



The *GO* Dock

A portable sound amplifier/charger for your smartphone

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IDT-290 Capstone Spring 2014



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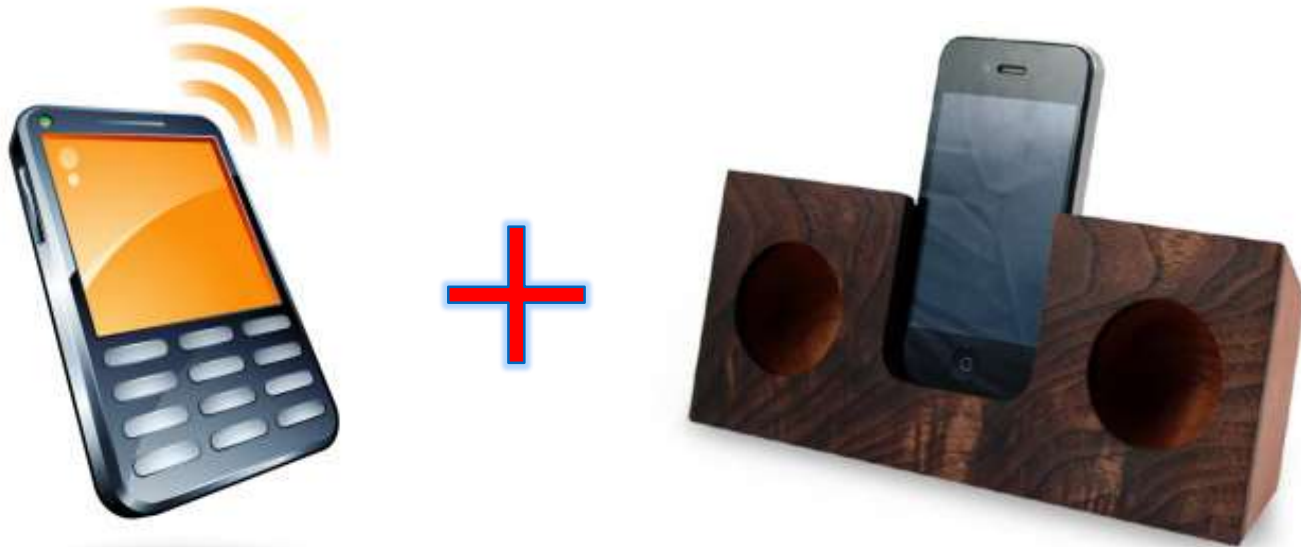


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Project Summary



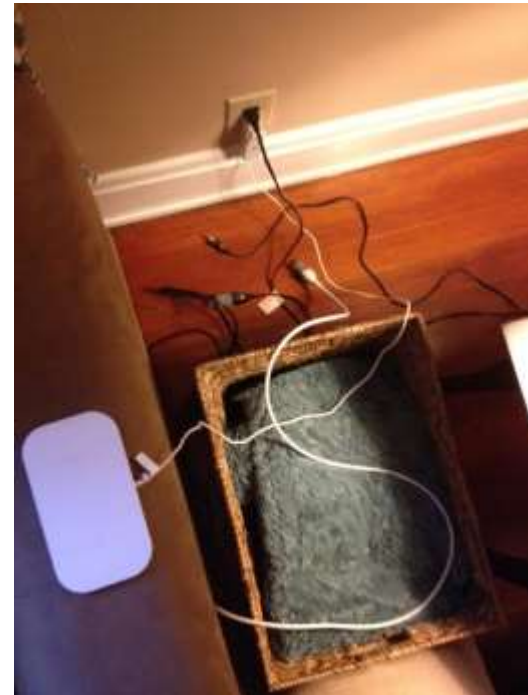
- Allow for wireless phone charging via portable, rechargeable battery.
- Phone volume amplifier.
- When away from a wall socket, customer can still charge device as well intensify its speaker output.

Market Research-Customer Needs

- Minimalist Design
- Portability/Compact size
- Can charge multiple phone types.

