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Non-volatile memory cell

Jabeur, K. and G. di Pendina
FR3009421, Jul. 30 2013

Voltage-controlled magnetic device with a broad temperature working range

Dieny, B., H. Béa and S. Bandiera
FR3008821, Jul. 22 2013

Non-volatile memory device

Di Pendina, G. and V. Javerliac
EP2821998, Jul. 5 2013

Multilevel MRAM for low consumption and reliable write operation

Alvarez-Hérault, J., L. Lombard, S. Bandiera and I.L. Prejbeanu
EP2804180, May 15 2013

Thermally-assisted MRAM cells with improved reliability at writing

Bandiera, S. and I.L. Prejbeanu
WO2014177368, Apr. 29 2013

Non-volatile memory cell

Di Pendina, G. and G. Prenat
FR3004577, Apr. 15 2013

Memory cell with non-volatile data storage

Di Pendina, G.
FR3004576, Apr. 15 2013

MRAM element with low writing temperature

Prejbeanu, I.L., J. Moritz and B. Dieny
WO2014114550, Jan. 23 2013

2012

Magneto-optical surface

Calemczuk, R., B. Dieny, H. Joisten and P. Sabon
EP2720057, Oct. 15 2012

Magnetic logic unit (MLU) cell and amplifier having a linear magnetic signal

Cambou, B., B. Dieny, K. Mackay and I.L. Prejbeanu
WO2014048758, Sep. 25 2012

Magnetic logic unit (MLU) cell and amplifier having a linear magnetic signal

Cambou, B., B. Dieny, K. Mackay and I.L. Prejbeanu
WO2014048757, Sep. 25 2012

Magnetic device with thermally-assisted writing

Dieny, B. and R.C. Sousa
FR2993387, Jul. 11 2012

MRAM element having improved data retention and low writing temperature

Prejbeanu, I.L., B. Dieny, C. Ducruet and L. Lombard
EP2672488, Jun. 8 2012

Method for writing to a Random Access Memory cell with improved cell lifespan

Alvarez-Hérault, J., I.L. Prejbeanu and R.C. Sousa
WO2013182699, Jun. 8 2012

Radiation-hardened reprogrammable logic device

Gonçalves, O. and G. Prenat
WO2013160615, Apr. 27 2012

Magnetic device with thermally assisted writing

Dieny, B.
WO2013153321, Apr. 10 2012

MRAM cell and method for writing to the MRAM cell using a thermally-assisted write operation with a reduced current

Prejbeanu, I.L. and R.C. Sousa
EP2615610, Jan. 16 2012

2011

Magnetic memory device with multi-bit cells

Sousa, R.C., N. Berger, M. El Baraji, L. Lombard, I.L. Prejbeanu and G. Prenat
WO2012170819, Jun. 10 2011

Magnetic stack and memory cell comprising such a stack

Bandiera, S., B. Dieny and B. Rodmacq
US2012313192, Jun. 7 2011

Magnetic device with exchange coupling

Moritz, J. and B. Dieny
EP2533244, Jun. 6 2011

Oscillation detector

Quinsat, M., M.-C. Cyrille, U. Ebels, J.-P. Michel, M. Pelissier, P. Villard and M. Zarudniev
US2012268172, Apr. 20 2011

Demodulator of a frequency-modulated signal

Quinsat, M., M.-C. Cyrille, J.-P. Michel and U. Ebels
US2012270515, Apr. 20 2011

Magnetic device and method for writing and reading an item of information stored in such a magnetic device

Dieny, B.

