

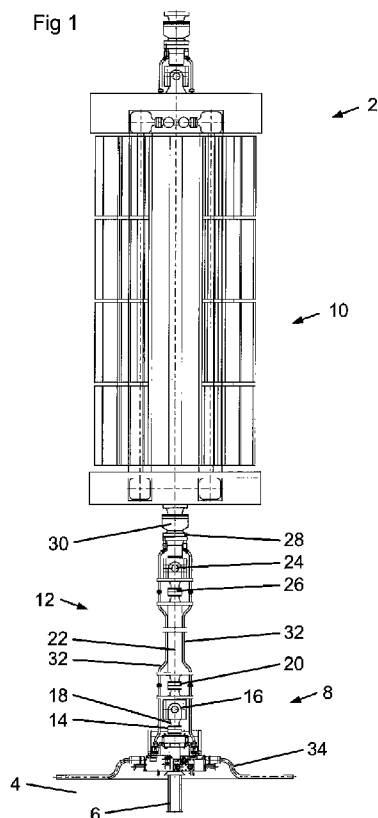


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(54) Title: METHOD AND APPARATUS FOR ENERGY GENERATION

Fig 1



(57) Abstract: A system for generating energy from a current flowing in an ocean is disclosed, the system comprising a generator assembly comprising a generator and operable to generate energy in response to the flow of the current; an anchor assembly at the bed of the ocean; and a retaining means attaching the generator assembly directly to the anchor assembly, the generator assembly being held between the bed of the ocean and the surface of the body of water, and the generator assembly being rotatable about a substantially vertical axis with respect to the anchor assembly. A preferred generator assembly is disclosed, the assembly comprising a housing having a form such that, in use, the housing has an upstream orientation; an impellor assembly located within the housing comprising a plurality of blades arranged to be contacted by the flow of water when in use; and means to be acted upon by the flow of water to hold the housing in the upstream orientation. A preferred impellor assembly comprises an elongate hub rotatable about an axis of rotation; a plurality of elongate impellor blades extending along and radially outwards from the hub, each blade having an inner portion adjacent the hub and an outer portion distal from the shaft, adjacent blades defining a blade cavity therebetween; wherein each impellor blade is fixed relative to the shaft and moveable therewith, the shaft and inner portions of the impellor blades being arranged such that fluid may be exchanged between the inner regions of the blade cavities.



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