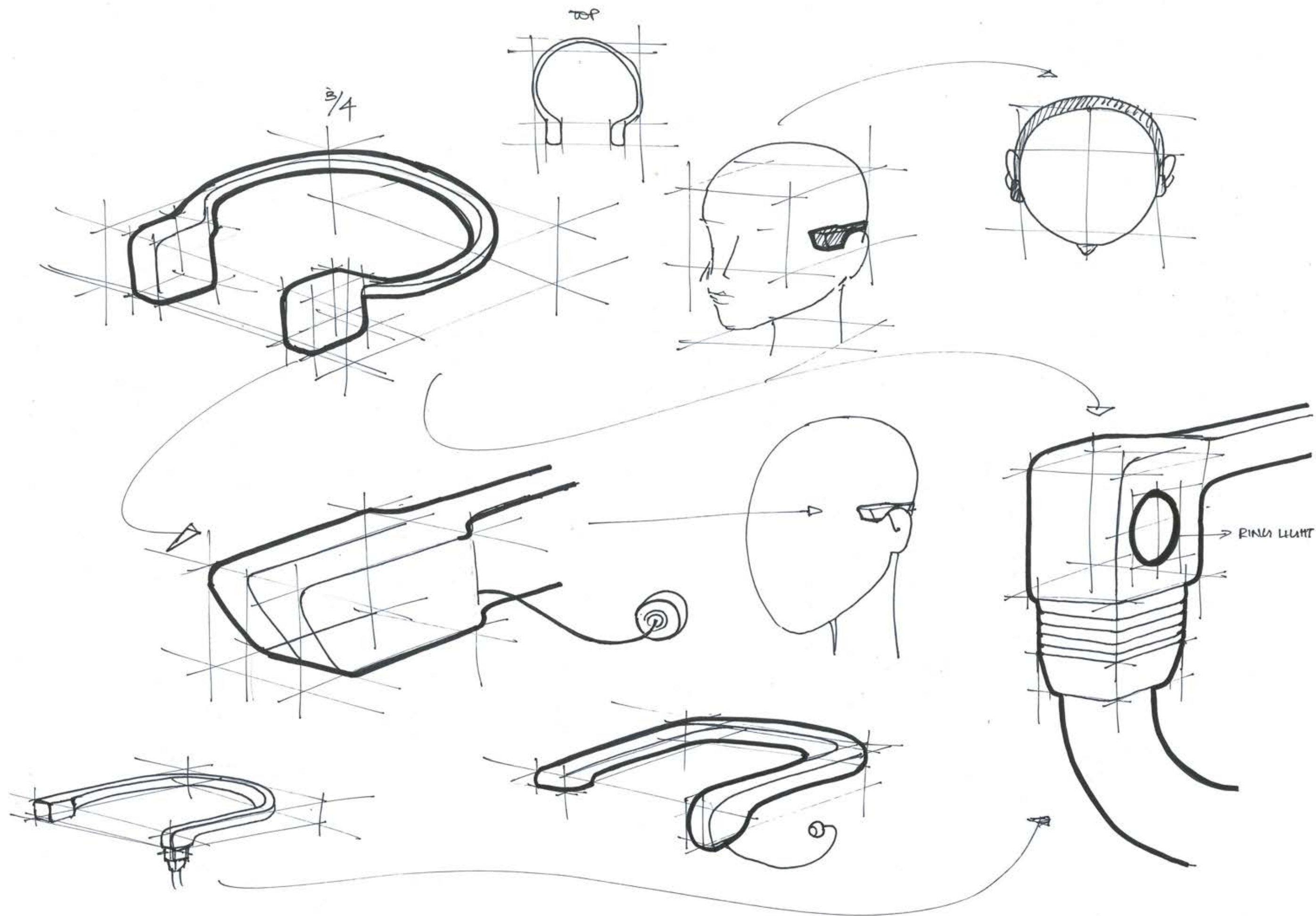
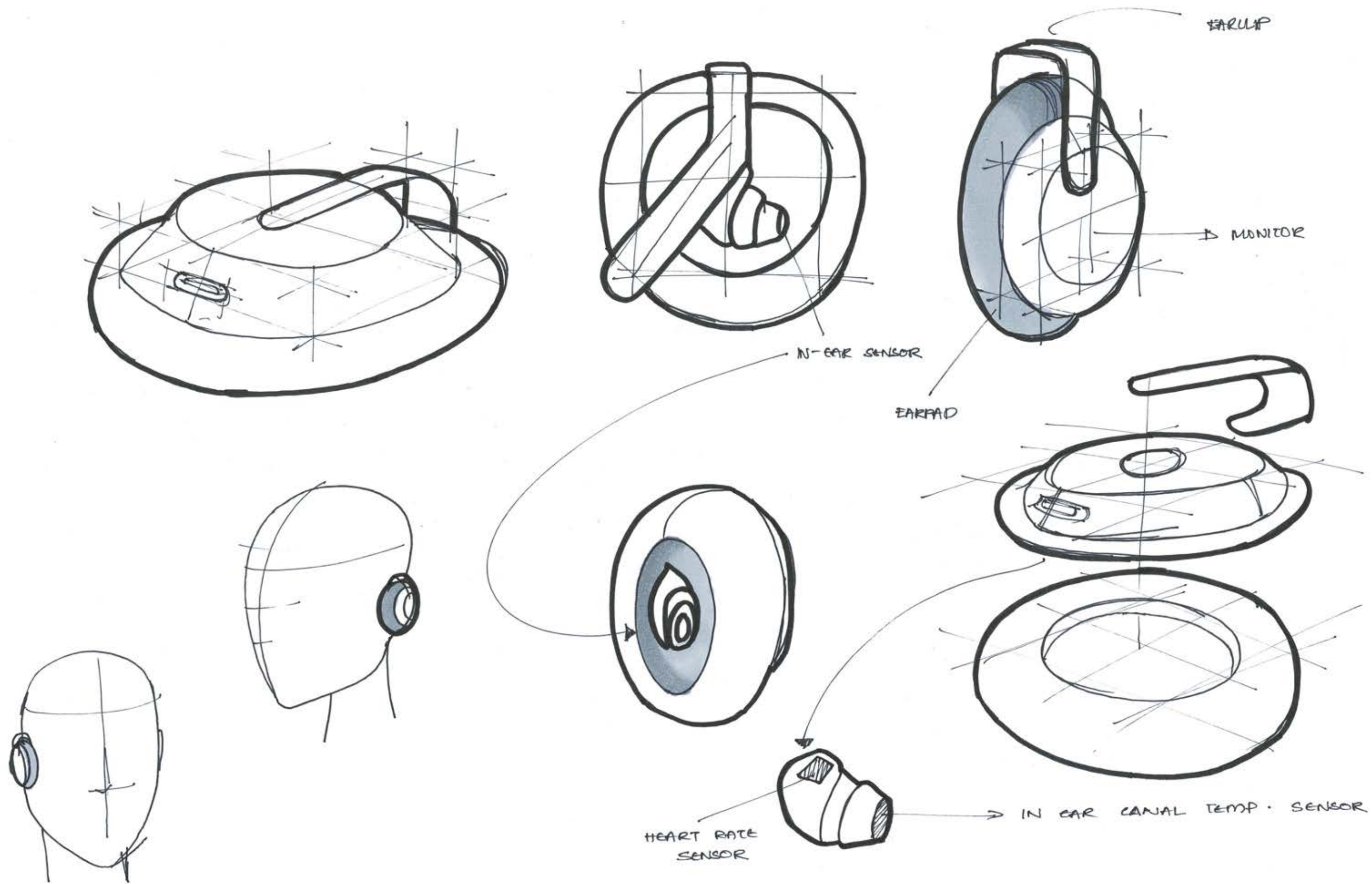
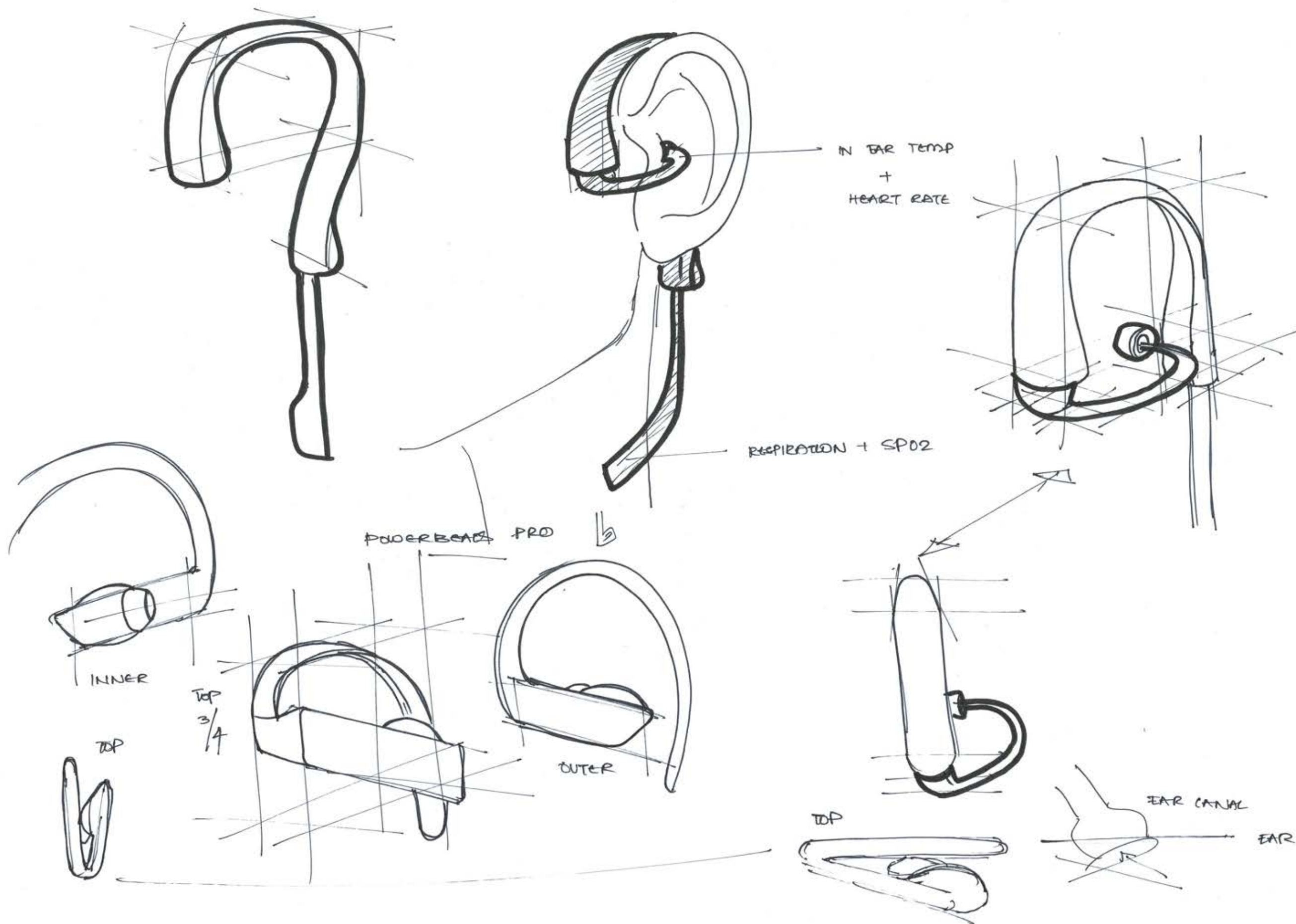
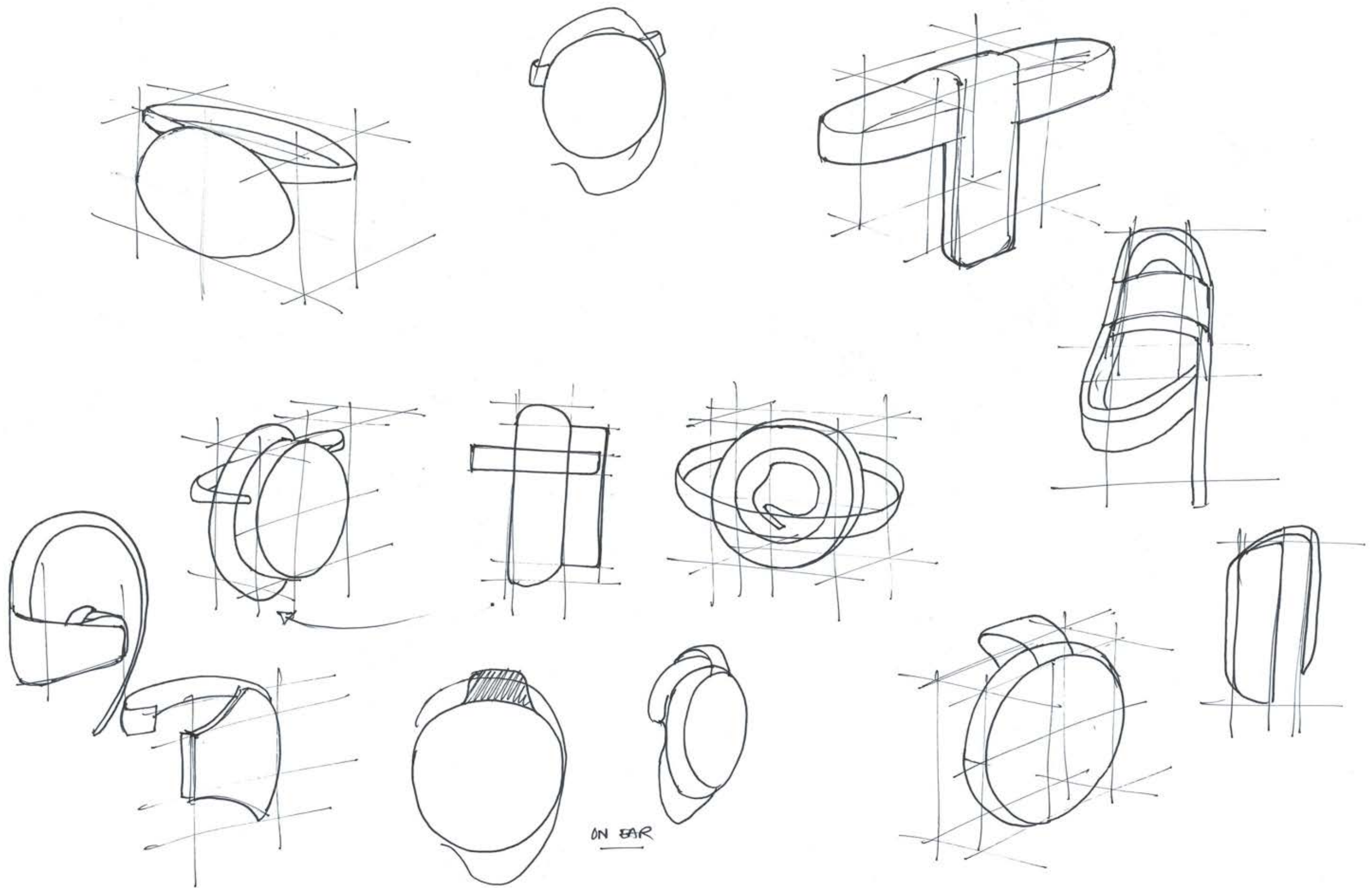










ANTERIOR CYMBA CONCHA

LOWER POINT
OF EAR CANAL

INSULA
INTERTRICULA

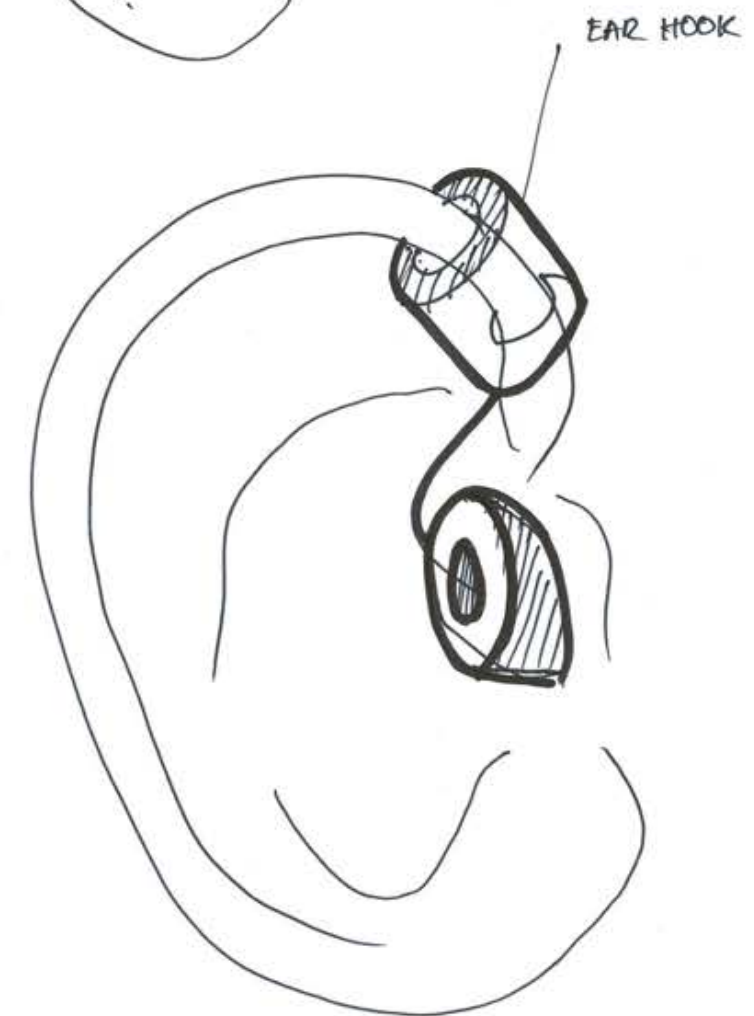
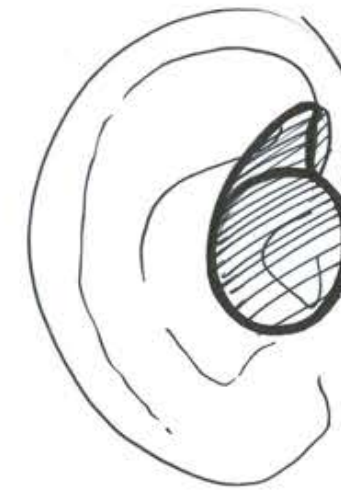
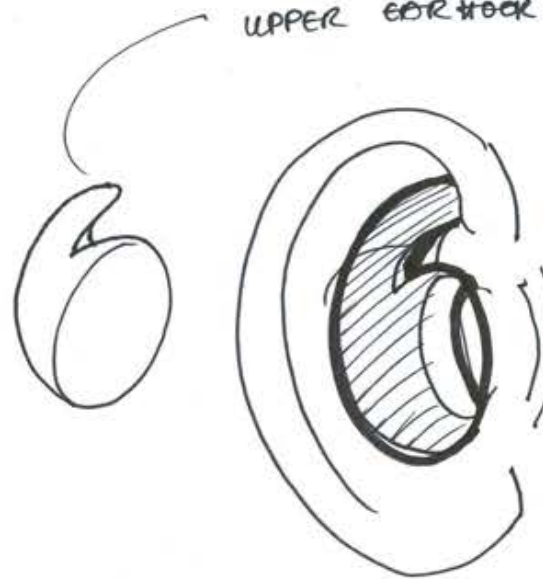
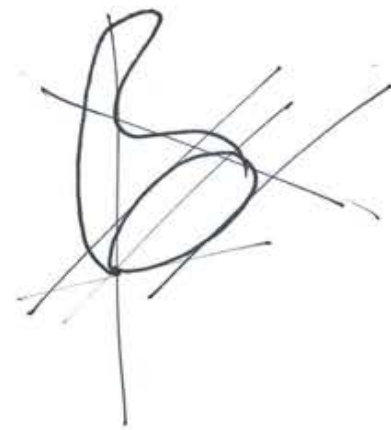
POSTERIOR CONCHA

