

ENERGY PRODUCTION DEVICE WITH CAPILLARY CHARACTERISTIC AND GRAVITY FORCE

SWEDEN | SAJAD SHABANPOURHAGHIGHI

INVENTION SUMMARY

The Invention of "Energy Production Device with capillary tubes and gravity force" which includes several capillary tubes helps the fluid reach a specific height in the opposite direction of gravity & gravitational force by the help of surface adhesive energy after which it directs the fluid towards the turbine by the help of gravity and in the same direction. By moving the turbine blades by the help of gravitational force on the fluid, rotational energy of the turbine is converted to electricity energy. The whole system is comprised of lower storage tank and an upper storage tank and two units of A and B, a penstock, turbine, and generator. Capillary tubes transfer the fluid from lower tank to upper tank. The system has a bleeder valve to mitigate against the air pressure. Later, the fluid is directed by one-way valve towards the upper tank. Fluid is directed from the upper tank by the gravity force towards the turbine through penstock and the cycle recurs repetitively.

KEY INNOVATION

The fluid is directed by the help of capillary tubes and surface adhesive energy up to a certain altitude in the opposite direction of the gravity and then the fluid, relying on the gravity force, is directed towards the turbine and moving the turbine blades by the gravity force on the fluid and rotational turbine is converted to electricity energy.

