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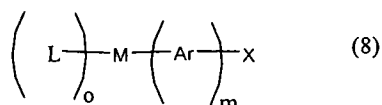
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(54) **Polymeric light emitting substance and polymer light emitting device using the same**

(57) The present invention provides a complex of formula (8):



wherein M represents a metal atom having an atomic number of 50 or more and showing a possibility of inter-system crossing between the singlet state and the triplet state in this complex by a spin-orbital mutual action; Ar represents a ligand bonded to M via one or more of a

nitrogen atom, oxygen atom, carbon atom, sulfur atom and phosphorus atom, with bonding to a polymer at an arbitrary position; L represents a hydrogen atom, hydrocarbon group having 1 to 10 carbon atoms, carboxylate group having 1 to 10 carbon atoms, diketonate group having 1 to 10 carbon atoms, halogen atom, amide group, imide group, alkoxide group, alkylmercapto group, carbonyl ligand, arylene ligand, alkene ligand, alkyne ligand, amine ligand, imine ligand, nitrile ligand, isonitrile ligand, phosphine ligand, phosphine oxide ligand, phosphite ligand, ether ligand, sulfone ligand, sulfoxide ligand or sulfide ligand; m represents an integer of 1 to 5; and o represents an integer of 0 to 5; and X is a halogen atom, arylsulfonyloxy group, or alkylsulfonyloxy group.

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EUROPEAN SEARCH REPORT

Application Number
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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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			TECHNICAL FIELDS SEARCHED (IPC)
			C09K H05B H01L C08G
1 The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 20 September 2011	Examiner Kövecs, Monika
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 10 01 0414

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外部链接	Espacenet		

摘要(译)

本发明提供式(8)的络合物:其中M代表原子序数为50或更大的金属原子,并且通过自旋-轨道相互作用显示该络合物中单线态和三线态之间的系统间交叉的可能性。Ar表示通过氮原子,氧原子,碳原子,硫原子和磷原子中的一个或多个与M键合的配体,在任意位置与聚合物键合;L表示氢原子,碳原子数1~10的烃基,碳原子数1~10的羧酸酯基,碳原子数1~10的二酮基,卤原子,酰胺基,酰亚胺基,醇盐基,烷基硫基,羰基配体,亚芳基配体,烯炔配体,炔配体,胺配体,亚胺配体,腈配体,异腈配体,膦配体,氧化膦配体,亚磷酸酯配体,醚配体,砜配体,亚砜配体或硫化物配体;m表示1至5的整数;o表示0到5的整数;X是卤原子,芳基磺酰氧基或烷基磺酰氧基。

