

Title (en)  
Improvements in security features

Title (de)  
Verbesserungen bei Sicherheitsfunktionen

Title (fr)  
Améliorations apportées à des caractéristiques de sécurité

Publication  
**EP 2524814 B1 20150325 (EN)**

Application  
**EP 12167814 A 20120514**

Priority  
CH 8432011 A 20110518

Abstract (en)  
[origin: EP2524814A2] The invention pertains to a security element such as a security thread (1) for a security document comprising at least one layer of metallization (2) or metallic print, wherein said layer (2) is electric contact with at least one sacrificial element (5) protecting the metallization (2) or metallic print from corrosion. it furthermore pertains to a method for making such a security threat, a security document comprising such a security thread, and to a method for making such a security document.

IPC 8 full level  
**B42D 15/00** (2006.01); **B41M 3/14** (2006.01); **C09D 11/00** (2014.01); **D21H 21/42** (2006.01); **G07D 7/00** (2006.01); **G09F 3/00** (2006.01)

CPC (source: EP US)  
**B41M 3/14** (2013.01 - US); **B42D 25/29** (2014.10 - EP); **B42D 25/328** (2014.10 - EP US); **B42D 25/355** (2014.10 - EP US); **B42D 25/373** (2014.10 - US); **D21H 21/42** (2013.01 - EP US); **G09F 3/0292** (2013.01 - EP); **B42D 2033/10** (2022.01 - EP); **B42D 2033/16** (2022.01 - EP); **B42D 2033/20** (2022.01 - EP); **B42D 2033/28** (2022.01 - EP); **B42D 2033/30** (2022.01 - EP); **B42D 2035/14** (2022.01 - EP); **B42D 2035/16** (2022.01 - EP); **B42D 2035/36** (2022.01 - EP)

Citation (opposition)  
Opponent : Giesecke & Devrient GmbH  
• EP 2094504 B1 20100519 - GIESECKE & DEVRIENT GMBH [DE]  
• WO 2004050951 A2 20040617 - GIESECKE & DEVRIENT GMBH [DE], et al  
• EP 1934950 B1 20091021 - FABRIANO SECURITIES SRL [IT]  
• EP 0944480 B2 20061115 - GIESECKE & DEVRIENT GMBH [DE]  
• WO 9833648 A1 19980806 - RUE DE INT LTD [GB], et al  
• RUDOLF L. VAN RENESSE,: "Optical Document Security. 2nd ed.", 1997, ARTECH HOUSE BOSTON - LONDON, pages: 304-305, - 317-322, XP055274391

Cited by  
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**EP 2524814 A2 20121121; EP 2524814 A3 20130710; EP 2524814 B1 20150325**

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