

Title (en)
DOCUMENT HAVING A VALUE

Title (de)
WERTDOKUMENT

Title (fr)
DOCUMENT DE VALEUR

Publication
EP 0975838 A1 20000202 (DE)

Application
EP 99932413 A 19990129

Priority
• DE 19804024 A 19980202
• EP 9900592 W 19990129

Abstract (en)
[origin: DE19804024A1] The invention relates to a printed document having a value and comprising at least one authenticity feature in the form of a luminescent substance on the basis of a host lattice doped with at least two rare-earth metals. The host lattice absorbs essentially in the visible spectrum, can be excited in substantial parts of the visible spectrum and is transparent at least in partial areas of the infrared spectrum. The luminescent substance is present in the volume of the document having a value at a concentration which is such that the properties of said document are not affected. Thulium and holmium are used as the rare-earth metals.

IPC 1-7
D21H 21/48; **B42D 15/00**; **G06K 19/14**

IPC 8 full level
B41M 3/14 (2006.01); **B42D 15/00** (2006.01); **B42D 25/29** (2014.01); **D21H 21/48** (2006.01); **G01J 1/58** (2006.01)

CPC (source: EP US)
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Citation (search report)
See references of WO 9939051A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
DE 19804024 A1 19990805; AU 3251899 A 19990816; BR 9904815 A 20000523; BR 9904815 B1 20081118; CN 1138893 C 20040218; CN 1255950 A 20000607; EP 0975838 A1 20000202; HK 1027138 A1 20010105; NO 994739 D0 19990929; NO 994739 L 19990929; RU 2203188 C2 20030427; US 6479133 B1 20021112; WO 9939051 A1 19990805

DOCDB simple family (application)
DE 19804024 A 19980202; AU 3251899 A 19990129; BR 9904815 A 19990129; CN 99800098 A 19990129; EP 9900592 W 19990129; EP 99932413 A 19990129; HK 00106388 A 20001010; NO 994739 A 19990929; RU 99122748 A 19990129; US 38163900 A 20000107