

Title (en)
DEVICE FOR THE PARALLEL PROCESSING OF A DATA STREAM

Title (de)
EINRICHTUNG ZUR PARALLELVERARBEITUNG EINES DATENSTROMS

Title (fr)
DISPOSITIF DE TRAITEMENT EN PARALLELE D'UN FLUX DE DONNEES

Publication
EP 2332067 A1 20110615 (FR)

Application
EP 09779672 A 20090608

Priority

- EP 2009057033 W 20090608
- FR 0805369 A 20080930

Abstract (en)
[origin: WO2010037570A1] The present invention relates to a device for processing a data stream from a device generating data matrices of N_I -lines by N_c -columns. The processing device includes K calculation tiles (TC) and an interconnection means (4) for transferring the data stream between the calculation tiles (TC). According to the invention, at least one calculation tile (TC) comprises: one or more control units (UC) for providing instructions; n processing units (UT), each processing unit (UT) implementing the instructions received from a control unit (UC) on a region of V_I lines by V_c columns of data; a storage unit (UM) for converting the streamed data into regions of V_I lines by $(n+V_c-1)$ columns of data, the storage unit (UM) including a block (31) of converting memories having a size of $V_I \times N_c$ and a block of region registers having a size of $V_I \times (n+V_c-1)$; an input/output unit (UES) for conveying the data stream between the interconnection means (4) and the storage unit (UM) as well as between the processing units (UT) and the interconnection means (4). The invention enables a high modularity in the processing of a data stream while limiting power consumption.

IPC 8 full level
G06F 15/80 (2006.01); **G06T 1/60** (2006.01); **H04N 7/26** (2006.01)

CPC (source: EP US)
G06F 15/80 (2013.01 - EP US); **G06F 15/8015** (2013.01 - EP US); **G06T 1/20** (2013.01 - EP US)

Citation (search report)
See references of WO 2010037570A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
FR 2936626 A1 20100402; **FR 2936626 B1 20110325**; EP 2332067 A1 20110615; JP 2012504264 A 20120216; US 2011273459 A1 20111110; US 8836708 B2 20140916; WO 2010037570 A1 20100408

DOCDB simple family (application)
FR 0805369 A 20080930; EP 09779672 A 20090608; EP 2009057033 W 20090608; JP 2011528264 A 20090608; US 200913121417 A 20090608