HORIZONTAL ENDPOINT
OF EAR CANAL

ANTITRAGUS

UPPER EAR HOOK

EAR HOOK





AIM TO FIT WITHIN
THIS SECTION



OUTER
EAR
HOOK

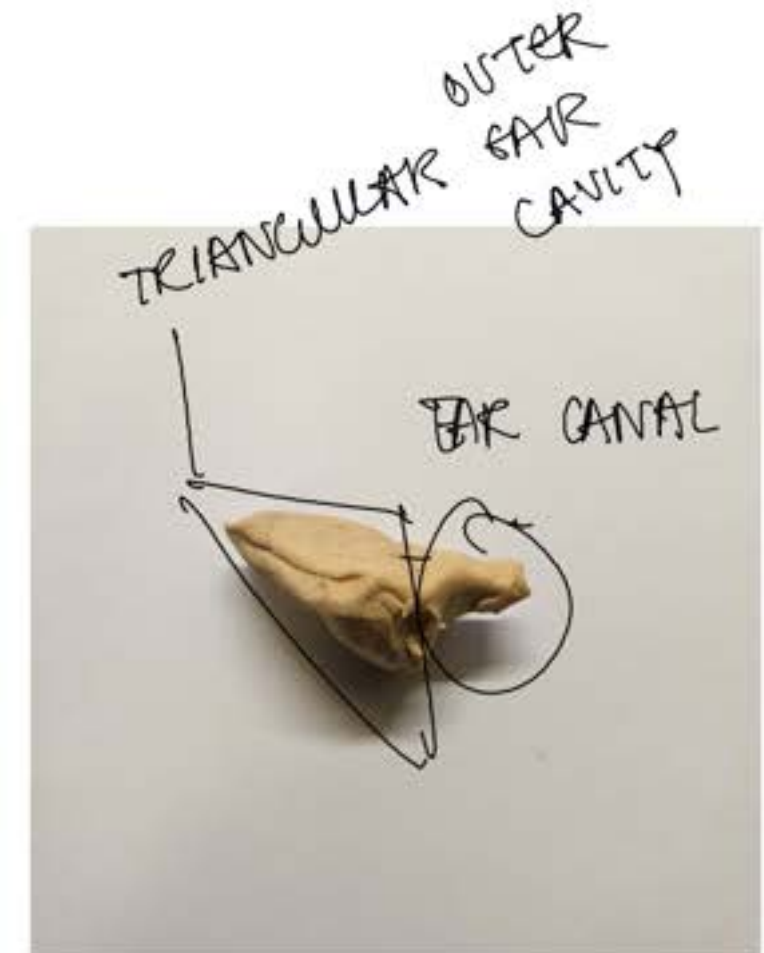
TO KEEP
THE EAR
MONITOR
IN PLACE



FLUSH
FULL
EAR
FITMENT

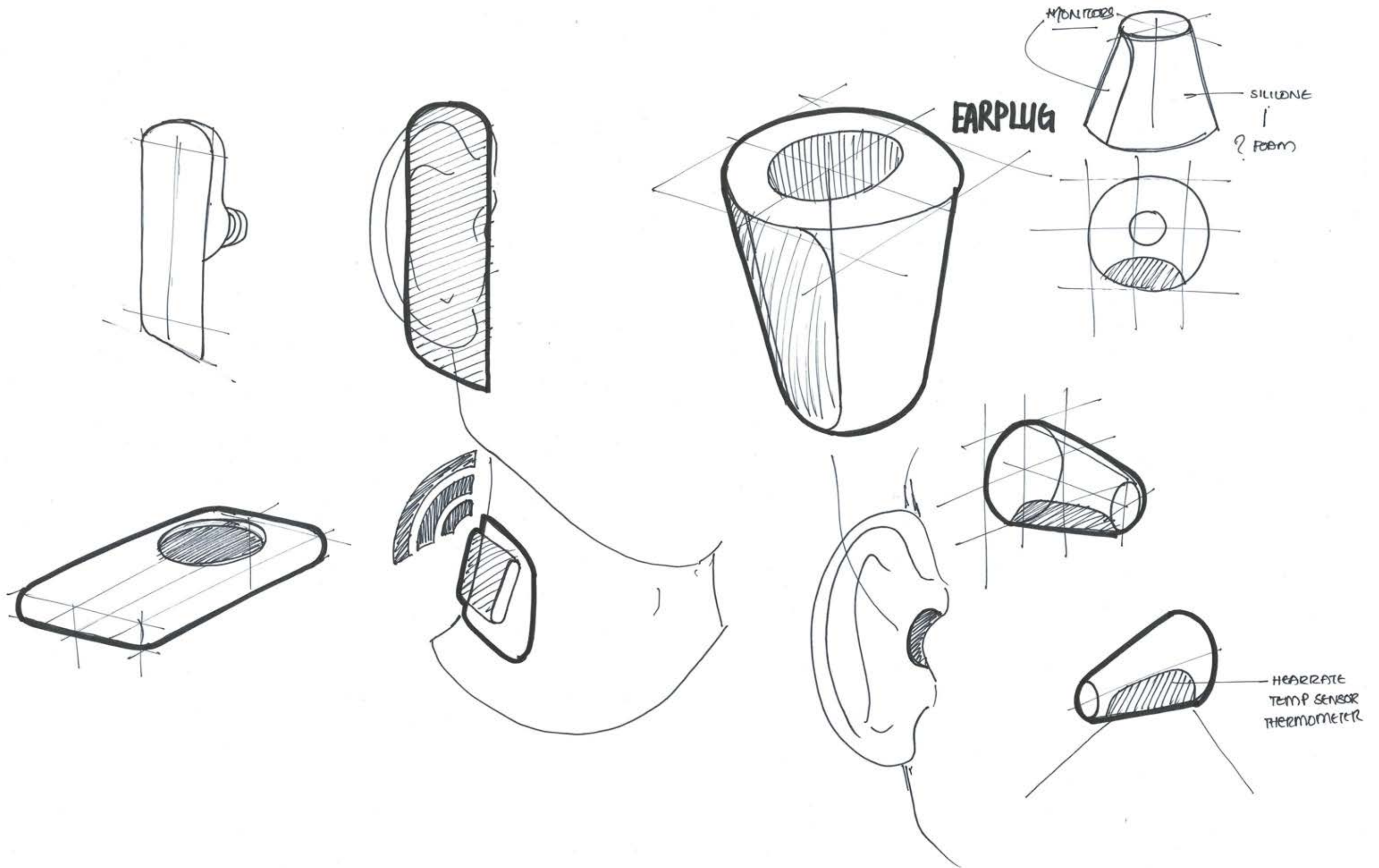


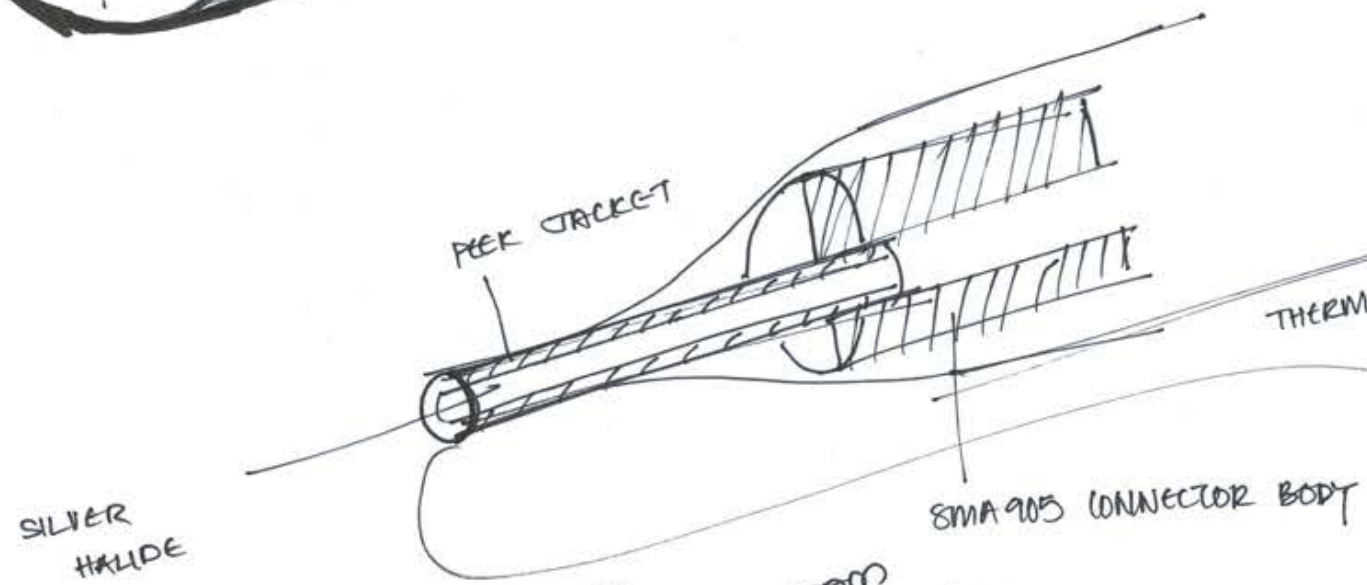
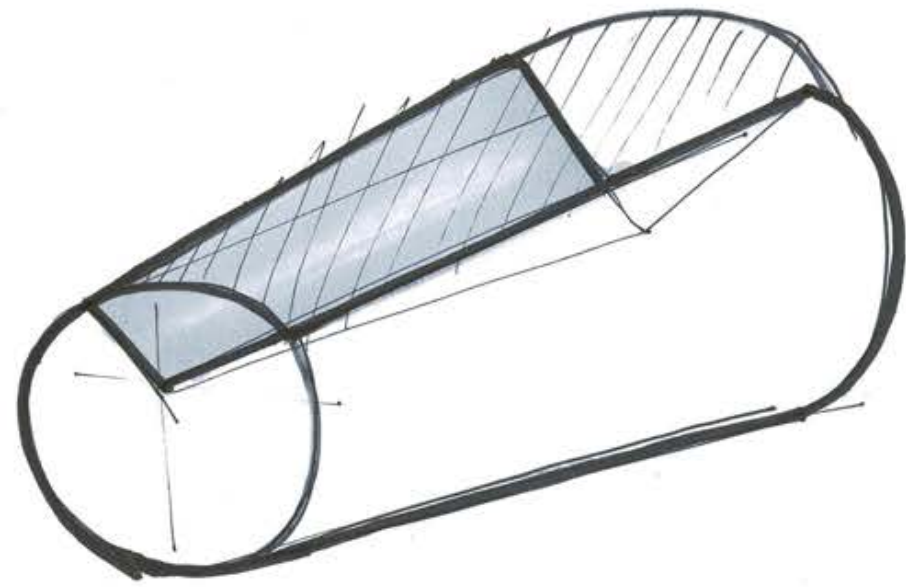
INNER
EAR
HOOK



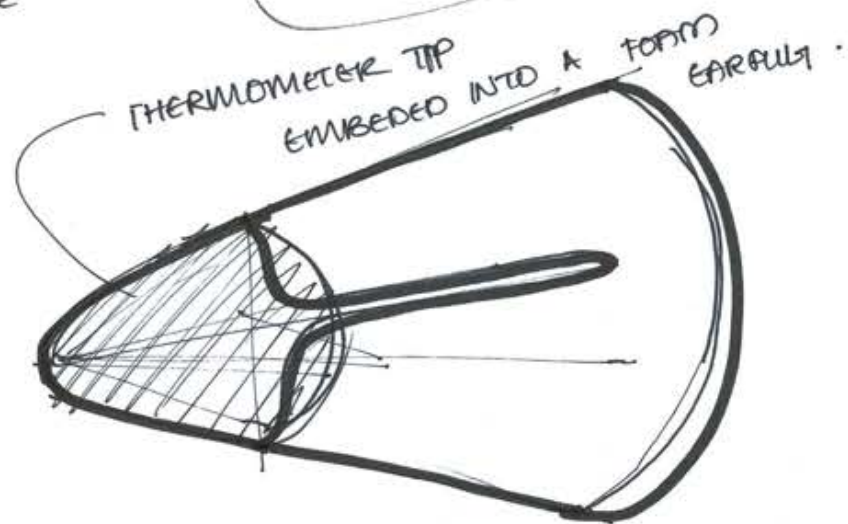
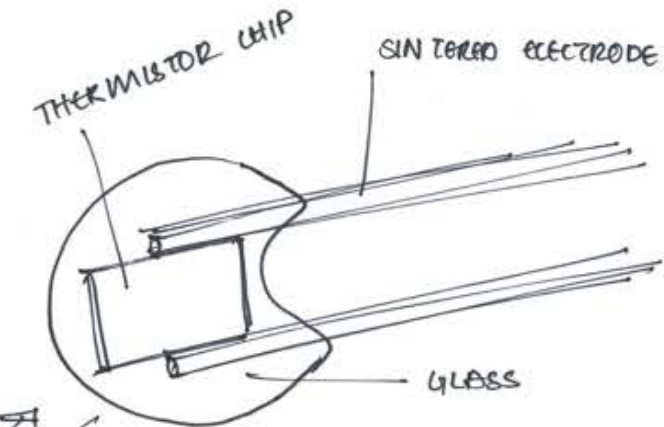
TRIANGULAR OUTER
EAR CAVITY

