

Title (en)
PROCESSING COMPUTATIONAL MODELS IN PARALLEL

Title (de)
PARALLELE VERARBEITUNG VON RECHENMODELLEN

Title (fr)
TRAITEMENT DE MODÈLES DE CALCUL EN PARALLÈLE

Publication
EP 3918477 A4 20220810 (EN)

Application
EP 20749721 A 20200131

Priority
• US 201962799797 P 20190201
• KR 20190163982 A 20191210
• KR 2020001449 W 20200131

Abstract (en)
[origin: KR20200096102A] The present disclosure relates to an artificial intelligence chip for processing the computation of a machine learning model, and more particularly, to a compute node and a method for processing a computation model in parallel by using a plurality of compute nodes. The compute node comprises a communication interface, a memory and a processor. According to the present invention, effective learning and inference can be performed overall in a device.

IPC 8 full level
G06F 9/50 (2006.01); **G06F 13/16** (2006.01); **G06N 3/04** (2006.01); **G06N 3/063** (2006.01); **G06N 3/08** (2006.01)

CPC (source: EP KR)
G06F 9/505 (2013.01 - KR); **G06F 9/5066** (2013.01 - KR); **G06F 13/1652** (2013.01 - KR); **G06N 3/04** (2013.01 - EP); **G06N 3/08** (2013.01 - EP); **G06N 3/063** (2013.01 - EP)

Citation (search report)
• [Y] WO 2016048345 A1 20160331 - HEWLETT PACKARD ENTPR DEV LP [US]
• [Y] US 2011191782 A1 20110804 - KIM JONG-TAE [KR], et al
• [A] US 9396023 B1 20160719 - TRIVEDI HEMANT [US]
• [A] WO 2005111843 A2 20051124 - MASSIVELY PARALLEL TECHNOLOGIE [US], et al
• [A] US 8370495 B2 20130205 - JACKSON DAVID BRIAN [US]
• [A] FARZIN HADDADPOUR ET AL: "Straggler-Resilient and Communication-Efficient Distributed Iterative Linear Solver", ARXIV.ORG, CORNELL UNIVERSITY LIBRARY, 201 OLIN LIBRARY CORNELL UNIVERSITY ITHACA, NY 14853, 16 June 2018 (2018-06-16), XP080891274
• [A] SONGZE LI ET AL: "Near-Optimal Straggler Mitigation for Distributed Gradient Methods", ARXIV.ORG, CORNELL UNIVERSITY LIBRARY, 201 OLIN LIBRARY CORNELL UNIVERSITY ITHACA, NY 14853, 27 October 2017 (2017-10-27), XP080832216
• See references of WO 2020159269A1

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

DOCDB simple family (publication)
EP 3918477 A1 20211208; EP 3918477 A4 20220810; KR 20200096102 A 20200811

DOCDB simple family (application)
EP 20749721 A 20200131; KR 20190163982 A 20191210