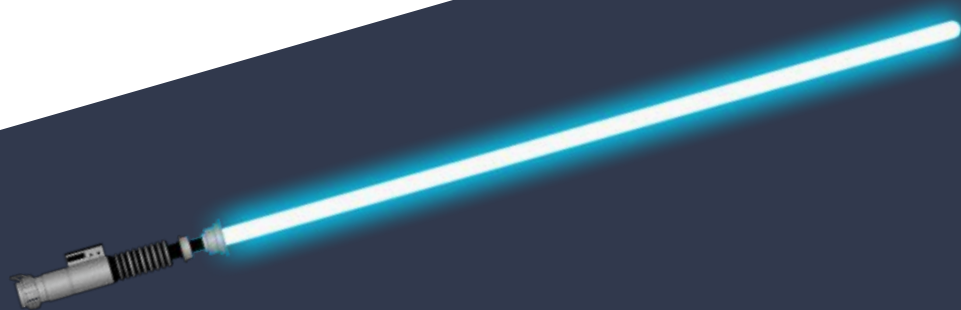


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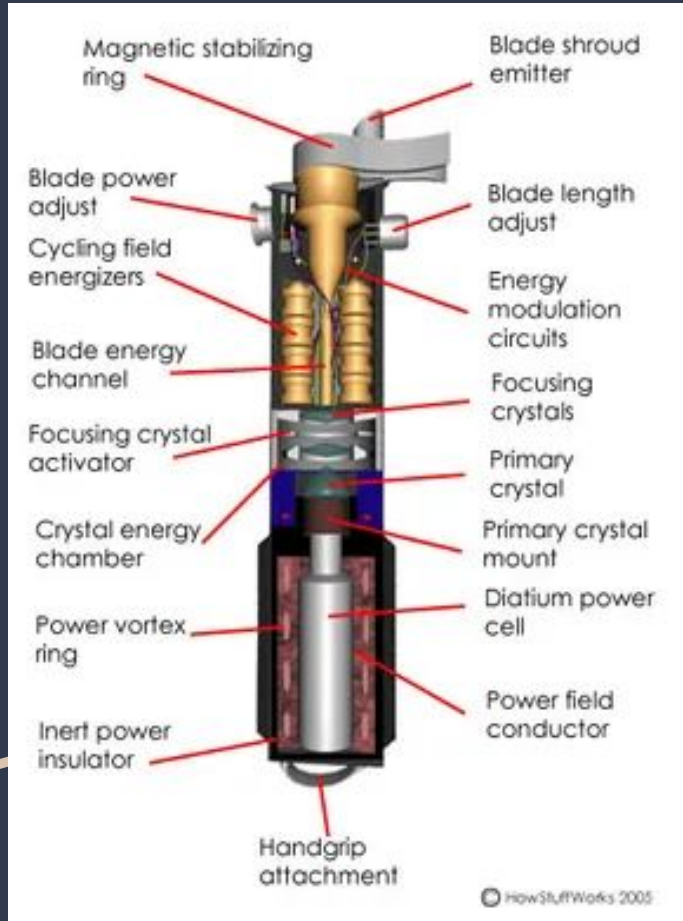
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Lightsaber

By: Cooper Lemly, Nicholas Mollica, and
Alex Rhodes



Inspiration



- The first time a lightsaber was seen was in **Star Wars: A New Hope** in 1977. Ever since then, it has become a staple in the Star Wars franchise.
- Every person who has watched the movies has thought about wielding a lightsaber.
- After watching these movies and brainstorming, our group decided to take on the project of a real life lightsaber.



Objectives



- To create a fun easy to use device that lives up to all the hype it has gotten from the movies
- Give it as close to as much power that it has in the movie
- With all of this safety is still one of our biggest priorities
- No material should be able to stop the cutting power of our lightsaber

Current Technology



- The closest working thing to a lightsaber right now is from a youtube channel called hacksmith industries.
- They are using a modified plasma torch with fuel of propane and pure oxygen to create a retractable blade.
- This plasma is at 4000 degrees Fahrenheit which means it can melt and cut through most things with time .
- One big hurdle we are going to have to jump is the energy source being too large and not that compact .

