

Title (en)

NON-VOLATILE MEMORY AND METHOD WITH NON-SEQUENTIAL UPDATE BLOCK MANAGEMENT

Title (de)

NICHTFLÜCHTIGER SPEICHER UND VERFAHREN MIT NICHTSEQUENTIELLEM AKTUALISIERUNGS-BLOCK-MANAGEMENT

Title (fr)

MEMOIRE NON VOLATILE ET PROCEDE AVEC GESTION DE BLOC DE MISE A JOUR NON SEQUENTIELLE

Publication

EP 1704484 A2 20060927 (EN)

Application

EP 04815767 A 20041221

Priority

- US 2004043762 W 20041221
- US 75015503 A 20031230
- US 91786704 A 20040813

Abstract (en)

[origin: WO2005066793A2] In a nonvolatile memory with block management system that supports update blocks with non-sequential logical units, an index of the logical units in a non-sequential update block is buffered in RAM and stored periodically into the non-volatile memory. In one embodiment, the index is stored in a block dedicated for storing indices. In another embodiment, the index is stored in the update block itself. In yet another embodiment, the index is stored in the header of each logical unit. In another aspect, the logical units written after the last index update but before the next have their indexing information stored in the header of each logical unit. In this way, after a power outage, the location of recently written logical units can be determined without having to perform a scanning during initialization. In yet another aspect, a block is managed as partially sequential and partially non-sequential, directed to more than one logical subgroup.

IPC 8 full level

G06F 12/02 (2006.01)

CPC (source: EP KR)

G06F 12/0246 (2013.01 - EP); **G11C 16/10** (2013.01 - KR); **G06F 2212/7202** (2013.01 - EP)

Citation (search report)

See references of WO 2005066793A2

Citation (examination)

EP 1341185 A1 20030903 - SANDISK CORP [US]

Cited by

CN108959280A; US9817593B1; US7913061B2; US7945759B2; US8051257B2; US8103841B2; US8239643B2

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)

WO 2005066793 A2 20050721; **WO 2005066793 A3 20060615**; EP 1704484 A2 20060927; KR 20070007264 A 20070115; TW 200601043 A 20060101; TW I288328 B 20071011

DOCDB simple family (application)

US 2004043762 W 20041221; EP 04815767 A 20041221; KR 20067013317 A 20060630; TW 93141426 A 20041230