

**PCT**WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H01H 1/38, 13/06, H01R 33/06	A1	(11) International Publication Number: WO 96/36980 (43) International Publication Date: 21 November 1996 (21.11.96)
(21) International Application Number: PCT/US96/04061 (22) International Filing Date: 22 March 1996 (22.03.96) (30) Priority Data: 08/445,085 19 May 1995 (19.05.95) US (71) Applicant: INTERNATIONAL STANDARD ELECTRIC CORPORATION [US/US]; Suite 1217, 1105 North Market Street, Wilmington, DE 19801 (US). (72) Inventors: LOTHAMER, Thomas, John; 7315 Silverthorn Run, Fort Wayne, IN 46835 (US). PONTECORVO, Carl, Anthony; 2410 Knollwood Court, Fort Wayne, IN 46815 (US). SCHATTKKE, Thomas, Lewis; 8633 Manor Drive, Fort Wayne, IN 46852 (US). OSTERHOUT, Richard, Albert; 8215 Post Oak Court, Fort Wayne, IN 46825 (US). (74) Agent: PLEVY, Arthur, L.; Plevy & Associates, P.O. Box 1365, 146 Route 1 North, Edison, NJ 08818-1366 (US).		(81) Designated States: AU, <u>SG</u> , European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>

(54) Title: INTERLOCK SWITCH**(57) Abstract**

An interlock switch (20) for electrically coupling opposing surfaces of a circuit card assembly (10), wherein each of the surfaces includes a contact pattern (14) defining circuit and switch functions. The interlock switch (20) comprises a pair of contacts (52) which engage the contact patterns on the circuit card assembly (10) to electrically couple the circuits located on the oppositely facing surfaces thereof and a switch body (22) for housing the contacts (52). The switch body (22) includes a slot (46) for solder-free coupling the switch (20) to an edge (18) of the circuit card assembly (10). The slot (46) enables the switch (20) to selectively reciprocate among three switch positions on the edge (18) of the circuit card assembly (10) to provide either an open circuit or a closed circuit on the circuit card assembly (10) in any one of the three positions for each contact (52). A spring (70) is housed with the switch body (22) for biasing the switch (20) from one of the three positions making it a momentary position. A pair of locking projections (50) are provided for preventing the switch (20) from being easily removed from the edge (18) of the circuit card assembly (10).

