

Title (en)

METHOD AND APPARATUS FOR APPLYING ANTI-LACERATIVE PLASTIC LAYER TO GLASS.

Title (de)

VERFAHREN UND VORRICHTUNG ZUM AUFBRINGEN ANTILAZERATIVEN KUNSTSTOFFSCHICHT AUF GLAS.

Title (fr)

PROCEDE ET APPAREIL D'APPLICATION D'UNE COUCHE PLASTIQUE ANTILACERATION SUR DU VERRE.

Publication

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Application

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Priority

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Abstract (en)

[origin: WO8505073A1] A unique method for producing an anti-lacerative glass assembly wherein a plastic composite anti-laceration sheet (18) is to be bonded to a glass substrate sheet (14). The plastic anti-laceration sheet includes an inner layer of polyvinyl butyral (20) adapted to abut the glass substrate sheet, an intermediate layer (22) of polyester, and an outer layer (24) of abrasion resistant material. A glass cover sheet (30) having substantially the same curvature as the glass substrate sheet is utilized to press the anti-laceration sheet into bonding engagement with the glass substrate sheet. In accordance with the present invention, the bonding operation is accomplished by heating the laminated glass assembly a predetermined temperature in the range of 285°F to 305°F. It has been found that such a temperature must be sufficiently high to cause the intermediate layer of polyester to bond to the inner layer of polyvinyl butyral, and to cause the inner layer of polyvinyl butyral to bond to the glass substrate sheet, and must be sufficiently low to prevent crazing of the abrasion resistant coating. The present invention also concerns the use of a unique vacuum ring construction which is mounted about the periphery of the laminated assembly and is utilized to de-air the assembly. The vacuum ring (36) is provided with a check valve (38) to maintain the vacuum within the ring during periods wherein it is disconnected from a vacuum source. Further, the method of the present invention includes the step of removing a selected portion or portions of the anti-laceration sheet after it has been bonded to the glass substrate sheet to provide an exposed glass surface for use in mounting the glass assembly into an associated frame.

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Citation (search report)

- [A] FR 2247348 A1 19750509 - SAINT GOBAIN [FR]
- [A] GB 1215471 A 19701209 - GLAVERBEL [BE]
- See references of WO 8505073A1

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