

Flexible & Wearable Electronics Human Computer Interaction (HCI)



Quanta & Qualia (doing business as Magos)

Touch the Intangible

www.themagos.com



Problem to be solved

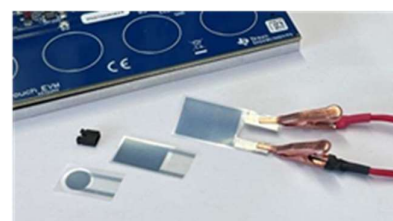
Human Computer Interaction is an area of research and practice that emerged with the rapid evolution of technologies for viewing and immersing in a digital environment. There is a variety of technologies for tracking fingers and hands in the market; however, the existing solutions only partially address the challenges of both accuracy and precision, especially considering certain motions and postures. A major factor is the lack of a device that enables users to interact naturally via their fingers within the digital environment – as in the physical world.

Solution provided by SmartEEs

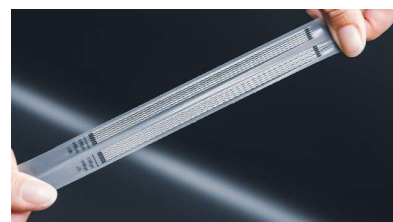
A pair of gloves, as a novel Human Computer Interaction (HCI) solution for interaction within extended reality environments thanks to advanced finger/hand tracking (22° of freedom and 250x higher accuracy in finger tracking from state of the art) enabled by haptic feedback and a new cabling solution with stable resistance in all mechanical solicitations and dimensions.

Business model & impact

Q&Q's approach is to be part of the whole human computer interaction ecosystem. The HCI gloves is a patent pending product, with additional and complementary patents in the pipeline. Current offerings are on integration services, incl. third-party devices with any HMD and tracking systems, and development services to unity SteamVR and Unreal game engine in order to incorporate Q&Q gloves into customers' software.



Printed actuators based on piezo-electric films



Horseshoes, waves and rectangles meander structures for conductive stretchable cables

