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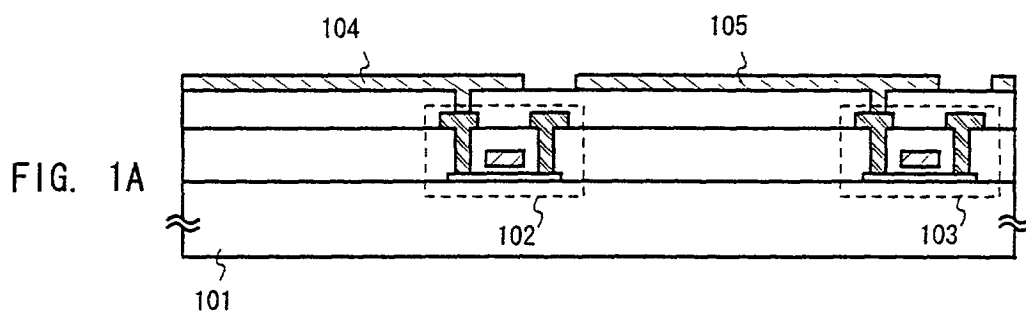
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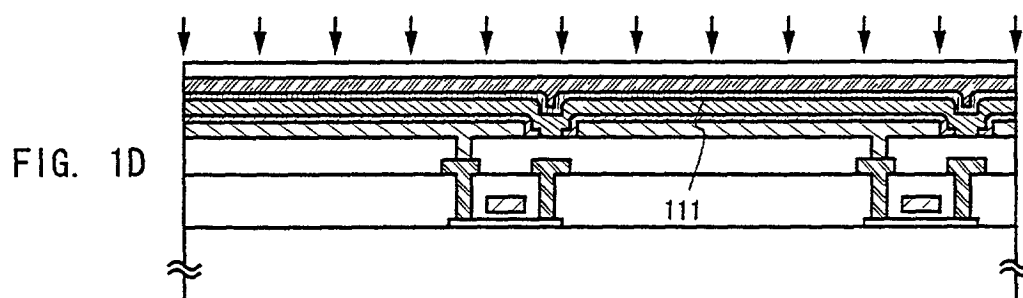
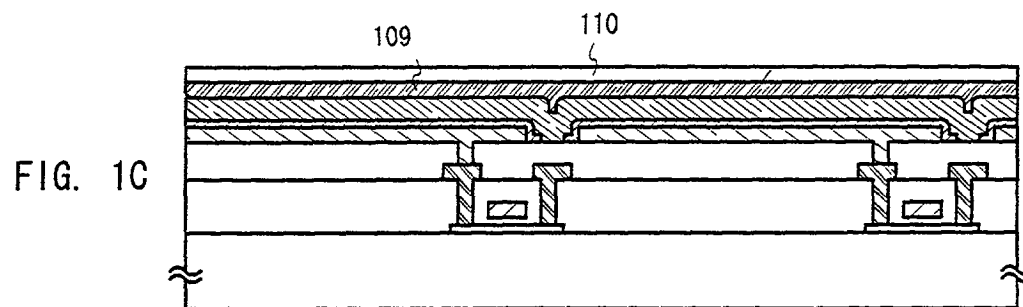
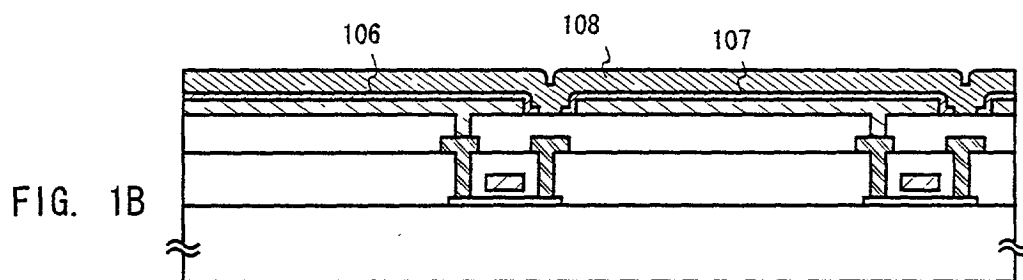
(54) **EL display device and a method of manufacturing the same**

(57) To decrease the number of layers while keeping or improving the performance of an EL element, so that the production cost is reduced. Cathodes (106, 107), a light emitting layer (108), an anode (109), and a passivation film (110) are formed on pixel electrodes (104, 105).

Thereafter, the vicinity of the interface between the light emitting layer (108) and the anode (109) are doped with a halogen element through the passivation film (110) and the anode (109). This leads to formation of a hole conveying region (111) that functions as a hole conveying layer, thereby enhancing the light emission efficiency.



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EUROPEAN SEARCH REPORT

Application Number
EP 00 11 5471

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 7 March 2006	Examiner Faou, M
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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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 7 March 2006	Examiner Faou, M
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The Hague		7 March 2006	Faou, M
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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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07-03-2006

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专利名称(译)	EL显示装置及其制造方法		
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[标]申请(专利权)人(译)	株式会社半导体能源研究所		
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发明人	YAMAZAKI, SHUNPEI, SEMICONDUCTOR EN. LAB. CO. LTD.		
IPC分类号	H01L51/20 H01L27/15 H05B33/10 H01L27/32 H01L31/12 H01L51/50 H01L51/52 H05B33/12 H05B33/14 H05B33/22		
CPC分类号	H01L51/5088 H01L27/3244 H01L51/5056 H01L51/5072 H01L51/5092 H01L51/5253 Y10S428/917		
优先权	1999209227 1999-07-23 JP		
其他公开文献	EP1071144B1 EP1071144A2		
外部链接	Espacenet		

摘要(译)

在保持或改善EL元件性能的同时减少层数，从而降低生产成本。在像素电极（104,105）上形成阴极（106,107），发光层（108），阳极（109）和钝化膜（110）。此后，发光层（108）和阳极（109）之间的界面附近通过钝化膜（110）和阳极（109）掺杂有卤素元素。这导致形成用作空穴传输层的空穴传输区域（111），从而提高发光效率。

