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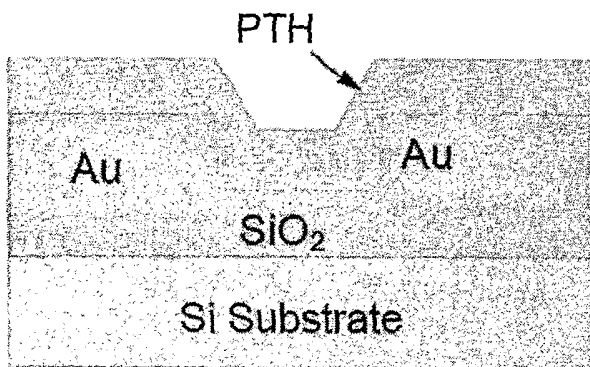
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(54) Title: SEMICONDUCTIVE PERCOLATING NETWORKS



(57) Abstract: The present invention relates to a semi-conductive composition comprising carbon nanotubes in a matrix. These semiconductive compositions are useful in printing semiconducting portions of thin film transistors.

$$\mu_{\text{linear}} = 3.1 \times 10^{-3} \text{ cm}^2/\text{Vs},$$

$$I_{\text{on}}/I_{\text{off}} = 1.9 \times 10^4,$$

$$V_{\text{th}} = 12 \text{ V}, S = 3.3 \text{ V/Dec.}$$

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# INTERNATIONAL SEARCH REPORT

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<b>A. CLASSIFICATION OF SUBJECT MATTER</b> H01L51/30      H01L51/20				
According to International Patent Classification (IPC) or to both national classification and IPC				
<b>B. FIELDS SEARCHED</b>				
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 practical, search terms used) EPO-Internal, INSPEC, PAJ				
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>				
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X	KYMAKIS E ET AL: "High open-circuit voltage photovoltaic devices from carbon-nanotube-polymer composites" JOURNAL OF APPLIED PHYSICS, AMERICAN INSTITUTE OF PHYSICS. NEW YORK, US, vol. 93, no. 3, 1 February 2003 (2003-02-01), pages 1764-1768, XP012058984 ISSN: 0021-8979 the whole document	1-3,5,9, 11		
X	EP 1 449 887 A (TORAY INDUSTRIES, INC) 25 August 2004 (2004-08-25) paragraph '0056! - paragraph '0075!; figure 1  ----- -/--	1-3,5,18		
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;"> <input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.                 </td> <td style="width: 50%; border: none;"> <input checked="" type="checkbox"/> See patent family annex.                 </td> </tr> </table>			<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.	<input checked="" type="checkbox"/> See patent family annex.
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Date of the actual completion of the international search  9 February 2006	Date of mailing of the international search report  24/02/2006			
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Königstein, C			

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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X	TSUKAMOTO J ET AL: "INFLUENCE OF SMALL AMOUNTS OF DISPERSED SINGLE-WALLED CARBON-NANOTUBES ON THE OPTICAL PROPERTIES OF POLY-3-HEXYLTHIOPHENE" JAPANESE JOURNAL OF APPLIED PHYSICS, JAPAN SOCIETY OF APPLIED PHYSICS, TOKYO, JP, vol. 43, no. 2A, 1 February 2004 (2004-02-01), pages L214-L216, XP001191839 ISSN: 0021-4922 the whole document	1-3,5
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