the present invention may comprise an electrochromic mirror, such as an electrochromic mirror assembly and electrochromic element utilizing principles disclosed in commonly assigned U.S. Pat. Nos. 5,140,455; 5,151,816; 6,690,268; 6,178,034; 6,154,306; 6,002,544; 5,567,360; 5,525,264; 5,610,756; 5,406,414; 5,253,109; 5,076,673; 5,073,012; 5,117,346; 5,724,187; 5,668,663; 5,910,854; 5,142,407 and/or 4,712,879, which are hereby incorporated herein by reference, and/or as disclosed in the following publications: N. R. Lynam, "Electrochromic Automotive Day/Night Mirrors", SAE Technical Paper Series 870636 (1987); N. R. Lynam, "Smart Windows for Automobiles", SAE Technical Paper Series 900419 (1990); N. R. Lynam and A. Agrawal, "Automotive Applications of Chromogenic Materials", Large Area Chromogenics: Materials and Devices for Transmittance Control, C.M. Lampert and C.G. Granquist, EDS., Optical Engineering Press, Wash. (1990), which are hereby incorporated by reference herein. The mirror assembly may comprise an interior rearview mirror assembly, and may include an accessory module or may be mounted to an accessory module, such as an accessory module of the types disclosed in U.S. pat. application, Scr. No. 10/355,454, filed Jan. 31, 2003 for VEHICLE ACCESSORY MODULE, now U.S. Pat. No. 6,824,281 (Attorney Docket DON01 P-1050), which is hereby incorporated herein by reference.

Please amend paragraph [6043] as follows:

[0043] Optionally, the mirror assembly may include one or more displays for displaying information to a driver of the vehicle at or through the reflective element of the mirror assembly.

PAGE 5/15 \* RCVD AT 2/27/2006 2:04:20 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-6/44 \* DNIS:2738300 \* CSID:6169885894 \* DURATION (mm-ss):03-28

Applicant Serial No. Niall R. Lynam

Serial No.

10/709,434

Page

: 3

For example, the mirror assembly may include one or more displays of the types described in U.S. Pat. Nos. 6,329,925; 6,501,387; 6,690,268; 5,910,854; 6,420,036; 5,668,663; and 5,724,187, and/or in U.S. pat, applications, Ser. No. 10/054,633, filed Jan. 22, 2002 by Lynam et al, for VEHICULAR LIGHTING SYSTEM (Attorney Docket DON01 P-962); and Scr. No. 10/456,599, filed Jun. 6, 2003 by Weller et al. for INTERIOR REARVIEW MIRROR SYSTEM WITH COMPASS, now U.S. Pat. No. 7,004,593 (Attorney Docket DON01 P-1076), and/or in PCT Application No. PCT/US03/29776, filed Scp. 19, 2003 by Donnelly Corporation et al. for ELECTROCHROMIC MIRROR ASSEMBLY (Attorney Docket DON01 FP-1109(PCT)); PCT Application No. PCT/US03/35381, filed Nov. 5, 2003 by Donnelly Corporation et al. for ELECTRO-OPTIC REFLECTIVE ELEMENT ASSEMBLY (Attorney Docket DON01 FP-1116(PCT)); and/or PCT Application No. PCT/US03/40611, filed Dec. 19, 2003 by Donnelly Corporation et al. for ACCESSORY SYSTEM FOR VEHICLE (Attorney Docket DON01 FP-1123(PCT)), and/or in U.S. provisional applications, Scr. No. 60/508,086, filed Oct. 2, 2003 by Schofield for MIRROR REFLECTIVE ELEMENT ASSEMBLY INCLUDING ELECTRONIC COMPONENT (Attorney Docket DON01 P-1113); Ser. No. 60/525,952, filed Nov. 26, 2003 by Lynam for MIRROR REFLECTIVE ELEMENT FOR A VEHICLE (Attorney Docket DON01 P-1130); Ser. No. 60/471,546, filed May 19, 2003 (Attorney Docket DON01 P-1093); Ser. No. 60/525,537, filed Nov. 26, 2003 (Attorney Docket DON01 P-1129); and Scr. No. 60/556,259, filed Mar. 25, 2004 (Attorney Docket DON01 P-1147), which are all hereby incorporated herein by reference, without affecting the scope of the present invention.

