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(57) Abstract :  
The present invention relates to a fake currency detection device (102). The device (102) further includes camera module (106), sensor (108), controller (110), LED light (112), database (114), and battery (116). The method (200) further includes activating camera module (106) and sensor (108) to capture real-time images and sense signals. The method (200) further includes pre-processing captured data for subsequent analysis. The method (200) further includes extracting features such as patterns, colors, watermarks, or ultraviolet (UV) markings from processed data. The method (200) further includes processing and analyzing pre-processed data using a machine-learning algorithm to differentiate between real and fake currency. The method (200) further includes extracting relevant data from analysis to make a decision. The method (200) further includes comparing extracted data with pre-stored data to determine fake currency. The method (200) further includes activating LED light (112) of device (102) to notify user regarding detected fake currency.

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