

Title (en)
DEVICES FOR MEMORY MANAGEMENT

Title (de)
VORRICHTUNGEN ZUR SPEICHERVERWALTUNG

Title (fr)
DISPOSITIFS DE GESTION DE MÉMOIRE

Publication
EP 4121861 A1 20230125 (EN)

Application
EP 20733408 A 20200616

Priority
EP 2020066577 W 20200616

Abstract (en)
[origin: WO2021254598A1] The present disclosure relates to a requesting entity configured to request access to a range of virtual addresses and to a memory arrangement configured to allocate physical memory to the range of virtual addresses and to make the requested virtual addresses available to the requesting entity. Embodiments thereof enable to request multiple pages over a single range, which minimizes the number of requests and hence allows for reduced the request queue size. As the number of request messages significantly decreases, embodiments of the present invention also minimize communication volume between the requesting entity and the memory arrangement. Furthermore, embodiments of the invention allow for multiple responses for the same request, wherein each response refers to a subrange of the range of virtual addresses requested. This enables the requesting entity to immediately start DMA to parts of the translated addresses and the memory arrangement to translate a range of memory pages.

IPC 8 full level
G06F 12/1072 (2016.01); **G06F 12/109** (2016.01)

CPC (source: EP)
G06F 12/1072 (2013.01); **G06F 12/109** (2013.01)

Citation (search report)
See references of WO 2021254598A1

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2021254598 A1 20211223; CN 116034346 A 20230428; EP 4121861 A1 20230125

DOCDB simple family (application)
EP 2020066577 W 20200616; CN 202080102045 A 20200616; EP 20733408 A 20200616