

(54) Title of the invention : SMART MIRROR SYSTEM WITH INTEGRATED VIRTUAL STYLIST

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(57) Abstract :

1. A smart mirror system with integrated virtual stylist 100 comprising of reflective display panel 102 to serve as the interactive surface, allowing users to view augmented reality fashion suggestions seamlessly; high-resolution camera 104 to capture detailed images of the user, providing essential data for the computer vision algorithms and machine learning models; embedded computer system 106 to function as the central processing unit orchestrating tasks, from image processing to executing sophisticated algorithms for personalized fashion recommendations; control unit 108 to direct and manage the flow of information within the smart mirror's components, ensuring seamless coordination for optimal functionality; memory 110 to store and retrieve critical user data, including profiles and preferences, contributing to a personalized and adaptive fashion consultation; computer vision algorithms 112 to analyze user attributes, such as body measurements and facial features, forming the foundation for personalized fashion insights; machine learning models 114 to process historical outfit choices and style preferences, adapting over time to deliver increasingly accurate and tailored fashion recommendations; augmented reality module 116 to overlay virtual fashion items onto the user's reflection, offering a real-time virtual try-on experience; online retailer integration system 118 to connect the smart mirror to online fashion platforms, allowing users to seamlessly purchase recommended items directly; real-time fashion update module 120 to provide immediate notifications about the latest trends, sales, and discounts, keeping users fashionably informed; customization and personalization module 122 to empower users to tailor their fashion experience, adjusting settings and experimenting with different styles; cloud system 124 to enhance scalability, facilitate data storage, and enable adaptive updates, ensuring a connected and resilient smart mirror experience. 2. The smart mirror system with integrated virtual stylist 100 as claimed in claim 1, wherein reflective display panel transforms a traditional mirror into an interactive fashion advisor, presenting augmented reality fashion suggestions seamlessly. 3. The smart mirror system with integrated virtual stylist 100 as claimed in claim 1, wherein high-resolution camera captures detailed user images for precise analysis, including body measurements, skin tone, and facial features. 4. The smart mirror system with integrated virtual stylist 100 as claimed in claim 1, wherein embedded computer system orchestrates tasks and executes advanced algorithms for generating personalized fashion recommendations based on user attributes. 5. The smart mirror system with integrated virtual stylist 100 as claimed in claim 1, wherein computer vision algorithms analyses user attributes such as body measurements and facial features to form the basis for personalized fashion insights. 6. The smart mirror system with integrated virtual stylist 100 as claimed in claim 1, wherein machine learning models processes historical outfit choices and style preferences, adapting over time to deliver increasingly accurate and tailored fashion recommendations. 7. The smart mirror system with integrated virtual stylist 100 as claimed in claim 1, wherein smart mirror utilizes augmented reality technology to present the personalized fashion recommendations and outfit suggestions to the user by displaying overlay virtual clothing items, accessories, and hairstyle suggestions onto the user's reflection, allowing them to virtually try on different outfits and see how they would look without physically wearing them. 8. The smart mirror system with integrated virtual stylist 100 as claimed in claim 1, wherein online retailer integration system connects the smart mirror to online fashion platforms, enabling users to directly purchase recommended items seamlessly. 9. The smart mirror system with integrated virtual stylist 100 as claimed in claim 1, wherein real-time fashion update module provides immediate notifications about the latest trends, sales, and discounts, ensuring users stay fashionably informed. 10. The smart mirror system with integrated virtual stylist 100 as claimed in claim 1, wherein the method comprises user standing in front of the Smart Mirror with Integrated Virtual Stylist 100 and high-resolution camera 104 embedded in the mirror capturing a detailed image of the user's appearance, including body measurements, skin tone, and facial features; transmission of captured image to the embedded computer system 106, which uses sophisticated computer vision algorithms 112 for processing and analyzing various attributes of the user; machine learning models 114 analyzing the user's historical outfit choices, color preferences, and clothing brands, learning and adapting to the user's evolving style over time; based on the analysis, the virtual stylist generates personalized fashion recommendations, including clothing items, accessories, and hairstyle suggestions; augmented reality module 116 overlaying the recommended fashion items onto the user's reflection in real-time, allowing them to virtually try on different outfits; users customizing the virtual stylist, adjusting style conservatism, specifying occasions (casual, formal, work), and experimenting with new fashion trends or styles; smart mirror 100 connecting to online fashion retailers online retailer integration system 118, enabling users to directly purchase the recommended items through the mirror's interface 102; system 100 providing real-time notifications about the latest trends, sales, and discounts from preferred brands or stores through real time fashion update module 120, keeping users informed about the ever-changing fashion landscape; cloud system 124 facilitating data storage, ensuring user profiles, personalization settings, and making historical data accessible across multiple instances of the smart mirror; machine learning models 114 continuously adapting and learning from user interactions, ensuring that the mirror's 100 recommendations become increasingly accurate and aligned with the user's unique style; entire process creating a seamless and interactive fashion consultation experience, empowering users to make informed decisions, discover new styles, and enjoy a personalized and efficient shopping journey. 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