



(51) International Patent Classification:
H01R 12/00 (2006.01)

(21) International Application Number:
PCT/US2009/055023

(22) International Filing Date:
26 August 2009 (26.08.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/199,457 27 August 2008 (27.08.2008) US

(71) Applicant (for all designated States except US): **JOHN-STECH INTERNATIONAL** [US/US]; 1210 New Brighton Boulevard, Minneapolis, Minnesota 55413 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SHERRY, Jeffrey, C.** [US/US]; 9372 Creek Ridge La., Savage, Minnesota 55378 (US). **ALLADIO, Patrick, J.** [US/US]; 3337 Magowan Dr., Santa Rosa, California 95405 (US). **OBERG, Russell, F.** [US/US]; W6499 710th Ave., Beldenville, Wisconsin 54003 (US). **WARWICK, Brian** [US/US]; 2450 Scott Blvd., Ste. 305, Santa Clara, California 95050 (US).

(74) Agents: **LASKY, Michael, B.** et al.; Altera Law Group, LLC, 220 South 6th Street, Ste. 1700, Minneapolis, Minnesota 55402 (US).

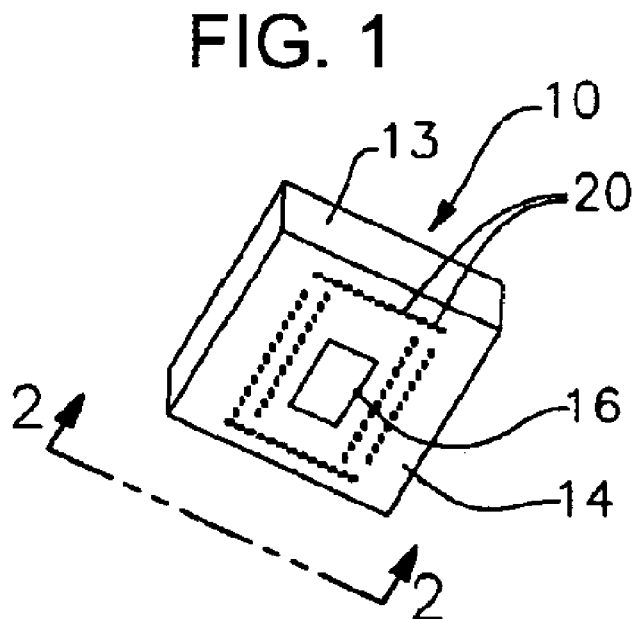
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: TEST CONTACT SYSTEM FOR TESTING INTEGRATED CIRCUITS WITH PACKAGES HAVING AN ARRAY OF SIGNAL AND POWER CONTACTS



(57) Abstract: A test fixture (120) is disclosed for electrically testing a device under test (130) by forming a plurality of temporary mechanical and electrical connections between terminals (131) on the device under test (130) and contact pads (161) on the load board (160). The test fixture (120) has a replaceable membrane (150) that includes vias (151), with each via (151) being associated with a terminal (131) on the device under test (130) and a contact pad (161) on the load board (160). In some cases, each via (151) has an electrically conducting wall for conducting current between the terminal (131) and the contact pad (161). In some cases, each via (151) includes a spring (152) that provides a mechanical resisting force to the terminal (131) when the device under test (130) is engaged with the test fixture (120).