

ABSTRACT

In a lighting or illuminating device with a transparent material body, one or more light sources, which introduce light into the body, and a light exit face on one or more sides of the body, by means of which light introduced into the body exits said body, a strip-like light source is so fitted to one side that the light passing out of the side of the strip-like light source facing the body substantially completely enters the body, and a lateral face of the body is at least partly constructed as a mirror for light travelling in the body and reflects the light impinging thereon at least partly to the light exit face.

Thus, an optimum light efficiency and homogeneous illumination of the light exit face are achieved.

The variants described in this patent specification are intended to make it possible to appropriately use electroluminescent foils (EL-foils), so that they can take their place among luminous means.

Hitherto, in most methods known luminous means have been used. Hitherto the use of electroluminescent foils has been unsuccessful due to the low lighting efficiency thereof. An optimum utilization of the light produced is made possible through the combination, discussed in this patent specification, of introducing light into the body and the use of said light below the total reflection angle.

In conventional light sources light is emitted in all directions. If a strip-like light source is fitted to the edge of a flat lighting body with irradiation into the body or is embedded in the marginal area, a considerable part of the light leaves the body at the edge of the surface to be illuminated, giving rise to a visible, light edge or border.

This effect occurs in all known applications and arrangements, because in said area the light strikes the surface (light exit face) under an angle smaller than the total reflection angle and consequently largely emerges.

This natural property restricts the optimum utilization of the emitted light for the lighting effect in the entire lighting body area.

The possibilities of compensating this effect described in the present patent specification by means of a clearly defined arrangement of illuminating foils and/or a planned arrangement of reflection faces and/or radiants and consequently the possibility of using the light portion ignored in known lighting means and applications, represents an essential feature of the claim.