

## Fluid Flow Experience: Interactive Display

OTT ID # 1417

### APPLICATIONS

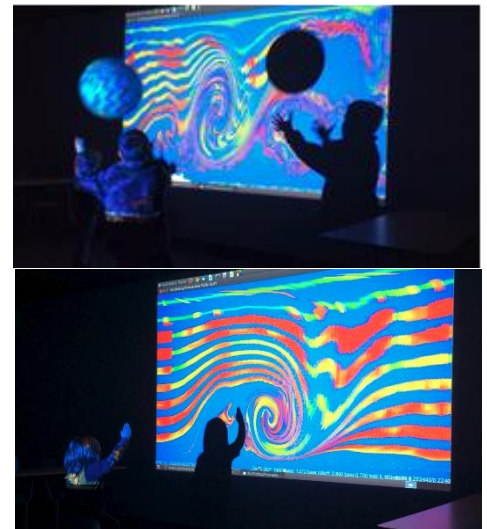
This novel interactive display projects a computer-generated depiction of fluid flow against a wall or other surface.

### TARGET PROBLEMS

- Hyperspectral chemical imaging (HCI) is incapable of measuring depth information or examine a specimen with a complicated internal structure.
- HCI records only 2D absorption maps, cannot detect the impurities buried inside a 3D volume.

### KEY FEATURES

- **Useful:** Installation in multiple settings, such as, classrooms, amusement parks, airport terminals, and train stations to name a few.
- **Fun:** Parents and kids alike could be active, burn some energy, and learn about fluid and air flow.
- **Educational:** Scientifically accurate software models fluid and/or air flow which may be used for teaching in school or university courses.
- **Options:** Sound sensitive versions may be utilized for music performances and on stage.
- **Flexible Set-up:** A range of pricing for projection and CPU components can be utilized to fit your budget needs and your specific display space.



### TECHNOLOGY

When any object is placed in the path of the projector beam, casting a shadow in the image, the fluid flow changes to seemingly flow around the shadow.

Large projections can allow participants to walk in front of the image and see the fluid swirl and flow around their silhouettes. In addition, objects of interest such as airfoils, models of fish, and any other object can be suspended by fine wires or utilized as puppets to observe the flow around these objects. If the projected surface is a whiteboard, shapes can be drawn on the whiteboard in dark marker, or dark refrigerator magnets could be used on a magnetic surface.

### INTELLECTUAL PROPERTY

This software is a registered with the US copyright office and is available for licensing.

### ABOUT THE INVENTOR(S)

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