6169885894

Please amend paragraph [0044] as follows:

5-15-08 Try

[0044] Optionally, the mirror assembly may include or be associated with electronic accessories, such as, for example, antennas, including global positioning system (GPS) or cellular phone antennas, such as disclosed in U.S. Pat. No. 5,971,552, a communication module, such as disclosed in U.S. Pat. No. 5,798,688, a blind spot detection system, such as disclosed in

U.S. Pat. Nos. 5,929,786 and/or 5,786,772, a high/low headlamp controller, such as disclosed in

PAGE 6/15 \* RCVD AT 2/27/2006 2:04:20 PM [Eastern Standard Time] \* SVR:USPTO-EFXRF-6/44 \* DNIS:2738300 \* CSID:6169885894 \* DURATION (mm-ss):03-28

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

Group Art

2872

Examiner

: Alessandro V. Amari

Applicant

: Niall R. Lynam

Serial No.

: 10/709,434

Filing Date

: May 5, 2004

For

MIRROR REFLECTIVE ELEMENT

Confirmation No.:

3433

Notice of Allowance Mailing Date: May 2, 2008

Mail Stop Issue Fee Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

#### AMENDMENT AFTER ALLOWANCE UNDER 37 CFR 1.312

Receipt of the Notice of Allowability and the Notice of Allowance and Fee(s) Due and Examiner's Amendment mailed May 2, 2008 in connection with the above identified application is hereby acknowledged.

Amendments to the Specification are on page 2 of this paper.

**Remarks** are on page 6 of this paper.

Applicant

Niall R. Lynam

Serial No.

10/709,434

Page

2.

# **Amendments to the Specification:**

Please amend paragraph [0042] as follows:

[0042] Optionally, it is envisioned that such ultrathin glass films, anti-abrasion films, reflective films or reflective systems may be used for electrochromic mirror reflective elements or cells as well. For example, the interior or exterior rearview mirror assembly of the present invention may comprise an electrochromic mirror, such as an electrochromic mirror assembly and electrochromic element utilizing principles disclosed in commonly assigned U.S. Pat. Nos. 5,140,455; 5,151,816; 6,690,268; 6,178,034; 6,154,306; 6,002,544; 5,567,360; 5,525,264; 5,610,756; 5,406,414; 5,253,109; 5,076,673; 5,073,012; 5,117,346; 5,724,187; 5,668,663; 5,910,854; 5,142,407 and/or 4,712,879, which are hereby incorporated herein by reference, and/or as disclosed in the following publications: N. R. Lynam, "Electrochromic Automotive Day/Night Mirrors", SAE Technical Paper Series 870636 (1987); N. R. Lynam, "Smart Windows for Automobiles", SAE Technical Paper Series 900419 (1990); N. R. Lynam and A. Agrawal, "Automotive Applications of Chromogenic Materials", Large Area Chromogenics: Materials and Devices for Transmittance Control, C.M. Lampert and C.G. Granquist, EDS., Optical Engineering Press, Wash. (1990), which are hereby incorporated by reference herein. The mirror assembly may comprise an interior rearview mirror assembly, and may include an accessory module or may be mounted to an accessory module, such as an accessory module of the types disclosed in U.S. pat. application, Ser. No. 10/355,454, filed Jan. 31, 2003 for VEHICLE ACCESSORY MODULE, now U.S. Pat. No. 6,824,281-(Attorney Docket DON01 P-1050), which is hereby incorporated herein by reference.

Please amend paragraph [0043] as follows:

[0043] Optionally, the mirror assembly may include one or more displays for displaying information to a driver of the vehicle at or through the reflective element of the mirror assembly. For example,

