Title (en)

CIRCUIT BREAKER, CIRCUIT BREAKER OVERTRAVEL ADJUSTMENT METHOD AND POWER SYSTEM

Title (de

SCHUTZSCHALTER, VERFAHREN ZUR EINSTELLUNG DES NACHLAUFS EINES SCHUTZSCHALTERS UND STROMVERSORGUNGSSYSTEM

Title (fr

DISJONCTEUR, PROCÉDÉ DE RÉGLAGE DE COURSE DE DISJONCTEUR ET SYSTÈME D'ALIMENTATION

Publication

EP 4391004 A1 20240626 (EN)

Application

EP 21957998 A 20210926

Priority

CN 2021120803 W 20210926

Abstract (en)

The present invention provides a circuit breaker, a circuit breaker overtravel adjustment method and a power system. The circuit breaker comprises an arc extinguishing structure, a moving contact, and a static contact. The circuit breaker further comprises: a driving assembly is connected to the moving contact, and the moving contact is driven to make contact with or separate from the static contact. The driving assembly has an accommodating cavity. A contact pressure spring is provided within the accommodating cavity and abuts between the moving contact and the driving assembly, and is used to apply a force to the moving contact toward the static contact when the circuit breaker is in a closed state. A detection assembly comprises a pressure detector and a distance sensor. The pressure detector is disposed between the contact pressure spring and the driving assembly, and measures the pressure value of the contact pressure spring when the moving contact and the static contact tightly abut. The distance sensor is used to detect the measure distance between the moving contact and the distance sensor so as to determine the overtravel between the moving contact and the static contact according to the pressure value and the detection distance. The circuit breaker has higher reliability.

IPC 8 full level

H01H 71/00 (2006.01); G01R 31/327 (2006.01)

CPC (source: EP)

G01R 31/327 (2013.01); H01H 71/00 (2013.01)

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)

EP 4391004 A1 20240626; WO 2023044880 A1 20230330

DOCDB simple family (application)

EP 21957998 A 20210926; CN 2021120803 W 20210926