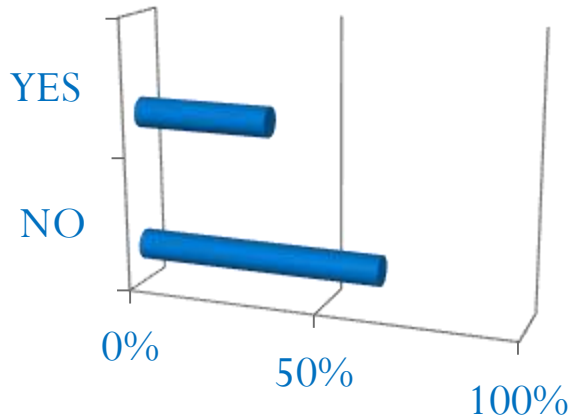


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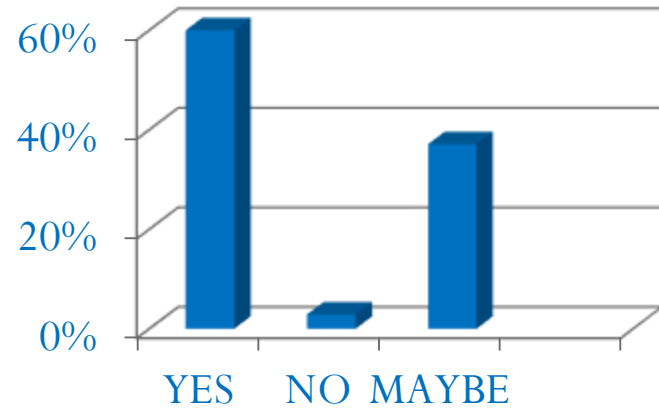


Market Research: Survey

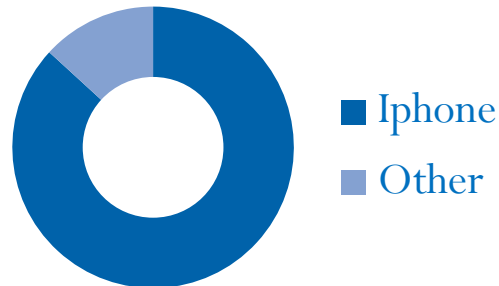
Do you currently use a docking station for your cell phone? (Used for listening to music and or charging your cell phone?)



If you answered "No" to the previous question, would you consider using a wireless charging product for your cell phone?



What type of cell phone do you use?



