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<p>(21) International Application Number: PCT/US96/05137</p> <p>(22) International Filing Date: 12 April 1996 (12.04.96)</p> <p>(30) Priority Data: 08/423,452 19 April 1995 (19.04.95) US</p> <p>(71) Applicant: NORTH AMERICAN SCIENCE ASSOCIATES, INC. [US/US]; 2261 Tracy Road, Northwood, OH 43619 (US).</p> <p>(72) Inventors: BEALING, John; 1011 Oaks Parkway, Smyrna, GA 30082 (US). GORSKI, Joel, R.; 850 Randall Court, Marietta, GA 30064 (US).</p> <p>(74) Agents: REMENICK, James et al.; Baker & Botts, L.L.P., The Warner, 1299 Pennsylvania Avenue, N.W., Washington, DC 20004 (US).</p>	<p>(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 9 January 1997 (09.01.97)</p>	
<p>(54) Title: INDICATOR INK COMPOSITIONS</p>		
<p>(57) Abstract</p> <p>The invention relates to indicator ink compositions that contain a water-based dispersion of a phenol-formaldehyde resin, at least one colorant and an amine-terminated catalyst. These indicator ink compositions are fixed to a surface, such as by drying, and respond to specific conditions of time, temperature, humidity, pressure and the presence or absence of certain chemicals by changing color. Compositions provide a means for detecting exposure to a predetermined condition and can be fixed or otherwise attached to nearly any article or designed into patterns on materials. Exposure of the indicator ink to the specific condition, the indicator ink provides a permanent detectable record of the event. Further, by varying the amount of amine-terminated catalyst in the formulation, the specific conditions at which the indicator composition will change color can be altered. Such compositions are specifically useful for determining the effectiveness of a sterilization process.</p>		

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INTERNATIONAL SEARCH REPORT

International Application No
PC1/US 96/05137

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 C09D11/00 //A61L2/26

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)
IPC 6 C09D A61L

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB,A,2 055 393 (AMERICAN CAN CO) 4 March 1981 see claims 1,3,4 ---	1
A	US,A,4 188 437 (ROHOWETZ STANLEY E) 12 February 1980 cited in the application see claims 1,3 ---	1
A	US,A,4 179 397 (ROHOWETZ STANLEY E ET AL) 18 December 1979 cited in the application see claims 1,3 ---	1
A	US,A,5 087 659 (FUJIISAWA T.) 11 February 1992 see claims 1,3 ---	1
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Further documents are listed in the continuation of box C. Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

International Application No
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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.
A	US,A,4 421 560 (KITO TUTOMU ET AL) 20 December 1983 see column 13, line 28 - line 65 -----	1

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INTERNATIONAL SEARCH REPORT

information on patent family members

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PCT/US 96/05137

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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US-A-4188437	12-02-80	NONE	
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