

Title (en)

SECURITY DEVICE COMPRISING SOFT MAGNETIC THIN FILM

Title (de)

SICHERUNGSVORRICHTUNG MIT WEICHMAGNETISCHER DÜNNSCHICHT

Title (fr)

DISPOSITIF DE SECURITE COMPRENANT UN FILM MINCE A AIMANTATION TEMPORAIRE

Publication

EP 1145204 B1 20021002 (EN)

Application

EP 99936527 A 19990712

Priority

- EP 99936527 A 19990712
- EP 9904942 W 19990712
- EP 98202418 A 19980720

Abstract (en)

[origin: WO0005693A2] A security device such as an anti-pilferage label or authentication label comprises as security feature a (first) soft-magnetic thin film having a thickness ranging from 100 nm to 2000 nm. The thin film is composed of an amorphous CoxZryNbz alloy, where x, y and z are atomic percentages and fulfil following conditions: (a) x ranging between 80 and 95; (b) y and z ranging between 0 and 20; (c) $y + z = 100 - x$. Due to the high effective relative permeability μ_r , and the direction of its easy axis, a label with a CoZrNb thin film is relatively independent of its geometry.

IPC 1-7

G08B 13/24; **H01F 10/12**

IPC 8 full level

G08B 13/24 (2006.01); **H01F 10/12** (2006.01); **H01F 10/13** (2006.01)

CPC (source: EP)

G08B 13/2408 (2013.01); **G08B 13/2437** (2013.01); **G08B 13/2442** (2013.01); **H01F 10/132** (2013.01); **H01F 10/265** (2013.01)

Cited by

DE10339559B4

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0005693 A2 20000203; **WO 0005693 A3 20020207**; AT E225549 T1 20021015; AU 5159399 A 20000214; DE 69903352 D1 20021107; DE 69903352 T2 20030710; EP 1145204 A2 20011017; EP 1145204 B1 20021002

DOCDB simple family (application)

EP 9904942 W 19990712; AT 99936527 T 19990712; AU 5159399 A 19990712; DE 69903352 T 19990712; EP 99936527 A 19990712