

Title (en)

MIMD PROCESSOR EMULATED ON SIMD ARCHITECTURE

Title (de)

AUF SIMD-ARCHITEKTUR EMULIERTER MIMD-PROZESSOR

Title (fr)

PROCESSEUR MIMD ÉMULÉ SUR ARCHITECTURE SIMD

Publication

EP 3782036 A1 20210224 (FR)

Application

EP 19742845 A 20190606

Priority

- FR 1855012 A 20180608
- FR 2019051352 W 20190606

Abstract (en)

[origin: WO2019234359A1] The present invention relates to a processor having a SIMD architecture, comprising an array (120) of elementary processors (150), each elementary processor (150) being associated with an elementary memory cell (155), a central controller (110) connected to the elementary processors by an instruction bus and a status bus. The central controller transmits a sequence of instructions in a loop, each instruction comprising a calculation flow indicator. Each elementary processor has an instruction filter that makes it possible to reject or take into account an instruction depending on the identifier it contains. This operating mode makes it possible to emulate a MIMD processor on a SIMD architecture.

IPC 8 full level

G06F 15/80 (2006.01)

CPC (source: EP US)

G06F 5/06 (2013.01 - US); **G06F 9/30101** (2013.01 - US); **G06F 9/321** (2013.01 - US); **G06F 9/3887** (2013.01 - EP US); **G06F 15/80** (2013.01 - EP); **G06F 15/8007** (2013.01 - US)

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2019234359 A1 20191212; EP 3782036 A1 20210224; FR 3082331 A1 20191213; FR 3082331 B1 20200918; US 11182170 B2 20211123; US 2021240482 A1 20210805

DOCDB simple family (application)

FR 2019051352 W 20190606; EP 19742845 A 20190606; FR 1855012 A 20180608; US 201915734729 A 20190606