

CPC COOPERATIVE PATENT CLASSIFICATION

F MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING (NOTE omitted)

ENGINES OR PUMPS

F03 MACHINES OR ENGINES FOR LIQUIDS (for liquid and gases [F01](#); positive-displacement machines for liquids [F04](#)); WIND, SPRING WEIGHT AND MISCELLANEOUS MOTORS; PRODUCING MECHANICAL POWER; OR A REACTIVE PROPULSIVE THRUST, NOT OTHERWISE PROVIDED FOR

F03D WIND MOTORS

NOTES

1. This subclass covers wind motors, i.e. mechanisms for converting the energy of wind into useful mechanical power, and the transmission of such power to its point of use.
2. This subclass does not cover electrical power generation or distribution aspects of wind-power plants, which are covered by section [H](#), e.g. [H02J](#) or [H02P](#).
3. In this subclass, the following terms or expressions are used with the meanings indicated:
 - "rotor" means the wind-engaging parts of the wind motor and the rotary member carrying them;
 - "rotation axis" means the axis of rotation of the rotor.

1/00 **Wind motors with rotation axis substantially parallel to the air flow entering the rotor** ([controlling thereof F03D 7/02](#))

- 1/02 . having a plurality of rotors

WARNING

Group [F03D 1/02](#) is impacted by reclassification into groups [F03D 1/04](#), [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 1/025 . . {coaxially arranged}

WARNING

Group [F03D 1/025](#) is impacted by reclassification into groups [F03D 1/04](#), [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 1/04 . having stationary wind-guiding means, e.g. with shrouds or channels ([F03D 9/35 takes precedence](#))

WARNING

Group [F03D 1/04](#) is impacted by reclassification into groups [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

1/06 . Rotors

1/0608 . . {characterised by their form}

1/0616 . . . {using the Magnus effect}

1/0625 . . . {of the whole rotor, i.e. form features of the rotor unit}

1/0633 . . . {of the blades}

1/0641 {of the section profile of the blades}

1/065 . . {characterised by their construction, i.e. structural design details ([F03D 13/10 takes precedence](#))}

1/0658 . . . {Fixing wind-engaging parts to rotor}

1/0666 . . . {of the whole rotor}

1/0675 . . . {of the blades}

1/0683 {of the section profile of the blades}

1/0691 . . . {of the hub}

3/00 **Wind motors with rotation axis substantially perpendicular to the air flow entering the rotor** ([controlling thereof F03D 7/06](#))

3/002 . {axis horizontal}

3/005 . {axis vertical}

3/007 . . {using the Magnus effect}

3/02 . having a plurality of rotors

WARNING

Group [F03D 3/02](#) is impacted by reclassification into groups [F03D 3/04](#), [F03D 3/0409](#), [F03D 3/0418](#), [F03D 3/0427](#), [F03D 3/0436](#), [F03D 3/0445](#), [F03D 3/0454](#), [F03D 3/0463](#), [F03D 3/0472](#), [F03D 3/0481](#), [F03D 3/049](#), [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/04 . . . having stationary wind-guiding means, e.g. with shrouds or channels ([F03D 9/35](#) takes precedence)

WARNING

Group [F03D 3/04](#) is impacted by reclassification into groups [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#)

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/0409 . . . {having stationary guiding vanes surrounding the rotor ([F03D 3/0427](#) takes precedence)}

WARNING

Group [F03D 3/0409](#) is impacted by reclassification into groups [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/0418 . . . {the vanes being adjustable}

WARNING

Group [F03D 3/0418](#) is impacted by reclassification into groups [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/0427 . . . {with augmenting action, i.e. the guiding means intercepting an area greater than the effective rotor area ([F03D 3/0463](#), [F03D 3/049](#) take precedence)}

WARNING

Group [F03D 3/0427](#) is impacted by reclassification into groups [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/0436 . . . {having shield means on one side of the rotor}

WARNING

Group [F03D 3/0436](#) is impacted by reclassification into groups [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/0445 . . . {fixed with respect to rotor, orientable together}

WARNING

Group [F03D 3/0445](#) is impacted by reclassification into groups [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/0454 {and only with concentrating action, i.e. only increasing the airflow speed into the rotor ([F03D 3/0463](#) takes precedence)}

WARNING

Group [F03D 3/0454](#) is impacted by reclassification into groups [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/0463 {with augmenting action, i.e. the shield means intercepting an area greater than the effective rotor area}

WARNING

Group [F03D 3/0463](#) is impacted by reclassification into groups [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/0472 . . . {orientable with respect to the rotor}

