



US006603070B2

(12) **United States Patent**
Lindsey et al.

(10) **Patent No.:** **US 6,603,070 B2**
(45) **Date of Patent:** ***Aug. 5, 2003**

(54) **CONVERGENT SYNTHESIS OF MULTIPORPHYRIN LIGHT-HARVESTING RODS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **09/939,010**

(22) Filed: **Aug. 24, 2001**

(65) **Prior Publication Data**

US 2003/0111108 A1 Jun. 19, 2003

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/852,560, filed on May 10, 2001, which is a continuation-in-part of application No. 09/670,463, filed on Sep. 26, 2000, which is a continuation-in-part of application No. 09/621,797, filed on Jul. 21, 2000, now Pat. No. 6,420,648.

(51) **Int. Cl.**⁷ **H01L 31/0248**; H01L 31/04; C07D 487/22

(52) **U.S. Cl.** **136/263**; 136/252; 136/256; 257/40; 257/431; 540/145; 429/111

(58) **Field of Search** 136/263, 252, 136/256; 257/40, 431; 429/111; 540/145

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(57) **ABSTRACT**

The present invention provides a convergent method for the synthesis of light harvesting rods. The rods are oligomers of the formula $A^1(A^{b+1})_b$, wherein b is at least 1, A^1 through A^{b+1} are covalently coupled rod segments, and each rod segment A^1 through A^{1+b} comprises a compound of the formula $X^1(X^{m+1})_m$ wherein m is at least 1 and X^1 through X^{m+1} are covalently coupled porphyrinic macrocycles. Light harvesting arrays and solar cells containing such light harvesting rods are also described, along with intermediates useful in such methods and rods produced by such methods.

60 Claims, 3 Drawing Sheets-

