

Title (en)  
OPTICAL RECORDING MEDIUM

Title (de)  
OPTISCHER AUFZEICHNUNGSTRÄGER

Title (fr)  
SUPPORT D'ENREGISTREMENT OPTIQUE

Publication  
**EP 1000424 A2 20000517 (EN)**

Application  
**EP 99921038 A 19990527**

Priority

- EP 99921038 A 19990527
- EP 98201771 A 19980527
- IB 9900958 W 19990527

Abstract (en)  
[origin: WO9962061A2] An optical recording medium is described having a grooved recording layer. The structure of unwritten tracks must enable a scanning device to derive a radial tracking error signal according to the push-pull method. The structure of the written tracks must enable the scanning device to derive a radial tracking error signal according to the high-frequency phase-detection method. To this end the width and depth of the groove are in the range from 0.3 to 0.6 times the wavelength over the numerical aperture of the radiation beam used for scanning the recording medium, and from 1/24 to 1/7 times the wavelength over the refractive index, respectively. The phase difference between the radiation beam reflected from a region on track in between written marks and from a mark is in the range from 0.4 to 2.0 radians.

IPC 1-7  
**G11B 7/0037**; **G11B 7/24**

IPC 8 full level  
**G11B 7/0037** (2006.01); **G11B 7/007** (2006.01); **G11B 7/09** (2006.01); **G11B 7/24** (2006.01); **G11B 7/24079** (2013.01); **G11B 7/243** (2006.01)

CPC (source: EP KR)  
**G11B 7/00454** (2013.01 - KR); **G11B 7/007** (2013.01 - EP); **G11B 7/0938** (2013.01 - EP); **G11B 7/24035** (2013.01 - KR); **G11B 7/24079** (2013.01 - EP KR); **G11B 7/0901** (2013.01 - EP); **G11B 7/0943** (2013.01 - EP); **G11B 2007/00709** (2013.01 - KR); **G11B 2220/2537** (2013.01 - KR)

Citation (search report)  
See references of WO 9962061A2

Cited by  
US6729780B2

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**WO 9962061 A2 19991202**; **WO 9962061 A3 20000217**; **WO 9962061 A8 20000413**; CN 1150537 C 20040519; CN 1272204 A 20001101; EP 1000424 A2 20000517; JP 2002517058 A 20020611; KR 100633476 B1 20061016; KR 20010022260 A 20010315

DOCDB simple family (application)  
**IB 9900958 W 19990527**; CN 99800844 A 19990527; EP 99921038 A 19990527; JP 2000551387 A 19990527; KR 20007000833 A 20000125