ISSN 2347-3487
Volume 11, Number 8
Journal of Advances in Physics

A perpetuum mobile of second kind is possible

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ABSTRACT

Great and important discoveries befall there seldom, but this one is just such a discovery. The discovery is in physics which disproves the validness of the second law of thermodynamics and several others up to now conceptions of the physics, and can open a new and inexhaustible energy resource for the mankind --- the low temperature thermal energy of the environment. In short is my discovery such that against the principles of the up to now physics and the second law of thermodynamics is a perpetuum mobile of the second kind possible, and entropy is not irreversible.

Indexing terms/Keywords

thought experiment; perpetual motion of second kind; gas; thermal energy; gravitation

Academic Discipline And Sub-Disciplines

Physics; thermodynamics

SUBJECT CLASSIFICATION

Physics Subject Classification; Library of Congress Classification

TYPE (METHOD/APPROACH)

Philosophical Inquiry

INTRODUCTION

As we know, such are the general conceptions of the contemporary physics. There is impossible to transform continuously into work or electrical energy a thermal energy of an equal temperature, and not at all a thermal energy without having an extraneous cooler or body with the lower temperature, and without heating this cooler with the heat of the heat energy source, while a part of this thermal energy will degenerate irreversibly. There is impossible to transfer a thermal energy from a lower temperature to higher temperature without expending for that work or electrical energy, or heat by a cooler body a warmer body. But my discovery disproves the validness of these conceptions and proves that in an environment of an equal temperature there is possible to create differences of temperatures and thermodynamical imbalances without expanding for that any work or electrical energy, and derive from that also to transform the thermal energy of this environment completely or in 100% and continuously into work and electro energy. Such a transformation of energy from anergy (worthless thermal energy) into exergy (work, electrical energy, etc) can take place as follows.

DISCUSSION

As we know, such are the general conceptions of the contemporary physics. There is impossible to transform continuously into work or electrical energy a thermal energy of an equal temperature, and not at all a thermal energy without having an extraneous cooler or body with the lower temperature, and without heating this cooler with the heat of the heat energy source, while a part of this thermal energy will degenerate irreversibly. There is impossible to transfer a thermal energy from a lower temperature to higher temperature without expending for that work or electrical energy, or heat by a cooler body a warmer body. But my discovery disproves the validness of these conceptions and proves that in an environment of an equal temperature there is possible to create differences of temperatures and thermodynamical imbalances without expanding for that any work or electrical energy, and derive from that also to transform the thermal energy of this environment completely or in 100% and continuously into work and electro energy. Such a transformation of energy from anergy (worthless thermal energy) into exergy (work, electrical energy, etc) can take place as follows.

Let's imagine that we have an environment with the equal temperature of 0°C in depths of an ocean. In this environment we put to stand apeak a very high gas-column, which gas-column is in a very long hermetically closed and thermally isolated cylinder. The molecules of the gas in this gas-column are in chaotic thermal movements, move mutually in all possible directions, including in upwards and downwards directions, colliding by their movements with the walls of the cylinder, and the speed of movement of the molecules, movement impulses, or kinetic energies are the same thing as the temperature of the gas or temperature. In brief, the quantity of kinetic energy of a moving molecule is a temperature. In solid matter of the walls of the cylinder, like in all solid matters and fluids, the molecules also are in back and forth thermal movements, and the quantity of their kinetic energies of these movements is also a temperature of the matter, like it is in a gas.

By collisions of the molecules of the gas and the solid matter of the cylinder there comes about exchange of kinetic energies or temperatures of the molecules, which comes about so that the body with greater kinetic energy or higher temperature passes a part of its kinetic energy over to the body with smaller kinetic energy or lower temperature, losing by that its kinetic energy or cooling. In such a way of collisions and exchanges of kinetic energies or temperatures of molecules there comes about a mutual cooling and warming of the walls of the cylinder by the gas and the gas in the

cylinder by the walls of the cylinder, depending of quantities of kinetic energies of the molecules or temperatures.

By such actions of the molecules of gas in the gas column and the solid matter of walls of the cylinder comes into action still one hindrance which is gravitation, as all this comes about in the gravitation field. The gravitation diminishes the kinetic energies of gas molecules in the gas column which move from down upwards, and in reversible direction this increases the kinetic energy of gas molecules which move in from up downwards. That means that the gas molecules of the gas column which are colliding with the ceiling of the cylinder collide with smaller speeds and kinetic energies than the molecules which collide with the floor of the cylinder. At the same time the amount of kinetic energy of molecules is the same thing as temperature. As by the collisions of the gas molecules with the solid matter of the walls, floor and ceiling of the cylinder there comes about the exchange of kinetic energies or temperatures of these bodies, cooling and warming, will colliding gas molecules with the different speeds and kinetic energies cool the ceiling of the cylinder and warm the floor of the cylinder: the molecules will warm the floor of the cylinder with the heat, which has been taken by them from the ceiling of the cylinder.

The outcome of these processes in the gas column is such that if we have an environment with an equal temperature T, and we put in this environment into action a gas column, where gas molecules are moving upwards and downwards in a gravity field in their thermal movements, these gas molecules will cause the differences of temperatures in this environment between the floor and ceiling of the cylinder. This means that we put in this environment of equal temperature and thermodynamical equilibrium into action an heat pump and refrigerator in account of the same thermal energy of the environment, without spending for that any external work, electrical energy or other exergy. This means that we put into action an equipment in account of anergy causing differences of temperatures in this anergy and so continuously transforming anergy into exergy.

CONCLUSIONS

Causing differences of temperatures in such a way in the environment of an equal temperature, there appears a possibility to exploit these differences of temperatures for putting into action also an usual heat power engine, which will transform thermal energy of this environment into work, giving such an outcome that in conclusion the thermal energy of this environmnt will completely or in 100% and continuously transform into work, despite of the actual temperature of the thermal energy or anergy of the environment.

All this discovery refutes the rightness of several conceptions of physics in the matter of the second law of thermodynamics. The mankind has had up to now erroneous understandings about the possibilities of transformation thermal energy into work. In conclusion: against the conceptions of up to now physics the perpetuum mobile of the second kind is possible.

Author

Kalev Jaik (September 7, 1942) is an Estonian selfeducated philosopher and researcher. His fields of main interests are physics and thermodynamics, economical philosophy, political economy, economical history and human development. He has published books on political economy, physics and autobiographical reflections of cultural and economical circumstances of modern political system.

Books: The terminology of economics : illusions and assets ISBN 9789949186730