RND Dock for Samsung Galaxy S3

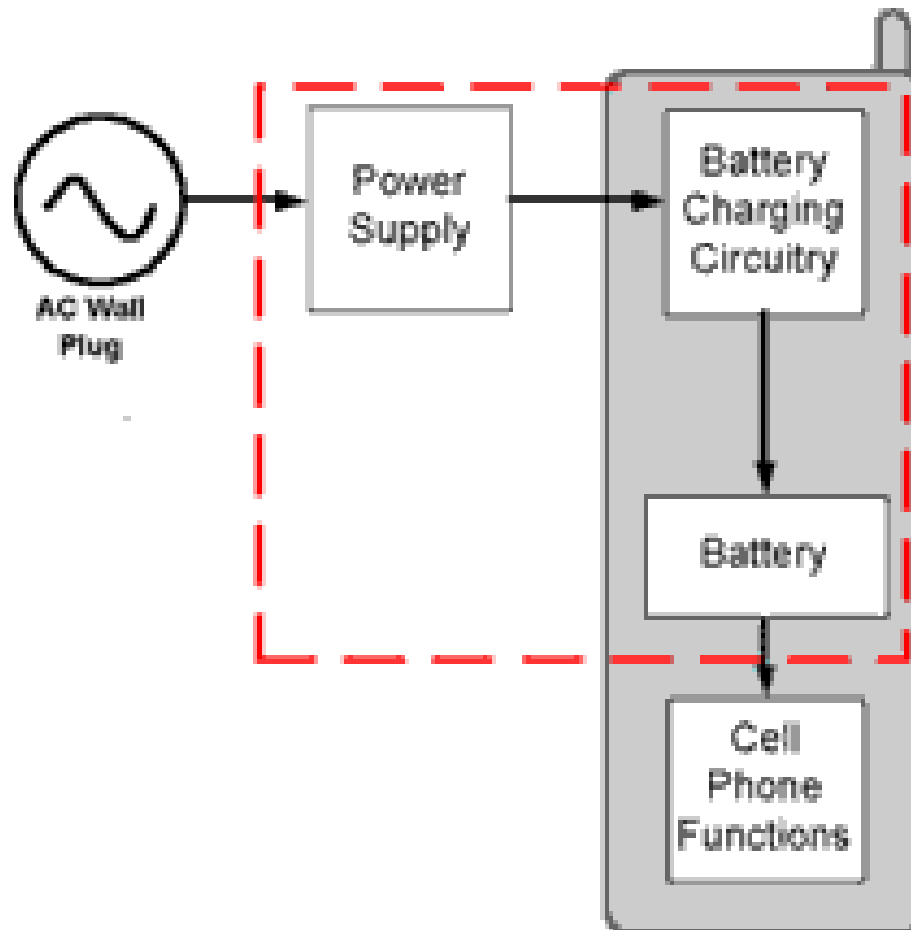


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niceEshop Black Egg Shaped Silicon Stand Amplifier

