

Title (en)

EFFICIENT SYSTEMS AND METHODS FOR CONSTRUCTION AND OPERATION OF ACCELERATING MACHINES

Title (de)

EFFIZIENTE SYSTEME UND VERFAHREN FÜR DEN BAU UND BETRIEB VON BESCHLEUNIGUNGSMASCHINEN

Title (fr)

SYSTÈMES ET PROCÉDÉS EFFICACES POUR LA CONSTRUCTION ET LE FONCTIONNEMENT DE MACHINES D ACCÉLÉRATION

Publication

**EP 2373888 A1 20111012 (EN)**

Application

**EP 09832552 A 20091210**

Priority

- US 2009067535 W 20091210
- US 12141208 P 20081210
- US 33231308 A 20081210

Abstract (en)

[origin: WO2010068780A1] [00363] In embodiments of the present invention improved capabilities are described for the efficiency with which fluid energy is converted into another form of energy, such as electrical energy, where an array of fluid energy conversion modules is contained in a scalable modular networked superstructure. In certain preferred embodiments, a plurality of turbines, such as for instance wind turbines, may be disposed in an array, where the plurality of arrays may be disposed in a suitable arrangement in proximity to each other and provided with geometry suitable for tight packing in an array with other parameters optimized to extract energy from the fluid flow. In addition, the turbines may be a more effective adaptation of a turbine, or an array of turbines, to varying conditions, including fluid conditions that may differ among different turbines in an array, or among different turbines in a set of arrays.

IPC 8 full level

**F03D 9/00** (2006.01); **F03D 1/04** (2006.01); **F03D 7/02** (2006.01)

CPC (source: EP US)

**F03D 1/02** (2013.01 - EP US); **F03D 7/0204** (2013.01 - EP); **F05B 2240/30** (2013.01 - EP); **F05B 2240/40** (2013.01 - EP); **Y02E 10/72** (2013.01 - EP)

Cited by

CN113239642A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

**WO 2010068780 A1 20100617**; CA 2746648 A1 20100617; CN 102317623 A 20120111; CN 102317623 B 20150909; EP 2373888 A1 20111012; EP 2373888 A4 20130814

DOCDB simple family (application)

**US 2009067535 W 20091210**; CA 2746648 A 20091210; CN 200980156506 A 20091210; EP 09832552 A 20091210