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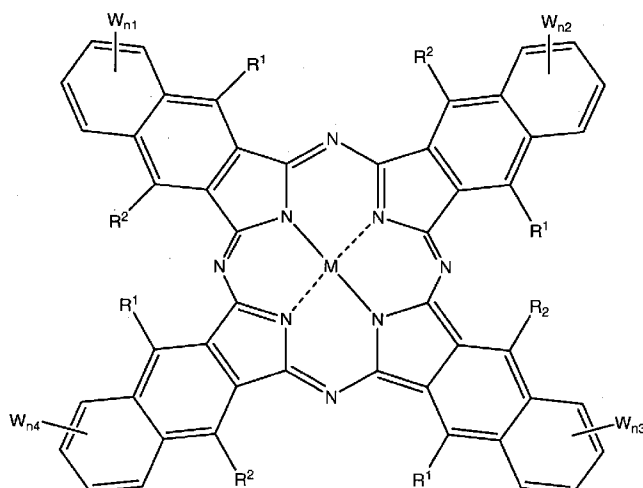
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(54) Title: SYNTHETICALLY EXPEDIENT WATER-DISPERSIBLE IR DYES



(57) Abstract: The present invention provides an IR-absorbing naphthalocyanine dye of formula (I): wherein M is selected from Si(A¹)(A²), Ge(A¹)(A²), Ga(A¹), Mg, Al(A¹), TiO, Ti(A¹)(A²), ZrO, Zr(A¹)(A²), VO, V(A¹)(A²), Mn, Mn(A¹), Fe, Fe(A¹), Co, Ni, Cu, Zn, Sn, Sn(A¹)(A²), Pb, Pb(A¹)(A²), Pd and Pt; A¹ and A² are axial ligands, which may be the same or different, and are selected from OH, halogen, OR³, a hydrophilic ligand and/or a ligand suitable for reducing cofacial interactions; R¹ and R² are selected from H or C₁₋₁₂alkoxy; R³ is selected from C₁₋₁₂ alkyl, C₅₋₁₂aryl, C₅₋₁₂ arylalkyl or Si(R^x)(R^y)(R^z); and R^x, R^y and R^z may be the same or different and are selected from C₁₋₁₂ alkyl, C₅₋₁₂ aryl, C₅₋₁₂ arylalkyl, C₁₋₁₂ alkoxy, C₅₋₁₂ aryloxy or C₅₋₁₂ arylalkoxy; W is a hydrophilic group; n1 is 0, 1, 2 or 3; n2 is 0, 1, 2 or 3; n3 is 0, 1, 2 or 3; n4 is 0, 1, 2 or 3; provided that at least one of n1, n2, n3 or n4 is greater than 0. Dyes of this type are especially suitable for use in netpage and Hyperlabel systems.

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