

# (19) United States

## (12) Patent Application Publication (10) Pub. No.: US 2024/0222974 A1 Hu et al.

## Jul. 4, 2024 (43) **Pub. Date:**

### (54) COORDINATED CONTROL METHOD AND SYSTEM FOR ACTIVE SUPPORT OF NEW **ENERGY POWER STATION CONTAINING** VOLTAGE-CONTROLLED SOURCE

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17/924,445 (21) Appl. No.:

(22) PCT Filed: Sep. 9, 2022

(86) PCT No.: PCT/CN2022/118039

§ 371 (c)(1),

Nov. 10, 2022 (2) Date:

#### (30)Foreign Application Priority Data

Feb. 10, 2022 (CN) ...... 202210123282.9

### **Publication Classification**

(51)	Int. Cl.	
	H02J 3/16	(2006.01)
	H02J 3/24	(2006.01)
	H02J 3/28	(2006.01)
	H02J 3/46	(2006.01)

(52) U.S. Cl.

CPC ...... H02J 3/16 (2013.01); H02J 3/241 (2020.01); H02J 3/28 (2013.01); H02J 3/46 (2013.01); H02J 2300/24 (2020.01); H02J 2300/28 (2020.01)

#### (57)ABSTRACT

Disclosed are a coordinated control method and system for active support of a new energy power station containing a voltage-controlled source. The method includes: obtaining a working mode and a controlled target value of an external characteristic of a new energy power station, and setting internal parameters of a voltage-controlled source and a current-controlled source in the new energy power station; monitoring a power output state of a controlled unit of a voltage source, and calculating a regulation margin of the voltage source; setting power, inertia, and an objective function and a constraint of multi-source coordinated control of primary frequency modulation (FM)/voltage regulation for the new energy power station, and obtaining controlled allocation logic of a current source based on the objective function and the constraint of the multi-source coordinated control; and setting secondary control logic of each controlled unit and its allocation priority strategy.

