

Title (en)  
DATA SUPPORT WITH IDENTIFICATIONS WRITTEN THEREON BY MEANS OF A LASER BEAM AND METHOD FOR PRODUCTION THEREOF

Title (de)  
DATENTRÄGER MIT MITTELS LASERSTRAHL EINGESCHRIEBENEN KENNZEICHNUNGEN UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)  
SUPPORT DE DONNEES POURVU D'IDENTIFICATIONS INSCRITES AU MOYEN D'UN FAISCEAU LASER ET PROCEDE DE FABRICATION DUDIT SUPPORT

Publication  
**EP 1697146 B1 20120215 (DE)**

Application  
**EP 04803402 A 20041201**

Priority  
• EP 2004013634 W 20041201  
• DE 10358784 A 20031212

Abstract (en)  
[origin: US8006908B2] The invention relates to a data carrier into which, by a laser beam, identifiers (20, 22) are introduced in the form of patterns, letters, numbers and/or images that are visible due to local changes in the optical properties of the data carrier, effected by the laser beam and resulting from material transformations. According to the present invention, the data carrier comprises a laser-sensitive recording layer (26) that is transparent in the visible spectral range and that is provided with a surface relief in the form of a lens grid (28). The identifiers are introduced with the laser beam from different directions through the lens grid (28) into the recording layer (26) and are perceptible when later viewed from those same directions. The data carrier is transparent at least in the area of the introduced identifiers (20, 22).

IPC 8 full level  
**B42D 15/10** (2006.01); **B42D 15/00** (2006.01)

CPC (source: EP US)  
**B42D 25/00** (2014.10 - EP US); **B42D 25/23** (2014.10 - US); **B42D 25/29** (2014.10 - EP US); **B42D 25/435** (2014.10 - US);  
**B42D 2033/24** (2022.01 - EP)

Cited by  
US10800201B2

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

DOCDB simple family (publication)  
**WO 2005058610 A2 20050630; WO 2005058610 A3 20060209**; AT E545518 T1 20120315; DE 10358784 A1 20050714;  
EP 1697146 A2 20060906; EP 1697146 B1 20120215; ES 2379632 T3 20120430; US 2007063053 A1 20070322; US 8006908 B2 20110830

DOCDB simple family (application)  
**EP 2004013634 W 20041201**; AT 04803402 T 20041201; DE 10358784 A 20031212; EP 04803402 A 20041201; ES 04803402 T 20041201;  
US 58212504 A 20041201