

Is there a path towards securing a patent?

For each question, there is suggested content to provide. It is recommended to try to address these suggestions as best as possible.

Describe the team, provide a budget, and propose a plan which utilizes the competition's resources. Some ideas would be to state a detailed plan, and include in the plan the investigation optimal heat exchanging materials and design

The proposal relies on the assertion that the air in the attic is considerably hotter than the water and that it can be heated beyond its current temperature.

It is not completely clear why this is better than simply exposing the copper pipes in a traditional solar heater case and having the sun heat the water rather than the attic air.

I believe this will struggle to have an effect on water heater efficiency in the winter, even in southern states.

There is no analysis on the additional cost of running copper pipe up to an attic and back down vs the savings from an increase in water heater efficiency.

This seems difficult to standardize into a one size fits all product and would likely be a custom product designed to fit a number of truss or purlin spacings and configurations.

A better solution to increased energy efficiency is to reflect the heat from the sun and prevent the attic from heating up in the first place.

I would look into the business case for solar thermal technologies in the US market. This product would add a very minimal amount of heat with a lot of added cost and complexity. The complexity of these types of systems makes them very difficult to justify. More work should be done to justify the business case for this product. Further understanding is need on the energy density of the product and how many BTUs can be captured when utilizing such simple heat fin technologies.

The proposed technology consists of solar thermal collector embedded inside an attic roof vent.