

METHOD AND APPARATUS FOR CUTTING A LAMINATE MADE OF A
BRITTLE MATERIAL AND A PLASTIC

ABSTRACT

A description is given of a method and an apparatus for cutting a laminate made of a brittle material and a plastic with a cutting tool. The plastic is heated up, thereby lowering its viscosity, at least in the region of a predetermined cutting line. A cutting tool is placed onto the plastic side of the laminate, the loading pressure being adjustable. By producing a relative movement between cutting tool and laminate along the predetermined cutting line, the plastic is severed; at the same time the brittle material is scored, thereby inducing a mechanical stress. If appropriate, the mechanical stress along the cutting line is subsequently increased to beyond the rupture strength of the scored brittle material. A preferred application is the cutting of thin glass or glass-ceramic/plastic laminates.

Figure 1