

Title (en)
MAGNETIC MEMORY WITH A MAGNETIC TUNNEL JUNCTION WRITTEN IN A THERMALLY ASSISTED MANNER, AND METHOD FOR WRITING THE SAME

Title (de)
MAGNETSPEICHER MIT EINEM AUF THERMISCH UNTERSTÜTZTE WEISE BESCHRIEBENEN TUNNELÜBERGANG UND VERFAHREN ZUM SCHREIBEN DARAUF

Title (fr)
MEMOIRE MAGNETIQUE A JONCTION TUNNEL MAGNETIQUE A ECRITURE ASSISTEE THERMIQUEMENT ET PROCEDE POUR SON ECRITURE

Publication
EP 1719135 A1 20061108 (FR)

Application
EP 05728082 A 20050217

Priority
• FR 2005050103 W 20050217
• FR 0401762 A 20040223

Abstract (en)
[origin: FR2866750A1] The RAM has memory points (40) each comprising a magnetic tunnel junction. Each junction has a reference, or "trapped", layer (44) in which magnetization direction is fixed, separated by an isolating layer (43) from a "free" magnetic layer (42) in which magnetization direction is variable. The storage layer is formed from at least one soft magnetic layer with reduced magnetic anisotropy and a trapped layer, the two layers being magnetically coupled by contact. The operation temperature of the memory while reading or at rest is chosen to be below that of the free and trapped layers. An independent claim is included for a method of writing in a magnetic memory.

IPC 8 full level
G11C 11/16 (2006.01)

CPC (source: EP KR US)
G11C 11/16 (2013.01 - EP US); **G11C 11/161** (2013.01 - KR); **G11C 11/1675** (2013.01 - EP US); **G11C 11/5607** (2013.01 - EP KR US); **H10B 61/00** (2023.02 - KR); **H10N 50/80** (2023.02 - KR)

Citation (search report)
See references of WO 2005086171A1

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)
FR 2866750 A1 20050826; FR 2866750 B1 20060421; CA 2553577 A1 20050915; CN 1922694 A 20070228; EP 1719135 A1 20061108; JP 2007525840 A 20070906; KR 101085246 B1 20111122; KR 20070027520 A 20070309; US 2006291276 A1 20061228; US 7411817 B2 20080812; WO 2005086171 A1 20050915

DOCDB simple family (application)
FR 0401762 A 20040223; CA 2553577 A 20050217; CN 200580005654 A 20050217; EP 05728082 A 20050217; FR 2005050103 W 20050217; JP 2007500269 A 20050217; KR 20067019357 A 20050217; US 48342506 A 20060707