Applicant: Niall R. Lynam Serial No. : 10/709,434

Page

the mirror assembly may include one or more displays of the types described in U.S. Pat. Nos. 6,329,925; 6,501,387; 6,690,268; 5,910,854; 6,420,036; 5,668,663; and 5,724,187, and/or in U.S. pat. applications, Ser. No. 10/054,633, filed Jan. 22, 2002 by Lynam et al. for VEHICULAR LIGHTING SYSTEM, now U.S. Pat. No. 7,195,381-(Attorney Docket DON01 P-962); and Ser. No. 10/456,599, filed Jun. 6, 2003 by Weller et al. for INTERIOR REARVIEW MIRROR SYSTEM WITH COMPASS, now U.S. Pat. No. 7,004,593 (Attorney Docket DON01 P-1076), and/or in PCT Application No. PCT/US03/29776, filed Sep. 19, 2003 by Donnelly Corporation et al. for ELECTROCHROMIC MIRROR ASSEMBLY (Attorney Docket DON01 FP-1109(PCT)); PCT Application No. PCT/US03/35381, filed Nov. 5, 2003 by Donnelly Corporation et al. for ELECTRO-OPTIC REFLECTIVE ELEMENT ASSEMBLY (Attorney Docket DONO) FP-4116(PCT)); and/or PCT Application No. PCT/US03/40611, filed Dec. 19, 2003 by Donnelly Corporation et al. for ACCESSORY SYSTEM FOR VEHICLE (Attorney Docket DON01 FP-4123(PCT)), and/or in U.S. provisional applications, Ser. No. 60/508,086, filed Oct. 2, 2003 by Schofield for MIRROR REFLECTIVE ELEMENT ASSEMBLY INCLUDING ELECTRONIC COMPONENT (Attorney Docket DON01 P-1113); Ser. No. 60/525,952, filed Nov. 26, 2003 by Lynam for MIRROR REFLECTIVE ELEMENT FOR A VEHICLE (Attorney Docket DON01 P-1130); Ser. No. 60/471,546, filed May 19, 2003 (Attorney Docket DON01 P-1093); Ser. No. 60/525,537, filed Nov. 26, 2003 (Attorney Docket DON01 P-1129); and Ser. No. 60/556,259, filed Mar. 25, 2004 (Attorney Docket DON01 P-1147), which are all hereby incorporated herein by reference, without affecting the scope of the present invention.

Please amend paragraph [0044] as follows:

[0044] Optionally, the mirror assembly may include or be associated with electronic accessories, such as, for example, antennas, including global positioning system (GPS) or cellular phone antennas, such as disclosed in U.S. Pat. No. 5,971,552, a communication module, such as disclosed in U.S. Pat. No. 5,798,688, a blind spot detection system, such as disclosed in U.S. Pat. Applicant : Niall R. Lynam Serial No. : 10/709,434

Page : 4

Nos. 5,929,786 and/or 5,786,772, a high/low headlamp controller, such as disclosed in U.S. Pat. Nos. 5,796,094 and/or 5,715,093, transmitters and/or receivers, such as a garage door opener or the like, a digital network, such as described in U.S. Pat. No. 5,798,575, a memory mirror system, such as disclosed in U.S. Pat. No. 5,796,176, a hands-free phone attachment, a video device for internal cabin surveillance and/or video telephone function, such as disclosed in U.S. Pat. Nos. 5,760,962 and/or 5,877,897, a remote keyless entry receiver or system or circuitry and/or a universal garage door opening system or circuitry (such as the types disclosed in U.S. Pat. Nos. 6,396,408; 6,362,771; 5,798,688 and 5,479,155, and/or U.S. pat. application, Ser. No. 10/770,736, filed Feb. 3, 2004 by Baumgardner et al. for GARAGE DOOR OPENING SYSTEM FOR VEHICLE, now U.S. Pat. No. 7,023,322-(Attorney Docket DON01 P-1135)), lights, such as map reading lights or one or more other lights or illumination sources, such as disclosed in U.S. Pat. Nos. 6,690,268; 5,938,321; 5,813,745; 5,820,245; 5,673,994; 5,649,756; 5,178,448; 5,671,996; 4,646,210; 4,733,336; 4,807,096; 6,042,253; and/or 5,669,698, and/or U.S. pat. application, Ser. No. 10/054,633, filed Jan. 22, 2002 by Lynam et al. for VEHICULAR LIGHTING SYSTEM, now U.S. Pat. No. 7,195,381 (Attorney Docket DON01-P-962), microphones, such as disclosed in U.S. Pat. Nos. 6,243,003; 6,278,377; and/or 6,420,975, and/or PCT Application No. PCT/US03/30877, filed Oct. 1, 2003-(Attorney Docket DON01-FP-4111(PCT)), speakers, a compass or compass system, such as disclosed in U.S. Pat. Nos. 5,924,212; 4,862,594; 4,937,945; 5,131,154; 5,255,442; and/or 5,632,092, and/or U.S. pat. application, Ser. No. 10/456,599, filed Jun. 6, 2003 by Weller et al. for INTERIOR REARVIEW MIRROR SYSTEM WITH COMPASS, now U.S. Pat. No. 7,004,593 (Attorney Docket DONO) P-1076), a navigation system, such as described in U.S. Pat. No. 6,477,464, and U.S. pat. applications, Ser. No. 10/456,599, filed Jun. 6, 2003 by Weller et al. for INTERIOR REARVIEW MIRROR SYSTEM WITH COMPASS, now U.S. Pat. No. 7,004,593-(Attorney Docket DON01 P-1076); Ser. No. 10/287,178, filed Nov. 4, 2002 by McCarthy et al. for NAVIGATION SYSTEM FOR A VEHICLE, now U.S. Pat. No. 6,678,614 (Attorney Docket DON01 P-1051); Ser. No. 10/645,762, filed Aug. 20, 2003 by Taylor et al. for VEHICLE

