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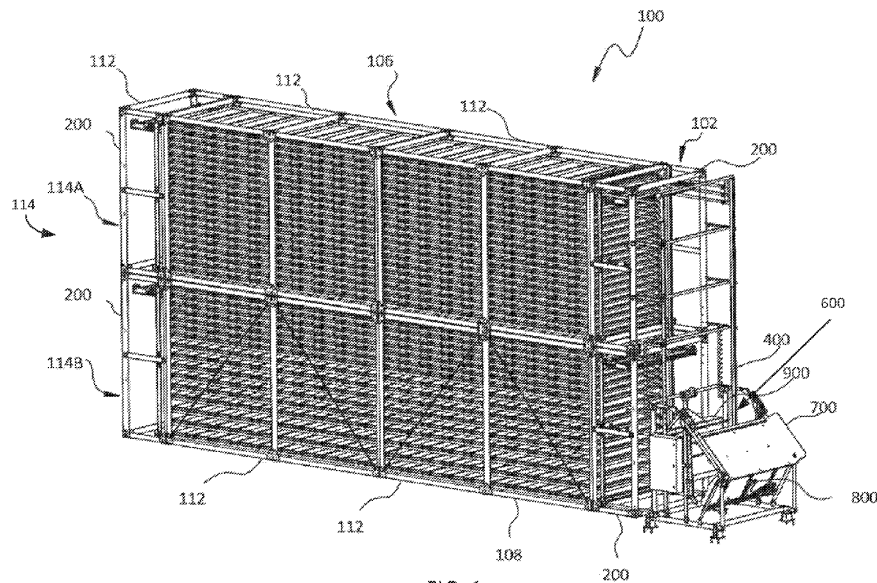


FIG. 1

(57) Abstract: The present disclosure presents systems and related methods for raising a cart in a modular grow tower assembly. One such system comprises a modular grow tower assembly including a plurality of body frames and a plurality of lift frames. The body frames are configured to support a plurality of carts moving along a path from a top end to a bottom end of the modular grow tower assembly. A harvest frame is positioned adjacent to one of the lift frames. A raising lift mechanism is configured to pull a cart from the modular grow tower assembly into the harvest frame. The raising lift mechanism comprises fork members that are configured to engage wheels of the cart. The raising lift mechanism is further configured to move vertically within the harvest frame to position the cart for subsequent harvesting and reinsertion into the modular grow tower assembly.

[Continued on next page]

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