

Title (en)

BILL VALIDATOR FOR BANK NOTE HAVING CONDUCTIVE STRIP

Title (de)

EINRICHTUNG ZUR PRÜFUNG DER ECHTHEIT VON BANKNOTEN, DIE EINEN LEITFÄHIGEN SICHERHEITSFADEN AUFWEISEN

Title (fr)

DISPOSITIF DE VALIDATION DE BILLET POUR BILLETS DE BANQUE MUNIS D'UNE BANDE CONDUCTRICE

Publication

**EP 1025550 A2 20000809 (EN)**

Application

**EP 98948648 A 19981019**

Priority

- CA 9800976 W 19981019
- CA 2218939 A 19971022
- US 10281998 A 19980623

Abstract (en)

[origin: WO9921139A2] A device for validating the authenticity of a document uses changes in capacitance due to the presence of an electrically conductive security thread extending across the document or the presence of a watermark. The device uses a drive arrangement for moving of a document such as a bank note, past a sensing arrangement which senses changes in capacitance due to movement of a security thread or watermark therapist. A frequency generator produces a high frequency time varying oscillator signal and provides this signal to an elongate oscillator electrode extending across the path of movement. A lead elongate measuring electrode is electrically conductive and positioned in front of the oscillator electrode and extends across said path and a trailing elongate measuring electrode is positioned behind the oscillator electrode and extends across the path. The signals from the measuring and the oscillator electrode are provided to a signal processing arrangement. The signal processing arrangement processes the signals relative to detect changes in amplitude and phase shift between the signals caused by a conductive security thread or the watermark passing by the electrodes. Chosen separation distances and using of two sensors placed on opposite sides of bank note reduces the signal intensity variations, caused by the wobbling of the bank note and changes in separation distance of the bank note from the sensor.

IPC 1-7

**G07D 1/00**

IPC 8 full level

**G07D 7/06** (2006.01); **G07D 7/02** (2006.01); **G07D 7/20** (2006.01)

CPC (source: EP US)

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