

Title (en)

A LIQUID CRYSTAL SHUTTER AND A LIGHT SHIELDING DEVICE INCLUDING SUCH A SHUTTER

Title (de)

FLÜSSIGKRISTALL-LICHTVERSCHLUSS SOWIE MIT DIESEM VESCHLUSS AUSGESTATTETE LICHTABSCHRIMVORRICHTUNG

Title (fr)

OBTURATEUR A CRISTAUX LIQUIDES ET DISPOSITIF POURVU D'UN TEL OBTURATEUR ET SERVANT D'ECRAN CONTRE LA LUMIERE

Publication

EP 0957852 A1 19991124 (EN)

Application

EP 96935760 A 19961025

Priority

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- SE 9503785 A 19951026

Abstract (en)

[origin: WO9715256A1] A liquid crystal shutter construction, suitable for glass shields or automatically darkening welding glass filters, which is switchable between a first state with high transmission of light and a second state with low transmission of light, and vice versa, in response to an electric control signal. The construction has a nematic type liquid crystal cell disposed between transparent plates having electrodes for providing an electric field in response to the control signal. The plates have mutually facing surfaces, each of which is provided with alignment means for defining a respective molecule alignment direction for molecules in the proximity of said alignment means in the absence of said electric field. The liquid crystal cell is mounted between polarisers and comprises a band pass filter. The liquid crystal cell and the band pass filter are matched so that the wavelength dependency of the transmission characteristics of the band pass filter in a certain wavelength range is substantially complementary to the wavelength dependency of the transmission characteristics of the liquid crystal cell in the absence of the electric field.

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

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