

Technical Disclosure Commons

Defensive Publications Series

August 2023

Cook top – easy clean stand

Aswath M
Versuni India

Follow this and additional works at: https://www.tdcommons.org/dpubs_series

Recommended Citation

M, Aswath, "Cook top – easy clean stand", Technical Disclosure Commons, (August 16, 2023)
https://www.tdcommons.org/dpubs_series/6147



This work is licensed under a [Creative Commons Attribution 4.0 License](https://creativecommons.org/licenses/by/4.0/).

This Article is brought to you for free and open access by Technical Disclosure Commons. It has been accepted for inclusion in Defensive Publications Series by an authorized administrator of Technical Disclosure Commons.

Title: Cook top – easy clean stand

Authors:

aswath.m@preethi.in

Abstract:

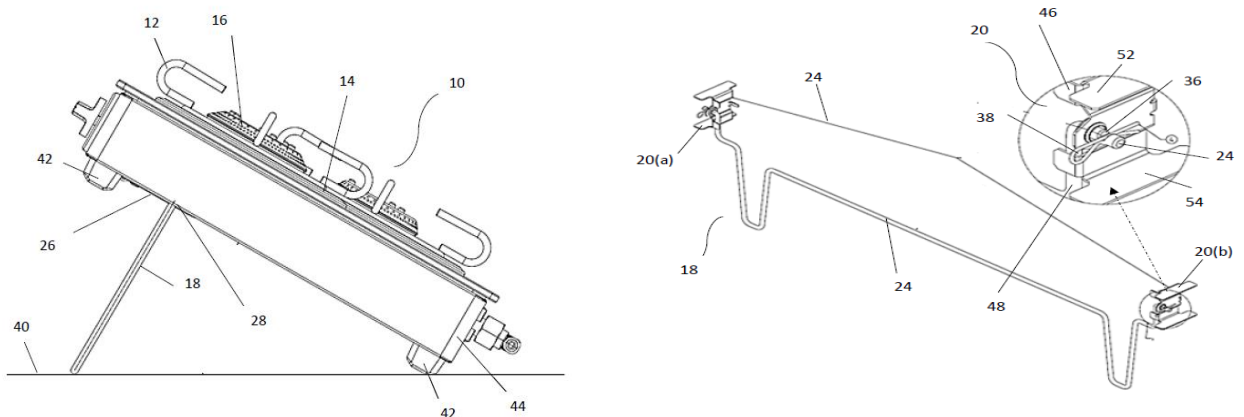
Cooktop is the most common appliance which is used for cooking food on a day to day basis. Cooktop is generally heavy and also occupies a larger area of kitchen table. During cooking, the food stuffs can spill and enter the counter space under the cooktop which needs to be cleaned regularly. Lifting the cooktop with one hand and cleaning in the other hand is a pain point,

In this paper, an easy lift stand for the cook top which enables the user to keep the cooktop in lifted condition and clean the space under the counter top with ease, is discussed.

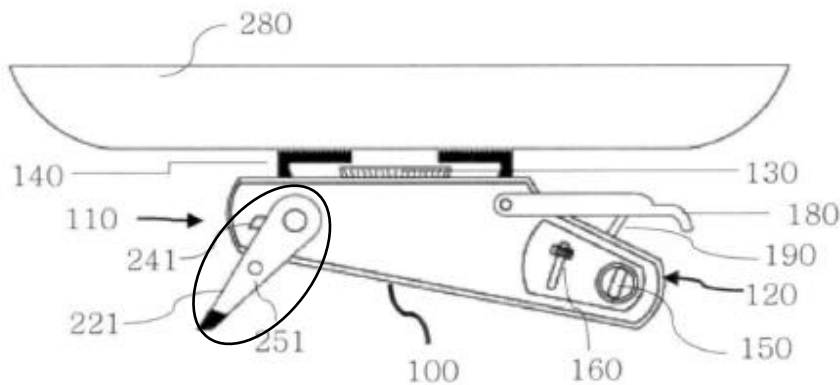
Background:

Cooktop are larger appliance which is heavy in nature because of the materials used for its construction. The cooktop is generally made of steel or glass. Glass cooktop are generally heavier than steel versions. During cleaning, lifting such a heavy object in single hand is difficult and holding it during the cleaning time is causing fatigue to the user. Many solutions are available in the market to solve above pain point. For example in the patent application 202141001532 (Filed at Indian Patent Office by Bosch) in which the leg can be extended manually after lifting the stove and the same can be folded back manually after cleaning process.

