

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

200100164-3

IP0S

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : H01C 17/28		A1	(11) International Publication Number: WO 00/68960
			(43) International Publication Date: 16 November 2000 (16.11.00)
(21) International Application Number: PCT/US00/04862		(81) Designated States: CN, JP, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(22) International Filing Date: 25 February 2000 (25.02.00)			
(30) Priority Data: ① 09/309,457 / 11 May 1999 (11.05.99) / US		Published With international search report. /	
(71) Applicant: MOTOROLA INC. [US/US]; 1303 East Algonquin Road, Schaumburg, IL 60196 (US).			
(72) Inventor: DUNN, Gregory; 430 S. Evergreen Avenue, Arlington Heights, IL 60005 (US).			
(74) Agents: FEKETE, Douglas, D. et al.; Motorola Inc., Intellectual Property Dept., 1303 East Algonquin Road, Schaumburg, IL 60196 (US).			

1 PD.

1 app/n.

1 Inv.

2 PAs

IPC = H01C 17/28

(54) Title: POLYMER THICK-FILM RESISTOR PRINTED ON PLANAR CIRCUIT BOARD SURFACE

(57) Abstract

A method of manufacturing a printed circuit board with a polymer thick-film (PTF) resistor (30) whose dimension can be defined with an improved precision by providing a circuit board (10) construction having a planar surface where the resistor is to be deposited. To achieve the desired board construction, the interconnect for the resistor (30) is pattern plated using a permanent photodielectric layer (18) as a plating mask instead of a sacrificial plating resist. The interconnect can be patterned before or after the (PTF) resistor is printed. The x and z dimensions (width and thickness, respectively) of the resistor are determined by the deposition process, while the y dimension (electrical length) is accurately determined by copper termination (26).

