

Title (en)

DEVICE AND METHOD FOR REAL-TIME MONITORING AND CONTROL OF DISTRIBUTED POWER GENERATING STATIONS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR ECHTZEITÜBERWACHUNG UND -KONTROLLE VON VERTEILTEN STROMERZEUGUNGSSTATIONEN

Title (fr)

DISPOSITIF ET PROCÉDÉ DE SURVEILLANCE ET DE COMMANDE EN TEMPS RÉEL DE CENTRALES ÉLECTRIQUES DISTRIBUÉES

Publication

EP 3395008 A4 20190821 (EN)

Application

EP 16877874 A 20161219

Priority

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- IB 2016057771 W 20161219

Abstract (en)

[origin: WO2017109669A1] The present disclosure relates to device and method for real-time monitoring and controlling of distributed power generating stations. Each power generating station is associated with a Power Conditioning Unit (PCU), a controller board and a computing device. The controller board receives a request for measured energy data associated with the power generating stations or one or more control commands from the computing device using one or more non Internet Protocol (IP) based communication and transmits it to the PCU through a serial communication interface. The PCU transmits the measured energy data or a response for the one or more control commands to the computing device and the computing device transmits it to Remote Monitoring and Control Server (RMCS) through IP based communication. The remote control station accesses the received measured energy data from the RMCS and performs monitoring and controlling of the distributed power generating stations at real-time.

IPC 8 full level

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CPC (source: EP US)

G06F 11/00 (2013.01 - US); **H02J 3/381** (2013.01 - EP US); **H02J 13/00001** (2020.01 - EP US); **H02J 13/00028** (2020.01 - EP US); **H04L 12/6418** (2013.01 - EP); **H02J 3/46** (2013.01 - EP US); **H02J 2300/20** (2020.01 - EP US); **Y02B 70/30** (2013.01 - EP); **Y02E 40/70** (2013.01 - EP US); **Y02E 60/00** (2013.01 - EP); **Y04S 10/123** (2013.01 - EP); **Y04S 10/40** (2013.01 - EP); **Y04S 20/20** (2013.01 - EP); **Y04S 40/128** (2013.01 - EP)

Citation (search report)

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- [A] US 6882904 B1 20050419 - PETRIE EDWARD M [US], et al
- [X] "COMMUNICATION BETWEEN COMPONENTS IN MINI-GRIDS - Recommendations for communication system needs for PV hybrid mini-grid systems", 30 June 2011, article IEA: "COMMUNICATION BETWEEN COMPONENTS IN MINI-GRIDS - Recommendations for communication system needs for PV hybrid mini-grid systems", XP055603696
- [A] ANGEL MOLINA-GARCÍA ET AL: "A Decentralized Wireless Solution to Monitor and Diagnose PV Solar Module Performance Based on Symmetrized-Shifted Gompertz Functions", SENSORS, vol. 15, no. 8, 29 July 2015 (2015-07-29), pages 18459 - 18479, XP055603701, DOI: 10.3390/s150818459
- See references of WO 2017109669A1

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