

21. The organic light emitting device according to claim 15 wherein the semiconductive organic layer is comprised of zinc phthalocyanine.

22. An organic laser comprising a cathode comprised of an electrically conductive non-metallic layer in low-resistance electrical contact with a semiconductive organic layer.

23. The organic laser according to claim 22 wherein the electrically conductive non-metallic layer is comprised of a wide band gap semiconductor having a band gap of at least 1 eV.

24. The organic laser according to claim 22 wherein the wide band gap semiconductor has a transmission of at least 50% for incident and admitted radiation.

25. The organic laser according to claim 22 wherein the semiconductive organic layer is comprised of a polyacene compound.

26. The organic laser according to claim 22 wherein the semiconductive organic layer is comprised of a phthalocyanine.

27. The organic laser according to claim 22 wherein the semiconductive organic layer is comprised of copper phthalocyanine.

28. The organic laser according to claim 22 wherein the semiconductive organic layer is comprised of zinc phthalocyanine.

29. A cathode comprising an electrically conductive non-metallic layer and a semiconductive organic layer wherein the layers are joined by an interface region that lowers the voltage drop across the two layers.

30. The cathode according to claim 29 wherein the electrically conductive non-metallic layer is comprised of a wide band gap semiconductor having a band gap of at least 1 eV.

31. The cathode according to claim 29 wherein the wide band gap semiconductor has a transmission of at least 50% for incident and admitted radiation.

32. The cathode according to claim 29 wherein the semiconductive organic layer is comprised of a polyacene compound.

33. The cathode according to claim 29 wherein the semiconductive organic layer is comprised of a phthalocyanine.

34. The cathode according to claim 29 wherein the semiconductive organic layer is comprised of copper phthalocyanine.

35. The cathode according to claim 29 wherein the semiconductive organic layer is comprised of zinc phthalocyanine.

36. A method of preparing a cathode for use in an optoelectronic device comprising:

depositing an electrically conductive non-metallic layer on an organic layer so as to form an interface region at the surface of the organic layer that lowers the voltage drop across the two layers when the two layers are used as a cathode in an optoelectronic device.

37. The method according to claim 36 wherein the electrically conductive non-metallic layer is comprised of a wide band gap semiconductor having a band gap of at least 1 eV.

38. The method according to claim 36 wherein the wide band gap semiconductor has a transmission of at least 50% for incident and admitted radiation.

39. The method according to claim 36 wherein the semiconductive organic layer is comprised of a polyacene compound.

40. The method according to claim 36 wherein the semiconductive organic layer is comprised of a phthalocyanine.

41. The method according to claim 36 wherein the semiconductive organic layer is comprised of copper phthalocyanine.

42. The method according to claim 36 wherein the semiconductive organic layer is comprised of zinc phthalocyanine.

43. A method for fabricating a cathode comprising:

preparing a cathode comprised of an electrically conductive non-metallic layer and a semiconductive organic layer, wherein the preparation process includes the step of forming an interface region between the electrically conductive non-metallic layer and the semiconductive organic layer, wherein said interface region causes the electrically conductive non-metallic material to be in low-resistance electrical contact with the semiconductive organic layer.

44. The cathode according to claim 43 wherein the electrically conductive non-metallic layer is comprised of a wide band gap semiconductor having a band gap of at least 1 eV.

45. The cathode according to claim 43 wherein the wide band gap semiconductor has a transmission of at least 50% for incident and admitted radiation.

46. The cathode according to claim 43 wherein the semiconductive organic layer is comprised of a polyacene compound.

47. The cathode according to claim 43 wherein the semiconductive organic layer is comprised of a phthalocyanine.

48. The cathode according to claim 43 wherein the semiconductive organic layer is comprised of copper phthalocyanine.

49. The cathode according to claim 43 wherein the semiconductive organic layer is comprised of zinc phthalocyanine.

50. A display incorporating an optoelectronic device containing the cathode of claim 1.

51. A vehicle incorporating an optoelectronic device containing the cathode of claim 1.

52. A computer incorporating an optoelectronic device containing the cathode of claim 1.

53. A television incorporating an optoelectronic device containing the cathode of claim 1.

54. A printer incorporating an optoelectronic device containing the cathode of claim 1.

55. A wall, theater or stadium screen incorporating an optoelectronic device containing the cathode of claim 1.

56. A billboard or a sign incorporating an optoelectronic device containing the cathode of claim 1.

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