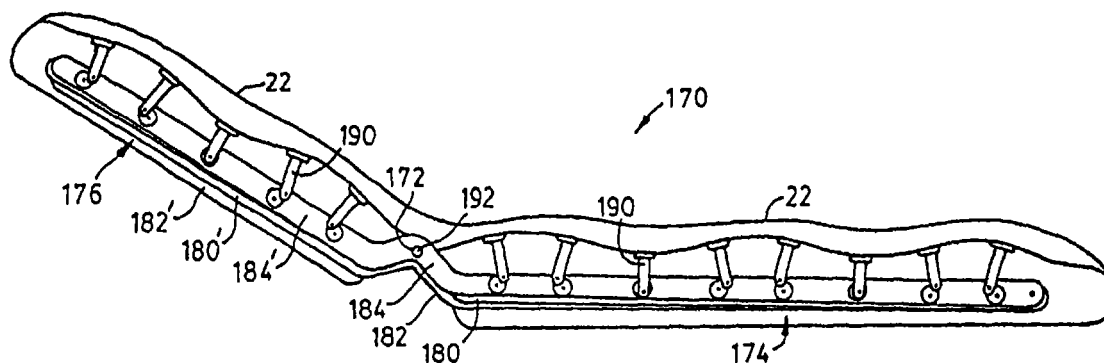




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(21) International Application Number: PCT/CA99/00664 (22) International Filing Date: 23 July 1999 (23.07.99) (30) Priority Data: 09/121,185 23 July 1998 (23.07.98) US (71)(72) Applicant and Inventor: SARINGER, John, H. [CA/CA]; 70 Main Street, Unionville, Ontario L3R 2E7 (CA). (74) Agents: SCHUMACHER, Lynn, C. et al.; Hill & Schumacher, Suite 802, 335 Bay Street, Toronto, Ontario M5H 2R3 (CA).  *G00002*		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, 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>  *162162*

(54) Title: MECHANISM FOR GENERATING WAVE MOTION**(57) Abstract**

The present invention provides a wave generating apparatus for generating waves in for example beds, chairs and the like. In one aspect the device includes a motor driven crankshaft to which are attached several longitudinal beams. The beams mounted on the crankshafts are offset with respect to each other in such a way as to produce a phase shift between the beams. Each beam is provided with several links pivotally attached at one end to each beam and the links are spaced apart along each beam by a distance equal to the desired wavelength of the wave being produced. The other ends of each link is attached to a flexible membrane which forms a support surface of the bed or chair. The links from the different beams are interleaved at equal phase intervals so as to produce a traveling wave in the flexible membrane so that a complete wave passes during each full rotation of the crankshaft assembly. In another embodiment the motor is replaced by a generator and the mechanical movement of the flexible membrane driven by a fluid for example is converted into other forms of mechanical or electrical power.