Serial No. :

Applicant: Niall R. Lynam 10/709,434

Page

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NAVIGATION SYSTEM FOR USE WITH A TELEMATICS SYSTEM, now U.S. Pat. No. 7,167,796 (Attorney Docket DON01 P-1103); and Ser. No. 10/422,378, filed Apr. 24, 2003, now U.S. Pat. No. 6,946,978 (Attorney Docket DONO! P-1074); and/or PCT Application No. PCT/US03/40611, filed Dec. 19, 2003 by Donnelly Corporation et al. for ACCESSORY SYSTEM FOR VEHICLE (Attorney Docket DON01 FP-1123(PCT)), a tire pressure monitoring system, such as the types disclosed in U.S. Pat. Nos. 6,294,989; 6,445,287; and/or 6,472,979, and/or in U.S. pat. application, Ser. No. 10/206,495, filed Jul. 26, 2002 by Schofield et al. for SELF TRAINING TIRE PRESSURE MONITORING SYSTEM, now U.S. Pat. No. 6,731,205 (Attorney Docket DON01 P-992), a seat occupancy detector, a trip computer, a telematics system, such as an ONSTAR® system or the like, and/or any other desired accessory or system or the like (with all of the above-referenced patents and patent applications and PCT applications being commonly assigned to Donnelly Corporation, and with the disclosures of all of the above referenced patents and patent applications and PCT applications being hereby incorporated herein by reference in their entireties).

Applicant

Niall R. Lynam

Serial No.

10/709,434

Page

: 6

# Remarks:

Review of the specification revealed that the specification needed updating to reference the patent numbers of the incorporated patent applications, which have now issued as United States patents.

Because the present amendment relates to matters of form only, and does not require any further search on the part of the Examiner, it is respectfully submitted that it is proper for entry and such entry is requested along with a notice of approval of the amendment.

Respectfully submitted,

NIALL R. LYNAM

By: Van Dyke, Gardner, Linn & Burkhart, LLP

Date: May 16, 2008

Timothy A. Flory

Registration No. 42 540

2851 Charlevoix Drive, S.E.

P.O. Box 888695

Grand Rapids, MI 49588-8695

(616) 975-5500

Electronic Acknowledgement Receipt			
EFS ID:	3313627		
Application Number:	10709434		
International Application Number:			
Confirmation Number:	3433		
Title of Invention:	MIRROR REFLECTIVE ELEMENT		
First Named Inventor/Applicant Name:	Niall R. Lynam		
Customer Number:	28101		
Filer:	Timothy A. Flory/Amanda Sytsma		
Filer Authorized By:	Timothy A. Flory		
Attorney Docket Number:	DON01 P-1152		
Receipt Date:	16-MAY-2008		
Filing Date:	05-MAY-2004		
Time Stamp:	13:35:37		
Application Type:	Utility under 35 USC 111(a)		

# Payment information:

Information:

Submitted with Payment	no
File Listing:	

Document Number	Document Description	File Name	File Size(Bytes) /Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	TransmittalForm.pdf	79940	no	1
l	Miscellaneous incoming Letter	rransmittan omi.pui	d792df3dd5ce2ed5ee104f066780c7d5 cf39f7e7	110	'
Warnings:					

2	Amendment after Notice of Allowance	AmendmentAfterAllowance.p	336975	no	6
2	(Rule 312)	df '	0affbd076d153fbc679e3cd1b3d00cd1f 89b6dd4	110	
Warnings:					
Information	!				
		Total Files Size (in bytes)	4	16915	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

#### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/21 (01-08)
Approved for use through 05/31/2008, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