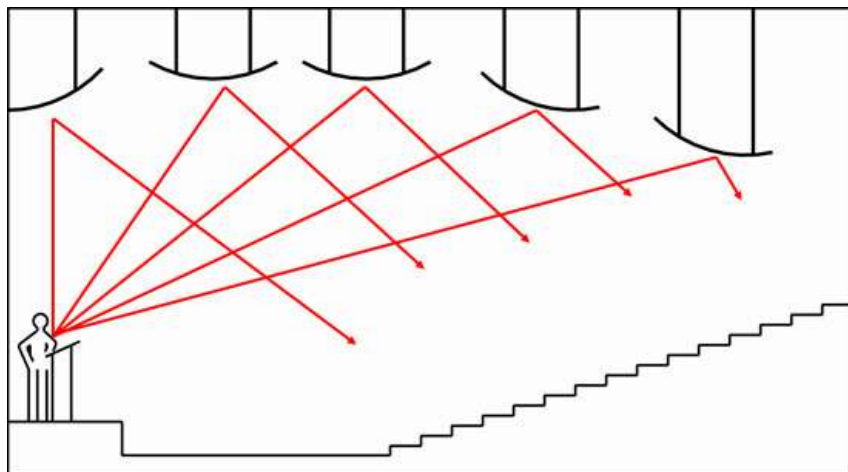


Rechargeable Battery



The components in the red box are part of the battery charger system

Sound Science



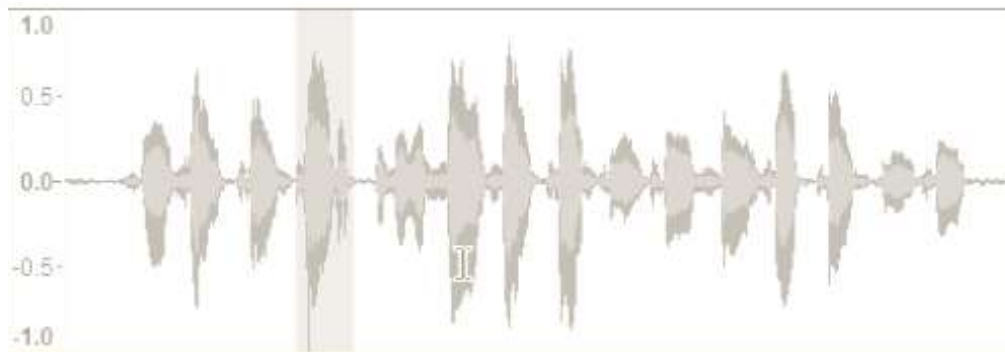
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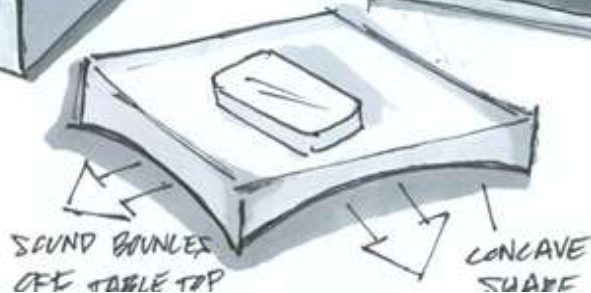
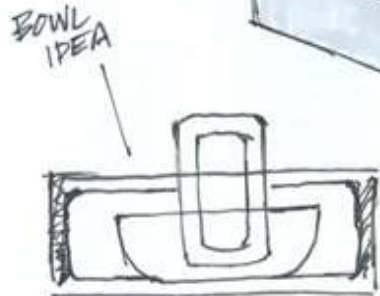
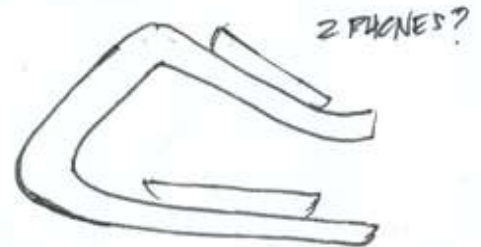
