

Title (en)  
Security element and printing method

Title (de)  
Sichereitselement und Druckverfahren

Title (fr)  
Élément de sécurité et procédé d'impression

Publication  
**EP 1447235 A1 20040818 (FR)**

Application  
**EP 03003332 A 20030213**

Priority  
EP 03003332 A 20030213

Abstract (en)  
The unit has a base with geometrical units (2-8), which are juxtaposed and each of them is formed with a set of lines. The lines of the units (2, 4, 6, 8) have angles different from that of the lines of neighboring units (3, 5, 7). The lines of one part of the geometrical units are printed with a classic ink and the lines of another part of geometrical units are printed with an ink having metallic characteristics. An independent claim is also included for a printing process of a security element.

Abstract (fr)  
L'élément de sécurité comprend un fond (1) ayant des éléments géométriques juxtaposés (2 à 8) formés chacun d'un ensemble lignes, les lignes d'un élément géométrique ayant un angle différent de celui des lignes d'un élément voisin. Les lignes d'une partie des éléments géométriques sont imprimées avec une encre classique et les lignes d'une autre partie des éléments géométriques sont imprimées avec une encre ayant des caractéristiques métalliques. <IMAGE>

IPC 1-7  
**B41M 3/14**; **B44F 1/08**; **B44F 1/00**

IPC 8 full level  
**B41M 3/14** (2006.01); **B44F 1/00** (2006.01); **B44F 1/08** (2006.01); **B44F 1/12** (2006.01)

IPC 8 main group level  
**B41M** (2006.01)

CPC (source: EP US)  
**B41M 3/14** (2013.01 - EP US); **B42D 25/23** (2014.10 - US); **B42D 25/24** (2014.10 - US); **B42D 25/29** (2014.10 - EP US); **B42D 25/405** (2014.10 - US); **B42D 25/485** (2014.10 - US); **B44F 1/08** (2013.01 - EP US); **B42D 2033/20** (2022.01 - EP); **B42D 2035/16** (2022.01 - EP); **B42D 2035/24** (2022.01 - EP)

Citation (applicant)  
• US 6050606 A 20000418 - FORESTI GIANFRANCO [CH]  
• US 5443579 A 19950822 - TANAKA TOSHINORI [JP], et al  
• US 5853197 A 19981229 - MOWRY JR WILLIAM H [US], et al  
• US 5487567 A 19960130 - VOLPE JOHN R [US]  
• EP 0614133 A2 19940907 - STANDARD REGISTER CO [US]  
• US 6101939 A 20000815 - GIORI FAUSTO [CH], et al

Citation (search report)  
• [X] WO 03006257 A1 20030123 - ECOLE POLYTECH [CH], et al  
• [DA] US 6050606 A 20000418 - FORESTI GIANFRANCO [CH]  
• [DA] US 5443579 A 19950822 - TANAKA TOSHINORI [JP], et al

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)  
**EP 1447235 A1 20040818**; AT E488376 T1 20101215; CN 100371177 C 20080227; CN 1750938 A 20060322; DE 602004030096 D1 20101230; EP 1597083 A2 20051123; EP 1597083 B1 20101117; US 2008134920 A1 20080612; WO 2004071779 A2 20040826; WO 2004071779 A3 20041104

DOCDB simple family (application)  
**EP 03003332 A 20030213**; AT 04708413 T 20040205; CN 200480004179 A 20040205; DE 602004030096 T 20040205; EP 04708413 A 20040205; IB 2004000399 W 20040205; US 54398804 A 20040205