WARNING

Group [F03D 3/0472](#) is impacted by reclassification into groups [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/0481 {and only with concentrating action, i.e. only increasing the airflow speed into the rotor ([F03D 3/049](#) takes precedence)}

WARNING

Group [F03D 3/0481](#) is impacted by reclassification into groups [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 3/049 {with augmenting action, i.e. the shield means intercepting an area greater than the effective rotor area}
- WARNING**
- Group [F03D 3/049](#) is impacted by reclassification into groups [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#) and [F03D 9/46](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 3/06 . Rotors
- 3/061 . . {Form}
- 3/062 . . {Construction}
- 3/064 . . . {Fixing wind engaging parts to rest of rotor}
- 3/065 . . . {the wind engaging parts having no movement relative to the rotor during its rotation}
- 3/067 . . . {the wind engaging parts having a cyclic movement relative to the rotor during its rotation}
- 3/068 {the cyclic relative movement being coupled to the movement of rotation; Controlling same, e.g. according to wind direction or force}
- 5/00 Other wind motors (controlling thereof [F03D 7/00](#))**
- 5/005 . {Wind motors having a single vane which axis generate a conus or like surface}
- 5/02 . the wind-engaging parts being attached to endless chains or the like
- 5/04 . the wind-engaging parts being attached to carriages running on tracks or the like
- 5/06 . the wind-engaging parts swinging to-and-fro and not rotating
- 7/00 Controlling wind motors**
- 7/02 . the wind motors having rotation axis substantially parallel to the air flow entering the rotor
- 7/0204 . . {for orientation in relation to wind direction}
- 7/0208 . . . {Orientating out of wind}
- 7/0212 {the rotating axis remaining horizontal}
- 7/0216 {the rotating axis changing to vertical position}
- 7/022 . . {Adjusting aerodynamic properties of the blades}
- 7/0224 . . . {Adjusting blade pitch}
- 7/0228 {of the blade tips only}
- 7/0232 . . . {with flaps or slats (with aerodynamic drag devices on the blades for braking [F03D 7/0252](#))}
- 7/0236 . . . {by changing the active surface of the wind engaging parts, e.g. reefing, telescoping, furling or coning}
- 7/024 . . . {of individual blades}
- 7/0244 . . {for braking}
- 7/0248 . . . {by mechanical means acting on the power train}
- 7/0252 . . . {with aerodynamic drag devices on the blades}
- 7/0256 . . {Stall control (adjusting the blades in stall position [F03D 7/0224](#))}
- 7/026 . . {for starting-up}
- 7/0264 . . {for stopping or in emergency situation (orientating out of wind [F03D 7/0208](#))}
- 7/0268 . . . {Parking or storm protection}
- 7/0272 . . {by measures acting on the electrical generator (controlling electric generator per se [H02P](#))}
- 7/0276 . . {Controlling rotor speed, e.g. variable speed}
- 7/028 . . {Controlling motor output power}
- 7/0284 . . . {in relation to the state of the electric grid (supplying or distributing electric power [H02J](#))}
- 7/0288 . . . {to prevent instantaneous damage to any part of the motor}
- 7/0292 . . . {to increase fatigue life}
- 7/0296 . . {to prevent, counteract or reduce vibration or noise}
- 7/04 . . Automatic control; Regulation
- 7/041 . . . {by means of a mechanical governor}
- 7/042 . . . {by means of an electrical or electronic controller}
- 7/043 {characterised by the type of control logic}
- 7/044 {with PID control}
- 7/045 {with model-based controls}
- 7/046 {with learning or adaptive control, e.g. self-tuning, fuzzy logic or neural network}
- 7/047 {characterised by the controller architecture, e.g. multiple processors or data communications}
- 7/048 {Controlling wind farms}
- 7/06 . the wind motors having rotation axis substantially perpendicular to the air flow entering the rotor
- 9/00 Adaptations of wind motors for special use; Combinations of wind motors with apparatus driven thereby; Wind motors specially adapted for installation in particular locations (hybrid wind-photovoltaic energy systems for the generation of electric power [H02S 10/12](#))**
- WARNING**
- Group [F03D 9/00](#) is impacted by reclassification into groups [F03D 9/18](#), [F03D 9/19](#), [F03D 9/20](#), [F03D 9/30](#), [F03D 9/32](#), [F03D 9/34](#), [F03D 9/35](#), [F03D 9/37](#), [F03D 9/39](#), [F03D 9/41](#), [F03D 9/43](#), [F03D 9/45](#), [F03D 9/46](#), [F03D 9/48](#) and [H02S 10/12](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 9/007 . {the wind motor being combined with means for converting solar radiation into useful energy}
- WARNING**
- Group [F03D 9/007](#) is impacted by reclassification into group [H02S 10/12](#).
- Groups [F03D 9/007](#) and [H02S 10/12](#) should be considered in order to perform a complete search..

