

Title (en)

EMISSIVE MULTICROMOPHORIC SYSTEMS

Title (de)

EMITTIERENDE MULTICROMOPHORISCHE SYSTEME

Title (fr)

SYSTEMES MULTICROMOPHORIQUES EMISSIFS

Publication

**EP 1363916 A4 20060628 (EN)**

Application

**EP 02763188 A 20020226**

Priority

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Abstract (en)

[origin: WO02104072A2] Synthetic multichromophoric systems exhibiting low energy fluorescent excited states in which the transition dipoles of the pigment building blocks are correlated in defined phase relationships are provided. The polarized nature of these singlet excited states can be maintained over long (ns) timescales. In preferred embodiments ethyne- and butadiyne- bridged multiporphyrin species that manifest high excited-state anisotropies display exceptionally large emitting dipole strengths, establishing a new precedent for superradiant oligopigment assemblies.

IPC 8 full level

**C07D 487/22** (2006.01); **H01L 33/00** (2010.01); **C07D 519/00** (2006.01); **C07F 3/06** (2006.01); **C09B 47/00** (2006.01); **C09K 11/06** (2006.01); **H01L 31/10** (2006.01); **H01L 33/26** (2010.01); **H01L 51/30** (2006.01); **H01S 3/213** (2006.01); **H05B 33/14** (2006.01); **H01L 51/00** (2006.01); **H01L 51/40** (2006.01); **H01L 51/42** (2006.01)

CPC (source: EP)

**C07D 487/22** (2013.01); **C07D 519/00** (2013.01); **C09K 11/06** (2013.01); **H05B 33/14** (2013.01); **H10K 85/361** (2023.02); **C09K 2211/1029** (2013.01); **C09K 2211/14** (2013.01); **C09K 2211/1416** (2013.01); **C09K 2211/1425** (2013.01); **C09K 2211/1466** (2013.01); **C09K 2211/185** (2013.01); **C09K 2211/188** (2013.01); **H10K 71/18** (2023.02); **H10K 85/111** (2023.02); **H10K 85/381** (2023.02); **H10K 85/615** (2023.02)

Citation (search report)

[X] CHACHISVILIS M ET AL: "SPECTRAL AND PHOTOPHYSICAL PROPERTIES OF ETHYLENE-BRIDGED SIDE-TO-SIDE PORPHYRIN DIMERS. 1. GROUND-STATE ABSORPTION AND FLUORESCENCE STUDY AND CALCULATION OF ELECTRONIC STRUCTURE OF TRANS-1,2-BIS(MESO-OCTAETH YLPORPYRINYL)ETHENE", JOURNAL OF PHYSICAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY, US, vol. 100, no. 32, 1996, pages 13857 - 13866, XP008052966, ISSN: 0022-3654

Citation (examination)

- WO 9404614 A1 19940303 - UNIV PENNSYLVANIA [US]
- WO 02051959 A1 20020704 - KONINKL PHILIPS ELECTRONICS NV [NL]

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