EAR CANAL



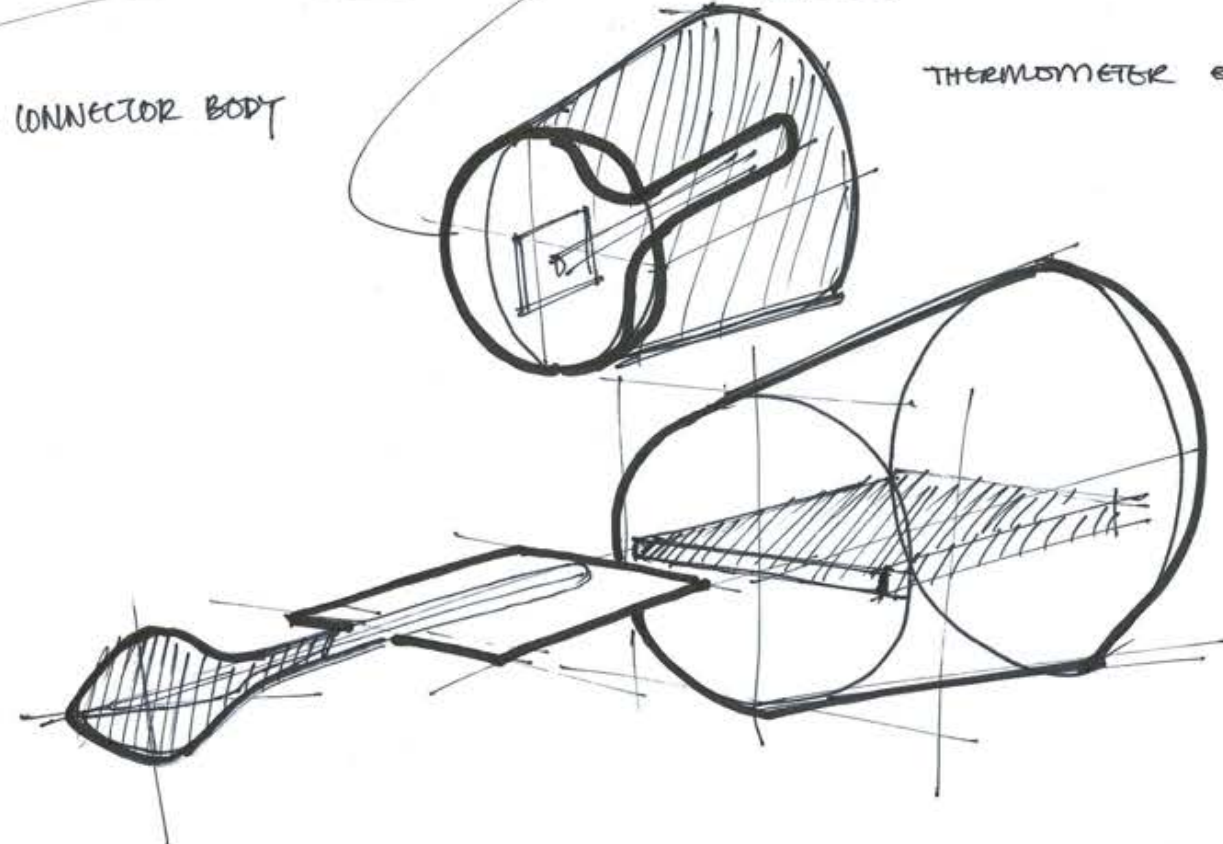


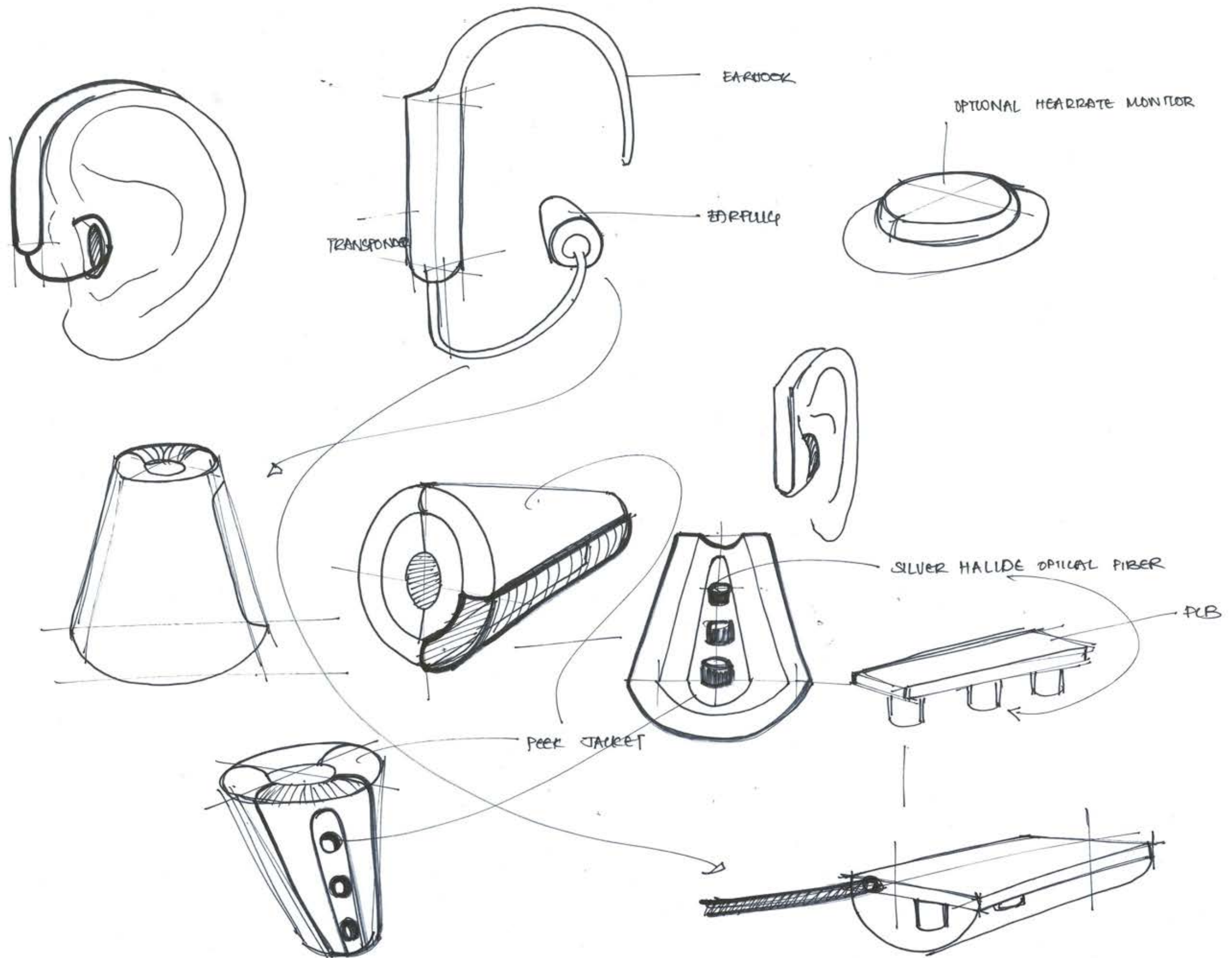
THERMISTOR.

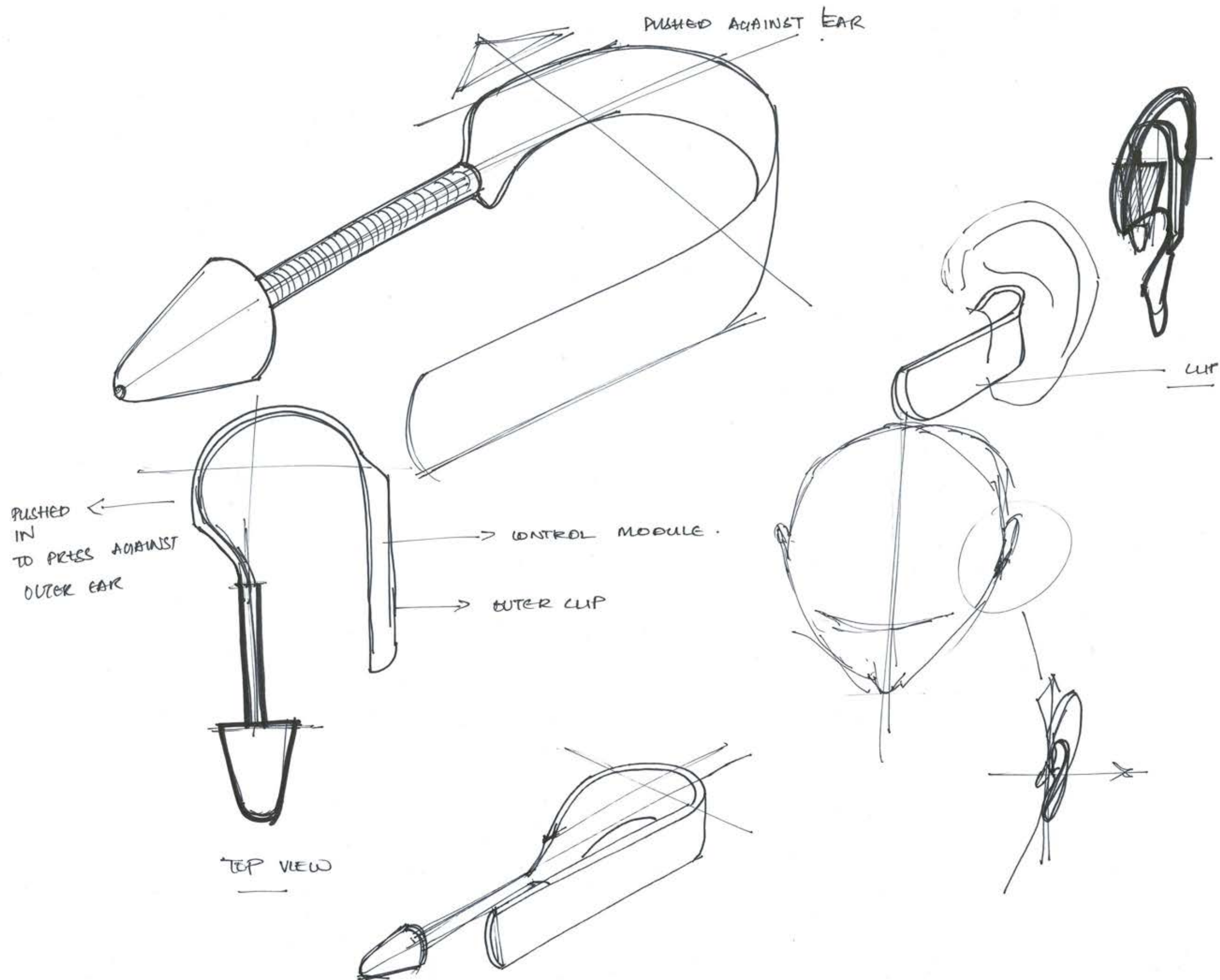


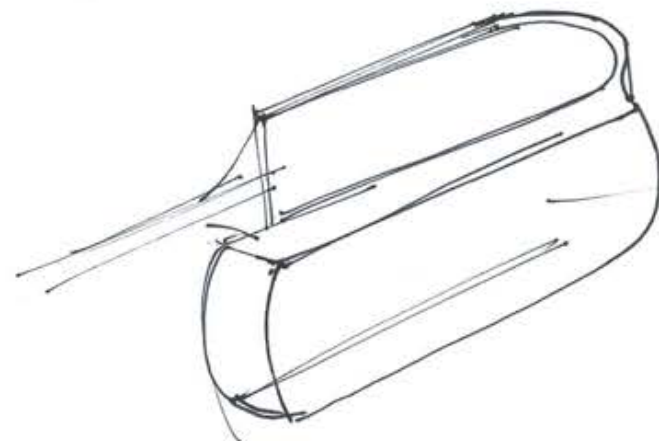
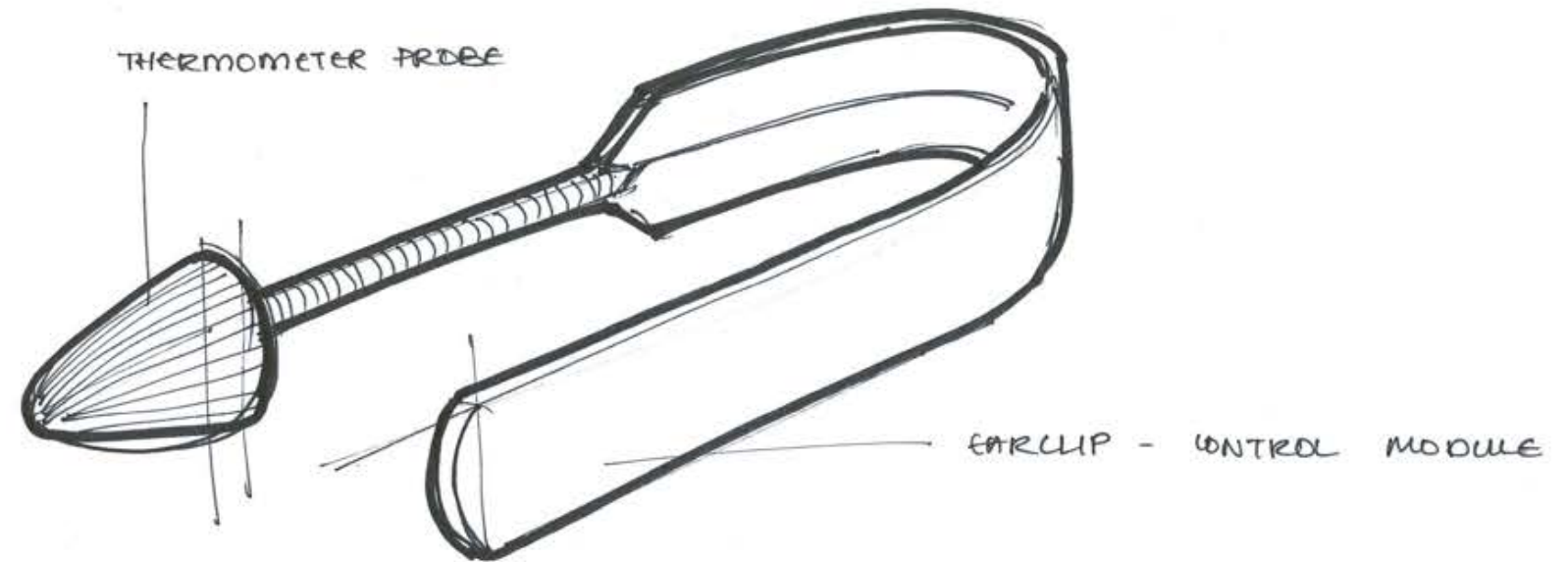
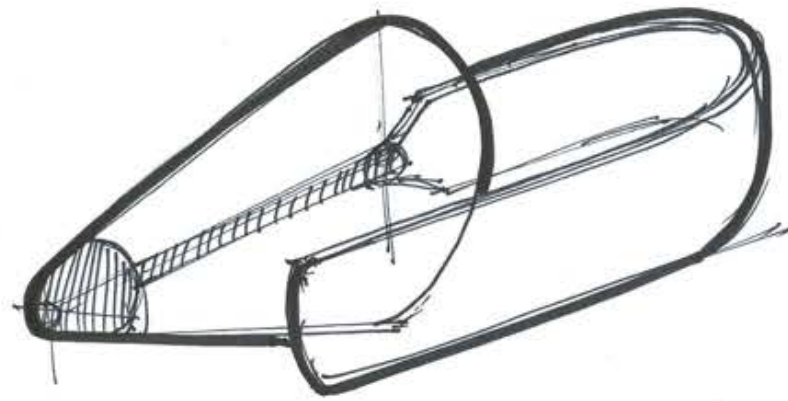
EARPLUG

THERMISTOR EAR PLUG.

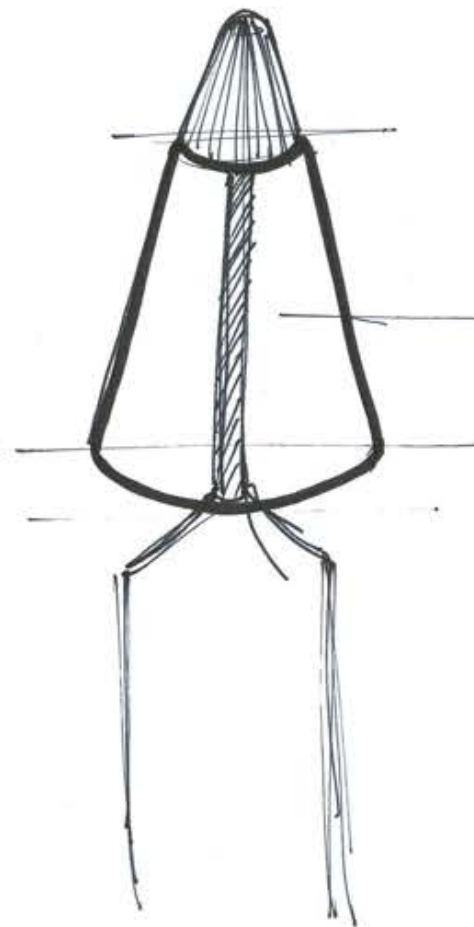




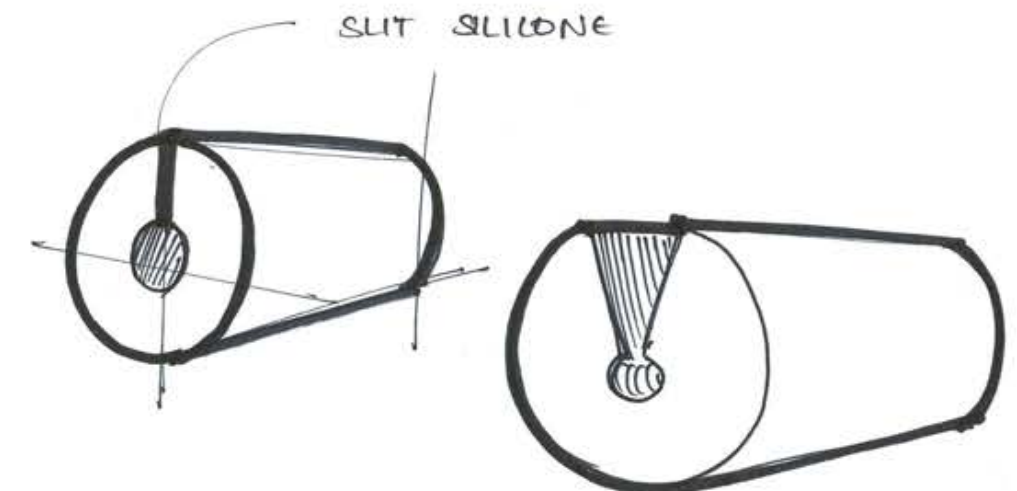


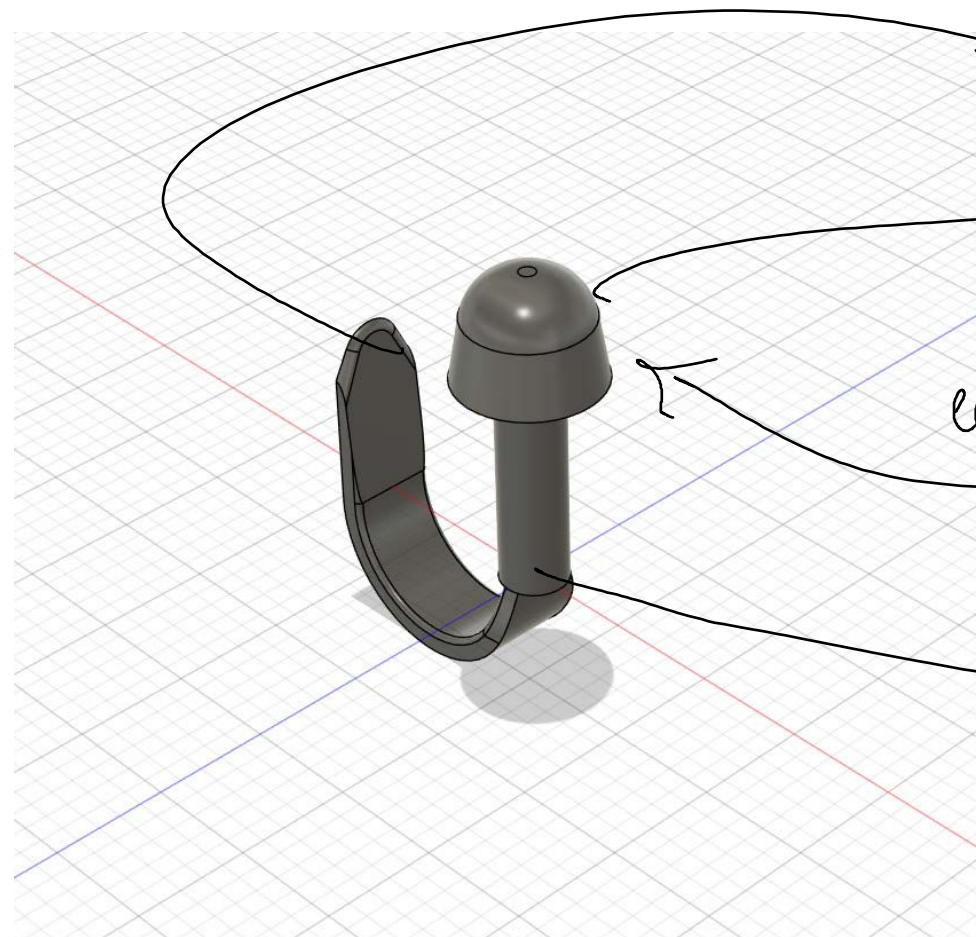


THICKER EAR
CLIP FOR
CONTROL MODULE



FOAM EARPUG — SWAP OUT
(SWAPPABLE)





