

ABSTRACT

TITLE:

Antiglare supports and contrast amplifying supports for
reflection-polarised light

APPLICANTS:

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INVENTION OF:

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The invention concerns a support intended for observing between crossed polarisers an object placed in the vicinity thereof in a medium (3) of index n_0 with incident convergent incoherent illumination under an angle θ_0 at a wavelength λ . Said support comprises a substrate (1) of complex refraction index n_2 and a layer (2) of complex refraction index n_1 and of thickness e_1 . According to the invention, the value of the thickness e_1 of the layer (2) is within 2 % so that

$$\frac{d^2}{de_1^2} \ln |\sigma|^2 = 0$$

with

$$\sigma = \frac{\sigma_{01} + \sigma_{12}(1 + \pi_{01})e^{(-2j\beta_1)} + \sigma_{01}\pi_{12}e^{(-4j\beta_1)}}{(1 + r_{01(p)} + r_{12(p)}e^{(-2j\beta_1)})(1 + r_{01(s)}r_{12(s)}e^{(-2j\beta_1)})}$$

The invention also concerns observation devices incorporating such a support.

Figure 2