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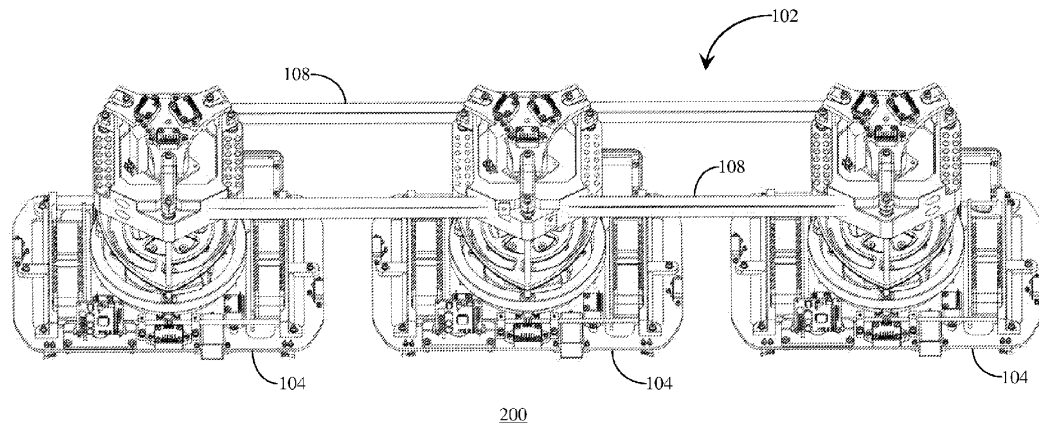


FIG. 2

(57) Abstract: Devices and methods for traversing vertical or near vertical surfaces are provided. In accordance with one aspect, a robotic device for traversing the vertical or near vertical surfaces includes three or more modular structures, each of the three or more modular structures including means for adhering a pad structure of the modular structure to the vertical or near vertical surfaces. Each of the modular structures also includes means for translational motion of the modular structure across the vertical or near vertical surfaces and means for maneuvering the modular structure over obstacles. The means for maneuvering the modular structure over obstacles includes means for detecting the obstacles and means for raising the pad structure in relation to the modular structure so that, in response to detecting the obstacles, the means for raising the pad structure raises the pad structure while the means for translational motion moves the raised pad structure over the obstacle.

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