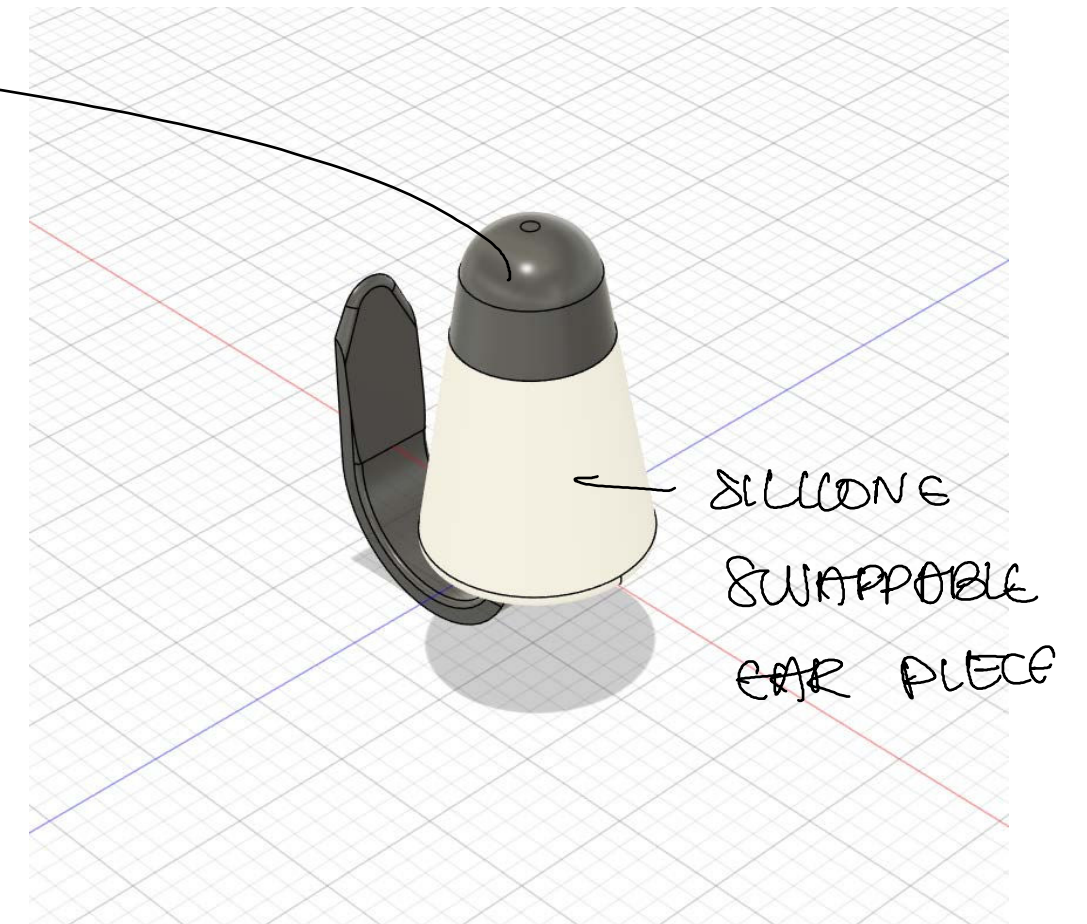
→ METAL EAR CLIP

→ THERMOMETER

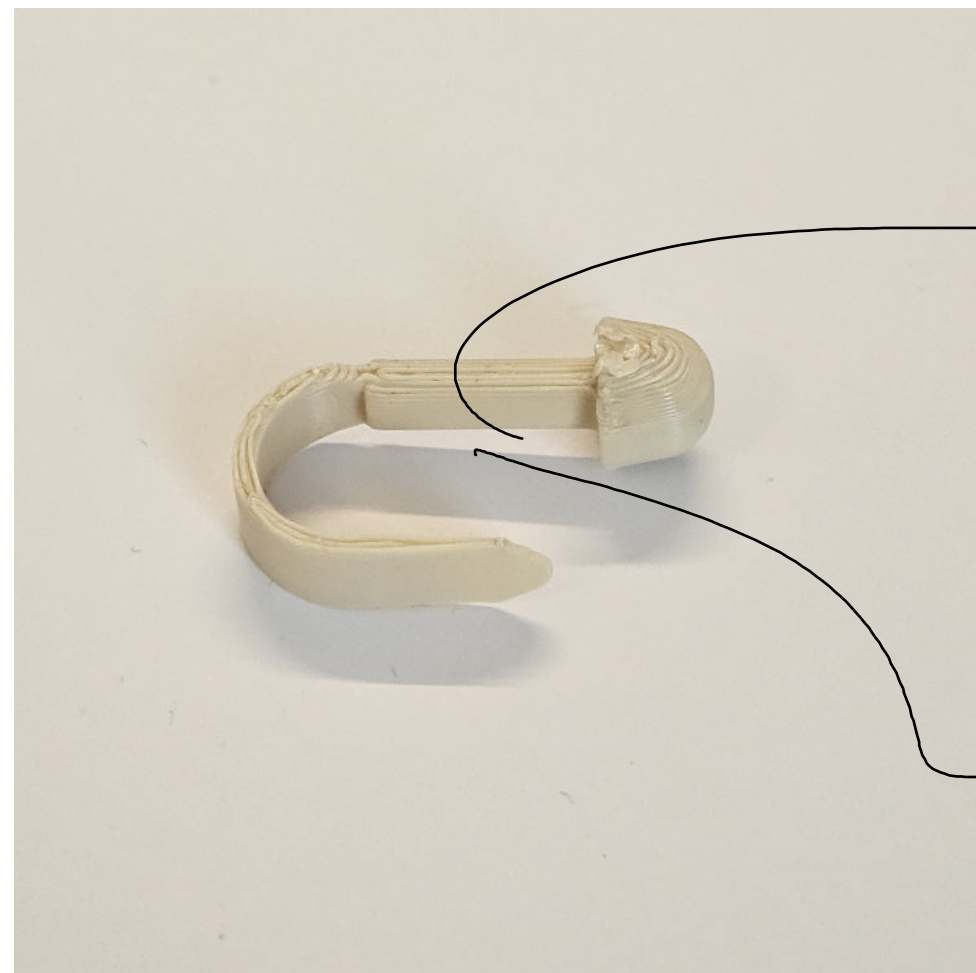
→ CORE EAR PIECE

→ CONTROL MODULE

IN EAR MONITOR v1



→ SILICONE
SWAPPABLE
EAR PIECE



→ 3D PRINT

REAL WORLD TEST

IDENTIFIED PROBLEMS : EARCLIP POSITION

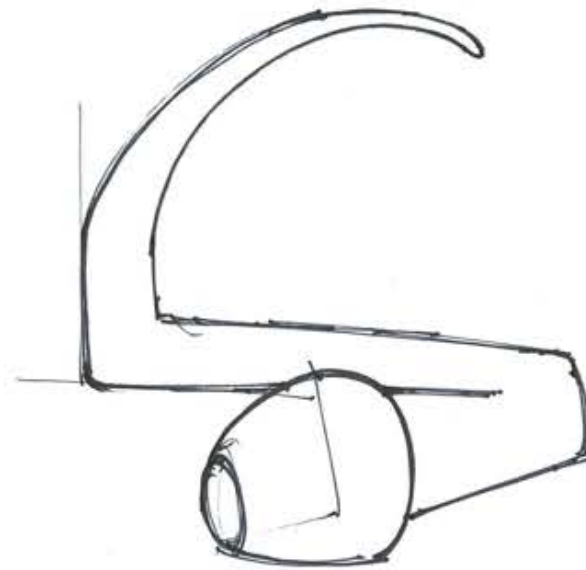
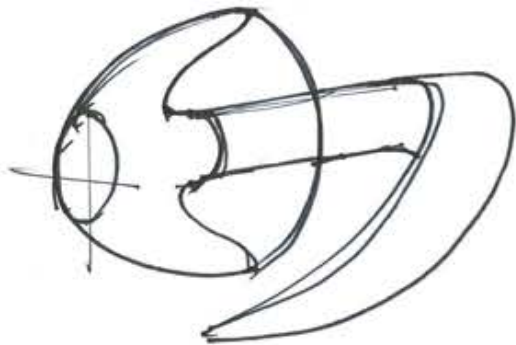
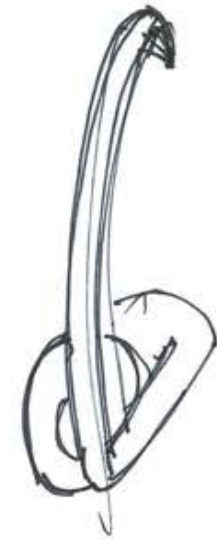
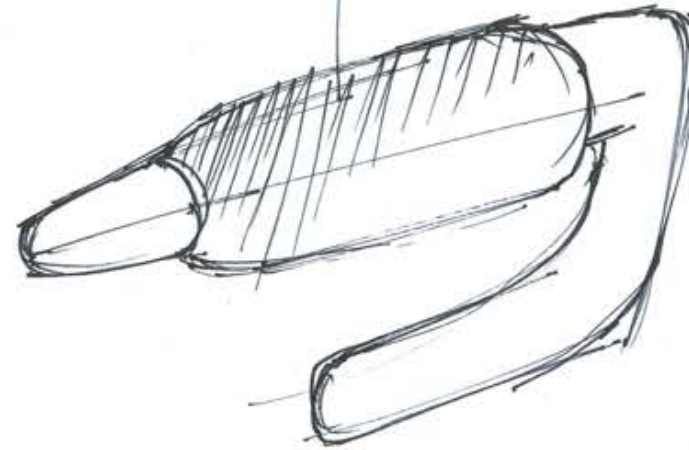
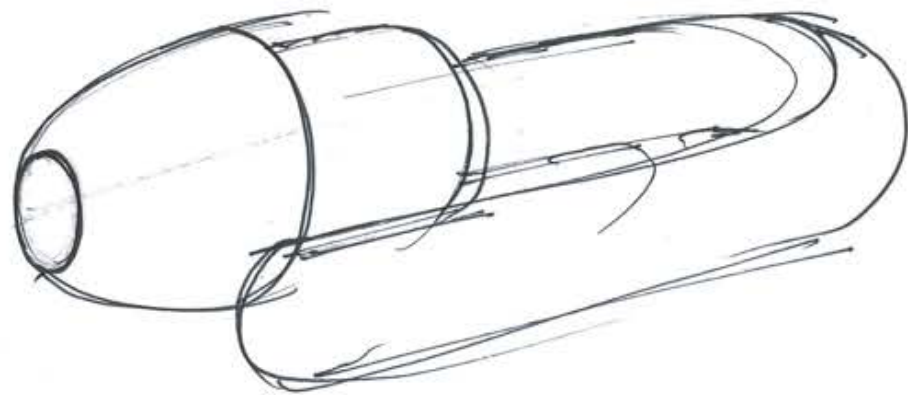
THERMOMETER PLACEMENT

→ SILICONE / FOAM - INSERT WON'T WORK.

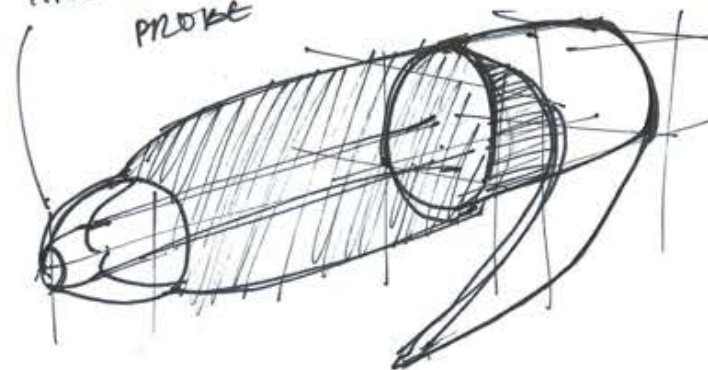
SWAPPABLE SILICONE BODY

MAINTAIN
INTERNAL
COMPONENTS

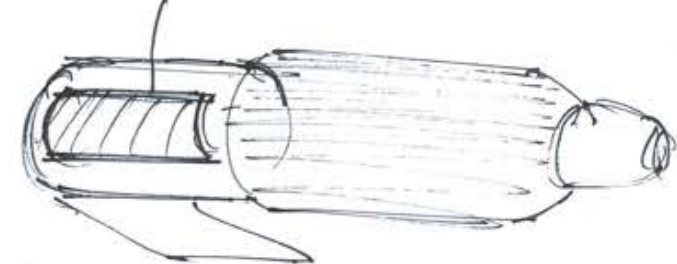
SWAPPABLE SILICONE

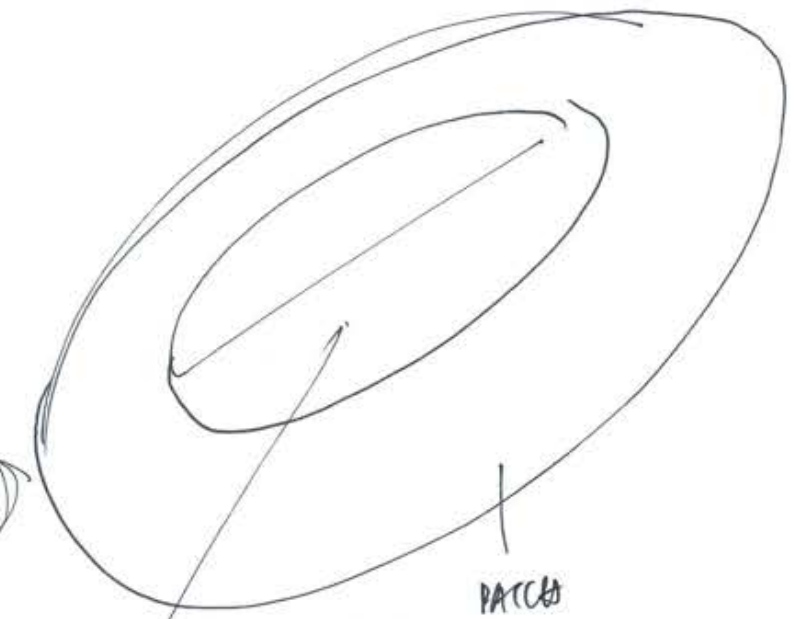
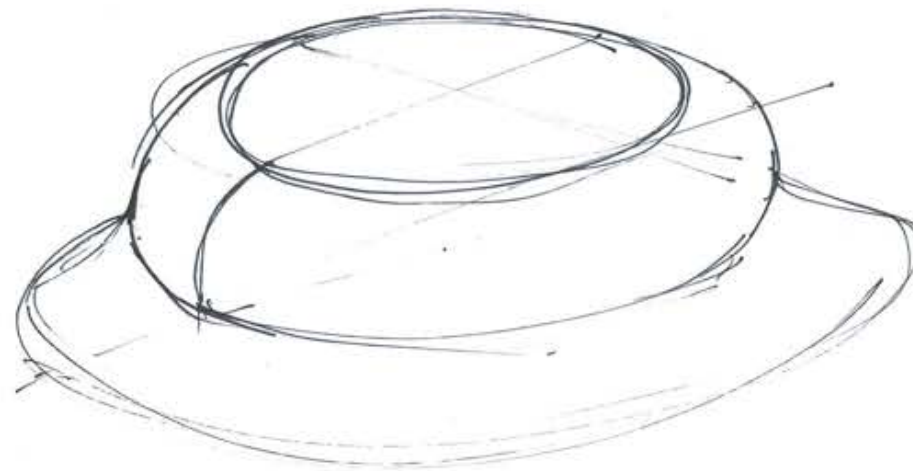
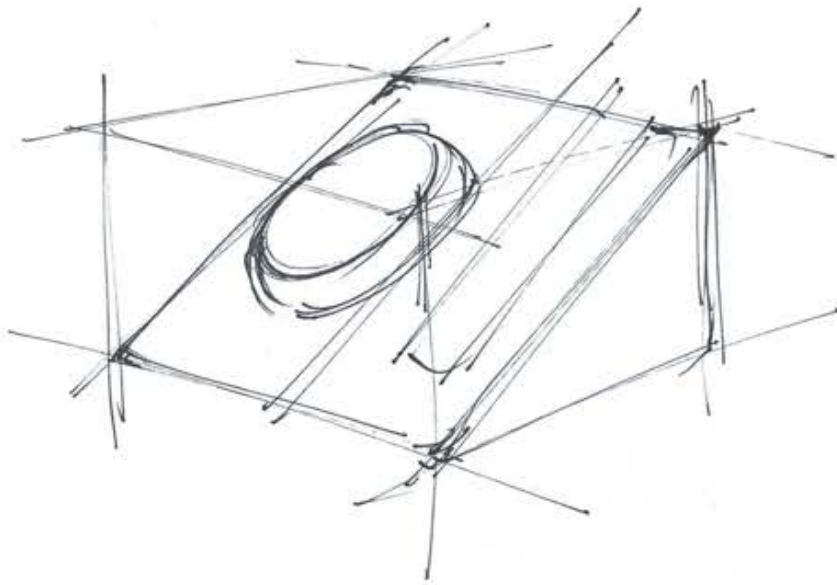
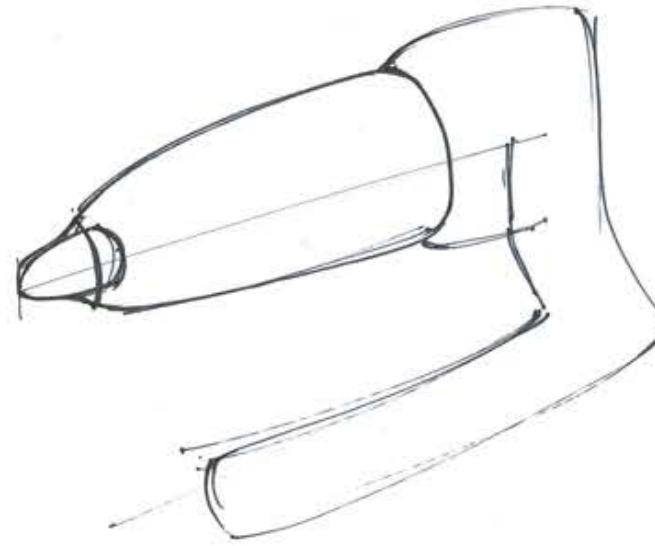
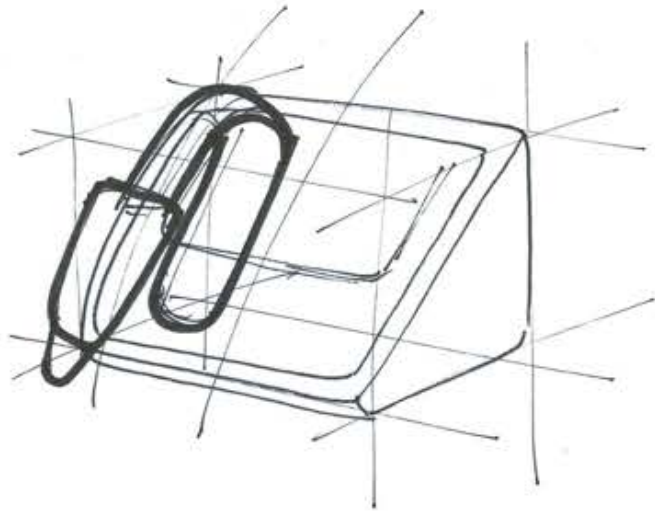


