

PROCESS OF PRODUCING PERMANENT MAGNET AND PERMANENT MAGNET

The present invention relates to a process of producing a permanent magnet, which includes extruding a preform to form a plate-shaped permanent magnet, in which the preform is extruded in such a way that a dimension of a cross section of the preform is reduced in an X-direction and enlarged in a Y-direction perpendicular to the X-direction. The present invention also relates to a plate-shaped permanent magnet formed by extruding a preform, in which the preform is extruded in such a way that a dimension of a cross section of the preform is reduced in an X-direction and enlarged in a Y-direction perpendicular to the X-direction, whereby the permanent magnet has a strain ratio $\varepsilon_2/\varepsilon_1$ with respect to the preform in a range of 0.2 to 3.5, in which ε_1 is a strain in the direction of the extrusion of the preform and ε_2 is a strain in the Y-direction.

FIGURE 1