

# 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

#### NOTE

In this subclass, the following words are used with the meanings indicated:

- "Wind motor" means a mechanism for converting the energy of natural wind into useful mechanical power, and the transmission of such power to its point of use;
- "Rotor" means the wind-engaging parts of the wind motor and the rotary member carrying them;
- "Rotations axis" means the axis of rotation of the rotor.

**1/00 Wind motors with rotation axis substantially in wind direction (controlling [F03D 7/00](#))**

**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 at right-angles to wind direction (controlling [F03D 7/00](#))**

**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 [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 in wind direction
- 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 at right angle to wind direction {([F03D 3/068](#) takes precedence)}

#### **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}