

Title (en)  
Joint structure as reinforcing rib to injected frame of door leaf with glass

Title (de)  
Vorrichtung zur Befestigung einer Scheibe in einer Türblattaussparung

Title (fr)  
Dispositif de fixation d'un vitre dans une porte

Publication  
**EP 1310625 B1 20051026 (EN)**

Application  
**EP 01126405 A 20011107**

Priority  
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Abstract (en)  
[origin: EP1310625A1] The present invention relates to the improvement on the assembly structure of door leaf with glass, and more particularly relates to the halving structure of two halving injected frames (2, 3) having the same structure with glass. The back-side circumferences of the halving injected frames (2, 3) with glass have a plurality of male tenons (15) and female tenons (14) which are disposed correspondingly each other top-to-bottom and left-to-right. By using the structures of male tenon (15) and female tenon (14) and the design of integrally surrounding reinforcing rib, the halving injected frame (2, 3) with glass has U-shape male tenon (15) reinforcing rib and U-shape female tenon (14) reinforcing rib to strengthen the strength of the having injected frame with glass; therefore, two halving injected frames (2, 3) having the same structure with glass joint each other by male tenons (15) and female tenons (14) to fix a multiple-layer glass, which is then held on a door leaf to quickly assemble a door leaf with glass without the need of joint members such as screws. While the two halving injected frames (2, 3) having the same structure with glass joint each other to assemble and compose a door leaf with glass, each tenon rib (152) of male tenons (15) is tenoned into the tenon groove (144) of a female tenon (14) respectively to reach the first positioning effect; by a successive and further tenoning, the female tenon head (145) of the female tenon (14) is tenoned into the positioning groove (154) of male tenon (15) and the tenon nose (153) of the male tenon (15) is tenoned into the positioning groove (143) of the female tenon (14) to accomplish the second positioning and tenoning fix effect. Therefore, the male tenon (15) and the female tenon (14) of the halving injected frame (2, 3) with glass designed by the present invention not only have novelty in structure, but also have a duplex positioning effect.

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