

Title (en)

CONTROLLING ACCESSES TO A BRANCH PREDICTION UNIT FOR SEQUENCES OF FETCH GROUPS

Title (de)

STEUERUNG VON ZUGRIFFEN AUF EINE VERZWEIGUNGSVORHERSAGEEINHEIT FÜR SEQUENZEN VON ABRUFGRUPPEN

Title (fr)

COMMANDE D'ACCÈS À UNE UNITÉ DE PRÉDICTION DE BRANCHEMENT DESTINÉE À DES SÉQUENCES DE GROUPES D'EXTRACTION

Publication

EP 4081899 A1 20221102 (EN)

Application

EP 20905906 A 20201104

Priority

- US 201916725203 A 20191223
- US 2020058806 W 20201104

Abstract (en)

[origin: WO2021133469A1] An electronic device handles accesses of a branch prediction functional block when executing instructions in program code. The electronic device includes a processor having the branch prediction functional block that provides branch prediction information for control transfer instructions (CTIs) in the program code and a minimum predictor use (MPU) functional block. The MPU functional block determines, based on a record associated with a given fetch group of instructions, that a specified number of subsequent fetch groups of instructions that were previously determined to include no CTIs or conditional CTIs that were not taken are to be fetched for execution in sequence following the given fetch group. The MPU functional block then, when each of the specified number of the subsequent fetch groups is fetched and prepared for execution, prevents corresponding accesses of the branch prediction functional block for acquiring branch prediction information for instructions in that subsequent fetch group.

IPC 8 full level

G06F 9/38 (2018.01)

CPC (source: EP KR)

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Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

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