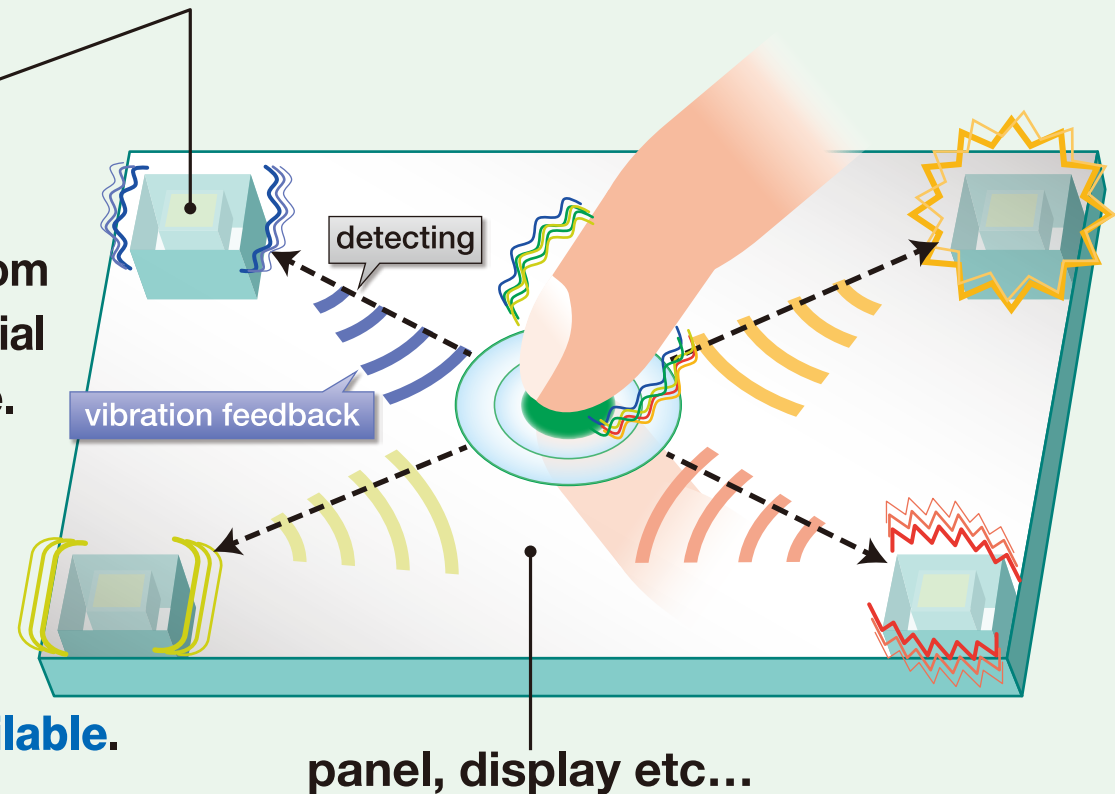




Haptics Interface

Outline

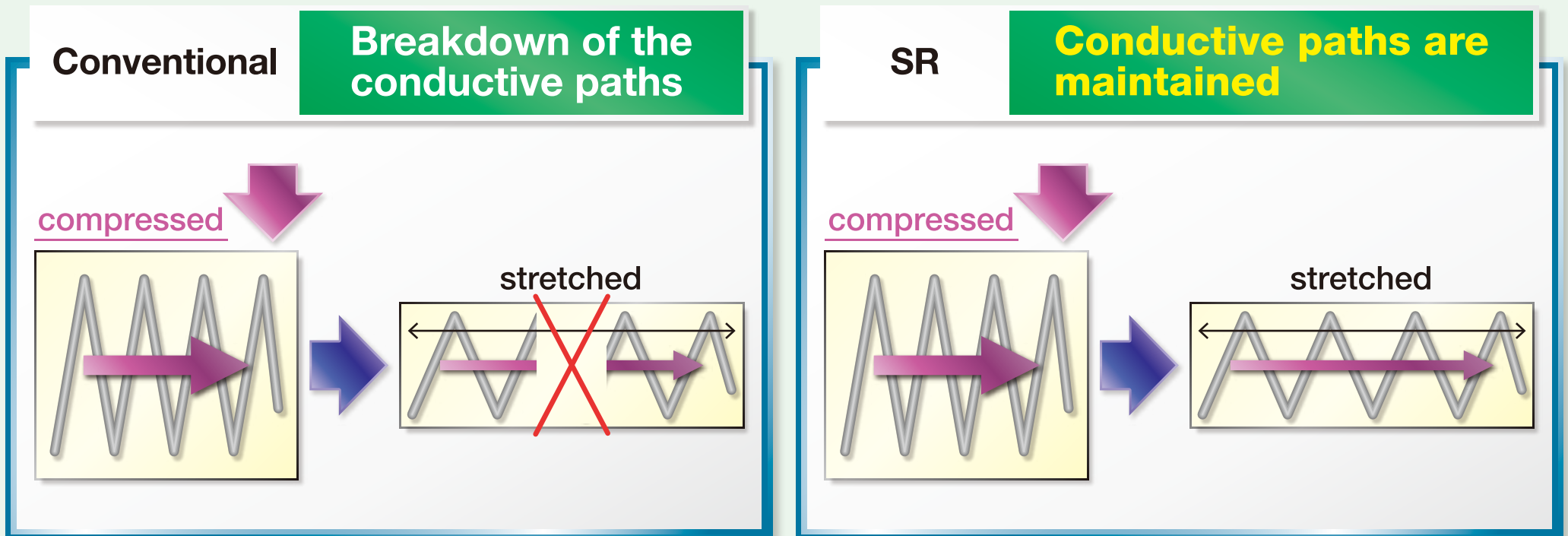
- **Artificial Muscle Actuator(AMA)** is made from **Smart Rubber(SR)**. It is made from the special elastic material which is soft and conductive.
- Giving expression ; **rich sense of touch**, and realizing a variety of feedbacks
- **Thin and Compact**
- **All-in-one with the pressure sensor is available.**
⇒ **Detecting** a touch (by a pressure sensor), and also providing **feedbacks** at the same time (by AMA)





