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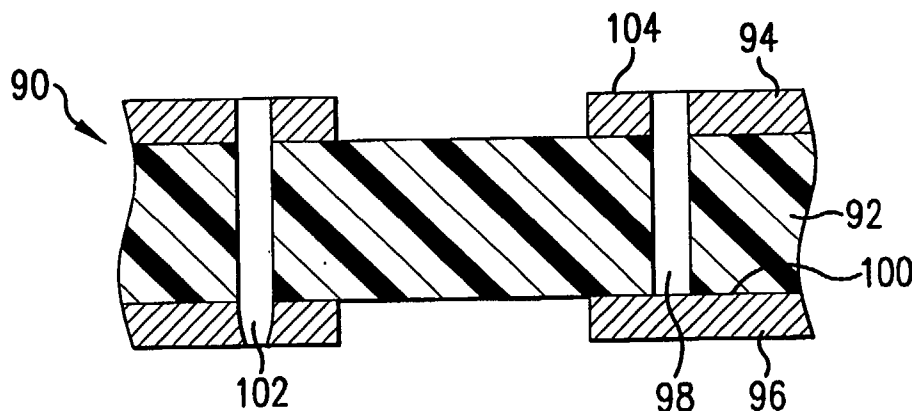
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LASER ABLATION RESISTANT COPPER FOIL



(57) Abstract: A copper foil (96) for lamination to a dielectric substrate (92) is coated with a laser ablation inhibiting layer (100) having an average surface roughness (R_z) of less than 1.0 micron and an average nodule height of less than 1.2 micron that is effective to provide a lamination peel strength to FR-4 of at least 80.4 grams per millimeter (4.5 pounds per inch). The coated foil (96) further has a reflectivity value of at least 40. The coated foil (96) is typically laminated to a dielectric substrate (92), such as glass reinforced epoxy or polyimide and imaged into a plurality of circuit traces. Blind vias (98) may be drilled through the dielectric (92) terminating at an interface between the foil (96) and the dielectric (92). The coated foil (96) of the invention resists laser ablation, thereby resisting piercing (102) of the foil (96) by the laser during drilling.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC: H01R 13/03(2006.01);B32B 15/20(2006.01)

USPC: 428/209,628,629,632,640

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)

U.S. : 428/209,628,629,632,640

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,800,930 A (CHEN et al) 01 September 1998 (01.09.1998), column 1, lines 20-21, column 2, lines 8-10, 32-34, column 5, lines 53-59.	1-36
Y	US 5,389,446 A (YAMANISHI et al) 14 February 1995 (14.02.1995), column 2 L 55-59.	1-36
Y	US 6,132,589 A (AMEEN et al) 17 October 2000 (17.10.2000), column 2, lines 16-20, column 2, lines 50-54.	1-36
Y	US 5,622,782 A (POUTASSE III et al) 22 April 1997 (22.04.1997), column 2, lines 30-35, column 5, lines 25-29, 57-61, column 10, lines 5-9.	1-36

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"&" document member of the same patent family

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