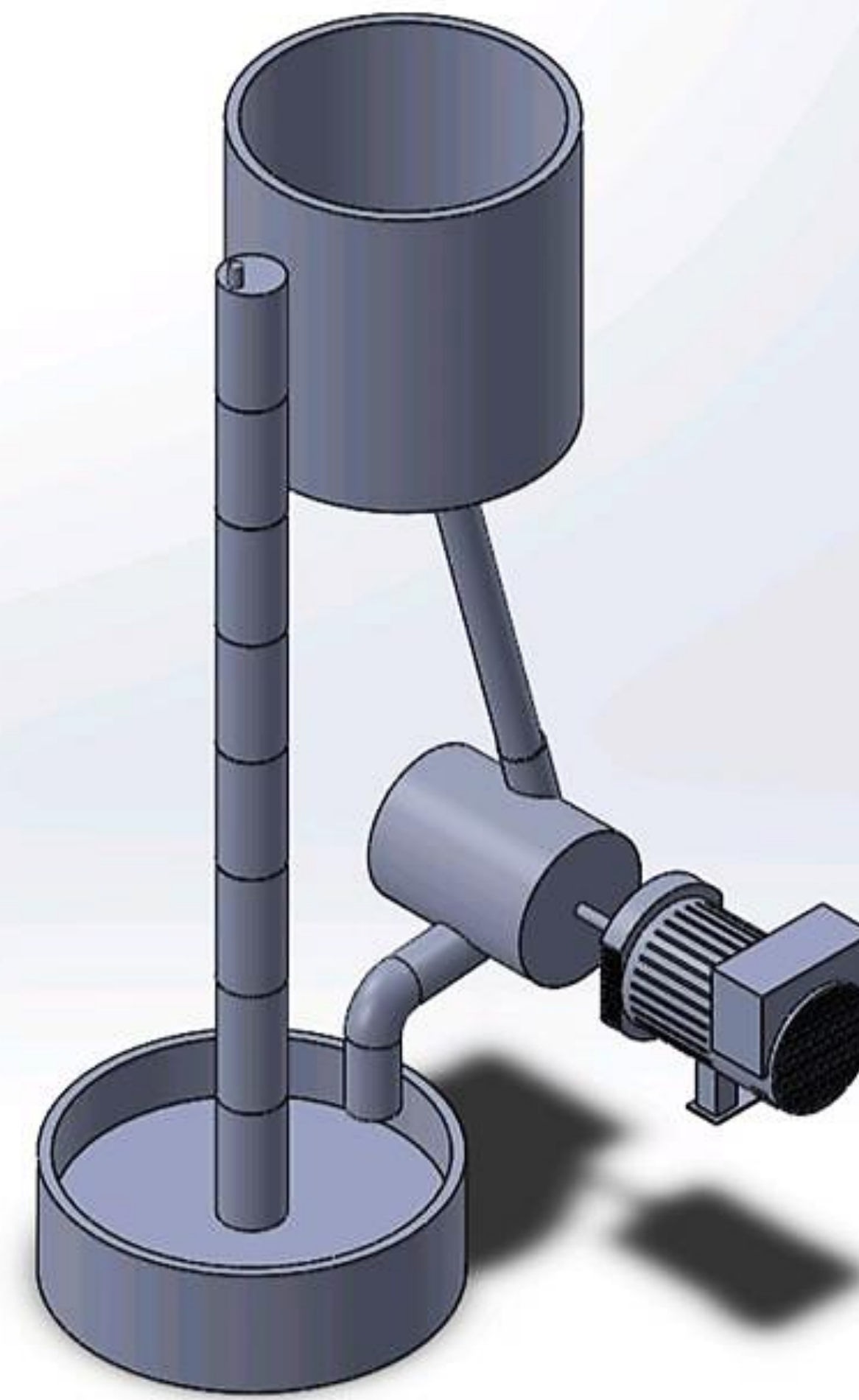
EFFECT & CONTRIBUTION

Access to widespread, clean, cheap and accessible energy source with simple development technology, low cost maintenance expenses, no need to preliminary fuel and no threat to mankind. The advantages include:

