

This a free energy device concept.

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My idea is an application of an already invented device used as a pseudo free energy device, similar to a type 2 perpetuum mobile.

What represents a free energy device or perpetuum mobile type? Is a device that extracts work from ambient temperature, or a device that doesn't need a cold and hot reservoir.

Second law of thermodynamics says that the heat spontaneous goes from hot to cold, and in order to extract work must exist a flow of heat. No flow, no work so in conclusion from ambient temperature work can't be extracted.

A normal heat engine is $W = Q_H - Q_C$ or heat pump that is $Q_H = Q_C + W$, work is needed to be used or generated.

In the case of this device that is already invented and used in a new way, it

spontaneously moves heat from cold to hot or two reservoirs that have the same temperature, this device will move heat and create a gradient without work input. After the difference is formed the reservoirs can be hooked up to a heat engine to extract work, decreasing the overall system temperature.

The reason that it not breaks the second law of thermodynamics is because it transfers the heat through the negative temperature. The heat expressed as the total sum of the different aspect that keep energy, rotation, vibration, velocity at the molecular level this device spontaneously change one aspect from positive temperature in to negative temperature and the heat transfer towards hotter reservoir as radiation, and this radiation also is thought as having negative temperature. The device that is already invented and used in a new way as a free energy device is a laser. A special laser where the gain medium is pumped by the thermal radiation or the far infrared emitted by the enclosure. And if the gain medium is a gas it must be matched with the infrared flux by reducing it's density to maintain population inversion. To maximize output, the cavity must be long and narrow, how narrow depends how much time does the medium gas stays in metastable state. It has two ways to increase it's flux, one by increasing it's length, secondly by focusing. It has a minimal working temperature dependent of the energy level necessary for lasing, for example, the peak emission wavelength at 300K is 9.6 microns, going bellow this in temperature the laser will stop working, so it must be designed for the minimal temperature of the environment that is working in and the trade that it has less specific power or requires to be bigger for the same energy flux.

I don't know if other than gas for gain mediums are possible because of the thermal energy of the interactions between molecules that will disrupt the metastable state. That's the second reason for a low pressure gas.

This in essence is a perfect refrigerator.

I call it PR LASER.

This concept is Open Source.