TRANSMITTAL Filing Date May 5, 2004 First Named Inventor Niall R. Lynam Art Unit 2872 Examiner Name Alessandro V. Amari Attorney Docket Number TOANG B 1459							
First Named Inventor Niall R. Lynam Art Unit 2872  Examiner Name Alessandro V. Amari  Attorney Docket Number							
Art Unit 2872  Examiner Name Alessandro V. Amari  Attorney Docket Number							
(to be used for all correspondence after initial filing)  Examiner Name  Alterney Docket Number							
(to be used for all correspondence after initial filing)  Attorney Docket Number							
Attorney Docket Number							
Total Number of Pages in This Submission 7 Attorney Docket Number   DON09 P-1152	4						
Total Number of Pages in This Submission / DONGS P-1132							
ENCLOSURES (Check all that apply)							
Fee Transmittal Form  Fee Attached  Licensing-related Papers  Appeal Communication to Boa of Appeals and Interferences  Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  Petition  Petition Petition to Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence Address  Terminal Disclaimer  Express Abandonment Request Information Disclosure Statement  Certified Copy of Priority Document(s)  Reply to Missing Parts Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53	rd ) ntify						
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT							
Firm Name  VAN DYKE, GARDNER, LINN & BURKHART, LLP							
Signature Tit De							
Printed name Timothy A. Flory							
Date May 16, 2008 Reg. No. 42 540							
CERTIFICATE OF TRANSMISSION/MAILING  I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with							
sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:  Signature							
Amarda B. Sytsma							
Typed or printed name Amanda R. Sytsma Date May 16, 2008							

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/709,434	05/05/2004	05/05/2004 Niall R. Lynam		3433	
	7590 06/16/200 SARDNER, LINN & B	EXAMINER			
SUITE 207	,	AMARI, ALESSANDRO V			
GRAND RAPI	CVOIX DRIVE, S.E. DS, MI 49546	ART UNIT PAPER NUMBER			
		2872			
			MAIL DATE	DELIVERY MODE	
			06/16/2008	PAPER	

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)
		10/709,434	LYNAM, NIALL R.
Respo	onse to Rule 312 Communication	Examiner	Art Unit
		ALESSANDRO AMARI	2872
	The MAILING DATE of this communication ap	pears on the cover sheet with the	correspondence address –
	amendment filed on <u>16 May 2008</u> under 37 CFR 1.3 entered.	12 has been considered, and has be	ən:
b) 🛛	entered as directed to matters of form not affecting	the scope of the invention.	
c) 🗌	disapproved because the amendment was filed after Any amendment filed after the date the issue fee and the required fee to withdraw the application	e is paid must be accompanied by a p	petition under 37 CFR 1.313(c)(1)
d) 🔲	disapproved. See explanation below.		
e) 🔲	entered in part. See explanation below.		
		/Alessandro Amari/ Primary Examiner, Art Unit	2872

U.S. Patent and Trademark Office PTOL-271 (Rev. 04-01) OK TO ENTER: /AA/

PATENT DON09 P-1152

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art

2872

Examiner

: Alessandro V. Amari

Applicant

: Niall R. Lynam

Serial No. Filing Date

: 10/709,434

For

: May 5, 2004 : MIRROR REFLECTIVE ELEMENT

Confirmation No.:

3433

Notice of Allowance Mailing Date: May 2, 2008

Mail Stop Issue Fee Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

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Receipt of the Notice of Allowability and the Notice of Allowance and Fee(s) Due and Examiner's Amendment mailed May 2, 2008 in connection with the above identified application is hereby acknowledged.

Amendments to the Specification are on page 2 of this paper.