- 9/008 . {the wind motor being combined with water energy converters, e.g. a water turbine}
- WARNING**
- Group [F03D 9/008](#) is impacted by reclassification into group [H02S 10/12](#).
- Groups [F03D 9/008](#) and [H02S 10/12](#) should be considered in order to perform a complete search.
- 9/10 . Combinations of wind motors with apparatus storing energy
- WARNING**
- Group [F03D 9/10](#) is impacted by reclassification into groups [F03D 9/12](#), [F03D 9/18](#), [F03D 9/19](#) and [H02S 10/12](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 9/11 . . storing electrical energy
- WARNING**
- Group [F03D 9/11](#) is impacted by reclassification into group [H02S 10/12](#).
- Groups [F03D 9/11](#) and [H02S 10/12](#) should be considered in order to perform a complete search.
- 9/12 . . storing kinetic energy, e.g. using flywheels
- WARNING**
- Group [F03D 9/12](#) is incomplete pending reclassification of documents from group [F03D 9/10](#).
- Groups [F03D 9/10](#) and [F03D 9/12](#) should be considered in order to perform a complete search.
- 9/13 . . storing gravitational potential energy
- WARNING**
- Group [F03D 9/13](#) is impacted by reclassification into group [H02S 10/12](#).
- Groups [F03D 9/13](#) and [H02S 10/12](#) should be considered in order to perform a complete search.
- 9/14 . . . using liquids
- WARNING**
- Group [F03D 9/14](#) is impacted by reclassification into group [H02S 10/12](#).
- Groups [F03D 9/14](#) and [H02S 10/12](#) should be considered in order to perform a complete search.
- 9/16 . . . using weights
- WARNING**
- Group [F03D 9/16](#) is impacted by reclassification into group [H02S 10/12](#).
- Groups [F03D 9/16](#) and [H02S 10/12](#) should be considered in order to perform a complete search.
- 9/17 . . storing energy in pressurised fluids
- WARNING**
- Group [F03D 9/17](#) is impacted by reclassification into group [H02S 10/12](#).
- Groups [F03D 9/17](#) and [H02S 10/12](#) should be considered in order to perform a complete search.
- 9/18 . . storing heat
- WARNING**
- Group [F03D 9/18](#) is incomplete pending reclassification of documents from group [F03D 9/00](#) and [F03D 9/10](#).
- Groups [F03D 9/00](#), [F03D 9/10](#) and [F03D 9/18](#) should be considered in order to perform a complete search.
- 9/19 . . storing chemical energy, e.g. using electrolysis
- WARNING**
- Group [F03D 9/19](#) is incomplete pending reclassification of documents from group [F03D 9/00](#) and [F03D 9/10](#).
- Groups [F03D 9/00](#), [F03D 9/10](#) and [F03D 9/19](#) should be considered in order to perform a complete search.
- 9/20 . Wind motors characterised by the driven apparatus ([F03D 9/10](#) takes precedence)
- WARNING**
- Group [F03D 9/20](#) is incomplete pending reclassification of documents from group [F03D 9/00](#).
- Groups [F03D 9/00](#) and [F03D 9/20](#) should be considered in order to perform a complete search.
- 9/22 . . the apparatus producing heat
- WARNING**
- Group [F03D 9/22](#) is impacted by reclassification into group [H02S 10/12](#).
- Groups [F03D 9/22](#) and [H02S 10/12](#) should be considered in order to perform complete search.
- 9/25 . . the apparatus being an electrical generator ([F03D 9/22](#) takes precedence)
- WARNING**
- Group [F03D 9/25](#) is impacted by reclassification into group [H02S 10/12](#).
- Groups [F03D 9/25](#) and [H02S 10/12](#) should be considered in order to perform complete search.

9/255 . . . {connected to an electrical general supply grid; Arrangements therefor}

WARNING

Group [F03D 9/255](#) is impacted by reclassification into group [H02S 10/12](#) search.

Groups [F03D 9/255](#) and [H02S 10/12](#) should be considered in order to perform a complete search.

9/257 {the wind motor being part of a wind farm}

WARNING

Group [F03D 9/257](#) is impacted by reclassification into group [H02S 10/12](#).

Groups [F03D 9/257](#) and [H02S 10/12](#) should be considered in order to perform a complete search.

9/28 . . the apparatus being a pump or a compressor

WARNING

Group [F03D 9/28](#) is impacted by reclassification into group [H02S 10/12](#).

