Low-Cost Smart Flush design

Technology:

This smart flushing technology for toilets comprises flush tanks with automatic refill mechanisms, tank fill valves available in side-float and concentric-float designs, and flapper-flush valves for urine and waste water tanks, activated by a lever to quickly empty water into the bowl. Additionally, the system includes siphon-flush mechanisms with two siphon-flush machines, each for urine and waste, initiated by pressing a lever to start water flow through the siphon until the cistern is emptied, halting the flush when air enters the siphon.

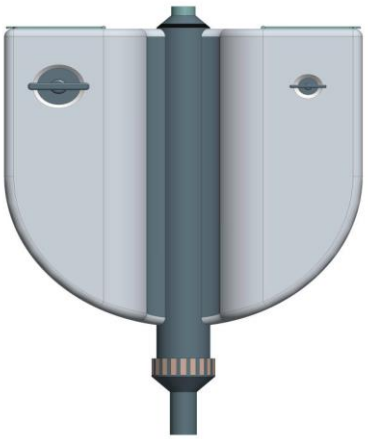
Intellectual Property:

Design Patent application

385677001

Category of the invention:

- ✓ Sanitation ware
- ✓ Bathroom fittings
- ✓ Smart Toilet



Design: Smart Flush

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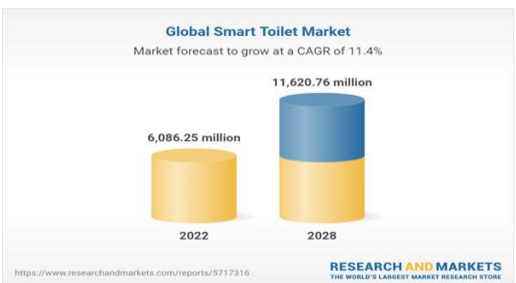
Problem addressed

- ✓ Excessive water usage in flush toilets, especially in regions where individuals flush multiple times daily, leading to water wastage and environmental strain.
- ✓ No separate button for urinal/fecal flushing in the traditional toilet system.

Advantage

- ✓ The smart flush system utilizes only 1 liter of water for urine flush and 4 liters for human waste, significantly reducing water consumption compared to traditional toilets.
- ✓ The system features two flush buttons, allowing users to select the appropriate water volume based on their needs.
- ✓ A float mechanism ensures that the tank refills automatically to the appropriate level after each flush, maintaining consistent performance without manual intervention.
- ✓ By conserving approximately 20 liters of water per person per day, the smart flush system contributes to water conservation
- ✓ The system can be easily installed in existing toilet setups, providing a convenient and cost-effective solution for upgrading to water-efficient technologies.

Potential Value:



Source: https://www.researchandmarkets.com/

USP:

- •Dual tank fill valve designs
- •Separate flapper-flush valves for urine and waste
- •Efficient water emptying
- •Automatic refill for convenience
- •Dual siphon-flush mechanisms
- •Water wastage reduction

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