THERMOMETER
PROBE

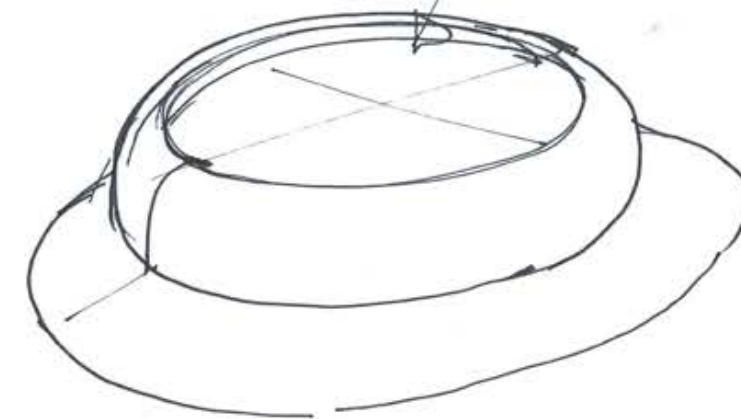
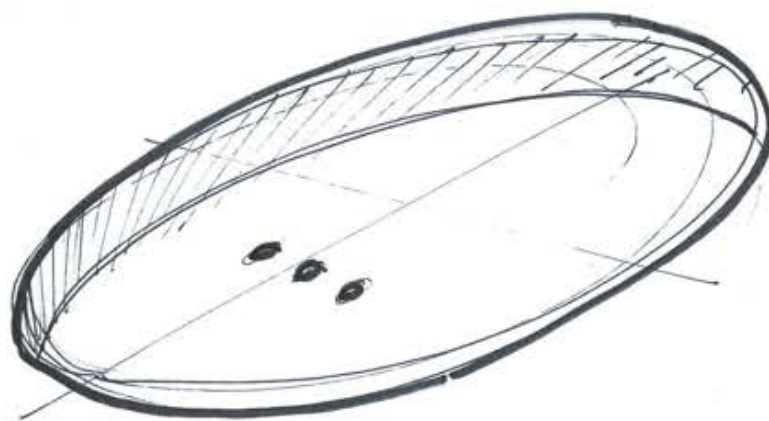


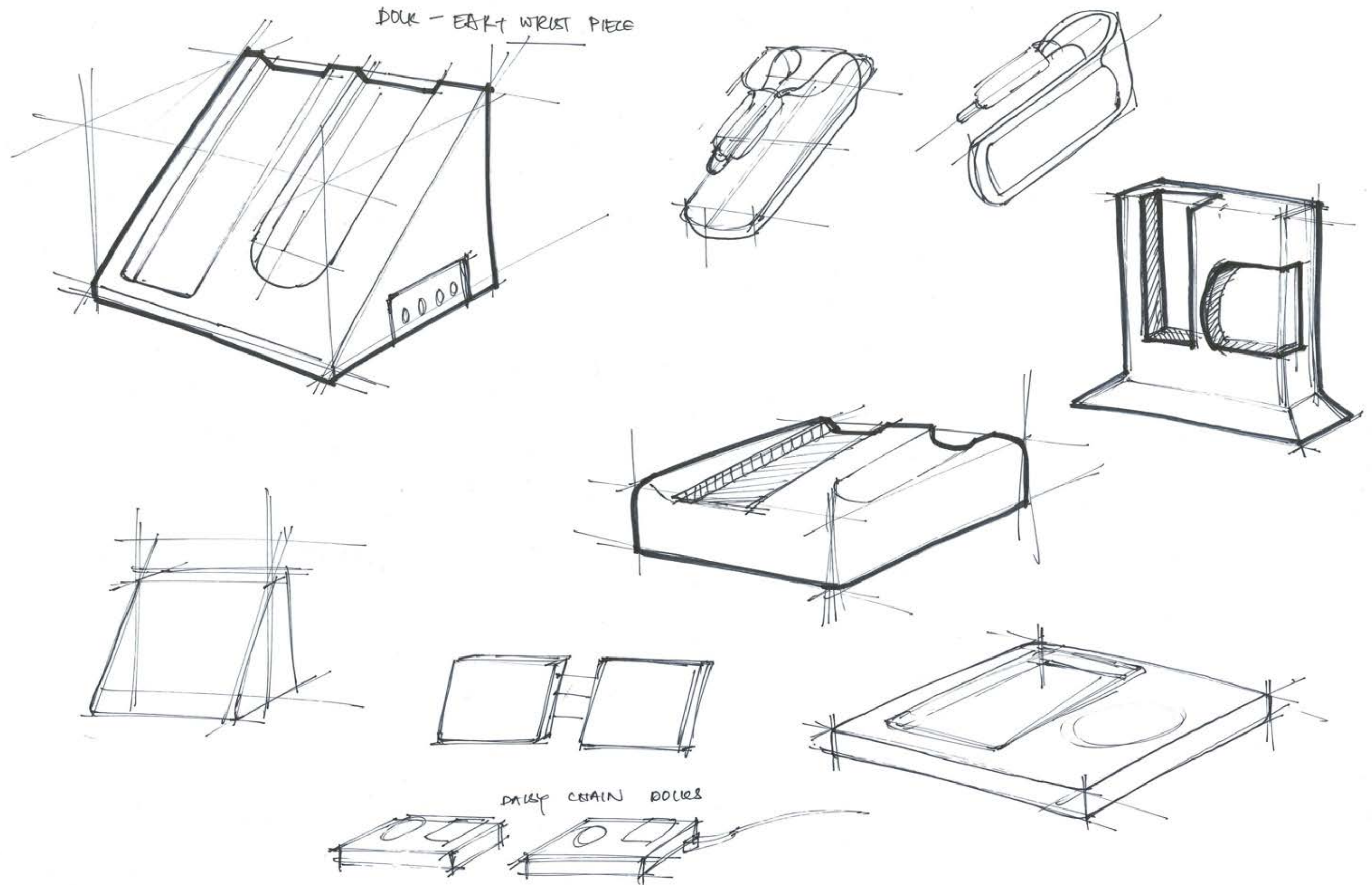
HEART RATE
SENSOR

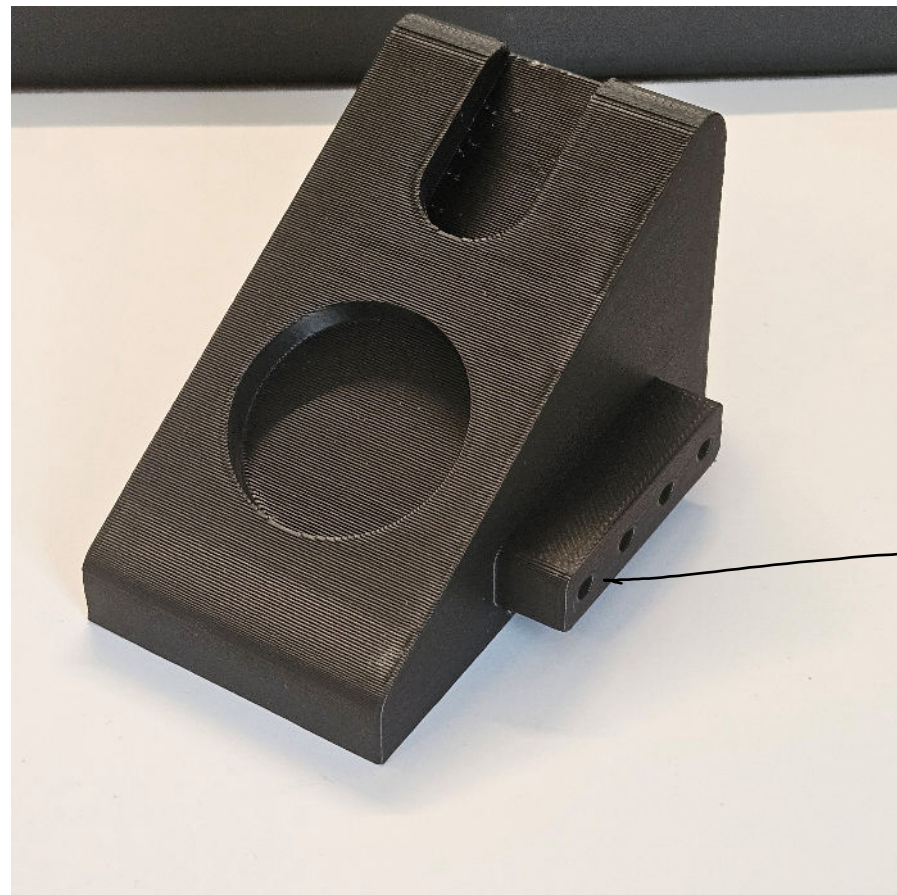




PATCHA





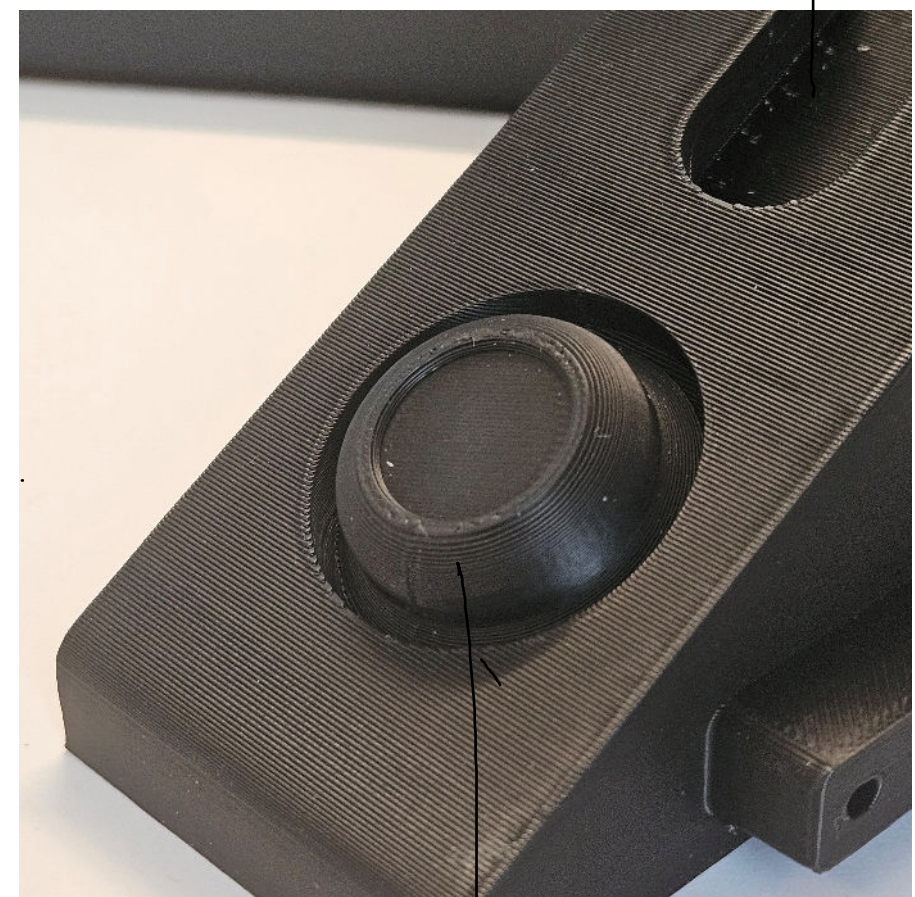


INITIAL BOUL IDEATION PRINT

→ DASH CHAIN
CONNECTOR FOR
USING SIMILAR
BOULS TOGETHER



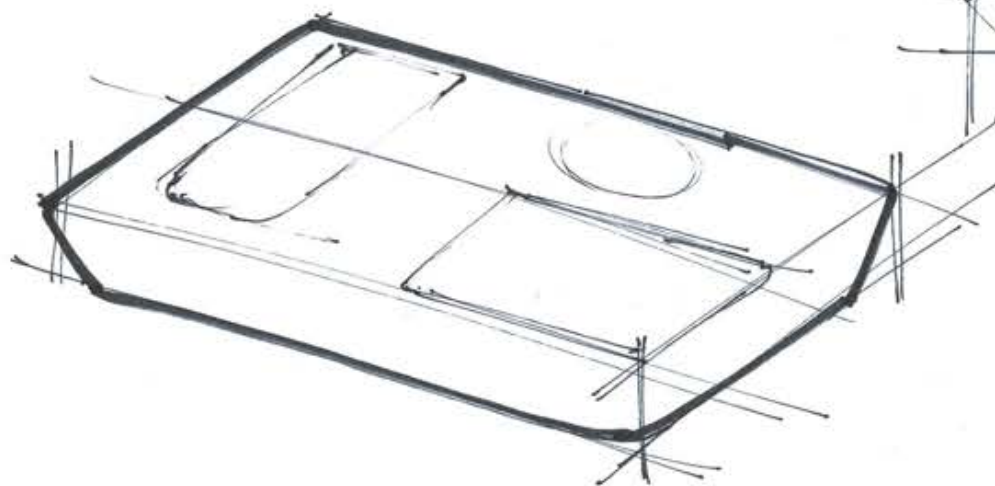
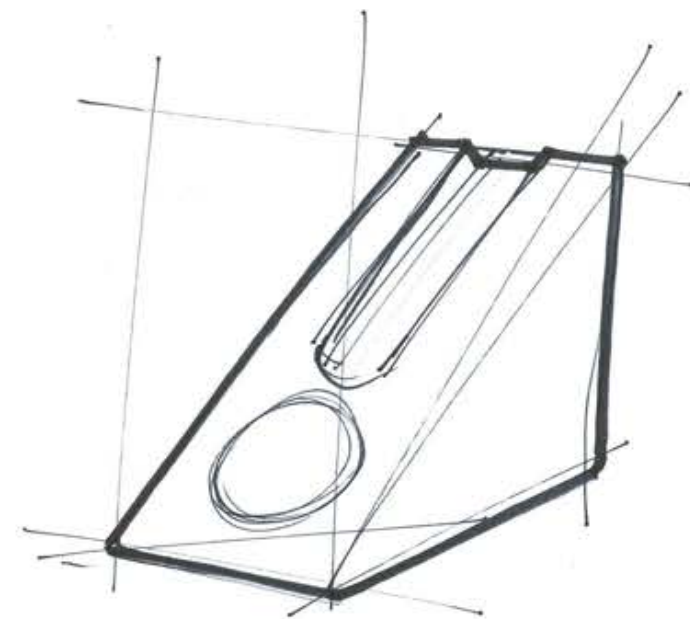
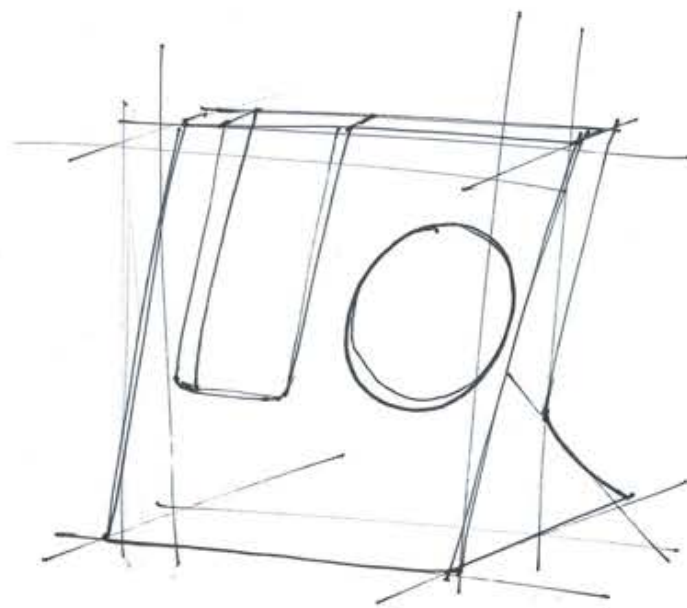
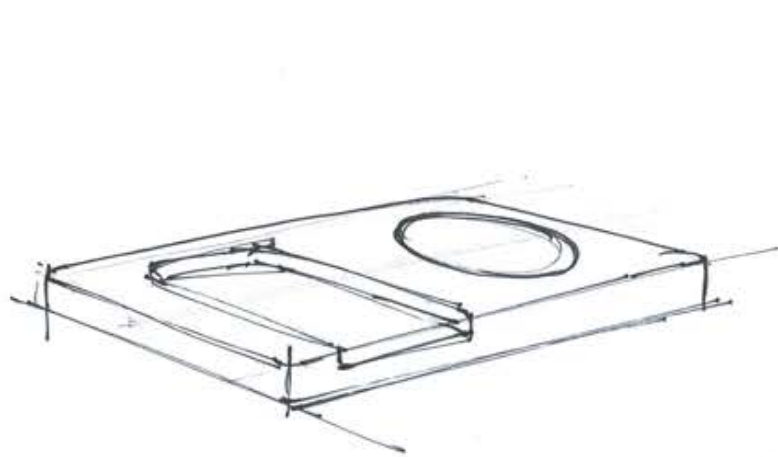
→ SENSOR
PATCH
SMALLER
DIMENSION



