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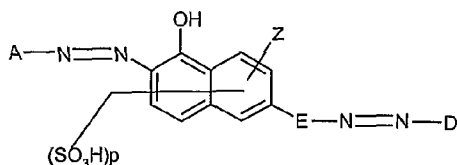
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(54) Title: PROCESS FOR PRINTING AN IMAGE, COMPOSITION AND COMPOUND



(1)

(57) Abstract: A process is provided for printing an image on a substrate, the process comprising applying to the substrate an ink composition which comprises a liquid medium and a compound of Formula (1); wherein: A and D each independently represent optionally substituted aryl or optionally substituted heteroaryl; E represents optionally substituted pyrazolyl; Z represents H, halogen, nitro, cyano, hydroxy, amino, carboxy, optionally substituted alkyl, optionally substituted alkoxy or optionally substituted aryloxy; and p is an integer from 0 to 5; provided that E does not have an optionally substituted carbonamide group of formula -CONR¹R² directly attached to it, wherein R¹ and R² each independently represent H, optionally substituted alkyl, optionally substituted cycloalkyl, or optionally substituted aryl. The printing is preferably ink jet printing. Also provided are compounds of Formula (1) and ink compositions containing the same.

WO 2007/017631 A3

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER INV. C09D11/00 C07D231/00		
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B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) C07D C09D		
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		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 1 483 639 A (HOECHST AG) 2 June 1967 (1967-06-02) claims 1,4; examples 1,2 -----	1-14
X	WO 03/095563 A (AVECIA LTD [GB]; MISTRY PRAHALAD MANIBHAI [GB]; BRADBURY ROY [GB]) 20 November 2003 (2003-11-20) cited in the application claim 1; examples 1-4 -----	1-14
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents :		
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Date of the actual completion of the international search	Date of mailing of the international search report	
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	A	Publication date	Patent family member(s)	Publication date
FR 1483639	A	02-06-1967	NONE	
<hr/>				
WO 03095563	A	20-11-2003	AU 2003227918 A1	11-11-2003
			AU 2003230002 A1	11-11-2003
			EP 1506260 A1	16-02-2005
			EP 1506261 A1	16-02-2005
			WO 03095562 A1	20-11-2003
			JP 2005529990 T	06-10-2005
			JP 2005525449 T	25-08-2005
			US 2005200671 A1	15-09-2005
			US 2005217535 A1	06-10-2005
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