

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2023/0230782 A1 Maney et al.

Jul. 20, 2023 (43) **Pub. Date:**

(54) SWITCHING SYSTEM FOR AN ON-LOAD TAP CHANGER, ON-LOAD TAP CHANGER AND METHOD FOR SWITCHING A TAP CONNECTION OF AN ON-LOAD TAP

CHANGER

(71) Applicant: HITACHI ENERGY

SWITZERLAND AG, Baden (CH)

(72) Inventors: Georgi Manev, Sofia (BG); Todor Kokev, Sofia (BG); Angel Mihaylov,

Plovdiv (BG)

(21) Appl. No.:

18/020,471

PCT Filed:

Jul. 5, 2021

(86) PCT No.:

PCT/EP2021/068484

§ 371 (c)(1),

(2) Date:

Feb. 9, 2023

(30)Foreign Application Priority Data

Oct. 21, 2020 (EP) 20202952.6

Publication Classification

(51) Int. Cl. H01H 9/00

(2006.01)

U.S. Cl.

CPC H01H 9/0027 (2013.01)

(57)ABSTRACT

A switching system for an on-load tap changer comprises: a Geneva mechanism, wherein the Geneva mechanism comprises: a holder, the holder being fixed relative to a housing;

- a rotatable ring with a recess, the rotatable ring being supported by the holder and being rotatable relative to the holder;
- a connector, the connector being rotatable together with the rotatable ring to electrically connect with a tap of the tap changer; and a rotatable driving wheel with a protrusion, the protrusion being coupleable with the recess to rotate the rotatable ring, the driving wheel being arranged inside the rotatable ring.

