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(54) **Laser irradiation device, patterning method and method of fabricating organic light emitting display (oled) using the patterning method.**

(57) In a laser irradiation device, a patterning method and a method of fabricating an Organic Light Emitting Display (OLED) using the same. The laser irradiation device includes a light source, a mask, a projection lens, and a Fresnel lens formed at a predetermined portion of the mask to change an optical path. When an organic layer pattern is formed using the laser irradiation device, laser radiation is irradiated onto a region of an organic layer, which is to be cut, and the laser radiation is appro-

priately irradiated onto a region of the organic layer, which is to be separated from a donor substrate. The laser radiation irradiated onto an edge of the organic layer pattern has a laser energy density greater than that of the laser radiation irradiated onto other portions of the organic layer pattern. As a result, it is possible to form a uniform organic layer pattern and reduce damage of the organic layer.

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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)
X	EP 1 109 067 A (ASML NETHERLANDS B.V) 20 June 2001 (2001-06-20) * paragraphs [0005] - [0009] * * paragraph [0017] * * paragraphs [0035] - [0038]; figure 3 * -----	1-5	INV. H01L51/56 B41J2/435
Y	US 6 582 875 B1 (KAY DAVID B ET AL) 24 June 2003 (2003-06-24) * column 2, lines 41-52 * -----	1-5	TECHNICAL FIELDS SEARCHED (IPC)  H01L G03F B41J
A	* column 3, lines 17-21 * * column 4, line 56 - column 5, line 52; figures 1,2a,10 * -----	6-18	
Y	HEINEMANN S: "Computer generated beam shaping and focusing optical elements for laser material processing" OPTICS COMMUNICATIONS, NORTH-HOLLAND PUBLISHING CO. AMSTERDAM, NL, vol. 119, no. 5, 15 September 1995 (1995-09-15), pages 613-622, XP004062612 ISSN: 0030-4018 * page 613, column 1, line 12 - line 14; figures 4,7 * -----	1-5	
Y	EP 1 357 590 A (SEIKO EPSON CORPORATION) 29 October 2003 (2003-10-29) * paragraphs [0020] - [0022], [0055], [0078], [0080]; figure 1 * -----	1-5	
X	US 5 768 023 A (SAWAKI ET AL) 16 June 1998 (1998-06-16) * column 6, line 56 - line 64; figures 8,10b * -----	1,2,4,5	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 12 May 2006	Examiner Pusch, 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	

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

EP 05 11 1621

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 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

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专利名称(译)	激光照射装置，图案化方法和使用图案化方法制造有机发光显示器 (oled) 的方法。		
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其他公开文献	EP1667249B1 EP1667249A2		
外部链接	<a href="#">Espacenet</a>		

摘要(译)

在激光照射装置中，图案化方法和使用其制造有机发光显示器 (OLED) 的方法。激光照射装置包括光源，掩模，投影透镜和形成在掩模的预定部分处的菲涅耳透镜，以改变光路。当使用激光照射装置形成有机层图案时，将激光辐射照射到待切割的有机层的区域上，并且将激光辐射适当地照射到有机层的区域上，这将是有机层的区域。与供体基质分离。照射到有机层图案的边缘上的激光辐射的激光能量密度大于照射到有机层图案的其他部分上的激光辐射的激光能量密度。结果，可以形成均匀的有机层图案并减少有机层的损坏。

DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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Y	US 6 582 875 B1 (KAY, DAVID B ET AL) 24 June 2003 (2003-06-24) * column 5, lines 41-52 * * column 3, lines 17-21 * * column 4, line 56 - column 5, line 52; figures 1,2a,10 *	1-5	
A	HEINEMANN S: "Computer generated beam shaping and focusing optical elements for laser material processing" OPTICS COMMUNICATIONS, NORTH-HOLLAND PUBLISHING CO., AMSTERDAM, NL, vol 119, no. 5, 15 September 1995 (1995-09-15), pages 613-622, XP004062612 ISSN: 0030-4018 * page 613, column 1, line 12 - line 14; figures 4,7 *	6-18	TECHNICAL FIELD (IPC) H01L G03F B41J
Y	EP 1 357 590 A (SEIKO EPSON CORPORATION) 29 October 2003 (2003-10-29) * paragraphs [0050] - [0052], [0055], [0078], [0080]; figure 1 *	1-5	
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The present search report has been drawn up for all claims.

Place of search: **Munich** Date of completion of the search: **12 May 2006** Examiner: **Pusch, C**

CATEGORY OF OTHER DOCUMENTS

X: particularly relevant if cited above  
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