

05/20/03
1c857 U.S. P.T.

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

Express Mail Label No. **EV353872042US**

INVENTOR(S)				
Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)		
Niall R.	Lynam	Holland, Michigan		
<input type="checkbox"/> Additional inventors are being named on the _____ separately numbered sheets attached hereto				
TITLE OF THE INVENTION (500 characters max)				
MIRROR REFLECTIVE ELEMENT				
Direct all correspondence to: CORRESPONDENCE ADDRESS				
<input checked="" type="checkbox"/> Customer Number	<input type="text" value="28101"/>	Place Customer Number Bar Code Label here		
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ENCLOSED APPLICATION PARTS (check all that apply)				
<input checked="" type="checkbox"/> Specification	Number of Pages	<input type="text" value="13"/>	<input type="checkbox"/> CD(s), Number	<input type="text"/>
<input checked="" type="checkbox"/> Drawing(s)	Number of Sheets	<input type="text" value="3"/>	<input type="checkbox"/> Other (specify)	<input type="text"/>
<input checked="" type="checkbox"/> Application Data Sheet.	See 37 CFR 1.76			
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT				
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.				FILING FEE AMOUNT (\$)
<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees				<input type="text" value="\$160.00"/>
<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number:	<input type="text" value="22-0190"/>			
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.				
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.				
<input checked="" type="checkbox"/> No.				
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60/471872
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Respectfully submitted,

SIGNATURE Timothy A. Flory
TYPED or PRINTED NAME Timothy A. Flory
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Date

REGISTRATION NO.
(if appropriate)
Docket Number:

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. 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, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

PATENT
DON01 P-1092
Express Mail No. EV353872042US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Niall R. Lynam
For : MIRROR REFLECTIVE ELEMENT

MS-Provisional Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

CERTIFICATE OF MAILING BY EXPRESS MAIL

I certify that the attached return postcard; a check in the amount of \$160.00 for the filing fee; Provisional Application For Patent Cover Sheet (1 page, in duplicate); Patent Application Bibliographic Data Sheet (1 page); 13 pages of specification; and 3 sheets of drawings are being deposited with the United States Postal Service as Express Mail in an envelope having Express Mail Label Number EV353872042US addressed to:

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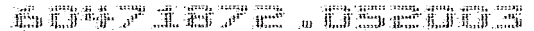
on May 20, 2003.



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Enclosures

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Citizenship Country:: US

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APPLICATION INFORMATION

Title Line One:: MIRROR REFLECTIVE ELEMENT
Total Drawing Sheets:: 3
Formal Drawings?: No
Application Type:: Provisional
Docket Number:: DON01 P-1092
Secrecy Order in Parent Appl.?: No

REPRESENTATIVE INFORMATION

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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 THE INVENTION

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.

According to an 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 flexible 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 from the elongated strip or sheet.

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.

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.

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

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