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(71)Name of Applicant :

1)INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

Address of Applicant :Dhanbad - 826004, Jharkhand, India
Dhanbad -----

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor :

1)Ravindra Bhagat

Address of Applicant :Department of Mechanical Engineering,
Indian Institute of Technology (Indian School of Mines),
Dhanbad, Dhanbad – 826004, Jharkhand, India Dhanbad -----

2)Dinesh Kumar

Address of Applicant :Department of Mechanical Engineering,
University College of Engineering and Technology (UCET),
Vinoba Bhawe University, Hazaribagh – 825301, Jharkhand, India
Hazaribagh -----

3)Shibayan Sarkar

Address of Applicant :Department of Mechanical Engineering,
Indian Institute of Technology (Indian School of Mines),
Dhanbad, Dhanbad – 826004, Jharkhand, India Dhanbad -----

(57) Abstract :

The present invention relates to an ellipsoid cross flow hydrokinetic turbine (ECFHKT) (100) for hydro energy generation operated at ultra-low head and low flow conditions. The turbine (100) comprises a plurality of curve shaped rotor blades (1) which are mounted over two endplates (2). The material used for construction of rotor component is stainless steel. The blades are bended at a particular angle and overall, they produce the structure of the ellipsoid turbine (100). It produces torque at its vertically aligned shaft axis (S) when water strikes on the rotor blades (1). The rotational motion along the vertical axis of the turbine (100) is initiated when the free stream strikes twice over the rotor blades (1). As the fluid strikes twice, this ultimately enhances the net positive torque, rotation, and power generation of the turbine (100).

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