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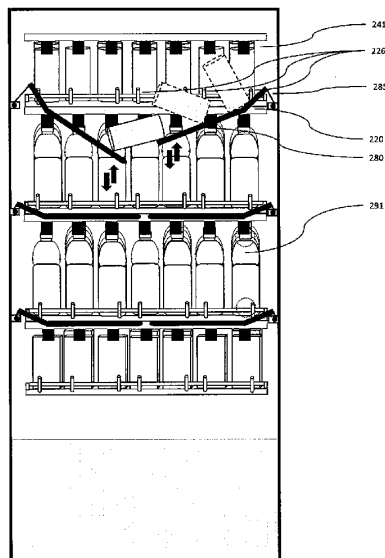


FIG 1.1

(57) Abstract: The present invention relates to a product drop and support mechanism used in the vending machine, including a product dropping mechanism using a product tray with a roller plate inclined forward at about 8 to 10 degrees, with side and front bar to guide the product row to slide on the roller plate. The product row stops when the outer product is stopped in turn at both the product base by the front bar and the product head by a product pushing/ stopping/ retaining device, which drops each product from the product tray in turn. The dropped product does not fall straight down but is supported by the product support mechanism and slides through each level into the product store compartment. The present invention also relates to a product pushing/stopping/retaining device, which is a mechanical device controlled by an electronic circuit that performs pushing, stopping, and retaining operations on the product head.

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