

## Title (en)

SYSTEM AND METHOD FOR MANAGING THE GENERATION, TRANSMISSION AND DISTRIBUTION OF POWER

## Title (de)

SYSTEM UND VERFAHREN ZUR VERWALTUNG DER ERZEUGUNG, ÜBERTRAGUNG UND VERTEILUNG VON ENERGIE

## Title (fr)

SYSTÈME ET PROCÉDÉ POUR GÉRER LA GÉNÉRATION, LA TRANSMISSION ET LA DISTRIBUTION DE COURANT

## Publication

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## Application

**EP 13749005 A 20130215**

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- US 201213738738 A 20120216
- US 201213738744 A 20120216
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- US 201213731027 A 20121230
- US 2013026507 W 20130215

## Abstract (en)

[origin: WO2013123443A1] A renewable energy resource management system manages a delivery of a power requirement from a multi-resource offshore renewable energy installation to an intelligent power distribution network within a renewable energy-based electricity grid infrastructure. Distributed data analytics enable modeling and delivery of an appropriate, time-sensitive, dynamic demand response from multiple renewable energy resource components to the intelligent power distribution network. Data processing resources are identified and aggregated within a distributed computing infrastructure to provide the dynamic demand response as a service of a dedicated grid data analytics module. Distributed data analytics also enable the electricity grid infrastructure to virtually, optimally and adaptively make decisions about power production, distribution, and consumption so that the demand response is a dynamic reaction across the electricity grid infrastructure in a distributed energy generation responsive to various types of grid demand situations, such as customer demand, direct current-specific demand, and security issues, and so that power production is substantially balanced with power consumption.

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## Citation (search report)

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- See references of WO 2013123443A1

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