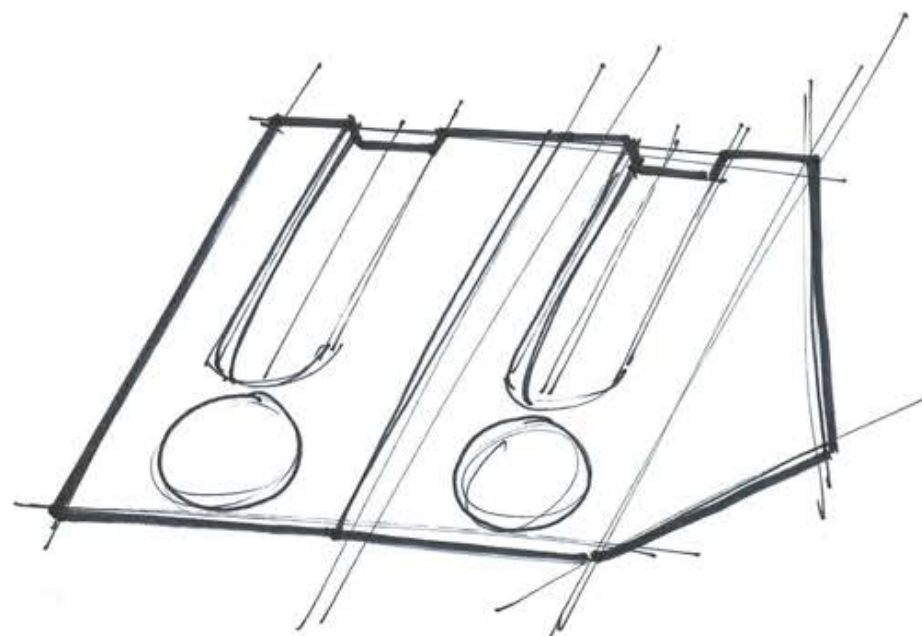
PLACE FOR IN EAR
SENSOR

→ SENSOR PATCH

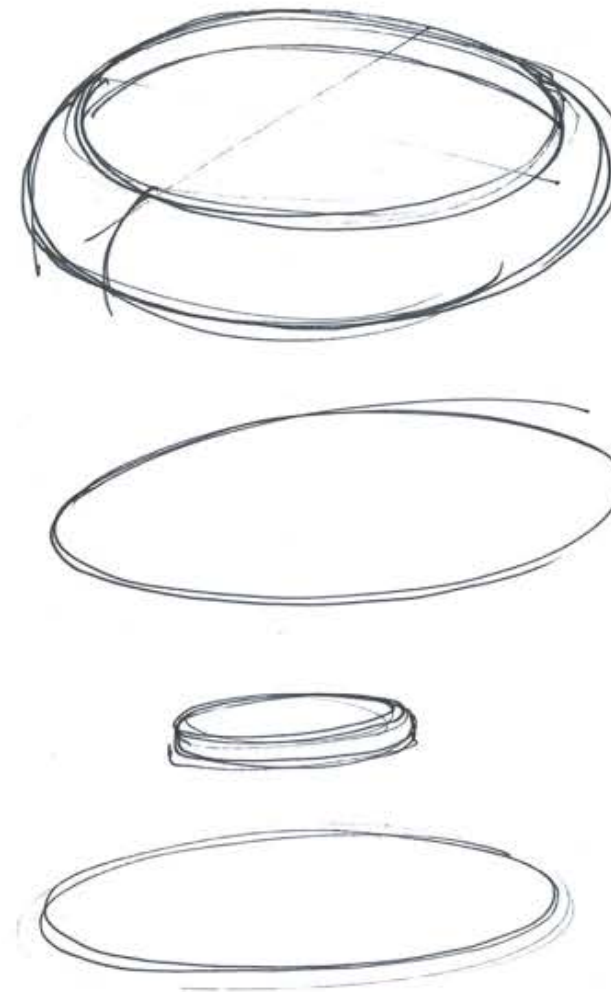
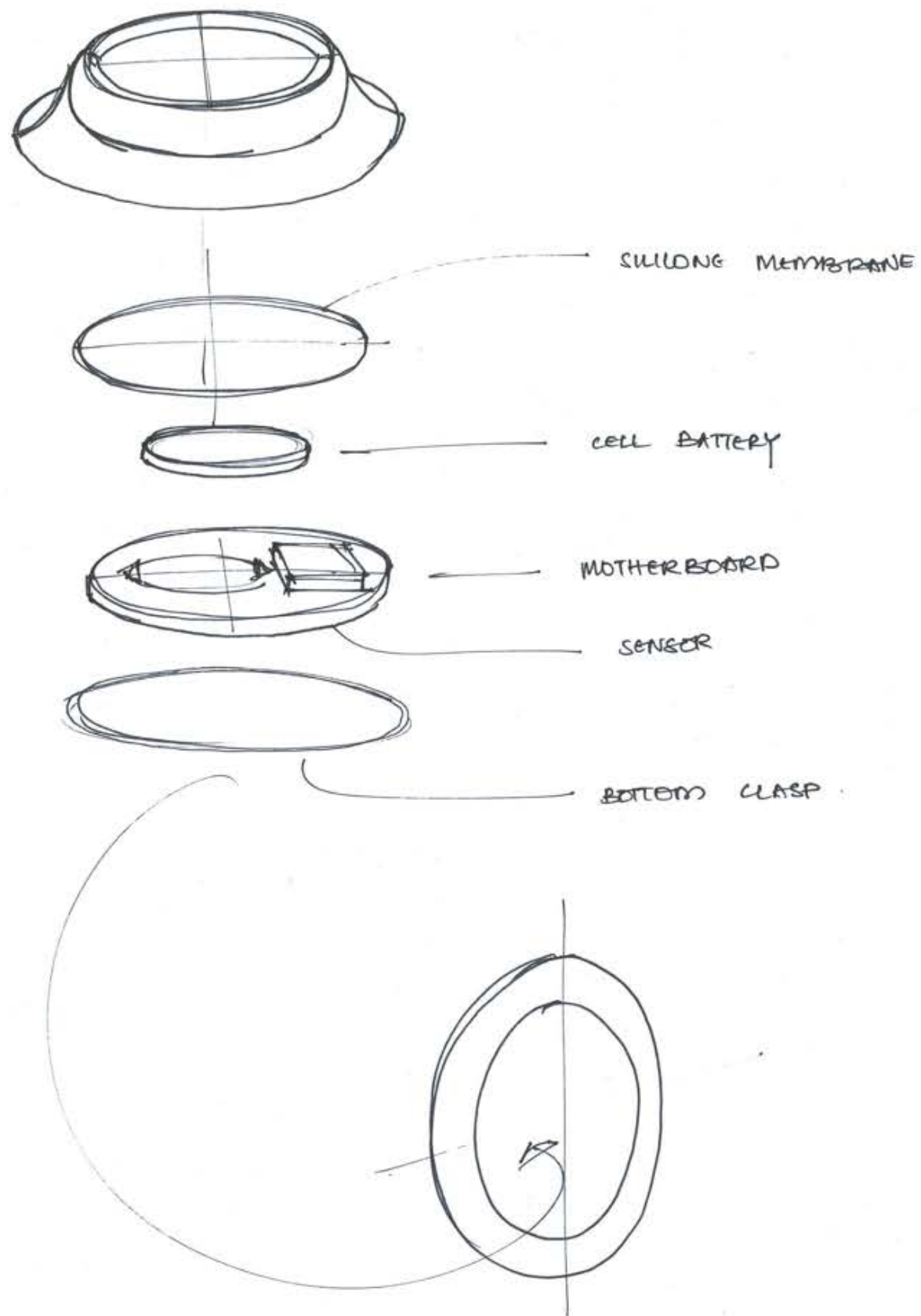
IDENTIFIED : TOO BULKY
NOT EASY TO REMOVE
PRODUCTS

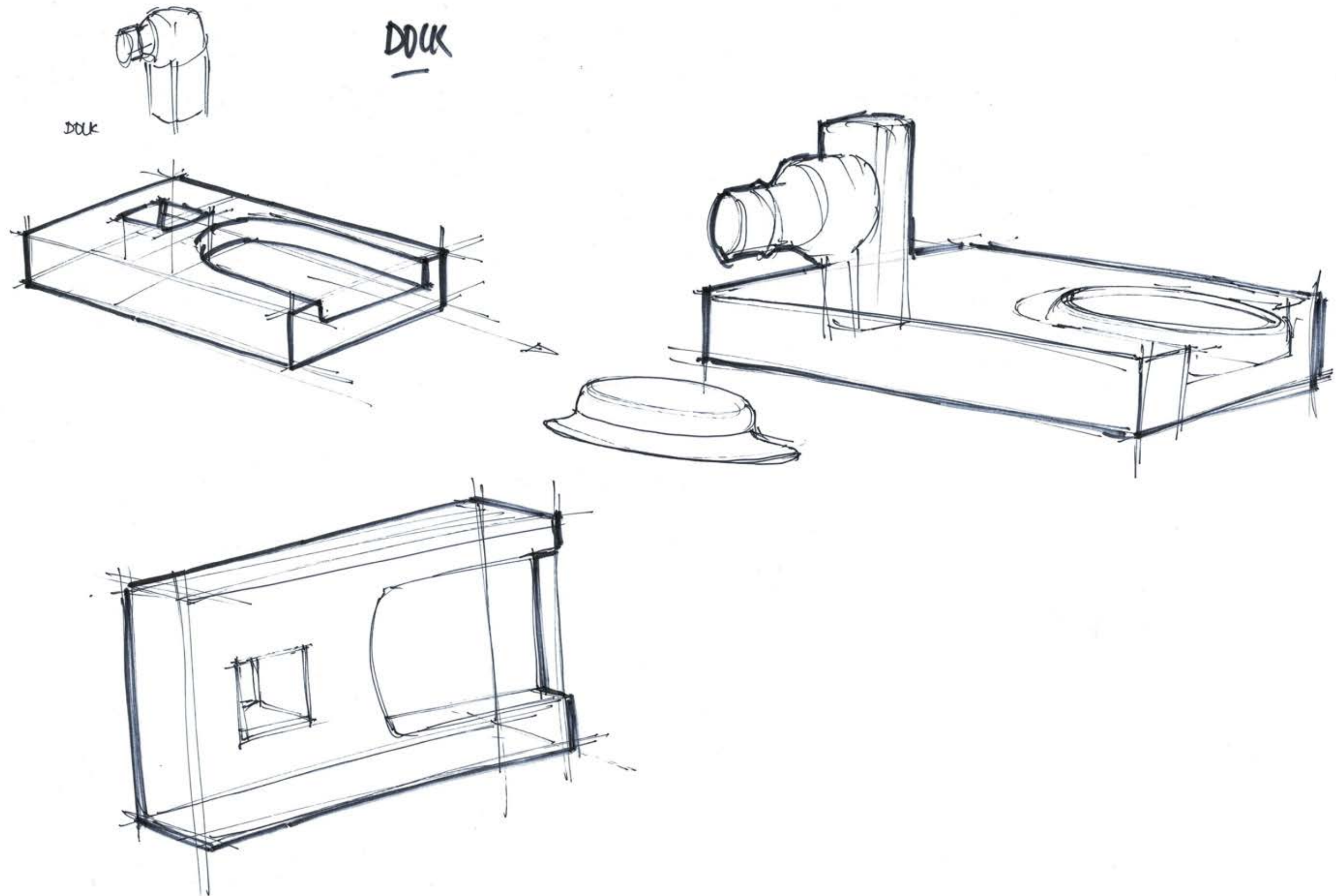


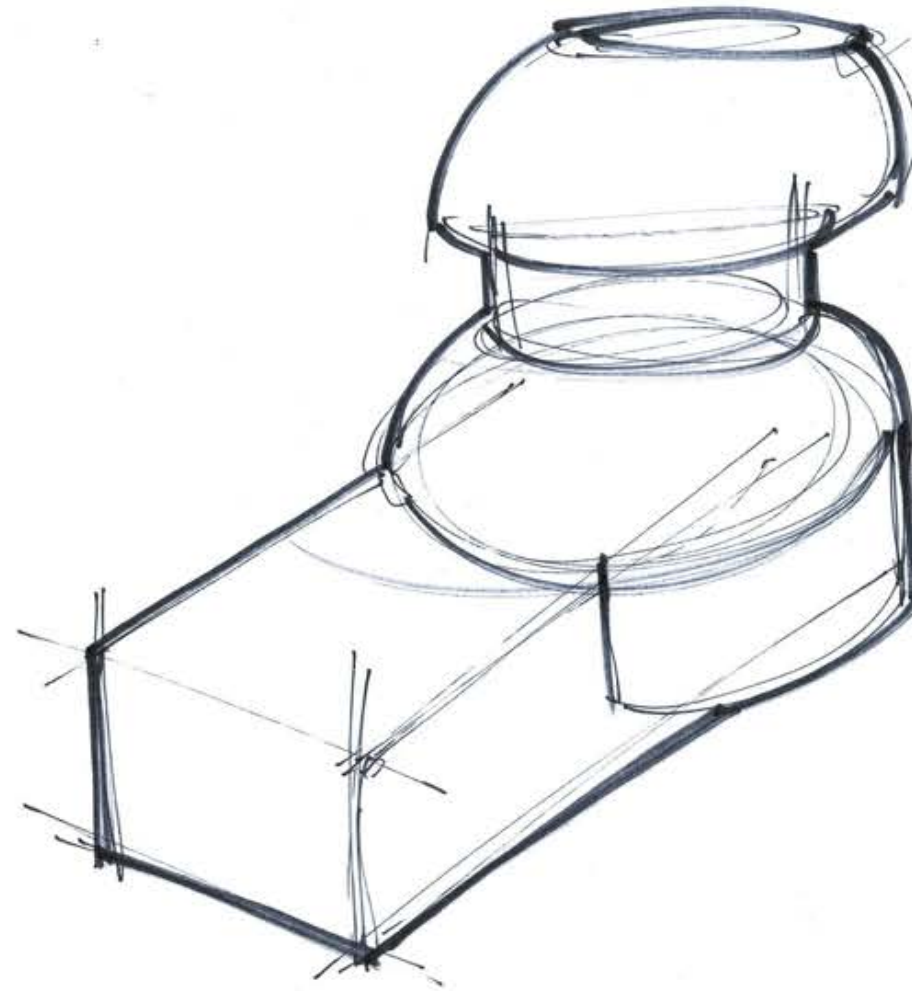
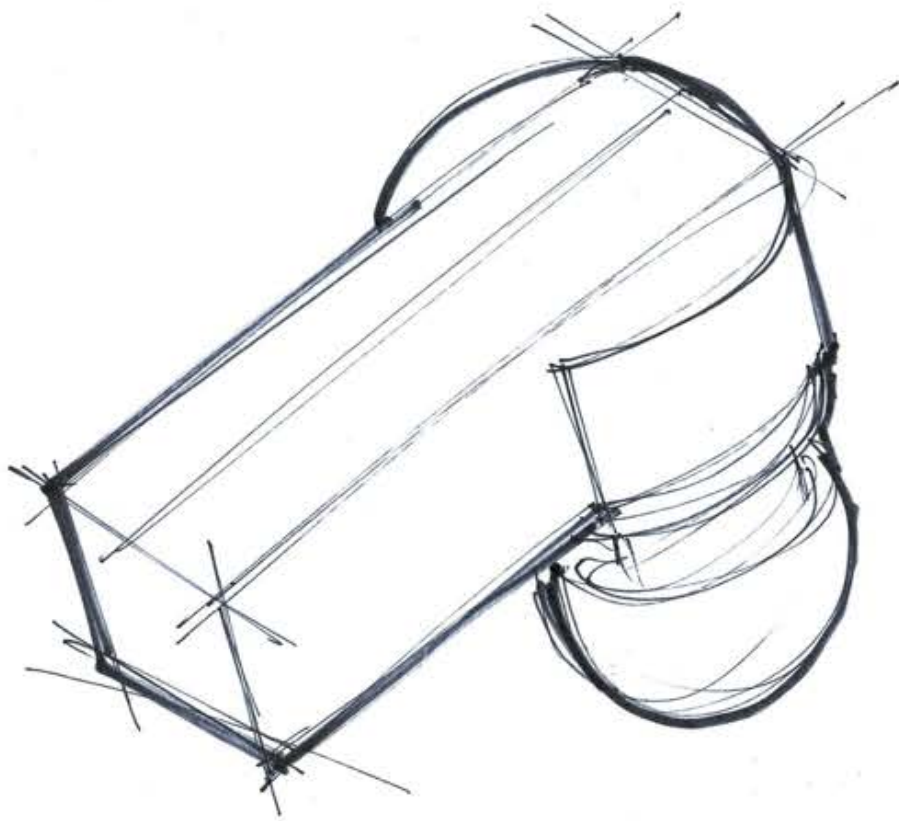
SHOULD BE
DARK- WARMABLE
— LOT MORE DEVICE
CHARMING CAPABILITY

