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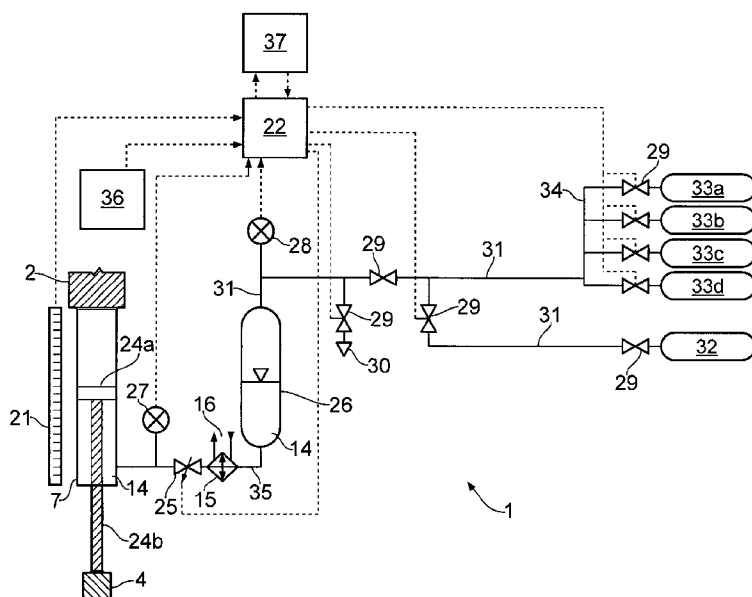


FIG. 3

(57) Abstract: An apparatus (1) for controlling movements of a free-hanging tubular (4) suspended via at least a connector element (8) by at least one compensator member (7) which is connected to a buoyant vessel (2), said tubular extending into a body of water below the vessel. The apparatus comprises motion sensing means (36) for sensing movements of the compensator member and thus that of the vessel (2), and position indicator means (21) for sensing the position of the connector element (8), and thus that of an upper region of the tubular, with respect to the compensator member. The apparatus further comprises data processing means (22) for determining one or more parameters regarding the movement between the vessel and the upper region of the tubular; and adjusting means (24a, b, 25, 26, 29, 33a-d) for controlling at least the stiffness and dampening of the compensator member (7); whereby the axial loads which are transferred between the compensator and the tubular may be controlled.