Reference images: 202141001532



Another Korean patent KR2020100003782U employs a foldable leg which can be extended during cleaning the countertop below the stove.



Problems overcome:

In all the above-mentioned concept, the user has to lift and hold the stove in one hand and extend the leg in other hand which is a pain point which needs to be addressed.

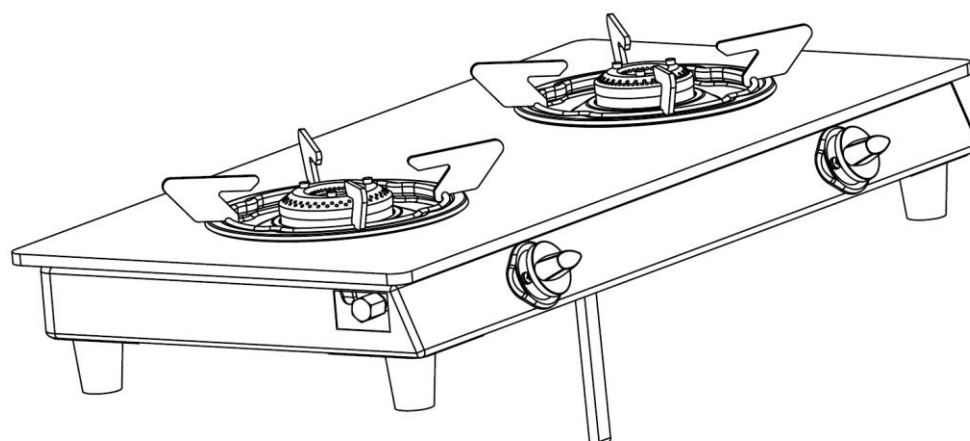
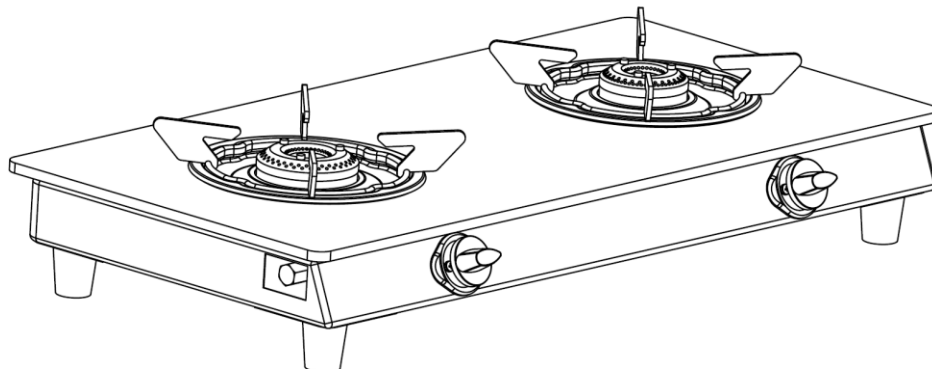
In this Proposed concept, a spring-loaded arm is arranged such that the leg pops out automatically so that the user need not manually extend the arm while lifting the stove is discussed.

Implementation details:

New concept:

- Spring loaded arm is automatically made to engage as the user lifts the cooktop.
- While closing, the user has to lift and fold the arm, then rest the stove on the counter top manually.

Versuni



Operation:

Existing user behavior: (with existing solutions)

1. User lifts the cooktop
2. Extends leg (While holding)
3. Clean
4. User lift the cook top
5. Retract leg (While holding)
6. Rest the cooktop on to the surface



