

Title (en)
ELECTROCHROMIC SYSTEM WITH COUPLED RED-OX SYSTEM AND SPECIAL ANIONS

Title (de)
ELEKTROCHROMES SYSTEM MIT GEKOPPELTEM RED-OX-SYSTEM UND SPEZIELLEN ANIONEN

Title (fr)
SYSTEME ELECTROCHROME A SYSTEME RED-OX ACCOUPLE ET ANIONS SPECIAUX

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Application
EP 98946284 A 19980806

Priority
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Abstract (en)
[origin: DE19735733A1] Coupled electrochromic substances (I) have covalent bridge(s) linking oxidizable group(s), which yield electrons at an anode, and reducible group(s), which accept electrons at a cathode, which are converted from weakly coloured or colourless forms to coloured forms, with an increase in the visible extinction, and revert when the charge is equalised. (I) are of formula: Y(BZ)_a(BY)_bcBZ (where, Y, Z = OX₂ or RED1 groups, with at least one Y = OX₂ and at least one Z = RED1; OX₂ = the residue of a cationic redox system undergoing reversible electrochemical reduction with an anion X<-> as counterion; RED1 = the residue of a redox system capable of reversible electrochemical oxidation; B = a bridging group; a, b, c = 0-5; X<-> = an anion which (a) has a molecular weight of over 200, preferably over 250 g/mole and/or is (almost) spherical and has a pronounced delocalisation of the negative charge). Independent claims are also included for (a) an electrochromic system; (b) an electrochromic liquid containing this system and inert solvent(s); and (c) an electrochromic device containing the liquid.

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