

Title (en)
CONSTITUTING SECURITY ELEMENTS WITH OPTICAL DIFFRACTION EFFECT, AND DEVICE FOR CONTROLLING SUCH ELEMENTS

Title (de)
AUFBAU BEUGUNGSOPTISCH WIRKSAMER SICHERHEITSELEMENTE UND VORRICHTUNG ZUR PRÜFUNG DERARTIGER ELEMENTE

Title (fr)
CONSTITUTION D'ELEMENTS DE SECURITE A EFFET OPTIQUE DE DIFFRACTION, ET DISPOSITIF POUR LE CONTROLE DE TELS ELEMENTS

Publication
EP 1004097 A1 20000531 (DE)

Application
EP 98932022 A 19980424

Priority

- DE 9801178 W 19980424
- DE 19734855 A 19970812

Abstract (en)
[origin: WO9909527A1] The invention concerns the constitution of security elements with optical diffraction effect, and a device for controlling such elements. The use of holograms and other security elements with optical diffraction effect for protecting documents and other valuable papers, as well as bank notes against forgery is becoming more and more frequent presently. The element with optical diffraction effect comprises a discontinuous metal coating and/or partial metal coats and/or metal coat zones in different planes, representing an electric data coding, corresponding to the objective. The device comprises a scanner with capacitive functioning. Said scanner consists of a plurality of emitting electrodes placed side by side and a receiving electrode extending parallel to said emitting electrodes arrangement.

IPC 1-7
G07D 1/00

IPC 8 full level
G07D 1/00 (2006.01); **G07D 7/00** (2016.01); **G07D 7/026** (2016.01)

CPC (source: EP KR)
G07D 7/0032 (2017.05 - EP); **G07D 7/026** (2013.01 - EP); **G07D 7/12** (2013.01 - KR)

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI NL PT SE

DOCDB simple family (publication)
WO 9909527 A1 19990225; AT E212143 T1 20020215; AU 8208198 A 19990308; BG 104143 A 20000630; BG 64293 B1 20040831; BR 9811153 A 20000725; CA 2300961 A1 19990225; CN 1265761 A 20000906; DE 19734855 A1 19990218; DE 19734855 B4 20050908; DE 59802653 D1 20020221; DK 1004097 T3 20020506; EP 1004097 A1 20000531; EP 1004097 B1 20020116; ES 2172157 T3 20020916; HU P0003358 A2 20010228; HU P0003358 A3 20021128; ID 25447 A 20001005; JP 2003517646 A 20030527; KR 20010022778 A 20010326; NO 20000615 D0 20000208; NO 20000615 L 20000407; PL 187652 B1 20040831; PL 338473 A1 20001106; PT 1004097 E 20020731; SA 98190497 B1 20060814; SK 1782000 A3 20001009; TR 200000651 T2 20000821; UA 50838 C2 20021115

DOCDB simple family (application)
DE 9801178 W 19980424; AT 98932022 T 19980424; AU 8208198 A 19980424; BG 10414300 A 20000208; BR 9811153 A 19980424; CA 2300961 A 19980424; CN 98807889 A 19980424; DE 19734855 A 19970812; DE 59802653 T 19980424; DK 98932022 T 19980424; EP 98932022 A 19980424; ES 98932022 T 19980424; HU P0003358 A 19980424; ID 20000246 D 19980424; JP 2000510116 A 19980424; KR 20007001378 A 20000210; NO 20000615 A 20000208; PL 33847398 A 19980424; PT 98932022 T 19980424; SA 98190497 A 19980906; SK 1782000 A 19980424; TR 200000651 T 19980424; UA 00020752 A 19980424