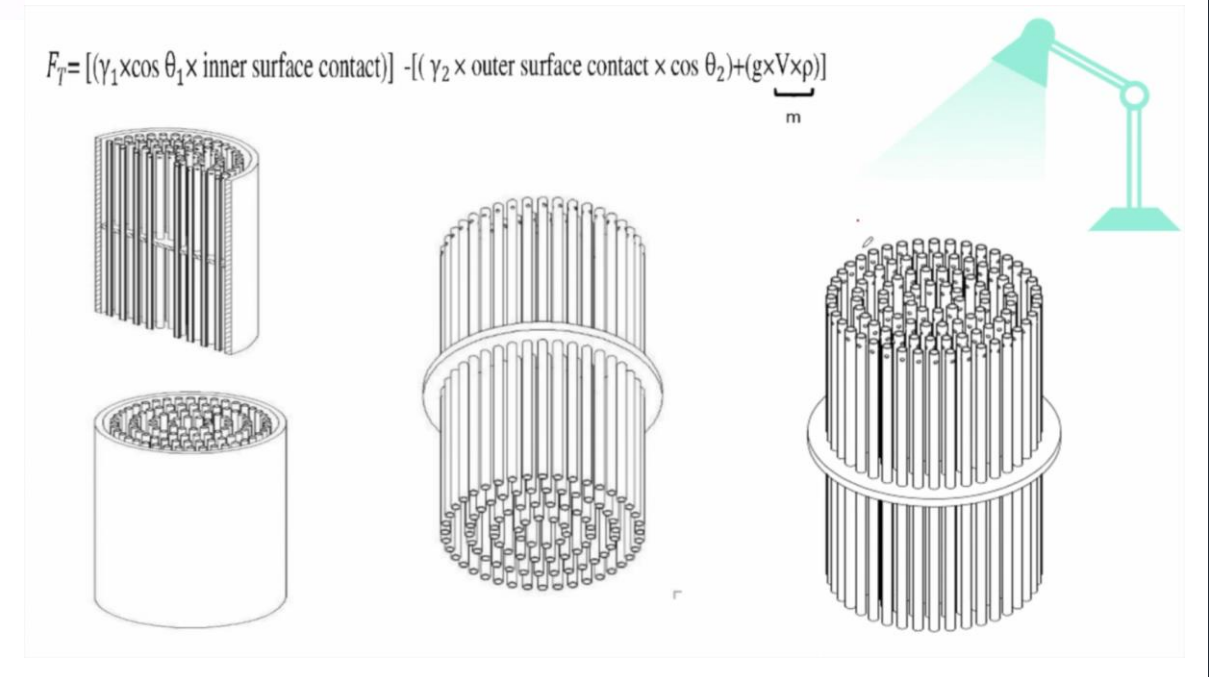
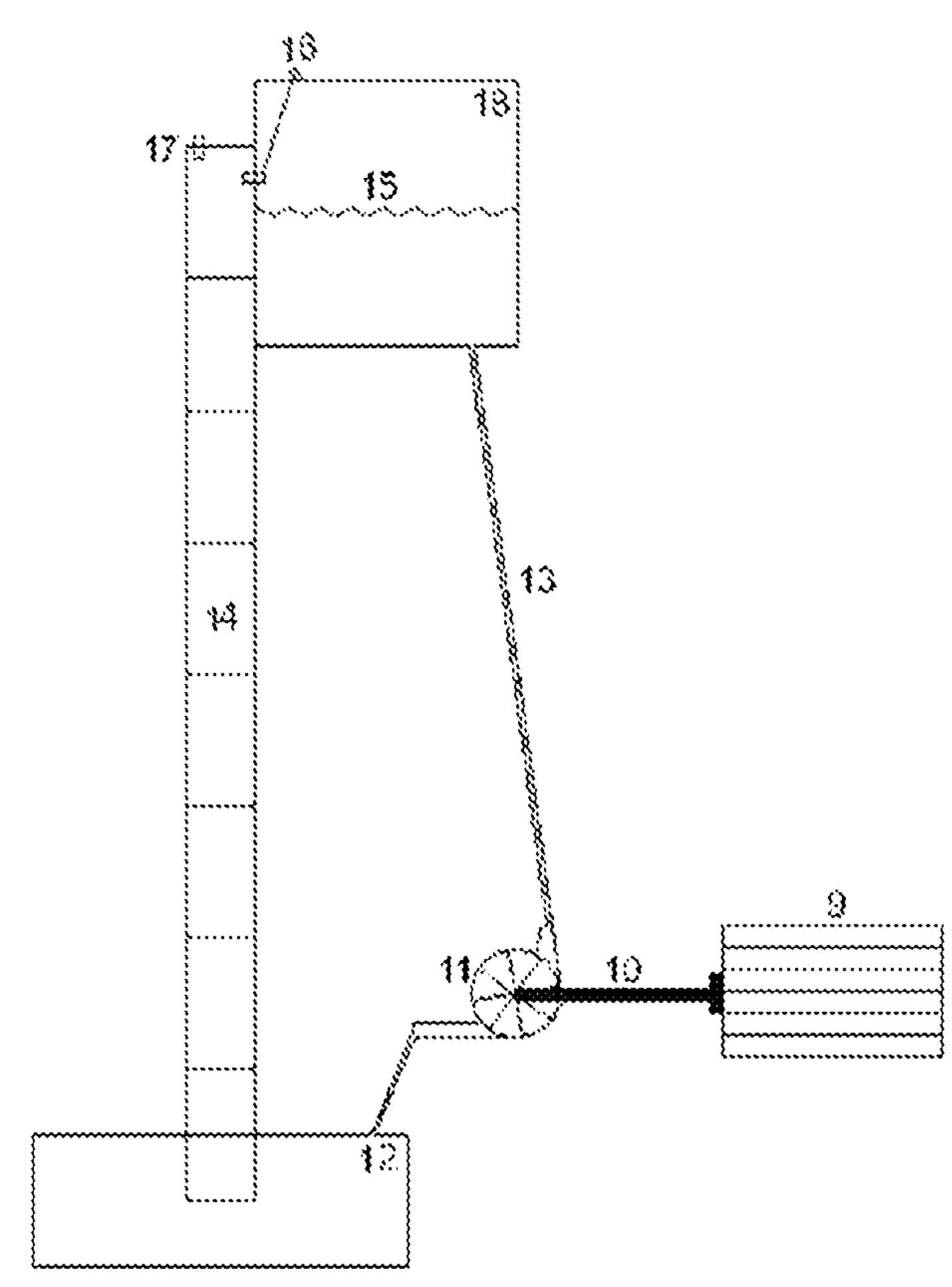
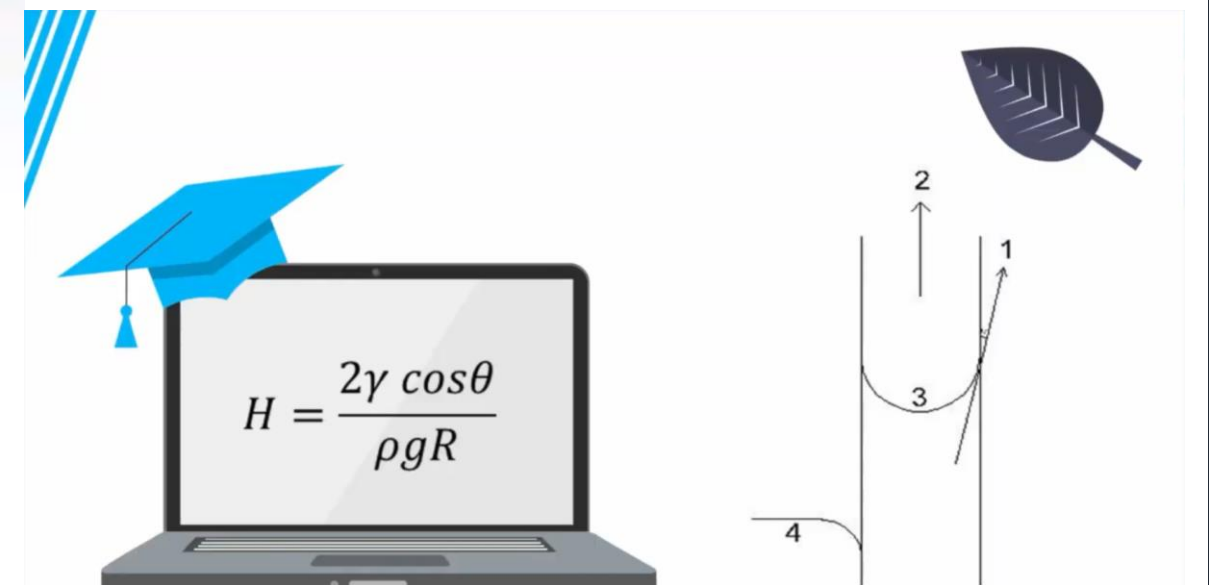
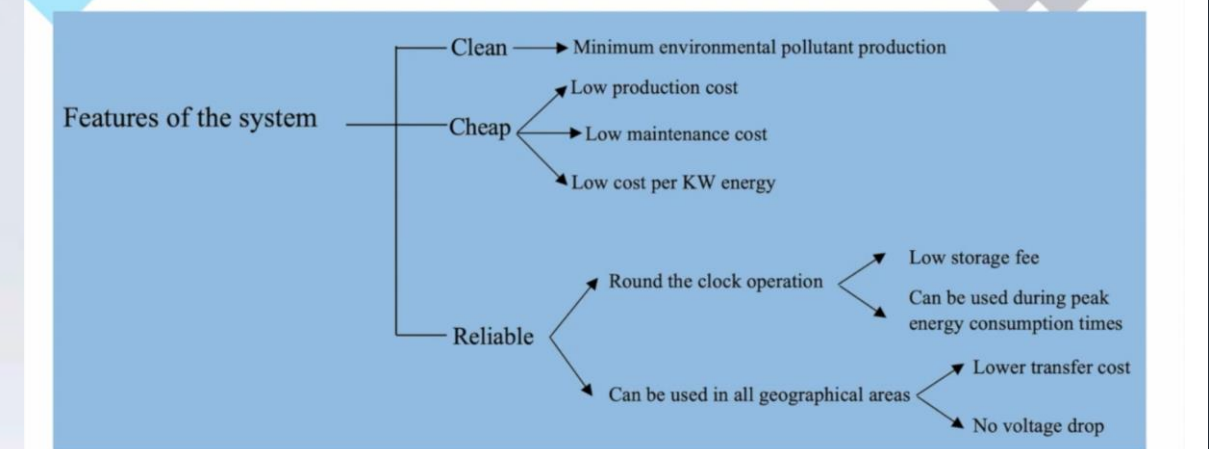
- Simplicity of its mechanism
- Clean and non-pollutant feature
- No maintenance costs
- Applicability of 24hrs / all geographic locations
- Economic and environment-friendly