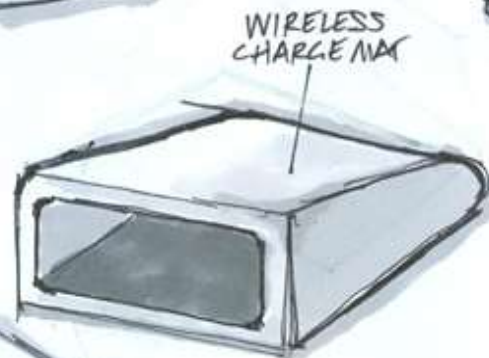
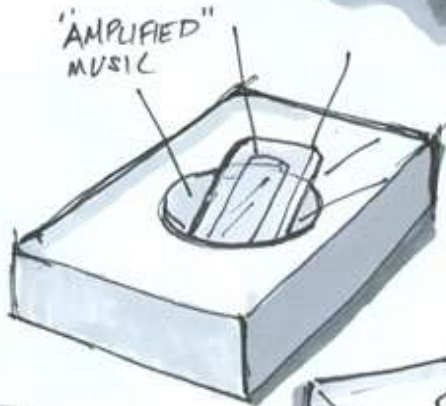
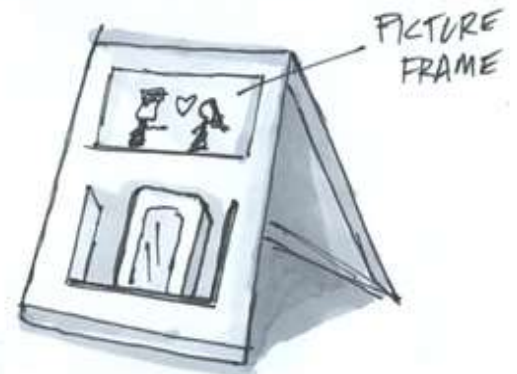
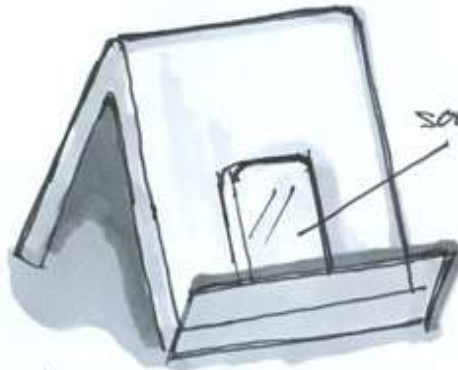
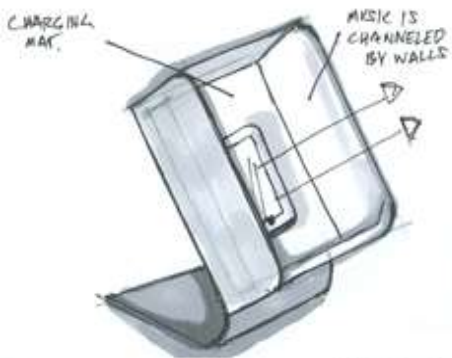
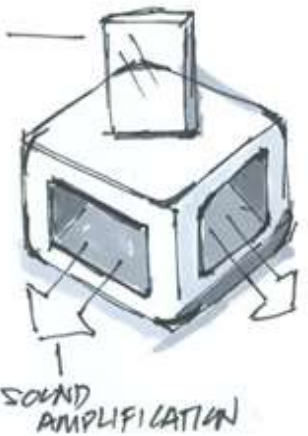
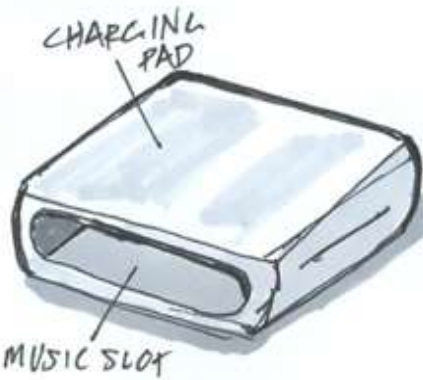
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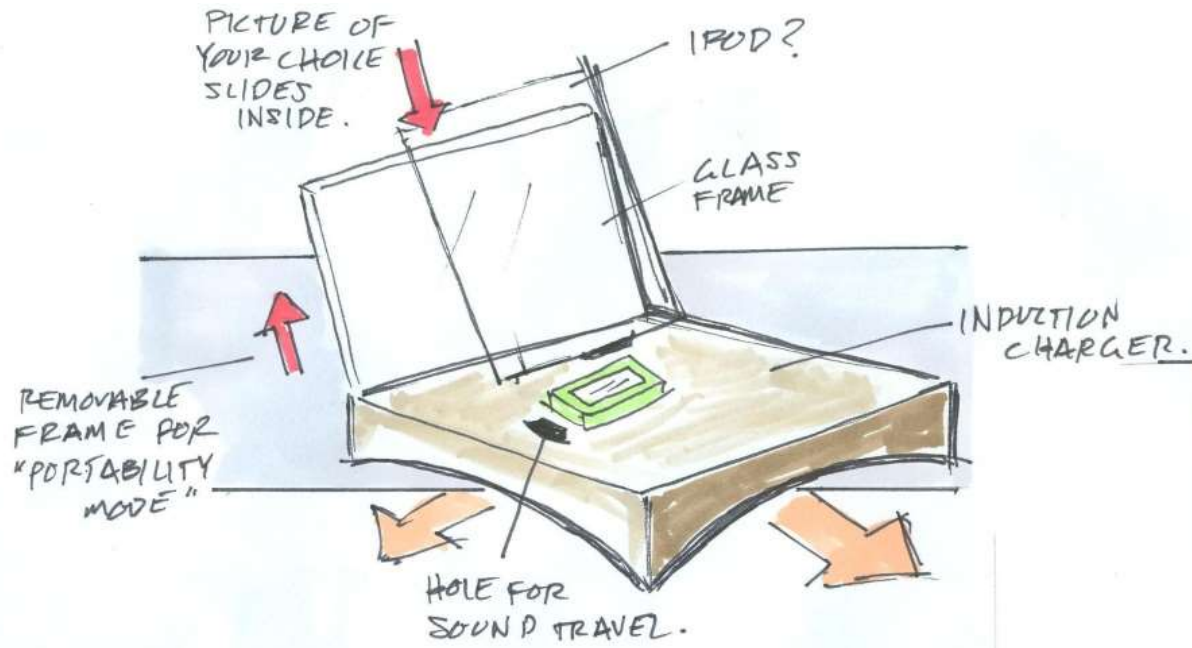


