Molecule Works Inc

Compact and efficient equipment for enhancement of air quality in living spaces or buildings

PROBLEM STATEMENT

- Carbon dioxide and other harmful gases in living spaces need to be controlled low enough for people to stay healthy.
- Fresh air needs to be introduced to the living space with temperature and humidity close to indoor air conditions.

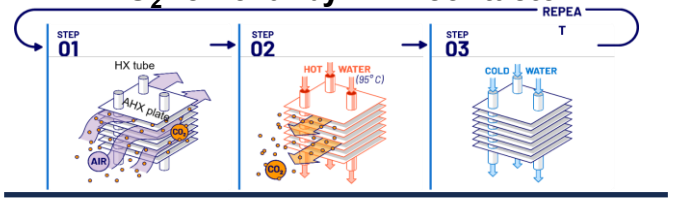
BENEFITS

- The AHX contactor provides higher productivity and energy efficiency than other solid adsorption processes.
- The thin-metal membrane ERV provides 2X higher productivity, higher durability, and more bio-fouling resistance than state-of-the-art polymer ERVs.

TECHNOLOGY SOLUTION

- Adsorption and heat exchanger (AHX) –a new type air/solid contactor for removal of carbon dioxide, moisture and other toxics.
- A new type of membrane energy recovery ventilator (ERV) comprising thin porous metal membranes for fresh air introduction.

CO_2 removal by AHX contactor



Metal-foil like thin metal membrane

