THIS SHEET HAS BEEN REPLACED

PROCESS AND APPARATUS FOR HOT FORMING PRECISION STRUCTURES IN FLAT GLASS

ABSTRACT OF THE DISCLOSURE

Flat glass provided with precision structures is required for precision applications, especially for glasses with optical properties, for example for modern flat display screen glass. The process of the invention for hot forming precision structures in or on flat glass includes pressing a heated forming tool with a structuring surface into a surface of the flat glass. In this process the structuring surface of the forming tool is heated locally from the outside of the forming tool, prior to and/or during contacting of the forming tool with the glass surface, until a predetermined surface depth corresponding to a height of the structures being formed has reached a process temperature at which a melting to form the structures occurs on contacting the forming tool to the glass surface. Preferably the local heating of the structuring surface occurs by laser radiation, which is directed through the flat glass on the structuring surface. The local heating of the structuring surface (2) is performed by laser radiation which is passed through the flat glass (3) to the structuring surface (2). Alternatively an inductive or resistance heating can be performed.

This Sheet Has Been Replaced