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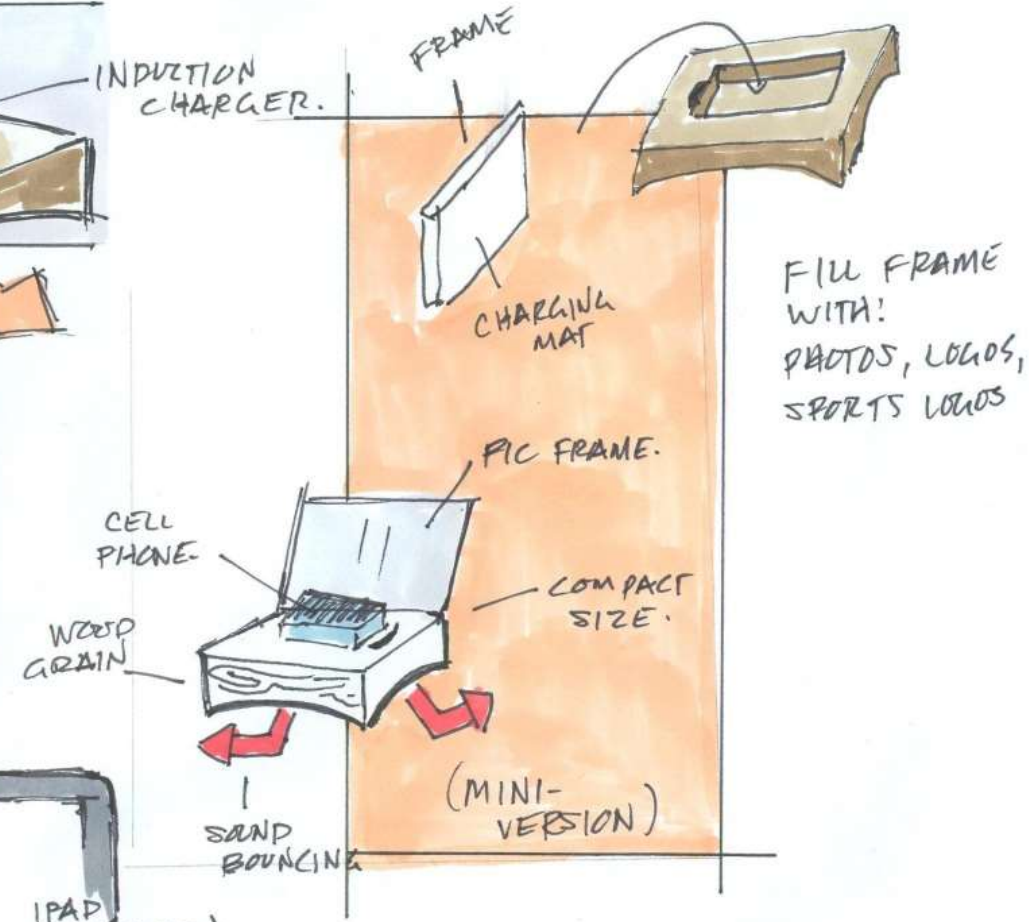