**Remarks** are on page 6 of this paper.

# PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE LE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEB and PUBLICATION FEE (if required). Blocks I through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block I, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEB ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDE		ock 1 for any change of address)		Note: A certificate of Fee(s) Transmittal. Transmittal. Transmittal addition have its own certificate.	f mailing can his certificate nal paper, suc te of mailing	only be used for e cannot be used for the as an assignment	r domestic mailings of the or any other accompanying at or formal drawing, must
VAN DYKE, G SUITE 207 2851 CHARLEV	OIX DRIVE, S.E.	<sup>/2008</sup> I & BURKHART,		C	ertificate of I	Mailing or Transr	
GRAND RAPIDS	S, MI 49546			Kristen M.	Buter		(Depositor's name)
				July 28, 20	1. Bu	tae_	(Signature)
APPLICA'TION NO.	FILING DATE		FIRST NAMED INVEN	TOR	ATTORNE	Y DOCKET NO,	CONFIRMATION NO.
10/709,434 TITLE OF INVENTION:	05/05/2004 MIRROR REFLECTIV	E ELEMENT	Niall R. Lynam		DON	0 <b>9</b> P-1152	3433
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE D	UE PREV. PAID ISSU	JE FEE TO	OTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0		\$1740	08/04/2008
EXAMI	NER	ART UNIT	CLASS-SUBCLASS				
AMARI, ALES	SANDRO V	2872	359-884000			•	
"Fee Address" indic PTO/SB/47; Rev 03-02 Number is required.  3. ASSIGNEE NAME AN PLEASE NOTE: Unle recordation as set forth (A) NAME OF ASSIG.  Donnelly (	ss an assignee is identi in 37 CFR 3.11. Comp NEE Corporation	Indication form ed. Use of a Customer  TO BE PRINTED ON fied below, no assignee letion of this form is NO	(2) the name of a s registered attorney 2 registered patent listed, no name wil THE PATENT (print o data will appear on the substitute for filing (B) RESIDENCE: (C) Holland, M	r type)  te patent. If an assig an assignment.  ITY and STATE OR  Iichigan	a member a nes of up to f no name is nee is identif	23	cument has been filed for
		4lermitted)	D. Payment of Fee(s): (I  A check is enclose  Payment by credit	Please first reapply a ed. card. Form PTO-203	my previous	ly paid issue fee s	hown above) iciency, or credit any extra copy of this form).
5. Change in Entity Statu  a. Applicant claims  NOTE: The Issue Fee and interest as shown by the re	SMALL ENTITY statu	s. See 37 CFR 1,27.	☐ b. Applicant is no	longer claiming SMA	LL ENTITY	status. See 37 CF	R 1.27(g)(2).
Authorized Signature	TEAL	Tle		Date Jul			
Typed or printed name				Registration	-		
This collection of informat an application. Confidentis submitting the completed this form and/or suggestion Box 1450, Alexandria, Vir Alexandria, Virginia 2231: Under the Paperwork Redu	tion is required by 37 Cl ality is governed by 35 application form to the ns for reducing this bur rginia 22313-1450. DO 3-1450. uction Act of 1995, no p	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary den, should be sent to th NOT SEND FHES OR 6 ersons are required to re-	on is required to obtain 1.14. This collection is depending upon the in e Chief Information Of COMPLETED FORMS spond to a collection of	or retain a benefit by sestimated to take 12 dividual case. Any c officer, U.S. Patent and TOTHIS ADDRES information unless it	the public when inutes to comments on Trademark (S. SEND TO displays a va	nich is to file (and omplete, including the amount of tim Office, U.S. Depar : Commissioner for the OMB control results in the Commissioner for the OMB control results in the Commissioner for the OMB control results in the Commissioner for	by the USPTO to process) gathering, preparing, and e you require to complete timent of Commerce, P.O. or Patents, P.O. Box 1450, number.

Electronic Patent Application Fee Transmittal					
Application Number:	10709434				
Filing Date:	05	-May-2004			
Title of Invention:	MIRROR REFLECTIVE ELEMENT				
First Named Inventor/Applicant Name:	Nia	all R. Lynam			
Filer:	Tir	nothy A. Flory/Kris	sten Buter		
Attorney Docket Number:	DC	DN01 P-1152			
Filed as Large Entity					
Utility Filing Fees					
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:					
Pages:					
Claims:					
Miscellaneous-Filing:					
Petition:	Petition:				
Patent-Appeals-and-Interference:					
Post-Allowance-and-Post-Issuance:					
Utility Appl issue fee		1501	1	1440	1440
Publ. Fee- early, voluntary, or normal		1504	1	300	300

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
	Tota	al in USE	) (\$)	1740

Electronic Acknowledgement Receipt			
EFS ID:	3684159		
Application Number:	10709434		
International Application Number:			
Confirmation Number:	3433		
Title of Invention:	MIRROR REFLECTIVE ELEMENT		
First Named Inventor/Applicant Name:	Niall R. Lynam		
Customer Number:	28101		
Filer:	Timothy A. Flory/Kristen Buter		
Filer Authorized By:	Timothy A. Flory		
Attorney Docket Number:	DON01 P-1152		
Receipt Date:	28-JUL-2008		
Filing Date:	05-MAY-2004		
Time Stamp:	15:36:04		
Application Type:	Utility under 35 USC 111(a)		

# Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	\$1740
RAM confirmation Number	886
Deposit Account	220190
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2			8272	no	2	
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#### New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

#### National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

### New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



Applicant

Niall R. Lynam

Serial No.

