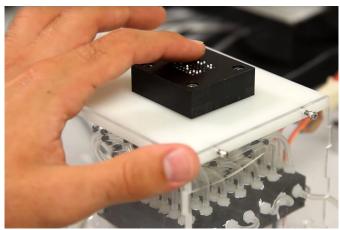
Written by Marco Attard 14 January 2016

Researchers at the University of Michigan might have a tablet solution for blind users-- a display using microfluidic bubbles to produce the bumps making the Braille alphabet on demand.



Braille displays and keyboards already exist but, being based on motorised pin systems, such systems tend to be heavy and expensive. The University of Michigan solution uses liquid or air to fill bubbles forming Braille symbols, making it both smaller (around tablet-size) and capable of showing more complex information than traditional devices.

Such a tablet is also less expensive to produce, since it depends or layering instead of a complex assembly of small parts.

"One of the main consequences for blind people not being able to access braille is that they're limited in terms of the kind of scientific and mathematical things they can do. Even being able to do something fun like see a graphic that represents the performance statistics of their football team," Sile O'Modhrain, a visually impaired performing arts professor working on the tablet says. "It's the kind of thing that people with vision do all the time, and it would be really nice to think that we could bring that back."

Watch Refreshable Braille Device