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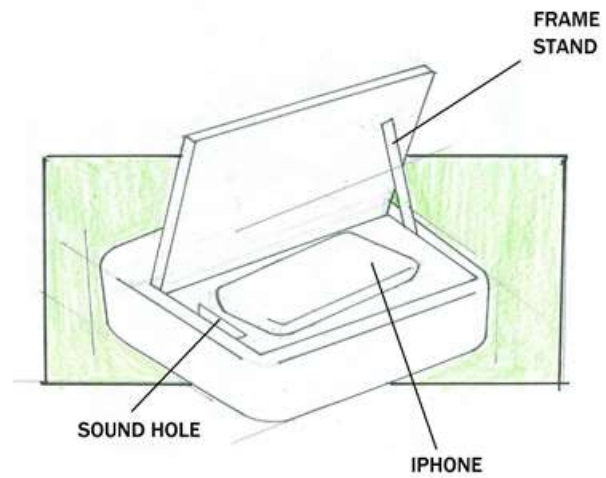
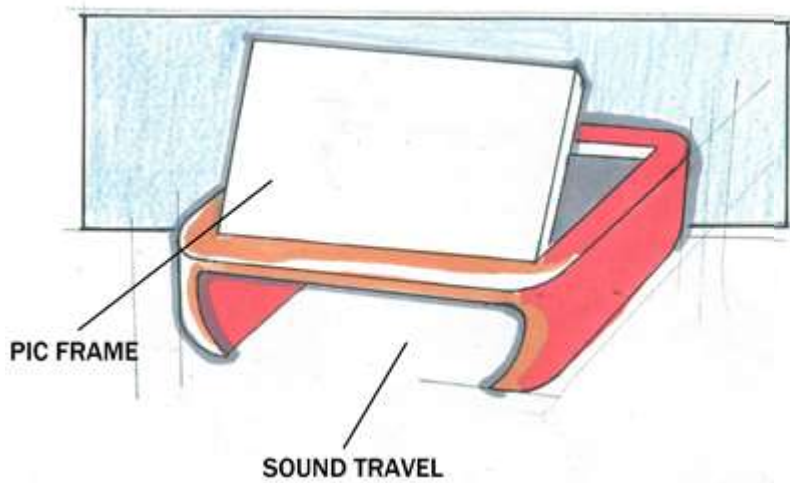
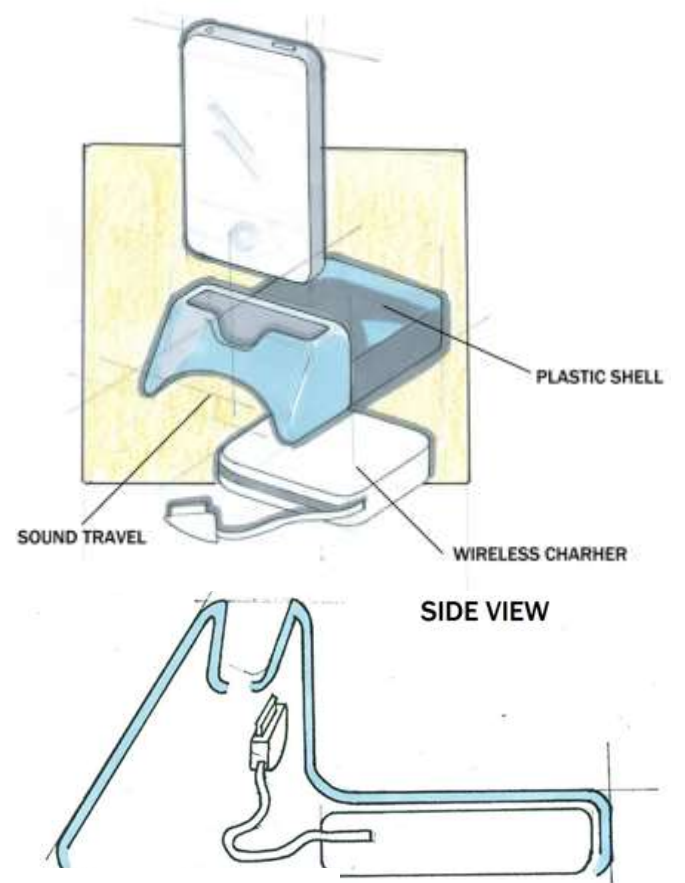
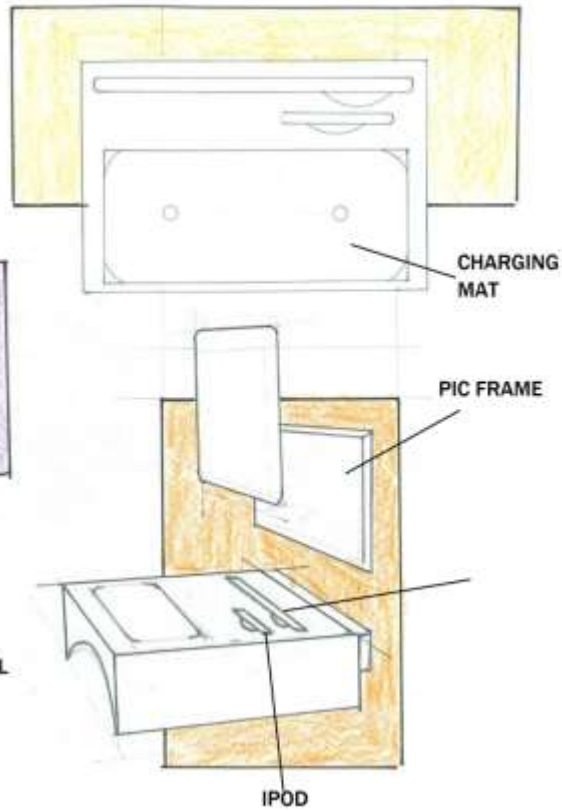
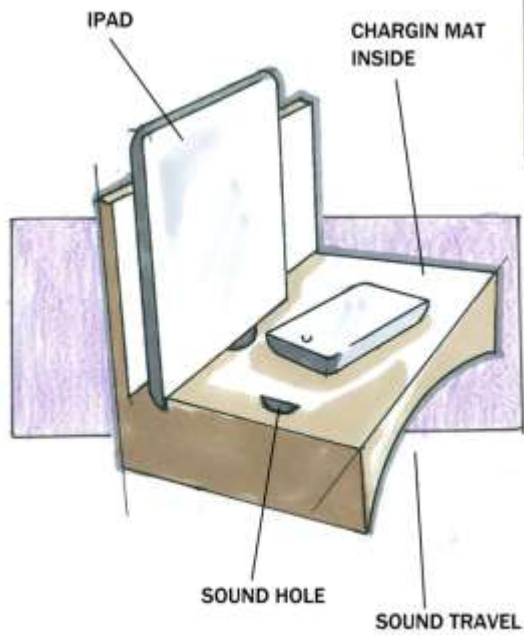


