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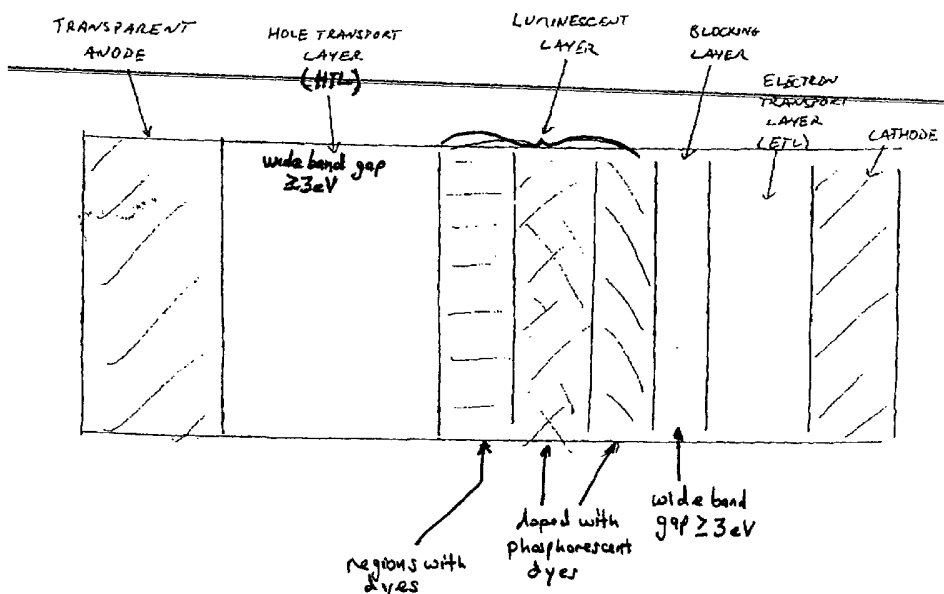
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(54) Title: HIGH EFFICIENCY MULTI-COLOR ELECTRO-PHOSPHORESCENT OLEDS



(57) Abstract: The present invention relates to efficient organic light emitting devices (OLEDs) doped with multiple light-emitting dopants, at least one dopant comprising a phosphorescent emitter, in a thin film emissive layer or layers. The present invention is directed to an efficient phosphorescent organic light emitting device utilizing a plurality of emissive dopants in an emissive region, wherein at least one of the dopants is a phosphorescent material. Thus, the present invention provides an organic light emitting device comprising an emissive region, wherein the emissive region comprises a host material, and a plurality of emissive dopants, wherein the emissive region is comprised of a plurality of bands and each emissive dopant is doped into a separate band within the emissive region, and wherein at least one of the emissive dopants emits light by phosphorescence.



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A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) :H01J 1/62, 6S/04
US CL :313/504
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
U.S. : 313/504, 506, 508

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
NONE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,837,391 A (UTSUGI) 17 November 1998 (17.11.1998), fig. 11; column 5, lines 20-41.	1-18
A	US 5,707,745 A (FORREST et al) 13 January 1998 (13.01.1998), fig. 2.	1-18

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means	
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