Fire-Out
## Product Contract

**Product Description:** Fire Extinguishing Projectile  
**Market:** Home Safety  
**Estimated Price:** $15-20

<table>
<thead>
<tr>
<th>Customer Need</th>
<th>Product Attributes</th>
<th>Engineering Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>User activated</td>
<td>Safety</td>
<td>Pin to activate heat trigger</td>
</tr>
<tr>
<td>Deploys only in a fire</td>
<td>Safety</td>
<td>Trigger reacts in temperatures &gt;150-175°F</td>
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<tr>
<td>Self-oriented for optimal dispersion</td>
<td>Stability</td>
<td>Counterweight and geometry force into functional position</td>
</tr>
<tr>
<td>Comfortable to launch</td>
<td>Weight</td>
<td>Total weight between 1 and 4 lbs</td>
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<tr>
<td>Extinguishes nearby fire</td>
<td>Dispersion</td>
<td>Dry chemical covers 2 foot radius with 1/16&quot; thickness</td>
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</tbody>
</table>
Dispersion: Venturi Design

Intended Airflow

Actual Airflow
Dispersion: Decreased Volume, Increased Hole Size
Dispersion: Further improvements

- Include a diffuser to spread air flow
- Further Decrease Volume
- Increase Pressure
- Further Increase Hole Size
Triggering

- Cerrosafe material melts at 150-175°F
- Loaded Spring
- Pin punctures CO₂ cartridge