Groups [F03D 9/28](#) and [H02S 10/12](#) should be considered in order to perform a complete search.

9/30 . Wind motors specially adapted for installation in particular locations (means for mounting or supporting wind motors [F03D 13/20](#))

WARNING

Group [F03D 9/30](#) is incomplete pending reclassification of documents from group [F03D 9/00](#).

Groups [F03D 9/00](#) and [F03D 9/30](#) should be considered in order to perform a complete search.

9/32 . . on moving objects, e.g. vehicles

WARNING

Group [F03D 9/32](#) is incomplete pending reclassification of documents from group [B60K 16/00](#) and [F03D 9/00](#).

Groups [B60K 16/00](#), [F03D 9/00](#) and [F03D 9/32](#) should be considered in order to perform a complete search.

9/34 . . on stationary objects or on stationary man-made structures

WARNING

Group [F03D 9/34](#) is incomplete pending reclassification of documents from group [F03D 1/02](#), [F03D 1/025](#), [F03D 1/04](#), [F03D 3/02](#), [F03D 3/04](#), [F03D 3/0409](#), [F03D 3/0418](#), [F03D 3/0427](#), [F03D 3/0436](#), [F03D 3/0445](#), [F03D 3/0454](#), [F03D 3/0463](#), [F03D 3/0472](#), [F03D 3/0481](#), [F03D 3/049](#) and [F03D 9/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

9/35 . . . within towers, e.g. using chimney effects

WARNING

Group [F03D 9/35](#) is incomplete pending reclassification of documents from group [F03D 1/02](#), [F03D 1/025](#), [F03D 1/04](#), [F03D 3/02](#), [F03D 3/04](#), [F03D 3/0409](#), [F03D 3/0418](#), [F03D 3/0427](#), [F03D 3/0436](#), [F03D 3/0445](#), [F03D 3/0454](#), [F03D 3/0463](#), [F03D 3/0472](#), [F03D 3/0481](#), [F03D 3/049](#) and [F03D 9/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

9/37 with means for enhancing the air flow within the tower, e.g. by heating

WARNING

Group [F03D 9/37](#) is incomplete pending reclassification of documents from group [F03D 1/02](#), [F03D 1/025](#), [F03D 1/04](#), [F03D 3/02](#), [F03D 3/04](#), [F03D 3/0409](#), [F03D 3/0418](#), [F03D 3/0427](#), [F03D 3/0436](#), [F03D 3/0445](#), [F03D 3/0454](#), [F03D 3/0463](#), [F03D 3/0472](#), [F03D 3/0481](#), [F03D 3/049](#) and [F03D 9/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

9/39 by circulation or vortex formation

WARNING

Group [F03D 9/39](#) is incomplete pending reclassification of documents from group [F03D 1/02](#), [F03D 1/025](#), [F03D 1/04](#), [F03D 3/02](#), [F03D 3/04](#), [F03D 3/0409](#), [F03D 3/0418](#), [F03D 3/0427](#), [F03D 3/0436](#), [F03D 3/0445](#), [F03D 3/0454](#), [F03D 3/0463](#), [F03D 3/0472](#), [F03D 3/0481](#), [F03D 3/049](#) and [F03D 9/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

9/41 by using the wind outside the tower, e.g. using ejectors

WARNING

Group [F03D 9/41](#) is incomplete pending reclassification of documents from group [F03D 1/02](#), [F03D 1/025](#), [F03D 1/04](#), [F03D 3/02](#), [F03D 3/04](#), [F03D 3/0409](#), [F03D 3/0418](#), [F03D 3/0427](#), [F03D 3/0436](#), [F03D 3/0445](#), [F03D 3/0454](#), [F03D 3/0463](#), [F03D 3/0472](#), [F03D 3/0481](#), [F03D 3/049](#) and [F03D 9/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 9/43 . . . using infrastructure primarily used for other purposes, e.g. masts for overhead railway power lines

WARNING

Group [F03D 9/43](#) is incomplete pending reclassification of documents from group [F03D 1/02](#), [F03D 1/025](#), [F03D 1/04](#), [F03D 3/02](#), [F03D 3/04](#), [F03D 3/0409](#), [F03D 3/0418](#), [F03D 3/0427](#), [F03D 3/0436](#), [F03D 3/0445](#), [F03D 3/0454](#), [F03D 3/0463](#), [F03D 3/0472](#), [F03D 3/0481](#), [F03D 3/049](#) and [F03D 9/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 9/45 Building formations

