ASPREX Fact Sheet

Touching watch

Watch with a tactile display, which enables a user to read the time through touch. The most usual configuration features an analog display, with raised tactile minute and hour-markings and robust hands, which are not affected by frequent touching. The watch-hands may be illuminated, to assist users with low vision. The watch face has a protective glass or plastic cover which can be flipped open to touch the clock face. The internal working of the touching-watch is based on quartz crystal, which is battery operated with a 12-hour time format. Touching watches are water resistant and therefore can be also used in extreme weathers.

Product Classification

- o APL (WHO Assistive Product Priority List): 45 (Watches, talking/touching)
- o ISO 9999:2022: 222803 (Clocks and timepieces)

Possible configuration variants

 Digital braille display (raised dots resembling braille, continually changing their position to reflect the changing time; the dots are powered by magnets or electrical signals; the user can read the time by touching the dots).

Possible accessories or optional components

- o Carrying case.
- o Cleaning cloth.
- Spare batteries.

Product goals

Activities or functions the product is mainly intended to support, according to WHO ICF Classification:

o Carrying out daily routine [d230].

Indicated impairments

Difficulties the product is mainly intended to address, according to the WHO ICF Classification:

Seeing [b210] (blindness or severe low vision).

Contraindicated impairments

Difficulties for which the product may be inappropriate:

o Difficulty in fine hand use.

Indicated environments

Specific environments in which the product should be used: None specified.

Contraindicated environments

Environments in which the product may be inappropriate:

Dusty places (a touching watch may be at risk of catching dirt or dust when the upper cover is open especially if the user is outdoors).

Other indicated factors

Other factors or situations the product is intended to address:

- O Ability to read Braille. Only if used with variants: Digital braille display
- Knowing the time.

Other contraindicated factors

Other factors or situations in which the product may be inappropriate: None specified.

Points to be considered in product selection

- Considering the people who use touching watches, the makers of the watches should provide comprehensive operating and user manuals along with the watches that include complete instructions on how to properly use and maintain their watches.
- A good idea is to provide the manual in the form of braille or as audio recording and in two or three popular and widely spoken languages if not in multiple languages.
- o The user manuals should also have instructions for people who repair the watches if required.
- O Touching watches should be able to work in all kinds of weathers and temperatures, especially in territories where there is more frequent rain or extreme cold due to year-round snowfall.
- o Touching watches should be resistant to water and shocks.
- O Touching watches are quartz watches that are battery operated; when selecting the product one should check the battery quality and life; it is difficult for some users to keep changing the battery of their watch frequently after every few months.
- A technological advancement of present times is the emergence of smart phones that have a built-in feature of announcing time to users. As the phones also have a voice recognition feature, a user with vision impairment can ask their phone to tell the time, which will respond by announcing the time. With the increased use of smart phone all over the world, the use of talking or touching watches and even other watches is decreasing.

Points to be considered in product fitting

- o Managing the touching watch effectively depends on the size and weight of the watch.
- o The size or radius of the dial and height of tactile arms or dots on analog watch should be manageable for a
- Users also need to be trained in taking care of or maintaining their watches, especially in keeping track of the time when the batteries need to be replaced.
- o The strap of a watch must be adjustable.

• Points to be considered in product use

- There are a number of manufacturers producing a wide variety of touching watches with new designs for males, females and children.
- Technology used in making touching watches is also rapidly changing with a focus on ease of use, longevity
 of the device, its robustness, prolonged life of batteries, and usability in all weathers.
- O Users must stay aware of the technological advancements in touching watches that fulfill their basic need and also provide them the ease of use.

Points to be considered in product maintenance / follow-up

- o Touching watches, both with braille display and analog, need regular cleaning and care.
- They need to be protected from water and dirt and must be cleaned frequently with a special purpose microfiber cleaning cloth.
- o The batteries must be replaced at the end of their life.

Examples of products available on the market

o Live product search in the EASTIN website https://www.eastin.eu/en/searches/products/list?iso=222803

Source

This Fact Sheet was compiled in 2021 by an international team of experts, to provide the initial knowledge base for a project ("An online system to assist the selection of assistive product") supported by the World Health Organization in 2020-2021 within the GATE Initiative (Global collaboration on Assistive Product). Fact Sheets were compiled for each of the 50 types of products included in the WHO APL (Assistive Product Priority List).

The team was composed of Renzo Andrich (Italy, group leader), Natasha Layton (Australia), Stefan von Prondzinski (Italy), Jerry Weisman (USA), Silvana Contepomi (Argentina) and Hasan Minto (Pakistan).

The project led to a prototype online tool called ASPREX (ASSistive PRoduct EXplorer). At the end of the project, it was transferred to a WHO collaborating center (the Global Disability Hub in the UK), in view of possible future developments.