10/709,434

Page

: 2

#### Amendments to the Specification:

Please amend paragraph [0042] as follows:

8/4/08 [00,42]

Optionally, it is envisioned that such ultrathin glass films, anti-abrasion films, reflective films or reflective systems may be used for electrochromic mirror reflective elements or cells as well. For example, the interior or exterior rearview mirror assembly of the present invention may comprise an electrochromic mirror, such as an electrochromic mirror assembly and electrochromic element utilizing principles disclosed in commonly assigned U.S. Pat. Nos. 5,140,455; 5,151,816; 6,690,268; 6,178,034; 6,154,306; 6,002,544; 5,567,360; 5,525,264; 5,610,756; 5,406,414; 5,253,109; 5,076,673; 5,073,012; 5,117,346; 5,724,187; 5,668,663; 5,910,854; 5,142,407 and/or 4,712,879, which are hereby incorporated herein by reference, and/or as disclosed in the following publications: N. R. Lynam, "Electrochromic Automotive Day/Night Mirrors", SAE Technical Paper Series 870636 (1987); N. R. Lynam, "Smart Windows for Automobiles", SAE Technical Paper Series 900419 (1990); N. R. Lynam and A. Agrawal, "Automotive Applications of Chromogenic Materials", Large Area Chromogenics: Materials and Devices for Transmittance Control, C.M. Lampert and C.G. Granquist, EDS., Optical Engineering Press, Wash. (1990), which are hereby incorporated by reference herein. The mirror assembly may comprise an interior rearview mirror assembly, and may include an accessory module or may be mounted to an accessory module, such as an accessory module of the types disclosed in U.S. pat. application, Ser. No. 10/355,454, filed Jan. 31, 2003 for VEHICLE ACCESSORY MODULE, now U.S. Pat. No. 6,824,281-(Attorney Docket <del>DON01 P 1050), which is hereby incorporated herein by reference.</del>

Please amend paragraph [0043] as follows:

TR 8/4/08

[0043] Optionally, the mirror assembly may include one or more displays for displaying information to a driver of the vehicle at or through the reflective element of the mirror assembly. For example,



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the mirror assembly may include one or more displays of the types described in U.S. Pat. Nos. 6,329,925; 6,501,387; 6,690,268; 5,910,854; 6,420,036; 5,668,663; and 5,724,187, and/or in U.S. pat. applications, Ser. No. 10/054,633, filed Jan. 22, 2002 by Lynam et al. for VEHICULAR LIGHTING SYSTEM, now U.S. Pat. No. 7,195,381 (Attorney Docket DON01 P-962); and Ser. No. 10/456,599, filed Jun. 6, 2003 by Weller et al. for INTERIOR REARVIEW MIRROR SYSTEM WITH COMPASS, now U.S. Pat. No. 7,004,593 (Attorney Docket DON01 P-1076), and/or in PCT Application No. PCT/US03/29776, filed Sep. 19, 2003 by Donnelly Corporation et al. for ELECTROCHROMIC MIRROR ASSEMBLY (Attorney Docket DON01 FP-1109(PCT)); PCT Application No. PCT/US03/35381, filed Nov. 5, 2003 by Donnelly Corporation et al. for ELECTRO-OPTIC REFLECTIVE ELEMENT ASSEMBLY (Attorney Docket DONO): FP-1116(PCT)); and/or PCT Application No. PCT/US03/40611, filed Dec. 19, 2003 by Donnelly Corporation et al. for ACCESSORY SYSTEM FOR VEHICLE (Attorney Docket DON01 FP-1123(PCT)), and/or in U.S. provisional applications, Scr. No. 60/508,086, filed Oct. 2, 2003 by Schofield for MIRROR REFLECTIVE ELEMENT ASSEMBLY INCLUDING ELECTRONIC COMPONENT (Attorney Docket DON01 P 1113); Ser. No. 60/525,952, filed Nov. 26, 2003 by Lynam for MIRROR REFLECTIVE ELEMENT FOR A VEHICLE (Attorney Docket DONO) P 1130); Ser. No. 60/471,546, filed May 19, 2003 (Attorney Docket DON01 P-1093); Ser. No. 60/525,537, filed Nov. 26, 2003-(Attorney Docket DON01 P-1129); and Ser. No. 60/556,259, filed

Please amend paragraph [0044] as follows:

reference, without affecting the scope of the present invention.

TR

[00,44] Optionally, the mirror assembly may include or be associated with electronic accessories, such as, for example, antennas, including global positioning system (GPS) or cellular phone antennas, such as disclosed in U.S. Pat. No. 5,971,552, a communication module, such as disclosed in U.S. Pat. No. 5,798,688, a blind spot detection system, such as disclosed in U.S. Pat.

