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CONNECTING INNOVATION...

Natural User Interfaces using Water

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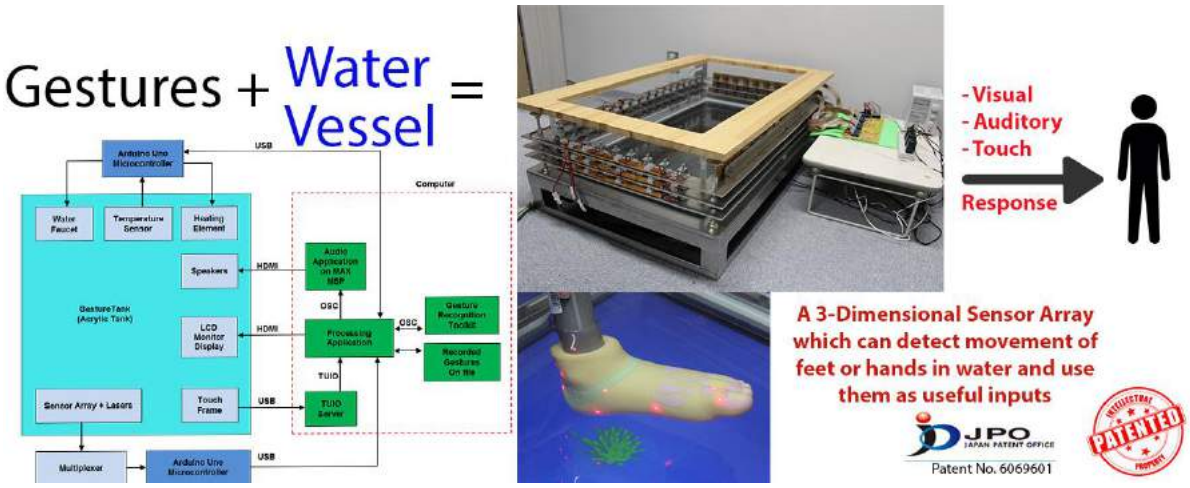

As Computing devices get smaller, the way we interact with computers has also changed from keyboard and mouse for desktop computers to touch screens in the case of tablets and smart phones. In the future, it is possible to envision that we do not need to carry computing devices in pockets or bags. Perhaps one could wear them, embed them in our bodies or they could merge into the environment around us. How would we interact with such devices ? using Voice is one option, Using Gestures is a more discreet and possibly natural option.
Computers are powered by electricity. Water and electricity aren't the best of friends who cohabitate. Yey water is such a natural medium which is connected with human life since the time of birth. Is there a day in your life which you spend without interacting with water ?. The soothing properties of water is what most of us desire after a long, hard day at work.
This Research studied how we can use natural movement performed using hands and feet in a water vessel environment as a novel computer interaction method. This approach considers a Sensor embedded Water tank to capture what movements are performed. Since there is no device such as cameras or sensors that are worn on the body, the user is free to relax and move around as he or she would naturally do. Trials carried out have proved that this approach is feasible for non-accurate special tasks.

References

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2. K.S.L. Gunawardena, K. Kimura & M. Hirakawa, SensorTank: An Interactive Water Vessel, *Journal of Information Processing*, 2014, 22(3), 547–555.