1. Patch: ...most important part of our system,

see the diagram blow...,

there is a copper ring around the chip for charge, and three batteries...

Since current devices..., our patches are collapsible and can fold along the lines to fit the joint parts of our body. Also, the bottom side is an adhesive layer which can cling on user’s muscle. The upper side is used to keep it circle for the convenience of charging.

1. User interface: log in,

user choose “mine”, then he/she needs to enter the individual statistic with the help of weighing scale with two handlers (common in the fitness centers) so that the system will learn current state to establish training plan.

user choose “For today’s training”, then...the system will automatically form the details and targets according to the data obtained previously. If the user wants to make some change，just alter the plan and begin.

Then the system will count the motions and show standard movements through animation. If the user feels tired, he/she can just click next to skip current exercises.

Finally, feedback.

Above are interfaces for mobile phones, but are similar and accessible to the watch. One special function of watch is it can detect some data like heart rate，whereas we can use single patch ,sticking it on the wrist, to replace the watch.

All in all, our assistive fitness patch system provides users with personalized guidance to achieve proper fitness posture and optimize muscle exertion during exercise. With our adhesive-based patches and advanced sensor technology, users can exercise anywhere and at any time, receiving real-time feedback and guidance to help them achieve their fitness goals. Our personalized advice and guidance are tailored to each user's progress and goals, making it easier to improve overall physical health and fitness levels without the need for a gym or personal trainer. This system successfully activate the motivation of each exerciser with comprehensive solutions to the challenges trainers may face during fitness.