

Title (en)

MAGNETIC LAYER SYSTEM AND A COMPONENT COMPRISING SUCH A LAYER SYSTEM

Title (de)

MAGNETISCHES SCHICHTSYSTEM SOWIE EIN SOLCHES SCHICHTSYSTEM AUFWEISENDES BAUELEMENT

Title (fr)

SYSTEME MAGNETIQUE STRATIFIE ET COMPOSANT COMPORTANT UN SYSTEME MAGNETIQUE STRATIFIE DE CE TYPE

Publication

**EP 1319257 A2 20030618 (DE)**

Application

**EP 01976034 A 20010919**

Priority

- DE 0103631 W 20010919
- DE 10046782 A 20000921

Abstract (en)

[origin: WO0225749A2] The invention relates to a method for producing a new generation of giant magnetoresistance (GMR) sensors and tunnel magnetoresistance (TMR) sensors. According to the invention, a thin-film fixing layer is produced, for example, from a *5d* transition metal (W, Rd, Os, Ir, Pt) or from a *4d* transition metal (Pd, Rh, Ru) having a high magnetocrystalline anisotropy. Said thin-film fixing layer fixes the direction of magnetization of the fixed layer (*3d* ferromagnetic transition metals). A moment filter can be constructed with which the effectiveness of GMR and TMR sensors can be increased.

IPC 1-7

**H01L 43/08**; **H01F 10/32**

IPC 8 full level

**H01F 10/12** (2006.01); **H01F 10/32** (2006.01); **H01L 21/8246** (2006.01); **H01L 27/105** (2006.01); **H01L 27/22** (2006.01); **H10N 50/10** (2023.01)

CPC (source: EP US)

**B82Y 10/00** (2013.01 - EP US); **H10B 61/00** (2023.02 - EP US); **H10N 50/85** (2023.02 - EP US); **H10N 59/00** (2023.02 - EP US)

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**WO 0225749 A2 20020328**; **WO 0225749 A3 20030103**; CA 2435025 A1 20020328; DE 10046782 A1 20020418; DE 10046782 B4 20080508; EP 1319257 A2 20030618; JP 2004509476 A 20040325; US 2004008453 A1 20040115

DOCDB simple family (application)

**DE 0103631 W 20010919**; CA 2435025 A 20010919; DE 10046782 A 20000921; EP 01976034 A 20010919; JP 2002528855 A 20010919; US 38116803 A 20030319