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(21) International Application Number: PCT/US97/01902 (22) International Filing Date: 6 February 1997 (06.02.97) (30) Priority Data: 08/599,537 6 February 1996 (06.02.96) US (71) Applicant: PROGRESSIVE SYSTEM TECHNOLOGIES, INC. [US/US]; Suite 100, 11000 North Mopac Expwy., Austin, TX 78759 (US). (72) Inventor: BABBS, Daniel, A.; 600A Bouldin Avenue, Austin, TX 78704 (US). (74) Agent: STANFORD, Gary, R.; Stanford & Bennett, L.L.P., Bank One Tower, Suite 1550, 221 West 6th Street, Austin, TX 78701 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
(54) Title: SUBSTRATE SUPPORT APPARATUS FOR A SUBSTRATE HOUSING (57) Abstract A substrate support apparatus for supporting one or more substrates (124) in a substrate carrier (100) to achieve a minimum amount of substrate sagging. A first support rod (128) supports one side of a substrate along a first support contact line and a second support rod (128) supports the other side of the substrate along a second support contact line. Rod support arms (126) provide support for each of the support rods. The first and second support contact lines are offset on either side of a centerline of the substrate, where the particular offset is determined by finite element analysis of the substrate to achieve a minimum amount of sag. Each rod support arm preferably includes two cantilevered beams mounted on either side of each of the support rods. Also, a plurality of support rods and corresponding rod support members are provided for supporting as many substrates as necessary in the carrier.		