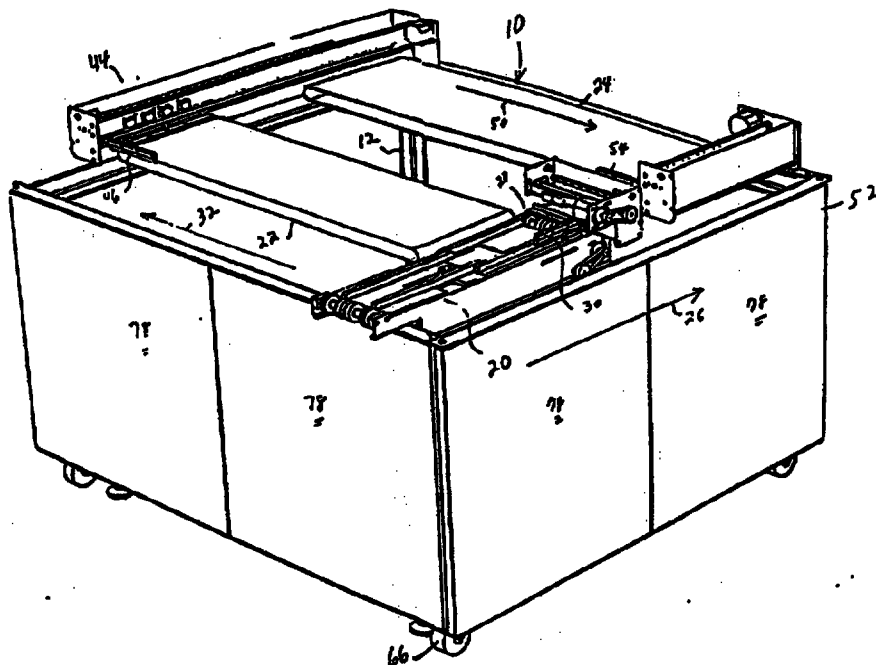




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : B23K 1/20, H01L 21/48, H05K 3/34	A1	(11) International Publication Number: WO 00/48780 (43) International Publication Date: 24 August 2000 (24.08.00)
(21) International Application Number: PCT/US00/03939 (22) International Filing Date: 16 February 2000 (16.02.00) (30) Priority Data: 09/252,377 18 February 1999 (18.02.99) US (71) Applicant: SPEEDLINE TECHNOLOGIES, INC. [US/US]; 16 Forge Park, Franklin, MA 02038 (US). (72) Inventor: RICH, Randall, L.; 2900 East Parker Road, Plano, TX 75074 (US). (74) Agent: SULLIVAN, Thomas, M.; Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., One Financial Center, Boston, MA 02111 (US).	(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>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.</i>	

(54) Title: COMPACT REFLOW AND CLEANING APPARATUS



(57) Abstract

A compact reflow oven and cleaning apparatus combines in a unitary housing for both the reflow and cleaning function. This results in the saving of valuable floor space in the printed circuit board assembly areas. The unitary housing and control of temperatures in the reflow and cleaning areas facilitate the removal of contaminants before solidification of such contaminants.