PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : G03F 7/038, 7/004	A1	(11) International Publication Number: WO 97/22910
		(43) International Publication Date: 26 June 1997 (26.06.97)

(21) International Application Number: PCT/US96/20268

(22) International Filing Date: 18 December 1996 (18.12.96)

(30) Priority Data:
60/009,023 21 December 1995 (21.12.95) US

(71) Applicant (*for all designated States except US*): THE DOW CHEMICAL COMPANY [US/US]; 2030 Dow Center, Midland, MI 48674 (US).

(72) Inventors; and
(75) Inventors/Applicants (*for US only*): SO, Ying, H. [US/US]; 1524 Dilloway Drive, Midland, MI 48640 (US). DARBY, Nicholas [CA/US]; 5602 Pine Meadow, Midland, MI 48640 (US). WARREN, Malcolm, W. [US/US]; Apartment L-1, 1811 Eastlawn Drive, Midland, MI 48642 (US). SCHMIDT, Donald, L. [US/US]; 2412 Saint Marys Drive, Midland, MI 48640 (US). ROSE, Gene, D. [US/US]; 216 East Saint Andrews Road, Midland, MI 48642 (US).

(74) Agent: DAMOCLES, Nemia, C.; The Dow Chemical Company, Patent Dept., P.O. Box 1967, Midland, MI 48641-1967 (US).

(81) Designated States: JP, KR, SG, US, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).

Published
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.

(54) Title: SOLDER MASK COMPOSITIONS

(57) Abstract

A process for producing a solder mask comprises: 1) coating a printed wiring board with a solder mask composition comprising an aqueous solution of (1) an aryl cyclic sulfonium zwitterion monomer or (2) an aryl cyclic sulfonium zwitterion and a polymer containing two or more carboxyl groups; 2) exposing the coating to UV light in selected areas to polymerize the zwitterion monomer on the exposed areas; 3) developing the exposed coating with water or alkaline aqueous solution, and 4) curing the developed coating.