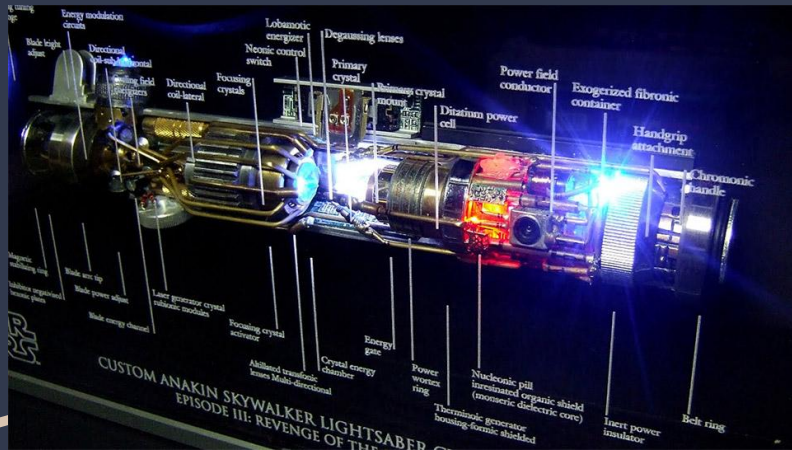
Possible Uses IRL

Although the project we are designing is meant to be used recreationally, some other possible uses:

- Jaws of Life Use
- Industrial Metal Cutting
- Military Use



Potential Risks/Concerns



- Without the actual technology in the movie, how do we replicate the lightsaber?
- Will the energy source for the plasma of the lightsaber be too large to be carried around or held?
- Is it worth the time and money?
- Will people be able to afford it?
- Would the military be able to make use of a lightsaber?

Approach

- Our approach will be to grow as fast as possible and research as much as possible about the tech
- We don't want to focus on profit at the beginning of the company and instead focus on creating as much hype around our product as possible
- We want to have as many people working on our product as possible to advance quickly
- We also want to have a separate sales and marketing team to focus on creating a market and gaining 'buzz' around our product
- Growing is our priority and profit once we have a great product with a market

Approach



Design

- We are hoping in our design to have similar form factor to the lightsaber in the movies for easy maneuverability
- With our next generation fuel source we are hoping to get rid of any external tanks needed
- Our new nozzle design upgrades the efficiency and power of our blade
- Our current engineering challenge is being able to fit a pure oxygen source in that form factor
- We are currently looking into switching to a liquid oxygen base to have more density but that comes with its own challenges

Budget



- Looking for \$300 million through series B financing
 - This is broken down into specific areas to develop our not a lightsaber
 - Facilities, employees salaries, research etc.
- Employees Salaries
 - Expect to hire 60-70 employees 25% of funding
- Sales & Marketing
 - Expected to be 25% of funding
- Manufacturing
 - Expect to be 30% of funding
 - This includes our Facilities
- Research
 - 20% of our funding is expected to be put towards our research
- We want to focus our budget towards growing as fast as possible

Schedule



- With current technologies we plan to have a working prototype within the first two months of funding
- We plan on creating a marketing campaign within these first three months
- First year of work is going to be dedicated to research and development of new prototypes and versions of our lightsaber
- Within the first year we plan to have our product ready to launch
- We also plan to grow our employment proportionally to the rate at which we create new tech and prototypes
- It is estimated that a year will be enough time for our first launch

Facilities and Resources

- We are looking for funding to construct a state of the art R&D lab to engineer this new advanced product
- Headquarters: \$20,000,000
- Engineering Space: \$70,000,000
- Manufacturing: \$10,000,000
- Total Cost for Facilities: \$100,000,000



References

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