

ABSTRACT

Method for Introducing at least one cutout or aperture into a sheetlike workpiece

The invention relates to a method for introducing at least one cutout (4), in particular in the form of an aperture, into a sheetlike workpiece (1) having a thickness of less than 3 millimetres. To this end, a laser beam (2) is directed onto the surface of the workpiece (1). The exposure time of the laser beam (2) is selected to be extremely short so that only a modification of the workpiece (1) concentrically around a beam axis of the laser beam occurs. Such a modified region having defects (3) results in a chain of blisters. In a subsequent method step, as a result of the action of a corrosive medium, anisotropic material removal takes place by successive etching in those regions of the workpiece (1) that are formed by the defects (3) and have previously been modified by the laser beam (2). As a result, along the cylindrical zone of action, a cutout (4) is produced as an aperture in the workpiece (1).

Fig. 1a, Fig. 1b and Fig. 1c