Mar. 25, 2004 (Attorney Docket DON01 P-1147), which are all hereby incorporated herein by



# United States Patent and Trademark Office

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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709 434	09/02/2008	7420756	DON01 P-1152	3433

28101 7590

08/13/2008

VAN DYKE, GARDNER, LINN & BURKHART, LLP SUITE 207 2851 CHARLEVOIX DRIVE, S.E. GRAND RAPIDS, MI 49546

#### **ISSUE NOTIFICATION**

The projected patent number and issue date are specified above.

# **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment is 40 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Niall R. Lynam, Holland, MI;

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

(Also Form PTO-1050)

# UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION					
	Page <u>1</u> of <u>1</u>				
PATENT NO. : 7,420,756 B2	. ags <u> </u>				
APPLICATION NO.: 10/709,434					
ISSUE DATE : September 2, 2008					
INVENTOR(S) : Niall R. Lynam					
It is certified that an error appears or errors appear in the above-identified patent and to is hereby corrected as shown below:	hat said Letters Patent				
Column 8: Line 15, "or" should beof Line 28, "Welter" should beWeller					
Column 9: Line 8, "Lynarn" should beLynam Line 9, "7,023,322" should be7,195,381					

MAILING ADDRESS OF SENDER (Please do not use customer number below):

Van Dyke, Gardner, Linn & Burkhart, LLP 2851 Charlevoix Drive S.E., Suite 207 Grand Rapids, MI 49588-8695

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Electronic Acknowledgement Receipt			
EFS ID:	4955011		
Application Number:	10709434		
International Application Number:			
Confirmation Number:	3433		
Title of Invention:	MIRROR REFLECTIVE ELEMENT		
First Named Inventor/Applicant Name:	Niall R. Lynam		
Customer Number:	28101		
Filer:	Timothy A. Flory/Chana Withers		
Filer Authorized By:	Timothy A. Flory		
Attorney Docket Number:	DON01 P-1152		
Receipt Date:	12-MAR-2009		
Filing Date:	05-MAY-2004		
Time Stamp:	14:44:17		
Application Type:	Utility under 35 USC 111(a)		

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1	Miscellaneous Incoming Letter	Transmittal Form Signed.pdf	63301	no	1
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#### New Applications Under 35 U.S.C. 111

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PTO/SB/21 (09-08) Approved for use through 10/31/2008. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE of a collection of information unless it displays a valid OMB control number. Under the Paperwork Reduction Act of 1995, no persons are required to respond Application Number 10/709,434 TRANSMITTAL Filing Date May 5, 2004 First Named Inventor **FORM** Niall R. Lynam Art Unit 2872 **Examiner Name** Alessandro V. Amari (to be used for all correspondence after initial filing) Attorney Docket Number DON09 P-1152 Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance Communication to TC Fee Transmittal Form Drawing(s) Appeal Communication to Board Licensing-related Papers Fee Attached of Appeals and Interferences Appeal Communication to TC Petition Amendment/Reply (Appeal Notice, Brief, Reply Brief) Petition to Convert to a Proprietary Information After Final Provisional Application Power of Attorney, Revocation Status Letter Affidavits/declaration(s) Change of Correspondence Address Other Enclosure(s) (please Identify Terminal Disclaimer Extension of Time Request below): Request for Certificate of Correction. Request for Refund Express Abandonment Request CD, Number of CD(s) -Information Disclosure Statement Landscape Table on CD Certified Copy of Priority Remarks Document(s) Reply to Missing Parts/ Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name Van Dyke, Gardner, Linn & Burkhart, LLP Signature Printed name Timothy A. Flory Date Reg. No. March 12, 2009 42 540 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

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Date | March 12, 2009

# UNITED STATES PATENT AND TRADEMARK OFFICE **CERTIFICATE OF CORRECTION**

PATENT NO.

: 7,420,756 B2

Page 1 of 1

**DATED** 

APPLICATION NO.: 10/709434

INVENTOR(S)

: September 2, 2008 : Niall R. Lynam

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

# Column 8:

Line 15, "or" should be --of--. Line 28, "Welter" should be --Weller--.

# Column 9:

Line 8, "Lynarn" should be -- Lynam--. Line 9, "7,023,322" should be --7,195,381--.

Signed and Sealed this

Seventh Day of April, 2009

JOHN DOLL Acting Director of the United States Patent and Trademark Office