Affordable Assistive Technology
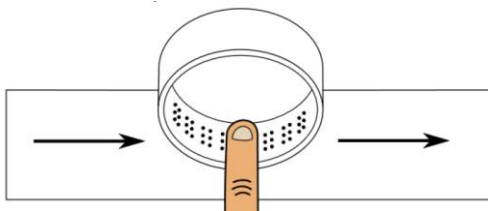# *Let's create it together*
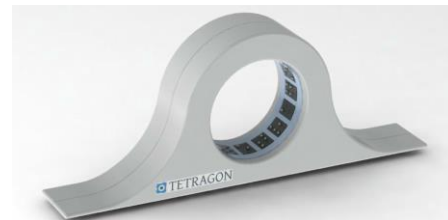
TETRAGON

Braille*Ring*

2023-06-03

The **Braille***Ring* is a new concept for displaying Braille characters. Although the device itself is compact, it allows reading along lines of any length.

This is done by forming the tactile Braille dots on the inner side of a rotating cylinder. When the finger moves the device over a flat surface, the cylinder will rotate. Thus, the user has the impression of reading a line of Braille on the tabletop.
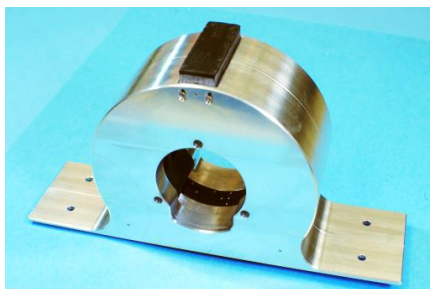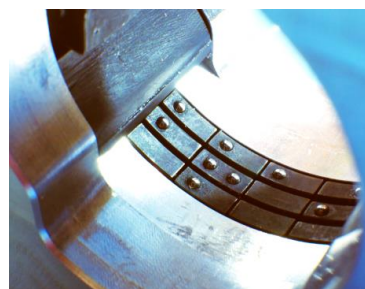

Operating principle

Design sketch

The present prototype (still under development) uses rather simple and robust parts which can be mass produced at reasonable costs. However, if the **Braille***Ring* would be completely produced in industrialized countries, such a device would not be affordable for more than 90% of the world's blind population.

Present prototype

Detail of reading area

In order to make Assistive Technology affordable for the majority of disabled people, we propose:

- Producing all high-tech components in large quantities in Europe – thus reaching significant economy of scale.
- Delivering the parts as kits at production cost (estimated 10% or less compared with the western price of the final product).
- Finding partners (maker-spaces, start-ups, SMEs etc.) in Africa willing and able to do the assembling, testing, marketing, distribution and servicing on a local / regional basis.
- The African partners will get all the necessary know-how, training and tools to do this job.
- They will assemble, customize, sell and service the final products in their own country / region.
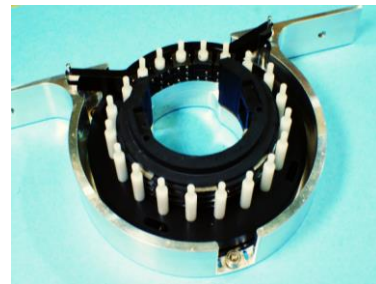
Exploded view of the main components to be assembled
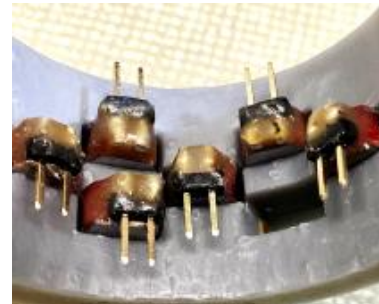
Examples of the main components:

Three out of 60 Braille-cubes on axle

20 axles inserted in the guide-ring

The nine actuators before coil-winding

Several actuators inserted in guide-element

Can you imagine becoming our partner in Africa in order to make this vision a reality?

For more information please visit: **https://tetragon.at/republica**

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