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FORM AND FUNCTION

Augmenting Stove Safety!

Our device is a stove monitor that augments the safety features of the stove and connects this information to an app on the owner's phone. The device is a small device connected to the power source of the stove. The device will monitor fluctuations in temperature. If the temperature ranges exceeds a safe limit, the device will manually turn off the stove. The device will also connect to detectors around the kitchen. This connection is wireless. The main detector that the device should connect to is the smoke detector. The monitor will shut off the stove when smoke exceeds the allowable level.

Furthermore, the device will monitor stove usage and has a number of customizable features. When the stove is in use, the device will monitor how long it has been used. Unless the owner disables this feature, the monitor will turn off the stove after a set period of time. This time period is configurable on the app and is set to 30 minutes as the default.

Restrictions are further customizable. Stove usage can be disabled during set periods. This can be set for days of the week and hours for each day. Therefore, owners can prevent unauthorized use during the night. The stove will be locked unless the owner manually unlocks the stove during prohibited times. This will help increase stove safety in families. Children will not be able to use a stove without parent permission and generally supervision.

Working with Stove Types

The stove monitor comes in two forms. For gas stove, it is attached to the gas line and needs to be plugged in separately. For the electric stove, it connects the stove and the outlet. Regardless of which type of stove that it is monitoring, the device must be plugged in some way. It will be small enough to fit in the space between the stove and the wall, either beneath or behind. It will be large enough to monitor the gases and temperatures around the stove area of the kitchen and receive messages from detectors in the kitchen. This is not meant to be an industrial product. It is for home usage only.

Connecting to the Phone App. What it can do for you!

The app on the phone is the main method that owners will use to customize the safety features of the stove monitor. Owners can restrict usage of the stove to set period or customize how long the stove is allowed to be on. Furthermore, the monitor will send information to the stove about current usage. The app will display average smoke and temperature around the stove. This will help owners detect problems before they become unsolvable. Through this monitoring, owners will be able to quantify their stove usage in a new way. The app will then have two parts. The customization part sent information the device. The monitoring part will receive information from the device. With these two parts, the application works with the device to provide safety the user.