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(54) Title: METHODS FOR PRE-CHARGING CARBON DIOXIDE SNOW

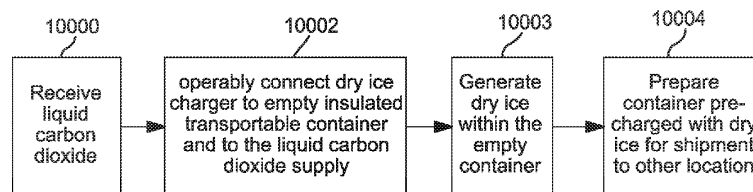


FIG. 10

(57) **Abstract:** Manual and automated methods of pre-charging an empty or partially empty insulated container with CO₂ snow are provided. A first location such as a charging location charges CO₂ liquid into a container to create a pre-charged container with CO₂ snow. The charging location prepares the pre-charged container for delivery to a second location, either by itself, or through a third party. The second location may be a clinical site, which upon receipt of the pre-charged container, loads a perishable item such as a biological sample into the pre-charged container. A user receives the pre-charged container with perishable item and removes the perishable item from the pre-charger container for testing (e.g., biological testing). Depending on the level of depletion of the CO₂ snow in the pre-charged container, the user returns the depleted container to the first location or the intermediate location.



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