

Title (en)

COMPOSITE MIRROR AND FABRICATION METHOD WITH PRECIPITATED REFLECTIVE COATING.

Title (de)

KOMPOSITSPIEGEL UND HERSTELLUNGSMETHODE MIT ABGESCHIEDENER REFLEKTIERENDER BESCHICHTUNG.

Title (fr)

MIROIR COMPOSITE ET SON PROCEDE DE FABRICATION AVEC UN REVETEMENT REFLECHISSANT PRECIPITE.

Publication

EP 0659281 A1 19950628 (EN)

Application

EP 94923467 A 19940708

Priority

- US 9407883 W 19940708
- US 8869593 A 19930708

Abstract (en)

[origin: WO9502199A1] A new mirror structure (18) is based upon a composite resin laminate. The mirror surface (20) is provided by a gel coat resin layer (8) that has been applied to a forming tool (2) which has an optical quality surface (4), and a shape complementary to the desired mirror shape. The gel coat resin layer is cured so that it replicates the optical quality surface of the forming tool, and a rigid composite backing (10, 12, 14, 16) is then built up over its rear surface. A reflective metal coating (34, 42) is applied to the mirror's resin surface, either with a conventional vacuum deposition or with a new process. In the new process the microporous resin surface (20) is first degreased and cleaned, followed by the application of a bonding material (28) which extends into the resin micropores (22), and a conventional Brashear process to precipitate a silver coating (34, 42) onto the resin. The metal coating can be applied either after the resin layup has been completed, or it can be integrated into the layup process.

IPC 1-7

G02B 5/08; **G02B 5/10**; **B29D 11/00**

IPC 8 full level

B29C 37/00 (2006.01); **B29D 11/00** (2006.01); **G02B 1/10** (2006.01); **G02B 5/08** (2006.01)

CPC (source: EP)

B29C 37/0025 (2013.01); **B29D 11/00596** (2013.01); **G02B 5/08** (2013.01); **G02B 5/0808** (2013.01); **G02B 5/10** (2013.01); **G02B 5/26** (2013.01)

Citation (search report)

See references of WO 9502199A1

Designated contracting state (EPC)

FR GB

DOCDB simple family (publication)

WO 9502199 A1 19950119; EP 0659281 A1 19950628

DOCDB simple family (application)

US 9407883 W 19940708; EP 94923467 A 19940708