

Title (en)

ELECTRO-OPTICAL STORAGE SYSTEM WITH FLYING HEAD FOR NEAR-FIELD RECORDING AND READING

Title (de)

ELEKTROOPTISCHES SPEICHERSYSTEM MIT FLIEGENDEM KOPF FÜR NAHFELDAUFZEICHNUNG UND WIEDERGABE

Title (fr)

SYSTEME DE MEMOIRE ELECTRO-OPTIQUE A TETE FLOTTANTE POUR ENREGISTREMENT EN CHAMP PROCHE ET LECTURE

Publication

EP 0979508 A4 20011024 (EN)

Application

EP 97923507 A 19970429

Priority

US 9707303 W 19970429

Abstract (en)

[origin: WO9849675A1] An electro-optical storage system based on air-bearing-suspended optical head in a near-field configuration. The system comprises a read/write head and a head positioning system, an optics module (1702) including beam relay optics and signal detectors (1804), an optical medium (1714) and a corresponding medium driving unit, and an electronic control system. The optical head includes a near-field lens with a high index of refraction and in a near-field regime has a numerical aperture greater than unity when the spacing between an exit facet of the optical head and a recording layer in an optical medium is a fraction of the wavelength.

IPC 1-7

G11B 5/09; **G11B 5/68**; **G11B 7/00**; **G11B 7/24**; **G11B 9/00**; **G11B 11/00**; **G11B 3/74**; **G02B 5/18**; **G02B 21/00**; **G11B 7/125**; **G11B 7/085**; **G11B 11/10**; **G11B 23/03**; **G11B 20/10**; **G11B 20/12**

IPC 8 full level

G11B 7/085 (2006.01); **G11B 7/09** (2006.01); **G11B 7/12** (2006.01); **G11B 7/125** (2006.01); **G11B 7/135** (2012.01); **G11B 11/105** (2006.01); **G11B 23/03** (2006.01); **G11B 7/00** (2006.01); **G11B 7/007** (2006.01); **G11B 7/14** (2012.01); **G11B 20/12** (2006.01)

CPC (source: EP)

B82Y 10/00 (2013.01); **G11B 7/08564** (2013.01); **G11B 7/122** (2013.01); **G11B 7/1374** (2013.01); **G11B 7/1387** (2013.01); **G11B 11/10584** (2013.01); **G11B 23/0328** (2013.01); **G11B 7/00745** (2013.01); **G11B 7/14** (2013.01); **G11B 11/10515** (2013.01); **G11B 11/10554** (2013.01); **G11B 11/10569** (2013.01); **G11B 11/1058** (2013.01); **G11B 20/1258** (2013.01); **G11B 2007/0013** (2013.01); **G11B 2007/13727** (2013.01)

Citation (search report)

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Designated contracting state (EPC)

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