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(57) Abstract :

A cargo overload compliance and optimization system, comprising a container 101 to store cargo, multiple omnidirectional mobile bases to accommodate and relocate cargo within the container 101, an interactive means 105 to receive input regarding parameters of the cargo stored in the container 101 and parameters of the vehicle, an overhead camera 107 capture dimensions and positions of the cargo, multiple repositioning units installed slidably within the container 101 to reposition cargo between the one or more mobile bases to maintain an even weight distribution of weight across the container 101, a distribution module configured with the control unit, receives destinations of the cargo, route for delivering the cargo, an instant weight distribution from the array of weight sensors 106 and the dimensions and the positions of the cargo to cause the mobile base and the one or more repositioning units to rearrange the cargo for an even weigh distribution.

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