The invention allows the proximity of production sites and consumption centers for energy consumption units to have their generator around the consumption centers. It also prevents energy dissipation during energy transfer.

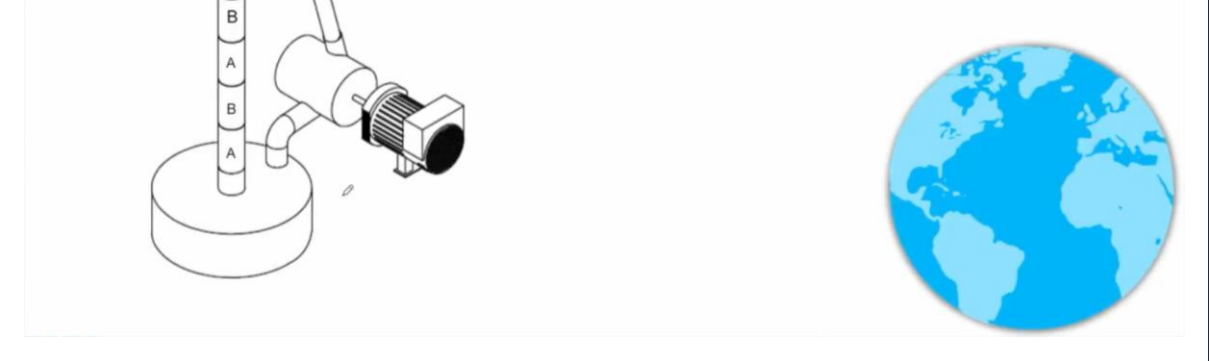
INVENTION VISUALS



By:
Sajad Shabanpourhaghighi
MD, Researcher
Address: Öpingsgatan 60, Göteborg 41871, Sweden
Tel: 0046722872476
Email: sajad.shabanpourhaghighi@gmail.com



$F_1 = m \times a \rightarrow F_2 = m \times \frac{L}{t} \rightarrow m = \frac{F_2 \times t}{L} \rightarrow$ time replacement of m kg fluid
 $F_1 = m \times a \rightarrow F_2 = m \times \frac{L}{t} \rightarrow m = \frac{F_2 \times L}{t} \rightarrow$ the amount of fluid transferred in time



$F_1 = [(γ_1 \times \cos \theta_1 \times \text{inner surface contact})] - [(γ_2 \times \text{outer surface contact} \times \cos \theta_2) + (\rho \times V \times g)]$

Law of conservation of energy
 "Energy cannot be created or destroyed it only can be transformed from one form into another"

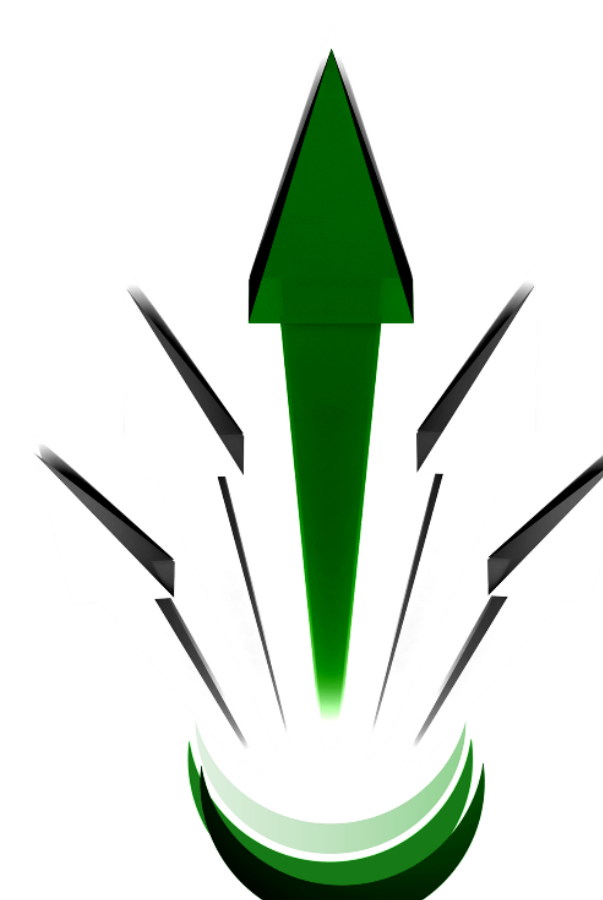
ACHIEVEMENTS



- ❖ WIPO PCT Publication: **WO 2019/012338 A1**
- ❖ EPO Publication: **EP 3 652 430 A0**
- ❖ iCAN 2020 **Gold Medal**
- ❖ iCAN 2020 **TISIAS Special Award**



INVENTION PRESENTED BY
TISIAS - CANADA
 WEBSITE: www.tisias.org
 EMAIL: info@tisias.org
 FACEBOOK: **INVENTOR SOUND**



TISIAS
 TORONTO INTERNATIONAL SOCIETY OF INNOVATION & ADVANCED SKILLS