What's SR ?

SR(Smart Rubber)is our new developed **elastomer** which is **soft and conductive**. It maintains the electrical conductivity even if it is stretched.



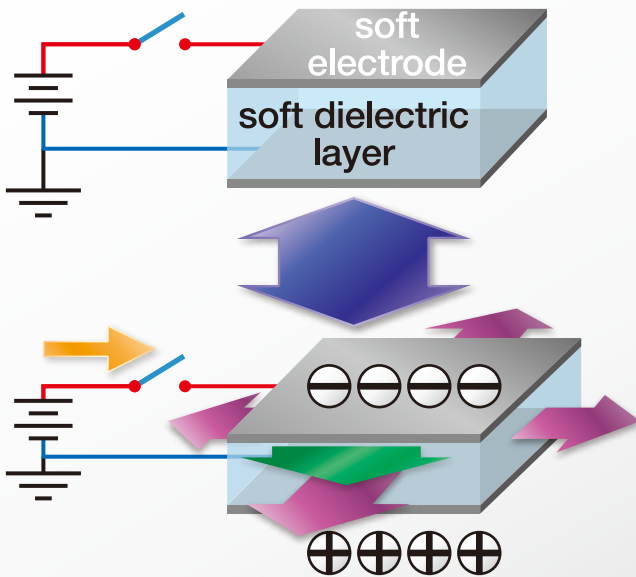


Principle of Actuator

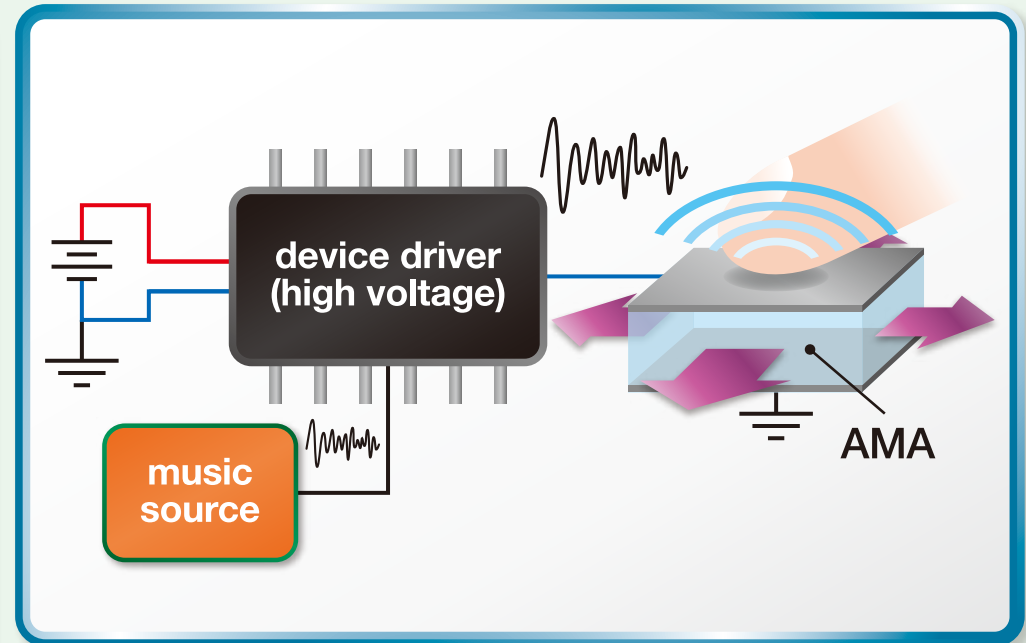
When applied a voltage, **AMA**(Artificial Muscle Actuator) stretches.

Operating Principle

The electrostatic attractive force between electrodes stretches a dielectric layer



outline





Aspects of this Actuator

- The rich and varied expressiveness
⇒ **Broadband vibration control is available**
- Thin and Compact
⇒ **Having a high degree of freedom for drawing because of the soft elastomer**
- Providing the feel that you push a switch
⇒ **By the structure monolithically with the pressure sensor**