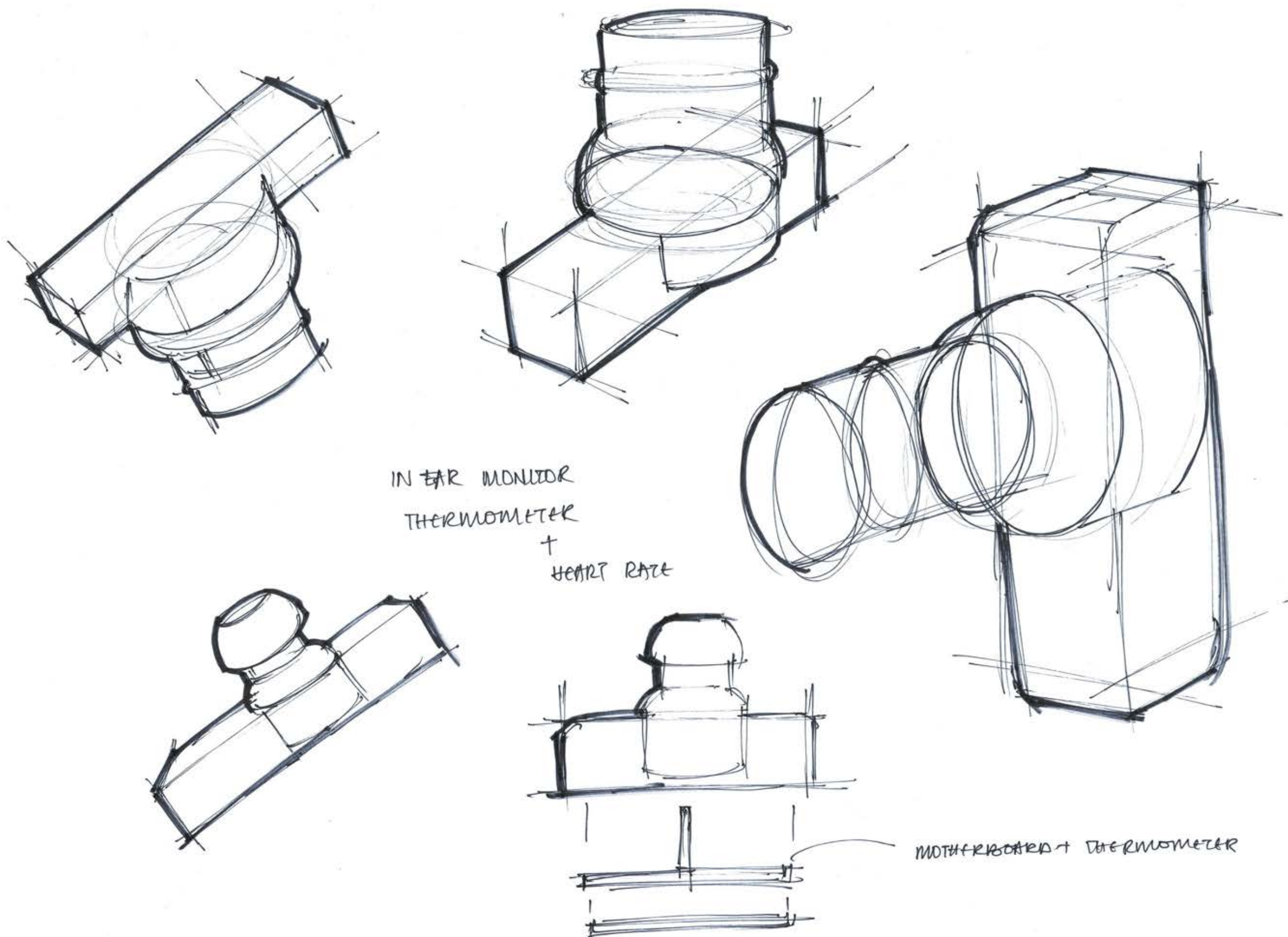


MAGNETIC DARK CHAIN

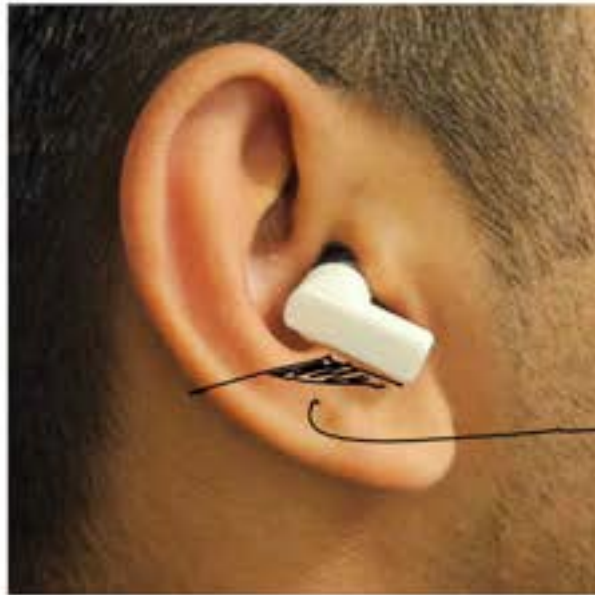








LOWER BAR TAB



RESTS
ON
THE
EAR

PROMINENT &
STANDS OUT

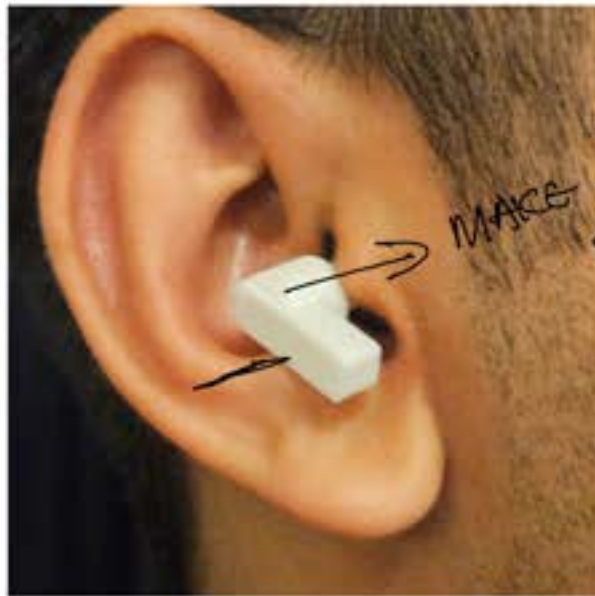


→ AVOID
EXTRA CONTACT

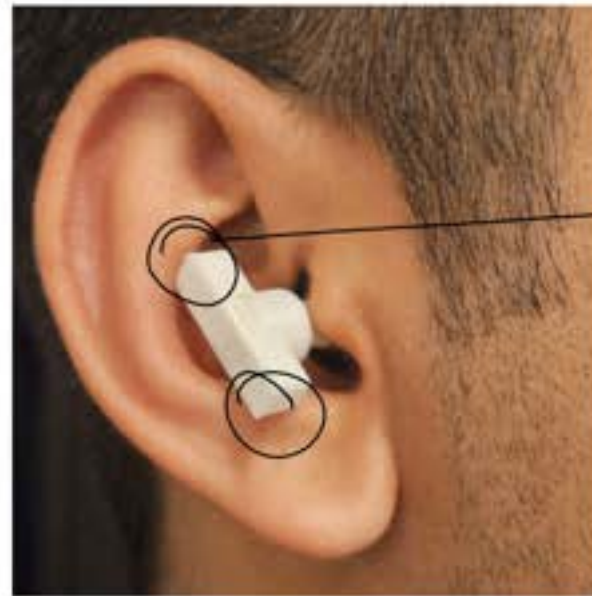
→ RESTS ON
THE EAR



MAKE IT SIT
FURTHER
INSIDE



2
CONTACT
POINTS
BUT
DOESN'T
LOCK ON
THE INNER
LOBE



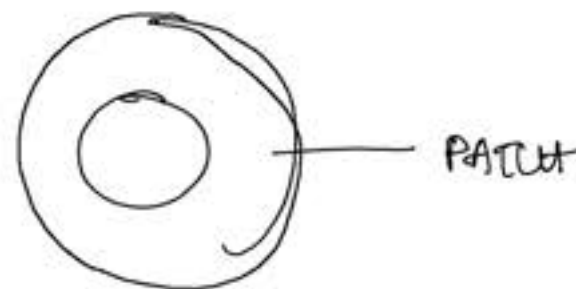
MAKE IT SIT
A BIT MORE
FURTHER IN





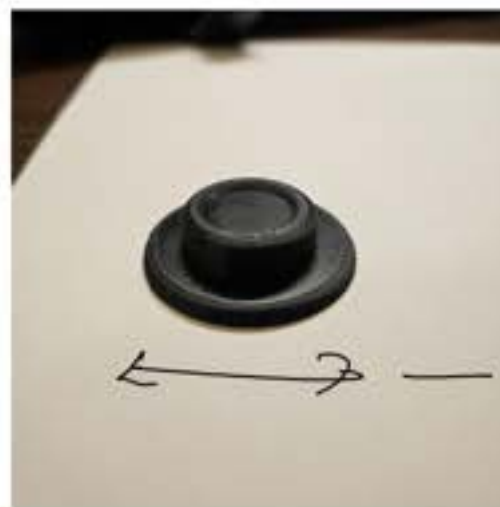
BIOSENSOR PATCH ROLLUP MODELS

- GOAL TO BE USED WITH EXISTING GYROMETER PATCHES
- ADDING EXTRA LIP ON THE EDGE TO MAINTAIN ADHESION



HEIGHT
TOTAL 10MM
LIP 3MM
WITH FILLET

NOT ENOUGH
SEATING
ON PATCH



ADDED
EXTRA
LIP
|

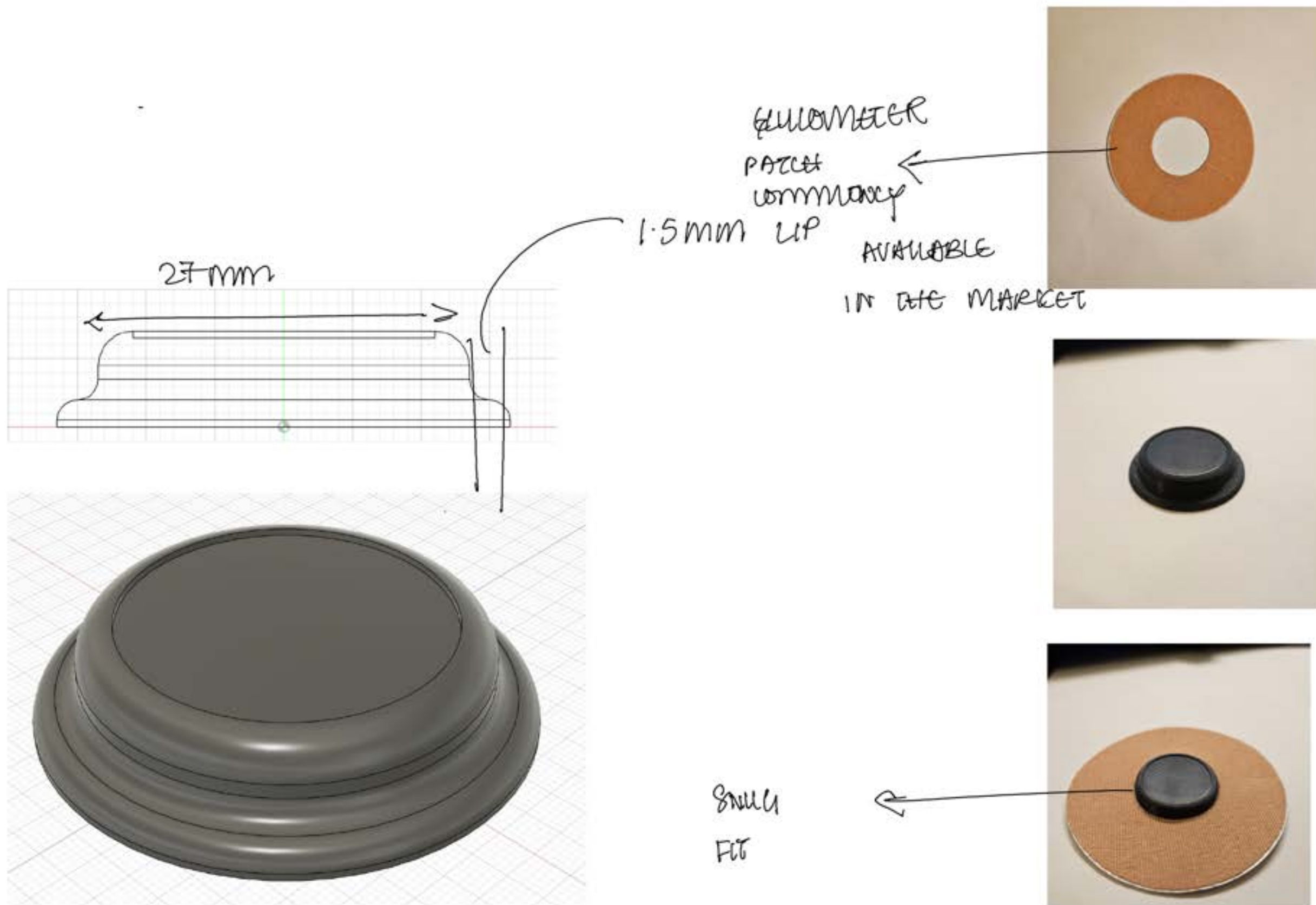
RESULTED
AWKWARD WRIST PLACEMENT



UPPER PART OF
PATCH SENSOR

STILL
CLOSE

WRECK
LIP
WIDTH



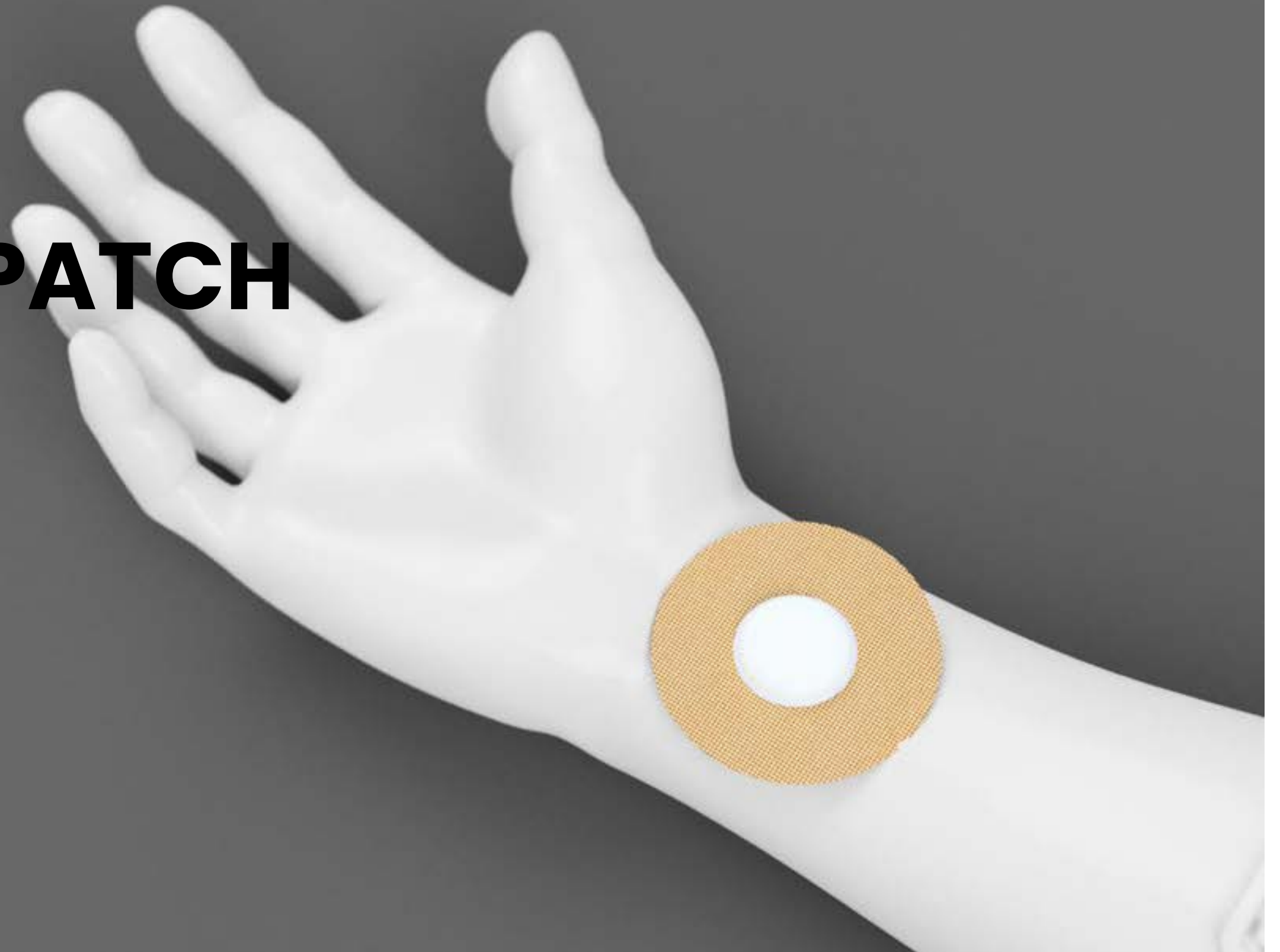
