

Title (en)

POWER SWITCHING CONTROL DEVICE AND CLOSING CONTROL METHOD THEREOF

Title (de)

LEISTUNGSSCHALTUNGSTEUERUNG UND SCHLISSSTEUERVERFAHREN DAFÜR

Title (fr)

DISPOSITIF DE COMMANDE DE LA COMMUTATION ÉLECTRIQUE ET PROCÉDÉ DE COMMANDE DE LA FERMETURE DE CELUI-CI

Publication

EP 2665078 B1 20151216 (EN)

Application

EP 11855640 A 20110111

Priority

JP 2011050273 W 20110111

Abstract (en)

[origin: EP2665078A1] A power switching control device and a closing control method of the power switching control device that can suppress generation of a transient voltage or current that is possibly caused by a mismatch between a gap-voltage estimate value after interrupting a current and an actual gap voltage is obtained. It is estimated that a load-side voltage estimate value at the next closing is zero when a predetermined time determined based on an attenuation time constant of a residual voltage on a power transmission line (3) in advance passes since a current interruption time, and when the load-side voltage at and after the current interruption time is a direct-current signal and the load-side voltage shows a behavior of converging into zero at a speed equal to or higher than a constant speed at and after the current interruption time.

IPC 8 full level

H01H 33/59 (2006.01); **H01H 9/56** (2006.01)

CPC (source: EP)

H01H 9/563 (2013.01)

Citation (opposition)

Opponent : **ABB Schweiz AG**,

- JP 2003168335 A 20030613 - MITSUBISHI ELECTRIC CORP
- "Operating Instructions CAT Controller Version 5.01", 1HC0056128 E01 / AB, 17 July 2008 (2008-07-17), pages 125
- "Operating Instructions CAT Controller Version 5.01", BESTÄTIGUNG VON ALSTOM HYDRO FRANCE PER E-MAIL ÜBER EMPFANG, March 2009 (2009-03-01)
- "Controlled Switching, Buyer's and Application Guide", 2009, pages 53
- U. SAMITZ ET AL.: "On Controlled Switching of High Voltage Unloaded Transmission Lines", CIGRE SESSION 2002, PAPER NO. 13-206, © CIGRE
- K. M. C. DANTAS ET AL.: "Mitigation of Switching Overvoltages in Transmission Lines via Controlled Switching", © 2008 IEEE. POWER AND ENERGY SOCIETY GENERAL MEETING - CONVERSION AND DELIVERY OF ELECTRICAL ENERGY IN THE 21ST CENTURY., 20 July 2008 (2008-07-20), XP031304594, ISSN: 1932-5517

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CN105706208A; US11437205B2; WO2020136545A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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