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(54) Title: METHOD FOR PROVIDING A STRUCTURAL AND/OR A COMPOSITIONAL MODIFICATION IN A MOLECULAR SEMICONDUCTOR TARGET FILM

(57) Abstract: The invention relates to a method for providing a structural and/or a compositional modification in a molecular semiconductor target film by means of a thermal, a solvent vapour or a light stimulus that locally activates diffusion of functional molecules of a solution-deposited donor layer into the molecular semiconductor target film through a semipermeable transitory interlayer. Therefore, the present invention could be included in the field of manufacturing of electronic, optoelectronic and photonic devices and structures based on molecular semiconductor materials.



WO 2021/254932 A3

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
INV. H01L51/56 H01L51/40 H01L51/48
ADD.
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)
H01L
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	F. PSCHENITZKA ET AL: "Solvent-enhanced Dye Diffusion in Polymer Thin-Films for OLED Application", MATERIALS RESEARCH SOCIETY SYMPOSIUM PROCEEDINGS, vol. 665, 31 December 2001 (2001-12-31), XP055746359, US ISSN: 0272-9172, DOI: 10.1557/PROC-665-C9.5 page C9.5.2; figure 1 ----- -/--	1-11

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

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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Parashkov, Radoslav
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>PSCHENITZKA F ET AL: "THREE-COLOR ORGANIC LIGHT-EMITTING DIODES PATTERNED BY MASKED DYE DIFFUSION", APPLIED PHYSICS LETTERS, A I P PUBLISHING LLC, US, vol. 74, no. 13, 29 March 1999 (1999-03-29), pages 1913-1915, XP000827172, ISSN: 0003-6951, DOI: 10.1063/1.123711 page 1913; figure 1 -----</p>	1-11