

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2022/0352719 A1 Gonzales et al.

Nov. 3, 2022 (43) **Pub. Date:**

(54) METHOD FOR CONTROLLING AN **ELECTRICAL TRANSMISSION NETWORK**

(71) Applicants: **Supergrid Institute**, Villeurbanne (FR); Centralesupelec, Gis-Sur-Yvette (FR); Centre National De La Recherche Scientifique, Paris (FR); Universite Paris-Saclay, Saint Aubin (FR)

(72) Inventors: Juan Carlos Gonzales, Lyon (FR); Valentin Costan, Lyon (FR); Gilney Damm, Lyon (FR); Abdelkrim Benchaib, Lyon (FR); Françoise Lamnabhi-Lagarrigue, Lyon (FR); Bruno Luscan, Lyon (FR)

17/621,529 (21) Appl. No.:

(22) PCT Filed: Jun. 25, 2020

(86) PCT No.: PCT/EP2020/067927

§ 371 (c)(1),

(2) Date: Dec. 21, 2021

(30)Foreign Application Priority Data

Jun. 26, 2019 (FR) FR1906968

Publication Classification

(51) Int. Cl. H02J 3/36 (2006.01)G05B 19/042 (2006.01)

(52) U.S. Cl. CPC H02J 3/36 (2013.01); G05B 19/042 (2013.01); G05B 2219/2639 (2013.01)

(57)ABSTRACT

A method for controlling an electrical transmission network including a plurality of DC high-voltage lines and at least three AC/DC converters which are identified by a respective index i and are interconnected by the DC high-voltage lines. Each of the AC/DC converts are connected to an AC voltage bus identified by a respective index i as well as to one of the DC high-voltage lines.

