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## (54) Title of the invention : AUTOMATED HUMIDITY SENSOR BASED FOOD DISPENSARY FOR RODENT CAGE

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(57) Abstract:

The present disclosure introduces an automated humidity sensor-based food dispensary for rodent cages 100, which ensures consistent food delivery and prevents spoilage through integrated monitoring and automated dispensing. The system includes a humidity sensor 102 to monitor humidity levels, with real-time data displayed on the display screen 110 for user visibility. Food is dispensed using a motorized rolling tray 104, supported by wheels 118 for smooth sliding movement. The structure is reinforced with steel pillars 106 and enclosed by steel mesh 108 to ensure durability, ventilation, and contamination prevention. A metal flap with magnetic door 112 provides secure and easy access for food refilling and maintenance, enabled by hinges 116 for smooth movement. The system is firmly secured to rodent cages using metal clamps 114. This innovative system automates feeding, ensures food hygiene, and reduces manual intervention, addressing the limitations of traditional rodent feeding systems. Reference Fig 1

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