

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
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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.

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