WO2012117212, Mar. 2 2011

Loadless volatile/non-volatile memory cell

Prenat, G., G. di Pendina and K. Torki

WO2012098195, Jan. 19 2011

Volatile/non-volatile memory cell

Guillemenet, Y., L. Torres, G. Prenat, K. Torki and G. di Pendina

WO2012098181, Jan. 19 2011

Magnetic tunnel junction comprising a polarizing layer

Prejbeanu, I.L. and R.C.Sousa

US2012181642, Jan. 13 2011

2010

Writable magnetic element

Gaudin, G., I.M. Miron, P. Gambardella and A. Schuhl

US2012098077, Oct. 26 2010

Magnetic device having heat-assisted writing

Dieny, B.

WO2012042178, Oct. 1 2010

Magnetic device and method for reading from and writing to said device

Dieny, B.

WO2012028664, Sep. 1 2010

Microscale or nanoscale magnetic tweezers and process for fabricating such tweezers

Dieny, B., P. Sabon and H. Joisten

WO2012017024, Aug. 4 2010

Writable magnetic memory element

Gaudin, G., I.M. Miron, P. Gambardella and A. Schuhl

US2012020152, Jul. 26 2010

Writable magnetic element

Gaudin, G., I.M. Miron, P. Gambardella and A. Schuhl

US2012018822, Jul. 26 2010

Spin transfer torque oscillator

Baraduc, C., N. de Mestier, B. Dieny and C. Thirion

WO2011154477, Jun. 9 2010

Method for manufacturing particles such as micro- or nanoparticles

Dieny, B., P. Sabon and J. Faure-Vincent
US2013052343, Apr. 12 2010

Magneto-resistive radiofrequency oscillator and method for generating an oscillating signal

Houssameddine, D., M. Quinsat, B. Delaët, M.-C. Cyrille and U. Ebels
WO2011107473, Mar. 3 2010

Magneto-resistive radiofrequency oscillator and method for generating an oscillating signal

Houssameddine, D., M. Quinsat, B. Delaët, M.-C. Cyrille and U. Ebels
WO2011107475, Mar. 3 2010

Integrated magnetometer and its manufacturing process

Schuhl, A., G. Gaudin, P. Sabon, P.-J. Zermatten and F. Montaigne
WO2011092406, Jan. 29 2010

2009

Magneto-resistive radiofrequency oscillator

Cyrille, M.-C., B. Delaët, U. Ebels and D. Houssameddine
WO2011076768, Dec. 21 2009

Radiofrequency oscillator

Delaët, B. and U. Ebels
US2011109397, Nov. 6 2009

Magnetic microparticle and method for making such a microparticle

Dieny, B., H. Joisten and P. Sabon
WO2011033080, Sep. 17 2009

Magnetic element with a fast spin transfer torque writing procedure

Dieny, B. and J.P. Nozières
EP2278589, Jul. 14 2009

Magnetic memory device with spin polarisation, and method for using same

Dieny, B., C. Papisoi, U. Ebels, D. Houssameddine, L.D. Buda-Prejbeanu and R.C. Sousa
WO2010136527, May 27 2009

Spin valve or tunnel junction radio-frequency oscillator, process for adjusting the frequency of such an oscillator and network consisting of a plurality of such oscillators

Dieny, B., M.-C. Cyrille, U. Ebels and L.D. Buda-Prejbeanu
WO2010116102, Apr. 9 2009

2008

Method for producing a magnetic tunnel junction and magnetic tunnel junction thus obtained

Viala, B., M.-C. Cyrille, B. Dieny, K. Garello and O. Redon
WO2010066976, Dec. 11 2008

Three-layer magnetic element, method for the production thereof, magnetic field sensor, magnetic memory, and magnetic logic gate using such an element

Rodmacq, B., S. Auffret, B. Dieny and L.E. Nistor
FR2932315, Jun. 9 2008

Heat-assisted magnetic write element

Dieny, B.
WO2009136313, May 6 2008

Magnetic device for performing a "logic function"

Javerliac, V. and G. Prenat
WO2009138615, Apr. 16 2008

Magnetic device for performing a "logic function"

Javerliac, V. and G. Prenat
WO2009138616, Apr. 16 2008

2007

Method for modeling a magnetic tunnel junction with spin-polarized current writing

