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[54] **DICHROIC LIGHT POLARIZERS**

[56] **References Cited**

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[58] **Field of Search** 359/491, 492; 546/35, 37; 534/607, 611, 615, 818, 827, 781, 791, 825

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[57] **ABSTRACT**

The present invention provides dyes of formula I-XXXIV, described in detail below, and dichroic light polarizers based on the dyes. In the dichroic light polarizers of this invention the dye molecules are aggregated into particles oriented in a predetermined direction on a surface of a substrate to enable the dye to polarize light transmitted through the dye. In another embodiment, a dichroic light polarizer includes a molecularly oriented layer of an organic dye on a surface of a substrate. The layer has a non-periodic arrangement of different polarizing elements. Each of the polarizing elements have differing orientations of the polarization vector in the substrate plane and/or differing colors. The dichroic light polarizer may contain one or more additional dye layers and may have a transparent layer intermediate to the dye layer.

21 Claims, 6 Drawing Sheets