WARNING

Group [F03D 9/45](#) is incomplete pending reclassification of documents from group [F03D 1/02](#), [F03D 1/025](#), [F03D 1/04](#), [F03D 3/02](#), [F03D 3/04](#), [F03D 3/0409](#), [F03D 3/0418](#), [F03D 3/0427](#), [F03D 3/0436](#), [F03D 3/0445](#), [F03D 3/0454](#), [F03D 3/0463](#), [F03D 3/0472](#), [F03D 3/0481](#), [F03D 3/049](#) and [F03D 9/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 9/46 Tunnels or streets

WARNING

Group [F03D 9/46](#) is incomplete pending reclassification of documents from group [F03D 1/02](#), [F03D 1/025](#), [F03D 1/04](#), [F03D 3/02](#), [F03D 3/04](#), [F03D 3/0409](#), [F03D 3/0418](#), [F03D 3/0427](#), [F03D 3/0436](#), [F03D 3/0445](#), [F03D 3/0454](#), [F03D 3/0463](#), [F03D 3/0472](#), [F03D 3/0481](#), [F03D 3/049](#) and [F03D 9/00](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 9/48 . . using landscape topography, e.g. valleys

WARNING

Group [F03D 9/48](#) is incomplete pending reclassification of documents from group [F03D 9/00](#).

Groups [F03D 9/00](#) and [F03D 9/48](#) should be considered in order to perform a complete search.

- 13/00 Assembly, mounting or commissioning of wind motors; Arrangements specially adapted for transporting wind motor components**

WARNING

Group [F03D 13/00](#) is incomplete pending reclassification of documents from group [F03D 80/00](#).

Groups [F03D 80/00](#) and [F03D 13/00](#) should be considered in order to perform a complete search.

- 13/10 . Assembly of wind motors; Arrangements for erecting wind motors
13/20 . Arrangements for mounting or supporting wind motors; Masts or towers for wind motors

WARNING

Group [F03D 13/20](#) is impacted by reclassification into group [F03D 13/25](#).

Groups [F03D 13/20](#) and [F03D 13/25](#) should be considered in order to perform a complete search.

- 13/22 . . {Foundations specially adapted for wind motors}
13/25 . . specially adapted for offshore installation

WARNING

Group [F03D 13/25](#) is incomplete pending reclassification of documents from group [F03D 13/20](#).

Groups [F03D 13/20](#) and [F03D 13/25](#) should be considered in order to perform a complete search.

- 13/30 . Commissioning, e.g. inspection, testing or final adjustment before releasing for production
13/35 . . Balancing static or dynamic imbalances
13/40 . Arrangements or methods specially adapted for transporting wind motor components

15/00 Transmission of mechanical power

- 15/05 . {using hollow exhausting blades}
15/10 . using gearing not limited to rotary motion, e.g. with oscillating or reciprocating members
15/15 . . {Changing or adjusting stroke}
15/20 . Gearless transmission, i.e. direct-drive

17/00 Monitoring or testing of wind motors, e.g. diagnostics (testing during commissioning of wind motors [F03D 13/30](#))

WARNING

Group [F03D 17/00](#) is incomplete pending reclassification of documents from group [F03D 80/00](#).

Groups [F03D 80/00](#) and [F03D 17/00](#) should be considered in order to perform a complete search.

80/00 Details, components or accessories not provided for in groups [F03D 1/00](#) - [F03D 17/00](#)

WARNING

Group [F03D 80/00](#) is impacted by reclassification into groups [F03D 13/00](#) and [F03D 80/60](#).

All groups listed in this Warning should be considered in order to perform a complete search.

F03D

- 80/10 . Arrangements for warning air traffic
- 80/20 . Arrangements for avoiding shadow flicker
- 80/30 . Lightning protection
- 80/40 . Ice detection; De-icing means
- 80/50 . Maintenance or repair

WARNING

Group [F03D 80/50](#) is impacted by reclassification into group [F03D 80/55](#).

Groups [F03D 80/50](#) and [F03D 80/55](#) should be considered in order to perform a complete search.

- 80/55 . . Cleaning ([F03D 80/40](#) takes precedence)

WARNING

Group [F03D 80/55](#) is incomplete pending reclassification of documents from group [F03D 80/50](#).

Groups [F03D 80/50](#) and [F03D 80/55](#) should be considered in order to perform a complete search.

- 80/60 . Cooling or heating of wind motors

WARNING

Group [F03D 80/60](#) is incomplete pending reclassification of documents from group [F03D 80/00](#).

Groups [F03D 80/00](#) and [F03D 80/60](#) should be considered in order to perform a complete search.

- 80/70 . Bearing or lubricating arrangements
- 80/80 . Arrangement of components within nacelles or towers
- 80/82 . . {of electrical components}
- 80/85 . . . {Cabling}
- 80/88 . . {of mechanical components}