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(21) International Application Number: PCT/US96/00432 (22) International Filing Date: 16 January 1996 (16.01.96) (30) Priority Data: 08/404,410 14 March 1995 (14.03.95) US (71) Applicant: THE WHITAKER CORPORATION [US/US]; Suite 450, 4550 New Linden Hill Road, Wilmington, DE 19808 (US). (72) Inventors: FLINCHBAUGH, Bernadette, Marie; 2930 Old Trail Road, Yorkhaven, PA 19370 (US). GABANY, Andrew, Joseph; 530 Lavina Drive, Mechanicsburg, PA 17055 (US). MELNYK, Adrian, Lubomyr; 2451 Wedgewood Way, York, PA 17404 (US). SCHMID, Christopher, Joseph; 5814 Severna Place, Harrisburg, PA 17111 (US). (74) Agents: NELSON, Katherine, A. et al.; The Whitaker Corporation, Suite 450, 4550 New Linden Hill Road, Wilmington, DE 19808 (US).		(81) Designated States: AU, BR, CA, CN, CZ, FI, HU, JP, KR, MX, NO, NZ, PL, RU, SG, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>

(54) Title: ELECTRICAL RECEPTACLE ASSEMBLY AND SPRING CONTACT THEREFOR**(57) Abstract**

An electrical receptacle connector assembly (4) for application to a printed circuit board consists of an insulating housing (6) and spring contacts (8) received in cavities (9) in the housing. The cavities are T-shaped having a portion that is substantially rectangular, constant cross section from a contact receiving face (12) of the housing (6) up to a position proximate to a mating face (10) of the housing and a contact retention slot (15) along one side thereof. Each spring contact (8) consists of a forward leaf contact spring (32), an intermediate retention portion (33) with retention ears (48), and a rearward contact tail (34) for soldering to a conductor on the circuit board. In each cavity (9) the retention portion (33) and a flat end portion of the leaf spring (32) lie flat against one face (24) of the cavity (9), the leaf spring being bowed towards the opposite face (26) of the cavity, with the retention ears (48) biting into surfaces of slots (15) and the contact tail (34) projecting from the contact receiving face (12) of the housing (6). The housing and the spring contacts are simple and economical to manufacture and the spring contacts are easy to load into the cavities. The contact tails can be configured for various modes of mounting the assembly on the circuit board.

