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(71) Applicant: **SEL SEMICONDUCTOR ENERGY**
LABORATORY CO., LTD.
Atsugi-shi, Kanagawa-ken 243-0036 (JP)

(72) Inventors:
 • **Yamazaki, Shunpei**
Atsugi-shi, Kanagawa-ken 243-0036 (JP)
 • **Konuma, Toshimitsu**
Atsugi-shi, Kanagawa-ken 243-0036 (JP)
 • **Mizukami, Mayumi**
Atsugi-shi, Kanagawa-ken 243-0036 (JP)

(74) Representative: **Grünecker, Kinkeldey,**
Stockmair & Schwanhäusser Anwaltssozietät
Maximilianstrasse 58
80538 München (DE)

(54) **Light-emitting organic compound with a low concentration of ionic impurities**

(57) By repeating a purification process of a light-emitting organic compound several times, a thin film made of the light-emitting organic compound to be used in an EL display device contains ionic impurities at the concentration of 0.1 ppm or lower and has a volume resistivity in the range of $3 \times 10^{10} \Omega \text{ cm}$ or larger. By using

such a thin film as a light-emitting layer in the EL device, a current caused by reasons other than the carrier recombination can be prevented from flowing through the thin film, and deterioration caused by unnecessary heat generation can be suppressed. Accordingly, it is possible to obtain an EL display device with high reliability.

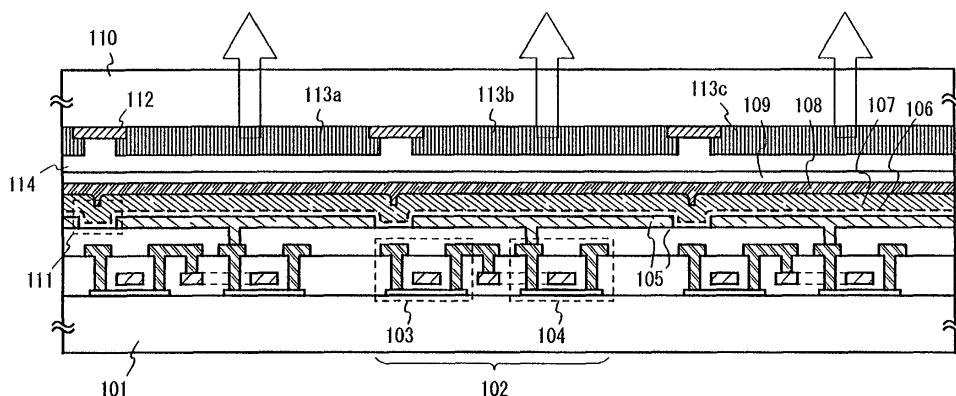


FIG. 1



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 00 12 0773

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
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A	US 5 420 288 A (OHTA ET AL) 30 May 1995 (1995-05-30) * column 57, line 30 - column 58, line 47; examples II-15 * -----		TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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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 23 February 2005	Examiner Königstein, C
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			

2
EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 00 12 0773

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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23-02-2005

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专利名称(译)	具有低浓度离子杂质的发光有机化合物		
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[标]申请(专利权)人(译)	株式会社半导体能源研究所		
申请(专利权)人(译)	SEL半导体能源研究所有限公司.		
当前申请(专利权)人(译)	半导体能源研究所有限公司.		
[标]发明人	YAMAZAKI SHUNPEI KONUMA TOSHIMITSU MIZUKAMI MAYUMI		
发明人	YAMAZAKI, SHUNPEI KONUMA, TOSHIMITSU MIZUKAMI, MAYUMI		
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优先权	1999336100 1999-11-26 JP 1999271297 1999-09-24 JP 1999336119 1999-11-26 JP 1999275391 1999-09-28 JP		
其他公开文献	EP1087448A2 EP1087448B1		
外部链接	Espacenet		

摘要(译)

通过多次重复发光有机化合物的纯化过程，由用于EL显示装置的发光有机化合物制成的薄膜含有浓度为0.1ppm或更低的离子杂质并具有体积电阻率在 $3 \times 10^{10} \Omega \text{cm}$ 或更大的范围内。通过在EL器件中使用这种薄膜作为发光层，可以防止由载流子复合以外的原因引起的电流流过薄膜，并且可以抑制由不必要的发热引起的劣化。因此，可以获得具有高可靠性的EL显示装置。

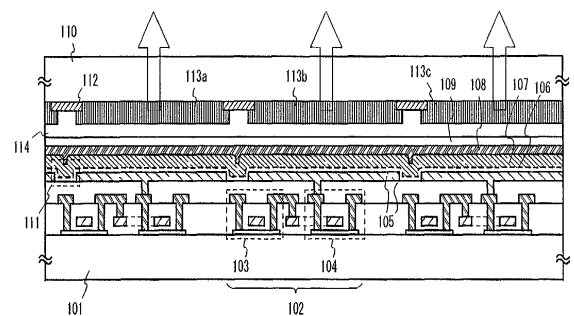


FIG. 1