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(54) Title: SYSTEMS AND METHODS FOR LOWERING A CART IN A MODULAR GROW TOWER

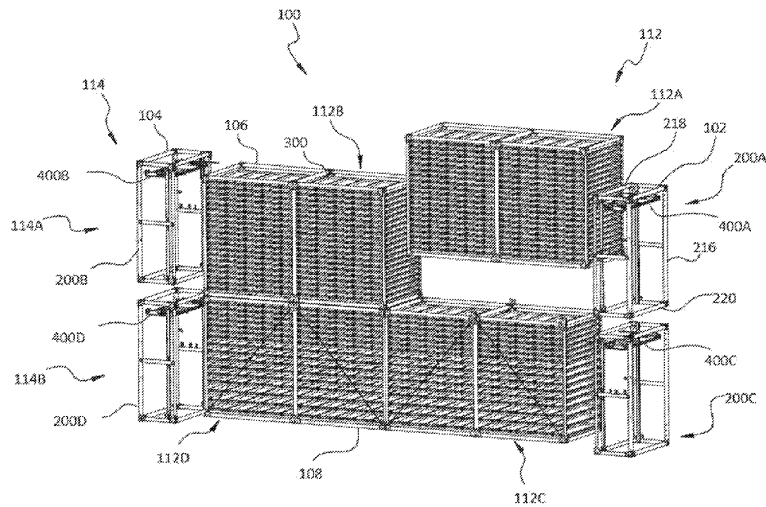


FIG. 1

(57) Abstract: The present disclosure presents systems and related methods for lowering a cart in a modular grow tower assembly. One such system comprise a plurality of body frames, each having multiple subframe supports arranged in parallel in a vertical direction, and a plurality of lift frames positioned at opposite ends of the body frames. The system further includes a plurality of carts, each cart comprising at least a plurality of wheels for traversing the subframe supports; a tray to support growing of crop material; or an engagement mechanism such that the carts remain in contact with adjacent carts as they traverse the subframe supports and become disengaged when the cart is moved vertically by a lowering lift mechanism. The system also includes a plurality of lowering lift mechanisms confined within the lift frames that are configured to pull, lower, and push one of the carts.

[Continued on next page]

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