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(54) Title: MODULAR BUILDING

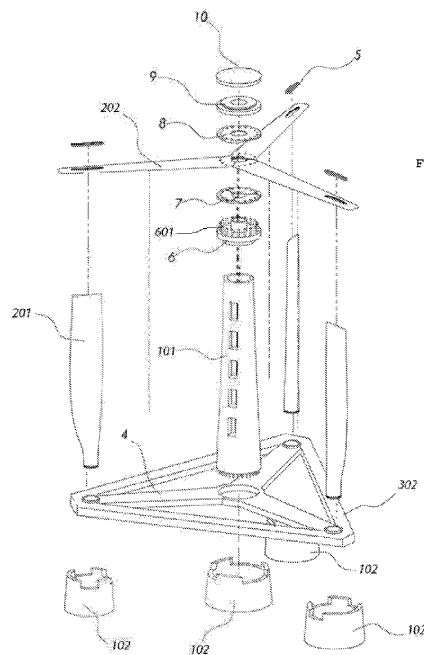


Fig. 5

(57) Abstract: The present invention describes the construction of sustainable modular buildings from end-of-life or reused wind turbine segments, promoting the circular economy and the "zero waste" concept. It discloses a modular building that follows structural mechanics and architecture strongly influenced by the introduction of wind turbine tower and blade segments at the end of their useful lives. The hollow section part of the tower will form the rigid core and the blades will form pillars and connecting beams that join these pillars to the central core. Valuing the hollow internal space of the components, there is also the incorporation of a fire fighting and safety system using a water circuit inside the structure, at the same time that it houses networks of the different tubes and pipes of the specialties present in a building. To improve anti-seismic behaviour and vibration control, cork is used as a connecting element and constituent of the expansion joints between structural elements.

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