

This Sheet Has Been Replaced



DESCRIPTIVE ABSTRACT

The present invention relates to a process for the production of the profile of reflective elements of a light as well as the lights obtained by this process, the light comprising at least two cylindrical reflective elements (5, 5').

This process is characterized in that it comprises the steps consisting of:

- defining the position of one end (R_o) of the profile of each reflective element (5, 5')

- defining an illumination function $E(\theta)$ corresponding to a desired illumination curve, connected to a luminance function $L(\theta)$ by the formula:

$$E(\theta) = L(\theta) \cdot \cos^2 \theta = k[(s \cdot \cos \theta + p \cdot r \cdot \sin(\phi - \theta) - p \cdot r_o \cdot \sin(\phi_o - \theta)] \cos^2 \theta$$

if said end (R_o) of the profile of the reflective element (5, 5') is the downstream end of this latter, and an illumination function:

$$E(\theta) = L(\theta) \cdot \cos^2 \theta = k[(s \cdot \cos \theta - p \cdot r \cdot \sin(\phi - \theta) + p \cdot r_o \cdot \sin(\phi_o - \theta)] \cos^2 \theta$$

if said end (R_o) is the upstream end of said profile

- determining, from said end (R_o), the coordinates of each of the points (R) of said profile of each reflective element (5, 5') satisfying the differential equation:

$d\alpha/d\theta = \sin \alpha \cdot \cos \alpha [d \log p(\theta)/d\theta] - \sin^2 \alpha$, in which the function $p(\theta)$ is equal to $p \cdot r \cdot \sin(\phi - \theta)$ and the value of the angle α is equal to $(\phi - \theta)/r$. (Figure 3)