

Title (en)
CACHE MEMORY MANAGEMENT SYSTEM AND METHOD

Title (de)
CACHE-SPEICHER-VERWALTUNGSSYSTEM UND -VERFAHREN

Title (fr)
SYSTEME ET PROCEDE DE GESTION D'UNE MEMOIRE CACHE

Publication
EP 1769360 A4 20080806 (EN)

Application
EP 04757053 A 20040714

Priority
US 2004022878 W 20040714

Abstract (en)
[origin: WO2006019374A1] A cache memory method and corresponding system for twodimensional data processing, and in particular, two-dimensional image processing with simultaneous coordinate transformation is disclosed. The method uses a wide and fast primary cache memory (PCM) and a deep secondary cache memory (SCM), each with multiple banks to access data simultaneously. A dedicated prefetching logic is used to obtain pixel data from an external memory upon receiving control parameters from an external processor system (PU1), and to store that data in the PCM based on a secondary control queue. The data are then prepared in specific block sizes and in specific format, and then stored in the PCM based on optimally sized pre-fetching primary control queue. The prepared data are then read by another external processor system (PU2) for processing. The cache control logic ensures the coherency of data and control parameters at the input of the PU2.

IPC 8 full level
G06F 12/00 (2006.01); **G06F 12/0862** (2016.01); **G06F 12/0897** (2016.01); **G06F 12/0815** (2016.01); **G06F 12/0875** (2016.01); **G06F 12/0879** (2016.01)

CPC (source: EP KR)
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Citation (search report)
• [A] WO 0120460 A1 20010322 - S3 INC [US]
• [A] EP 0926600 A1 19990630 - TEXAS INSTRUMENTS INC [US]
• [A] US 2004044847 A1 20040304 - RAY DAVID SCOTT [US], et al
• See references of WO 2006019374A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
WO 2006019374 A1 20060223; CN 100533403 C 20090826; CN 1961295 A 20070509; EP 1769360 A1 20070404; EP 1769360 A4 20080806; JP 2008507028 A 20080306; JP 5071977 B2 20121114; KR 101158949 B1 20120706; KR 20070038955 A 20070411

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