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(54) Title: ROBOTIC-MOVEMENT PAYLOAD LIFTER AND MANIPULATOR

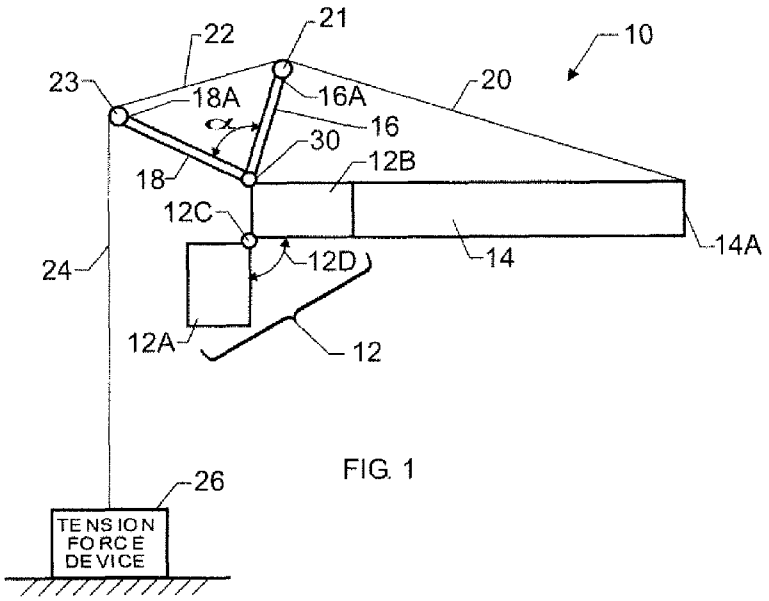


FIG. 1

(57) Abstract: A payload lifter/manipulator module includes a rotatable joint supporting spreader arms angularly spaced with respect to one another. A rigid arm is fixedly coupled to the joint and extends out therefrom to a tip. A tension arm has a first end and a second end with the first end being fixedly coupled to the tip of the rigid arm. The tension arm incorporates pivots along the length thereof. Each pivot can be engaged by or disengaged from the outboard end of a spreader arm based on a position of the spreader arm. A hoist, positioned remotely with respect to the module and coupled to the second end of the tension arm, controls the position of the spreader arms to thereby control the position of the rigid arm's tip. Payload lifter/manipulator assemblies can be constructed with one or more of the modules.

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