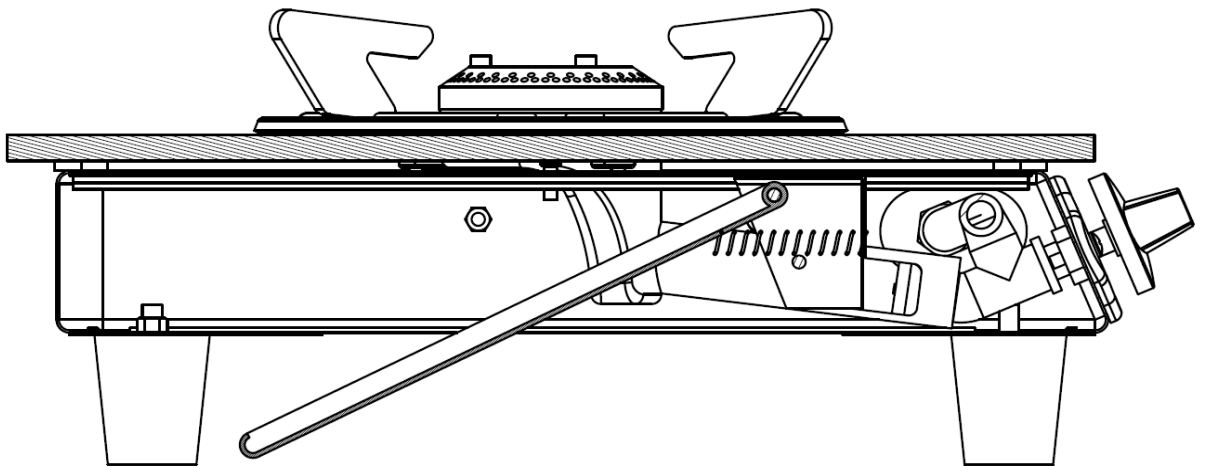
New user behaviour: (with new solution)

1. User lifts the cooktop
2. Clean
3. User lifts the cooktop
4. Fold the arm (While holding)
5. Rest the cook top on to the surface

(One step is eliminated in the new solution)

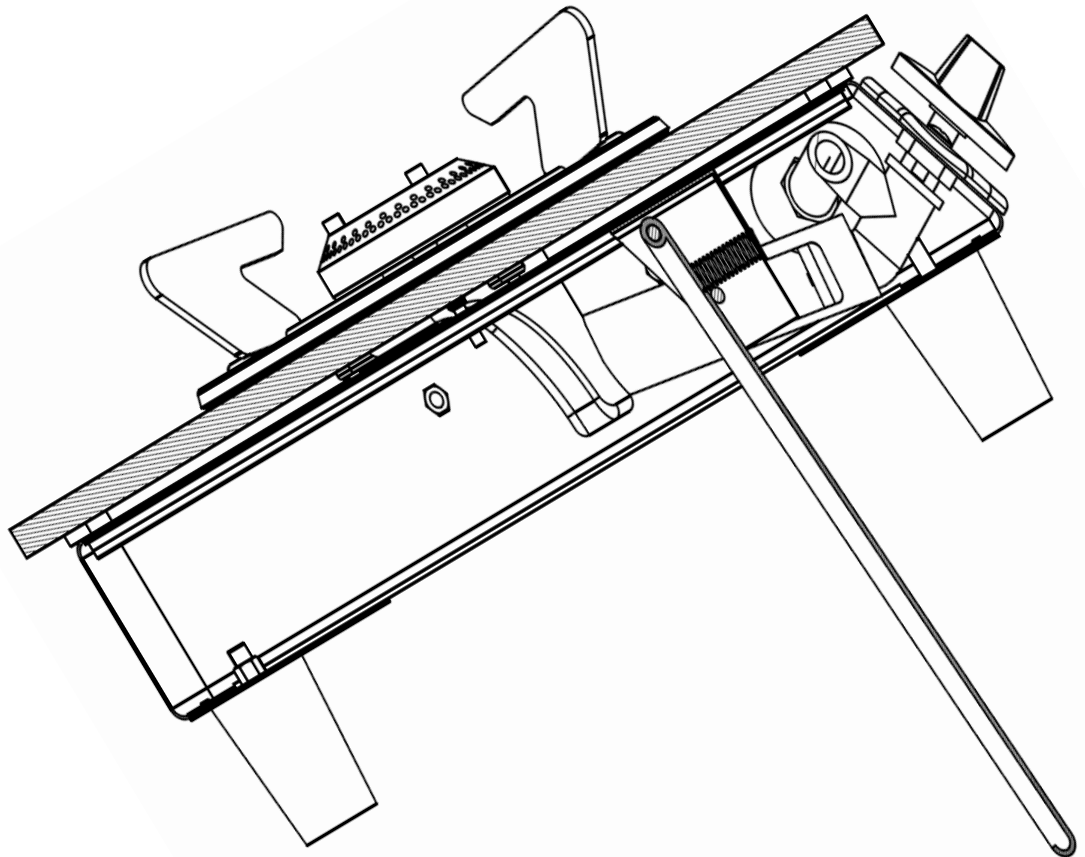
Sectional view during operation:

Normal operation:



Versuni

Lifted condition:





Additional module required:

