

Title (en)

MULTI-LAYERED PHOTOCHROMIC OPTICAL DATA DISK

Title (de)

MEHRSCHICHTIGE PHOTOCHROMISCHE OPTISCHE DATENPLATTE

Title (fr)

DISQUE OPTIQUE PHOTOCHROME MULTICOUCHE DE MEMORISATION DE DONNEES

Publication

EP 1090391 A4 20010411 (EN)

Application

EP 98960155 A 19981102

Priority

- US 9823194 W 19981102
- US 6379797 P 19971031

Abstract (en)

[origin: WO9923650A1] A 2.5-dimensional optical storage medium (101) is formed from multiple layers of photochromic molecules embedded in a polymer matrix separated by transparent separating layers (107). The medium (101) is moved into position in three dimensions for two-photon single beam information writing. The information thus written can be read bit-by-bit or page-by-page. In the latter case, an area is illuminated, and the fluorescence is detected by a CCD camera.

IPC 1-7

G11B 7/24; **G11B 3/70**; **G11C 11/00**; **B32B 3/00**

IPC 8 full level

B32B 3/00 (2006.01); **G11B 7/004** (2006.01); **G11B 7/0045** (2006.01); **G11B 7/005** (2006.01); **G11B 7/0055** (2006.01); **G11B 7/24** (2006.01); **G11B 7/244** (2006.01); **G11B 7/257** (2006.01); **G11B 7/00** (2006.01); **G11B 7/006** (2006.01); **G11B 7/14** (2006.01)

CPC (source: EP)

B82Y 10/00 (2013.01); **G11B 7/00455** (2013.01); **G11B 7/0052** (2013.01); **G11B 7/00552** (2013.01); **G11B 7/244** (2013.01); **G11B 7/245** (2013.01); **G11B 7/257** (2013.01); **G11B 7/006** (2013.01); **G11B 7/14** (2013.01); **G11B 2007/0013** (2013.01)

Citation (search report)

- [X] DE 4444988 A1 19960620 - WENDT ULRICH DR RER NAT HABIL [DE]
- [A] WO 9723463 A1 19970703 - MEMORY DEVICES INC [IL], et al
- [PXA] WO 9825268 A1 19980611 - OPTICAL MEMORY DEVICES LTD [IL], et al
- [PA] US 5800950 A 19980901 - HIRAO AKIKO [JP], et al & JP H0922034 A 19970121 - TOSHIBA CORP
- [A] WO 9638410 A1 19961205 - RISOE FORSKNINGSCENTER [DK], et al
- See references of WO 9923650A1

Cited by

US9275671B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9923650 A1 19990514; **WO 9923650 A9 19991202**; AU 1582199 A 19990524; EP 1090391 A1 20010411; EP 1090391 A4 20010411; JP 2001522119 A 20011113

DOCDB simple family (application)

US 9823194 W 19981102; AU 1582199 A 19981102; EP 98960155 A 19981102; JP 2000519427 A 19981102