

Title (en)

Safety element which can be verified without an aid

Title (de)

Sicherheitselement, das ohne Hilfsmittel verifiziert werden kann

Title (fr)

Élément de sécurité pouvant être vérifié sans moyen d'aide

Publication

EP 2159071 B2 20220112 (DE)

Application

EP 08014968 A 20080825

Priority

EP 08014968 A 20080825

Abstract (en)

[origin: EP2159071A1] The element has a transparent supporting substrate, and a color changing element consisting of an electromagnetic shaft reflecting layer, spacer layer and a metallic clustering layer. The electromagnetic shaft reflecting layer is partially applied as a line screen and as a full-faced layer made up of various metals. The electromagnetic shaft reflecting layer formed as the line screen is in the form of letter, specimen, guilloche, and symbols, and has a translucent appearance.

IPC 8 full level

B42D 25/29 (2014.01); **B42D 25/337** (2014.01); **B42D 25/351** (2014.01); **B42D 25/373** (2014.01)

CPC (source: BR EP US)

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Citation (opposition)

Opponent :

- EP 1580297 A2 20050928 - HUECK FOLIEN GMBH [AT]
- WO 2007006545 A1 20070118 - HUECK FOLIEN GMBH [AT], et al
- WO 0103945 A1 20010118 - FLEX PRODUCTS INC [US]
- WO 2004014663 A1 20040219 - HUECK FOLIEN GMBH [AT], et al
- EP 1343639 B1 20060719 - OVD KINEGRAM AG [CH]
- WO 2005063446 A1 20050714 - HUECK FOLIEN GMBH [AT], et al
- WO 03095227 A1 20031120 - KURZ LEONHARD FA [DE], et al
- WO 9904983 A1 19990204 - GIESECKE & DEVRIENT GMBH [DE], et al
- WO 2005077668 A1 20050825 - HUECK FOLIEN GMBH [AT], et al
- EP 1876033 A1 20080109 - HUECK FOLIEN GMBH & CO KG [DE]
- WO 2005047013 A2 20050526 - RUE DE INT LTD [GB], et al
- "Eintrag: 'Sputtering'", ROEMPP CHEMIE LEXIKON, 1999
- HELMUT KIPPHAN: "Handbuch der Printmedien", SPRINGER VERLAG BERLIN HEIDELBERG NEW YORK, article "2 Drucktechnologien mit fester Druckform", pages: 410

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DOCDB simple family (application)

EP 08014968 A 20080825; BR PI0918881 A 20090706; CA 2735030 A 20090706; EP 2009004864 W 20090706; ES 08014968 T 20080825; MY PI2011000806 A 20090706; US 200913002368 A 20090706