FRAME:
 - DETACHES → BECOMES A PORTABLE WIRELESS CHARGER!



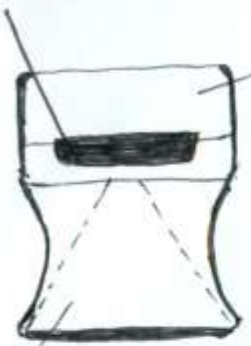
FILL FRAME WITH!
 PHOTOS, LOGOS,
 SPORTS LOGOS

- CUSTOMER NEEDS:
- PORTABLE / COMPACT SIZE
 - LONGER WIRE (WHEN PLUGGED IN)
 - LIKE PERSONAL TOUCH.
 - CAN CHARGE MULTIPLE DEVICES

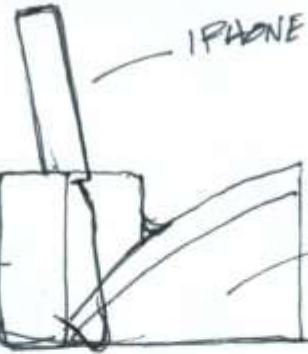


HOME CRADLE.

BATTERY COMPARTMENT

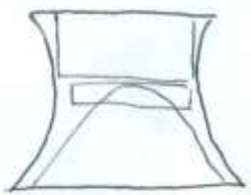


SOUND CHANNEL.

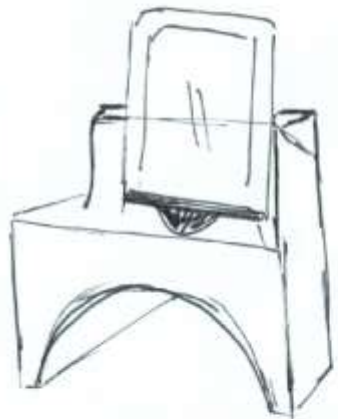
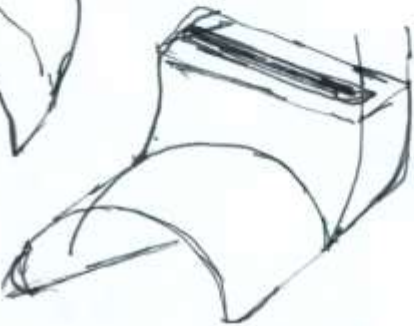


IPHONE

BATTERY.



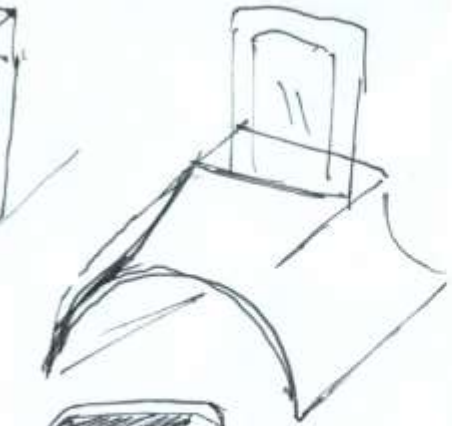
SOUND TRAVEL



HALF CIRCLE CUT FOR HOME BUTTON.



- TOP VIEW -



BATTERY

PHONE SLOT

SOUND TRAVEL.

1

3D Printing (Mcor Iris 3D Printer)



- No aesthetics-(fillets, smooth surfaces, eye pleasing shape)
- Used simply to identify general size and function of product.

- Printed samples to get a better idea of the size of the product
- Used to test sound



Mcor Iris in Action



Post Processing ("Weeding")

1



2



3



Final Model





Citations

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