Prenat, G. and W. Guo
WO2009080636, Dec. 21 2007

Thermally-assisted magnetic writing element

Prejbeanu, I.L., C. Maunoury, B. Dieny, C. Ducret and R.C. Sousa
EP2218072, Dec. 5 2007

Magnetic recording medium

Dieny, B., J. Moritz and B. Rodmacq
EP2220648, Nov. 26 2007

Magnetic recording device, especially for a hard disk and its manufacturing process

Gaudin, G., P.-J. Zermatten, I.M. Miron and A. Schuhl
US2009122658, Nov. 14 2007

Magnetic storage device, particularly for a hard disk and method for making the same

Gaudin, G., P.-J. Zermatten, I.M. Miron and A. Schuhl
CN101855672, Nov. 12 2007

Low-noise magnetic field sensor using lateral spin transfer

Dieny, B.
CN101688903, Jul. 10 2007

Low-noise magnetic field sensor

Dieny, B., C. Baraduc, S. Petit and C. Thirion
CN101688904, Jul. 10 2007

Magnetic memory with magnetic tunnel junction

Dieny, B., J.-P. Nozières, R.C. Sousa, O. Redon and L.P. Prejbeanu
EP2140455, Mar. 29 2007

Electronic device for conveying digital information

Javerliac, V.
EP2137913, Mar. 23 2007

Spin transfer torque oscillator

Firastrau, I., U. Ebels and B. Dieny
US2010039181, Feb. 21 2007

2006

Multilayer magnetic device, process for the production thereof, magnetic field sensor, magnetic memory and logic gate using such a device

Rodmacq, B., S. Auffret, B. Dieny and J. Moritz
WO2008087345, Dec. 26 2006

Magnetic device having perpendicular magnetization and interaction-compensating interlayer

Rodmacq, B., V. Baltz, A. Bollero and B. Dieny
US2008098167, Oct. 23 2006

Thin-layered magnetic device with high spin polarization perpendicular to the plane of the layers, and magnetic tunnel junction and spin valve using such a device

Rodmacq, B. and B. Dieny
WO2008015354, Aug. 3 2006

Method of fabricating a nanostructure on a pre-etched substrate

Ebels, U., B. Dieny, D. Lestelle and E. Gautier
US2010003421, Jul. 27 2006

2005

Radio-frequency oscillator with spin-polarized current

Dieny, B. and A. Deac
US2008241597, Nov. 2 2005

A magnetoresistive tunnel junction magnetic device and its application to MRAM

Dieny, B., A. Vedyayev, J. Faure-Vincent, P. Warin, M. Jamet and Y. Samson
US2009231909, Oct. 14 2005

Magnetoresistive device

Dieny, B. and V. Javerliac
US2009135526, Jul. 27 2005

2004

Recording device with a porous heat barrier

Gaudin, G., E. Algré, J.-P. Nozières and A. Bsiesy
US2009016207, May 28 2004

Magnetoresistive random access memory having high current density

Sousa, R.C., B. Dieny and O. Redon
JP2005251382, Mar. 5 2004

Magnetic memory with a magnetic tunnel junction written in a thermally assisted manner, and method for writing the same

Nozières, J.-P., B. Dieny, O. Redon, R.C. Sousa and I.L. Prejbeanu
WO2005086171, Feb. 23 2004

2003

Magnetic tunnel junction device and writing/reading for said device

Dieny, B., R.C. Sousa and D. Stanescu
US2007263434 (A1), Oct. 10 2003

Magnetic recording medium comprising a network of multi-coercive magnetic zones to increase storage capacity of computer hard disks

Baltz, V., B. Dieny and B. Rodmacq
FR2859306, Sep. 2 2003

2002

High density MRAM using thermal writing

Ounadjela, K., B. Dieny and O. Redon

US6980468, Oct. 28 2002