IN EAR SENSOR

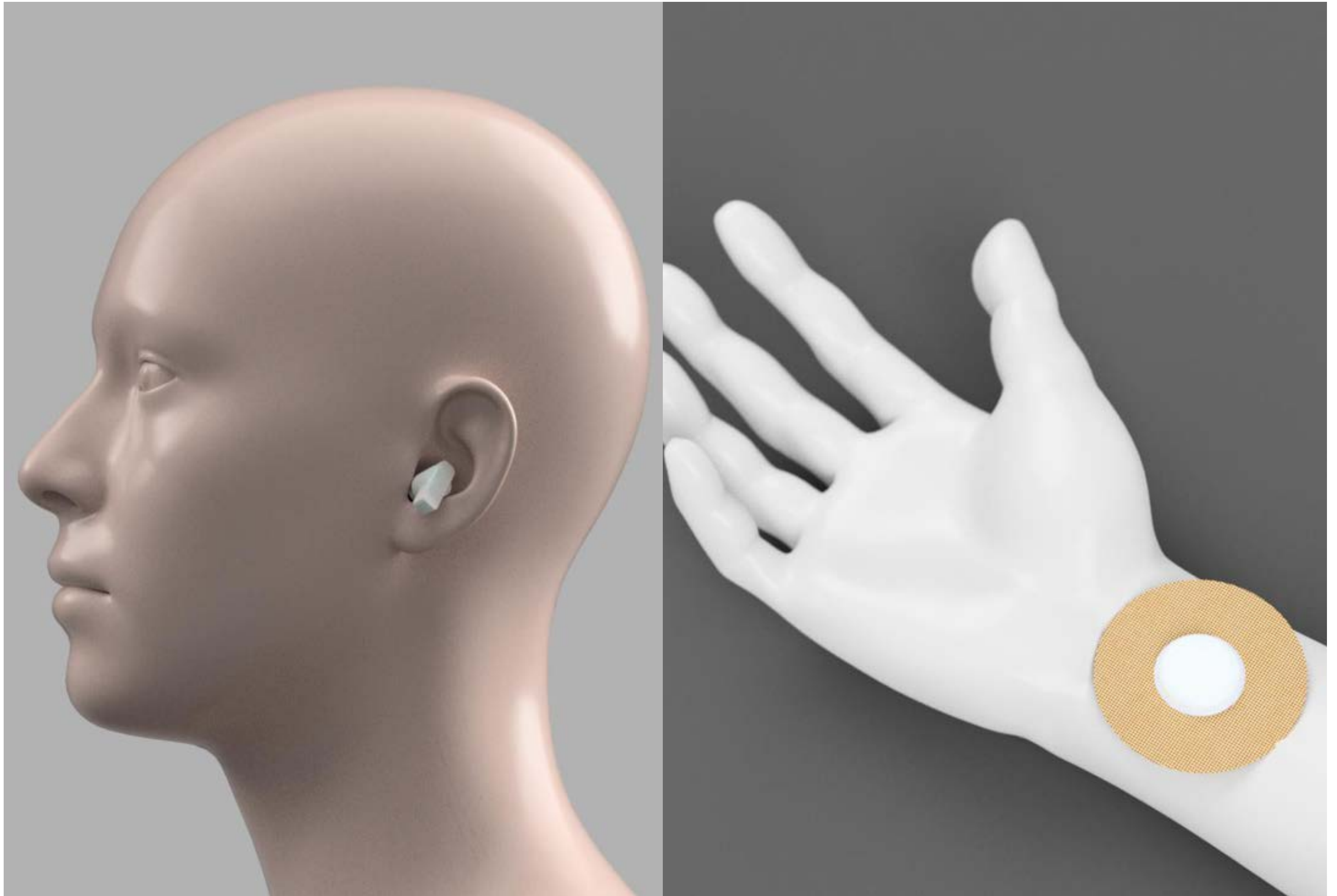


CHARGING DOCK

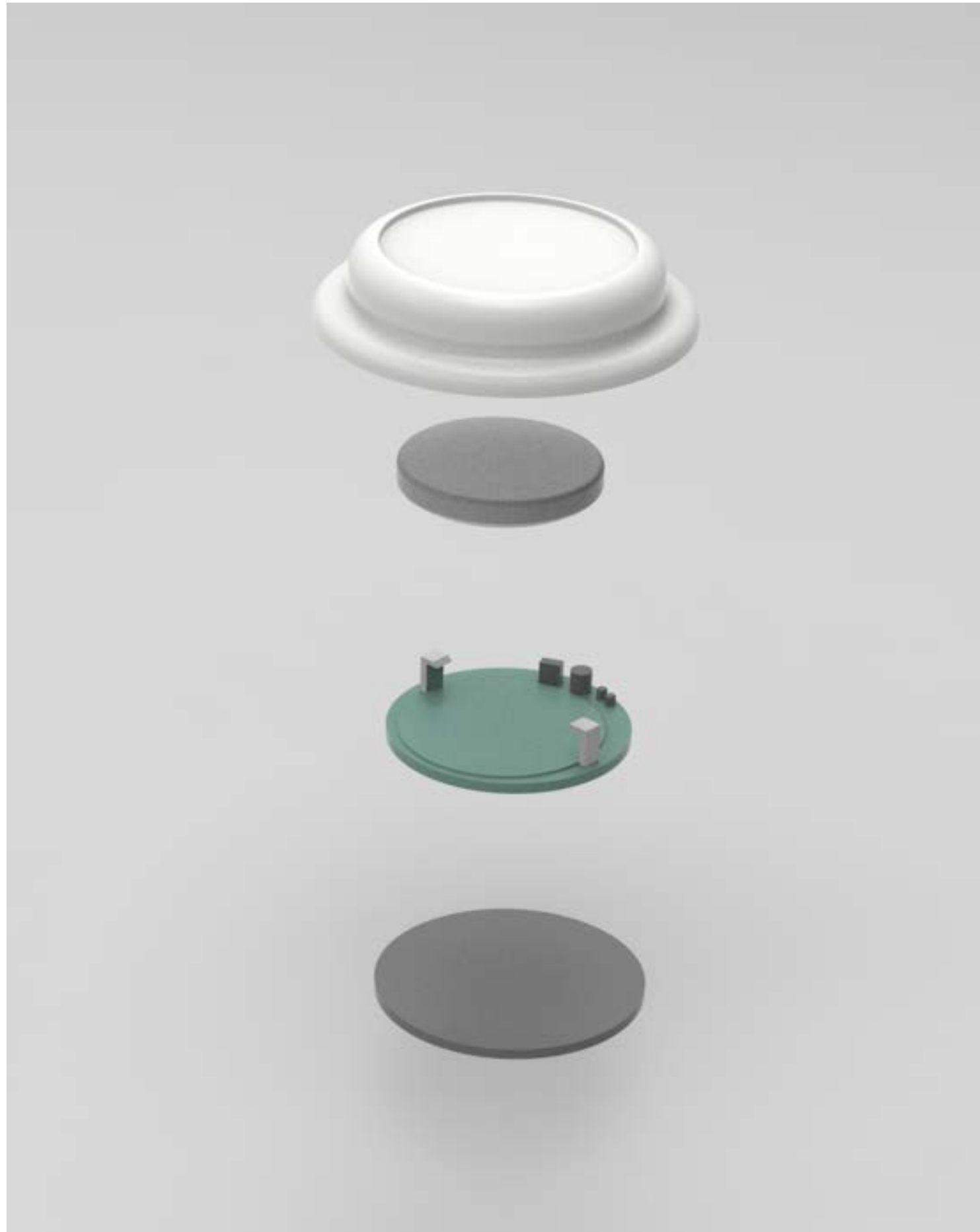


SENSOR PATCH



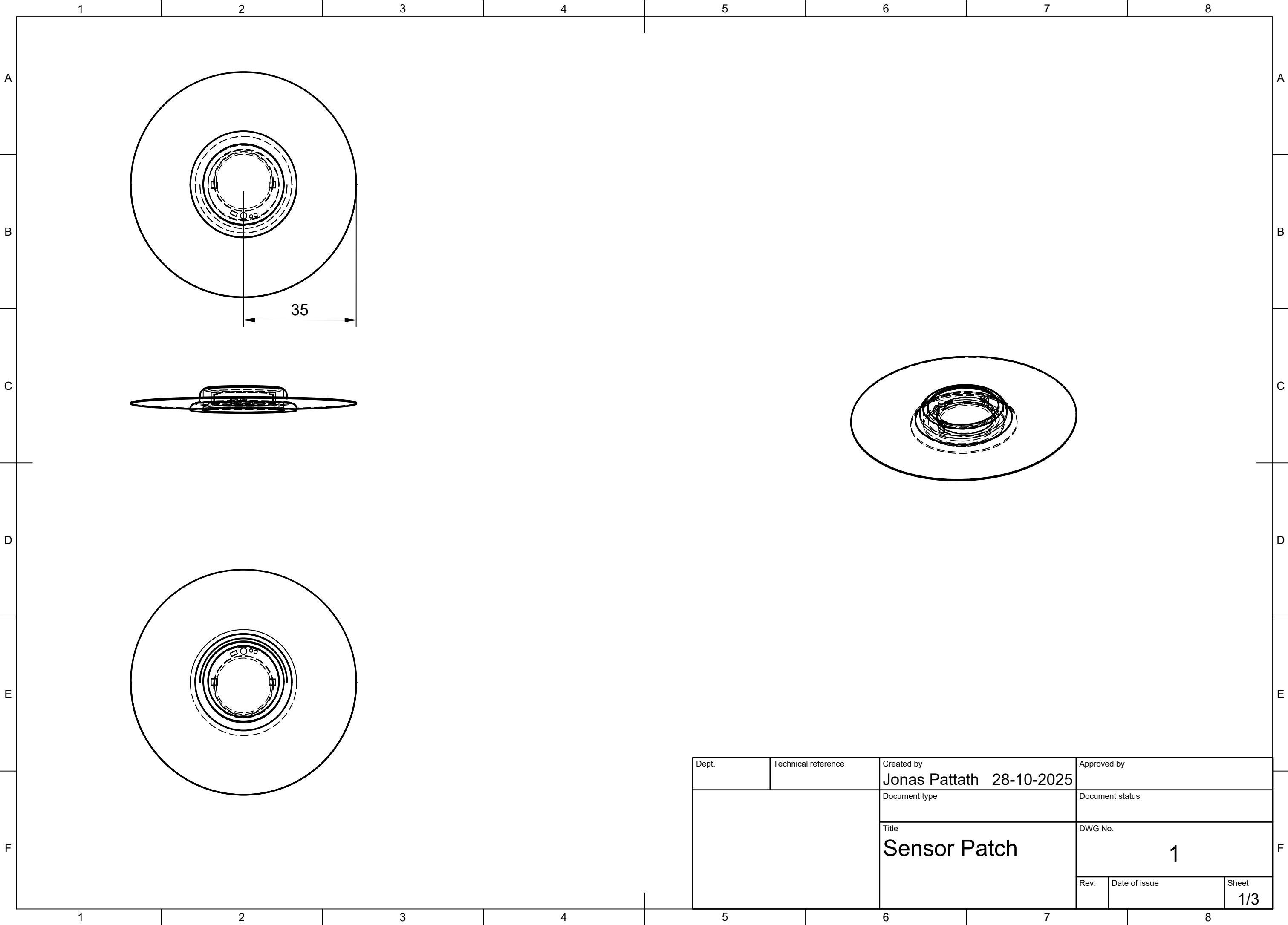


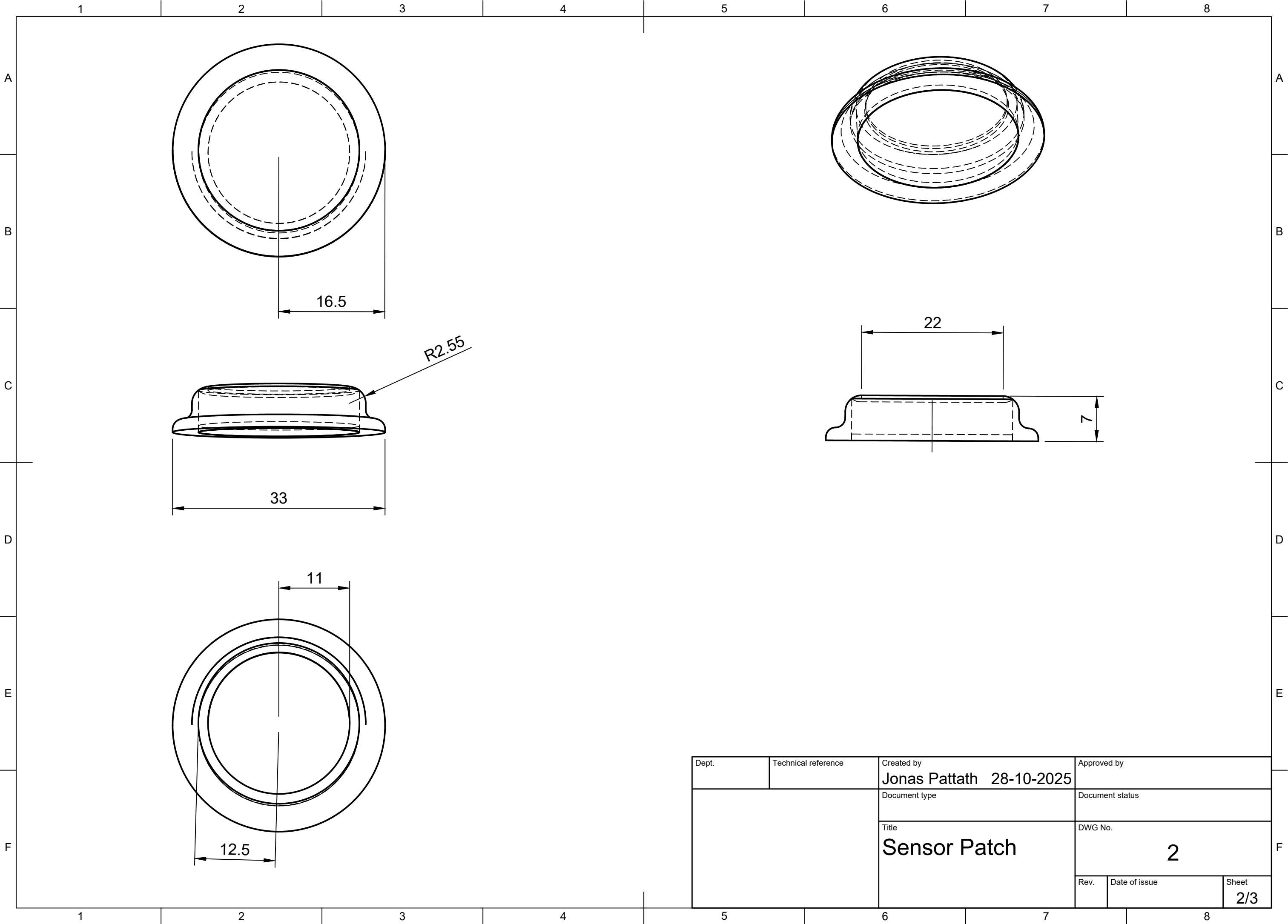
EXPLODED VIEW



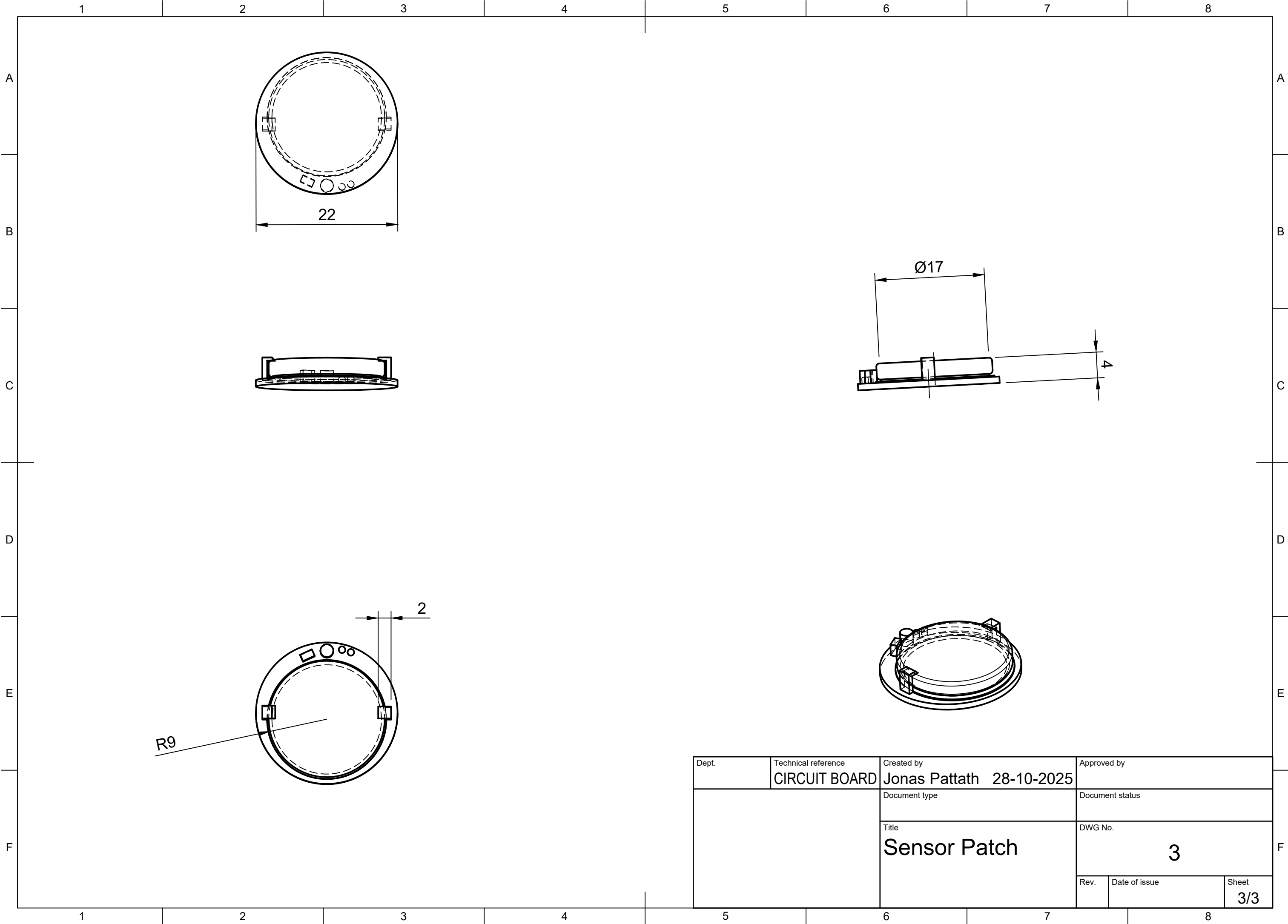
EXPLODED VIEW

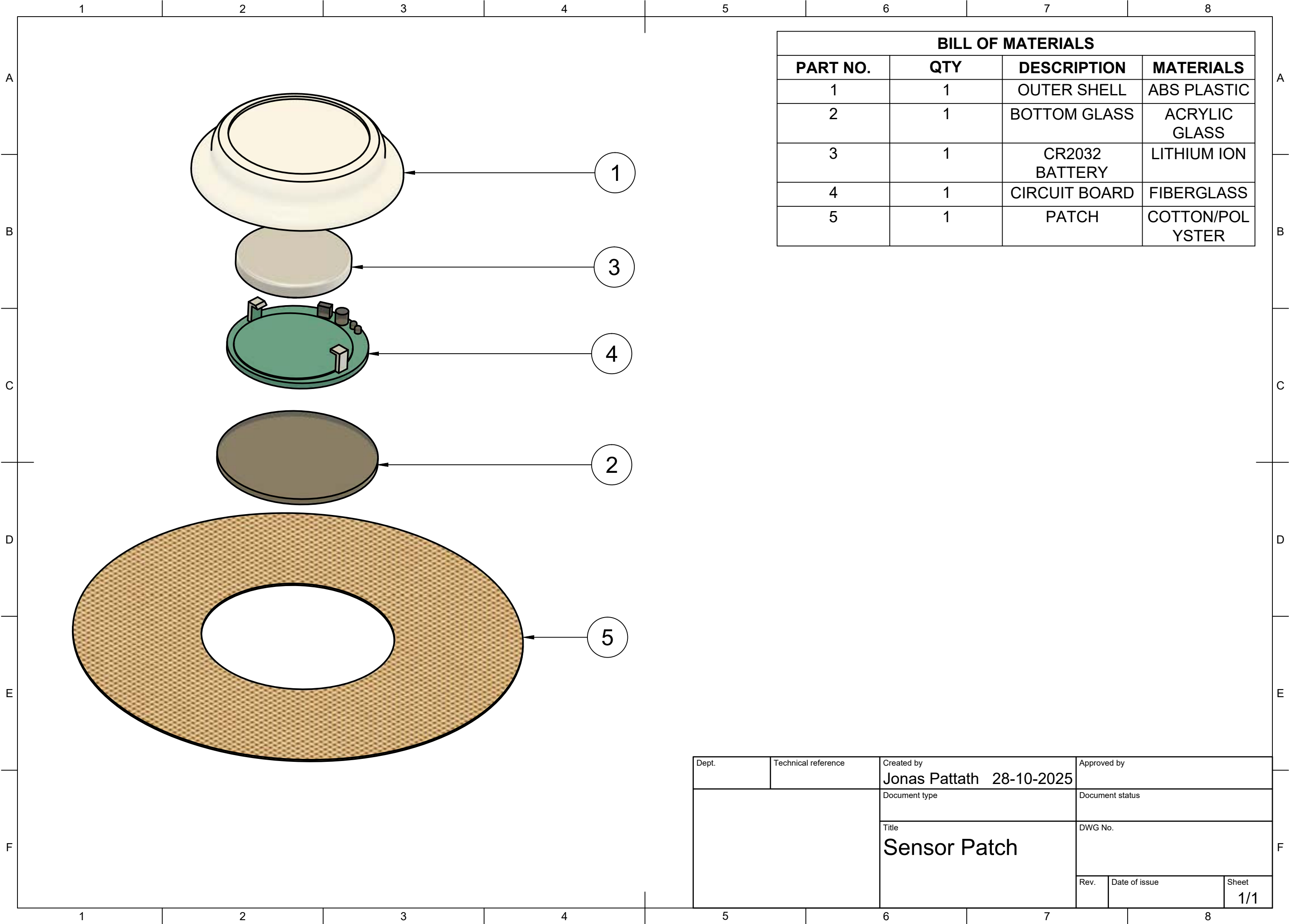






Dept.	Technical reference	Created by Jonas Pattath 28-10-2025	Approved by	
		Document type	Document status	
		Title Sensor Patch	DWG No. 2	
			Rev.	Date of issue
			Sheet 2/3	





Dept.	Technical reference	Created by Jonas Pattath 28-10-2025	Approved by
		Document type	Document status
		Title Sensor Patch	DWG No.
		Rev.	Date of issue
		Sheet 1/1	

BILL OF MATERIALS			
PART NO.	QTY NO.	DESCRIPTION	MATERIAL
1	1	OUTER PLASTIC SHELL	ABS PLASTIC
2	1	THERMOMETER	STAINLESS STEEL
3	1	BATTERY	LITHIUM ION
4	1	SILICONE TIP	SILICONE
5	1	OUTER SHELL	ABS PLASTIC

