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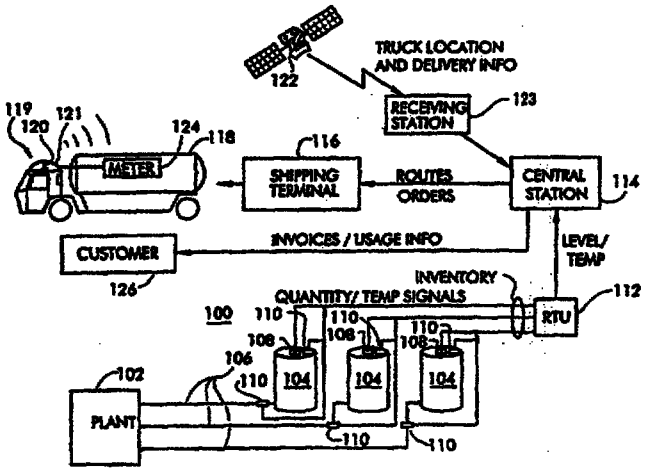
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(54) Title: INTEGRATED SYSTEM MONITORING USE OF MATERIALS, CONTROLLING AND MONITORING DELIVERY OF MATERIALS AND PROVIDING AUTOMATED BILLING OF DELIVERED MATERIALS



(57) Abstract

The system and method include a fleet of vehicles to provide material to a plurality of tanks at various customer locations. An inventory indicator associated with each of the tanks provides a quantity signal to the central station indicating the quantity and temperature of each of the tanks. A processor at the central station monitors the quantity signals of each of the tanks to determine past usage rates of the contents of each of the tanks. The processor projects future tank quantities based on the past usage pattern and determines possible routes for each of the vehicles to each of the tanks. The processor optimizes the routes, delivery amounts, and delivery schedule to minimize total delivered cost for the products based on the projected future tank levels and the possible routes to dispatch each of the vehicles.