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(54) Title: MOTION COMPENSATION DEVICE FOR COMPENSATING A CARRIER FRAME ON A VESSEL FOR WATER MOTION

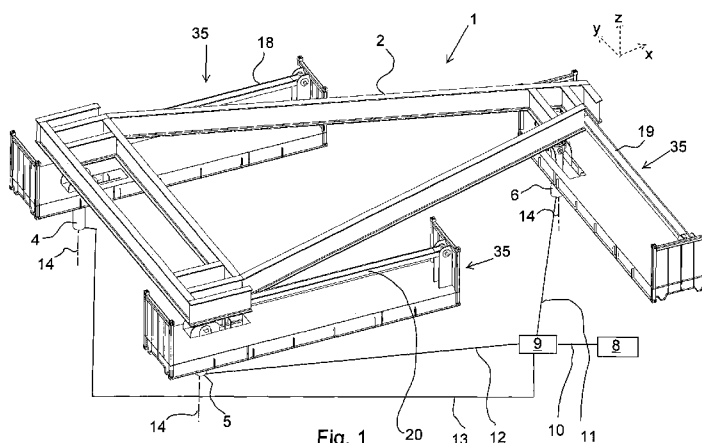


Fig. 1

(57) Abstract: The invention relates to a motion compensation device (1) for compensating a carrier frame on a vessel for local water motion. The device comprises a carrier frame (2); an actuator system (4, 5, 6) adapted for translating the carrier frame (2) along a z-axis and rotating the carrier frame around an x-axis and a y-axis, wherein the x-axis, y-axis and z-axis define an imaginary set of orthogonal axes, the z-axis extending vertical; a sensor system (8) for sensing z-axis translational movement, x-axis rotational movement and y-axis rotational movement of the vessel; a control system (9) generating control signals for driving the actuator system in response to said sensor signals. The actuator system comprises at least three cylinder-piston-units each having a longitudinal axis (14), which longitudinal axes are mutually parallel in a rest position. Each cylinder-piston unit has an upper support (15) for supporting the carrier frame on said cylinder-piston-unit and a lower support (16) for supporting said cylinder-piston-unit on a base. The upper support and/or lower support allows for rotational movement. A resilient system generates resilient reaction forces upon disturbance of said rest position, which reaction forces counteract the disturbance of said rest position.