

Title (en)
ELECTRICAL SWITCH ASSEMBLY AND METHOD OF MANUFACTURE

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Application
EP 81305809 A 19811209

Priority
• US 21616280 A 19801215
• US 29022081 A 19810805
• US 31820281 A 19811104

Abstract (en)
[origin: EP0055053A1] The present invention provides low cost electrical switch assemblies and methods for manufacturing same. The switch assembly comprises an array of resiliently flexible metallic conductors (24a, 24b) arranged in predetermined circuit pathways on a dielectric carrier panel. A plurality of apertures (32) or cavities are provided at predetermined locations in the carrier panel (30). The switch contacts (40, 42) comprise a pair of generally L-shaped fingers which are integral extensions of the flexible conductors. The fingers extend from opposite edge surfaces of the carrier panel defining an associated aperture or cavity, to pass one another over or within their associated aperture or cavity, with the free ends (54, 56) of the fingers terminating adjacent one another. The free ends (54, 56) of the L-shaped fingers extend in part above or below the plane of the carrier panel, and are positioned in spaced relationship to one another so that the conductors they connect are normally open, but are sufficiently close to one another so that slight deflection of the fingers from their normal orientation moves the free ends in contact with each other to thereby close the switch. Alternatively, the free ends of the L-shaped fingers are positioned in contact with one another so that slight deflection of the fingers from their normal orientation breaks their contact. The metallic conductors and integral switch contacts may be formed by photoimaging and either chemical milling or additive techniques such as plating up or solder doming, and/or mechanical milling and/or precision die stamping techniques.

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