

# 360° 3D Light-field Display

Original and exciting 3D display invention

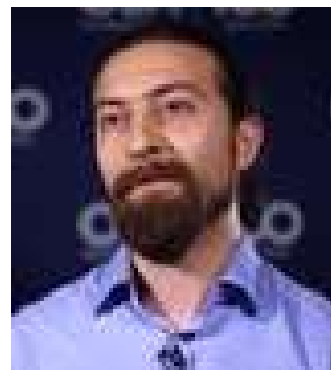


Dr Özgür Yöntem and his team in the Department of Electrical Engineering at the University of Cambridge have invented a novel 360° 3D light-field capturing and display system. The display has potential applications in novel gaming experiences, enhanced reality, novel interactive museum experiences, videoconferencing, and autonomous vehicle infotainment.

### Key benefits:

- Display can be viewed by many people from many angles
- 3D and appears to “pop” out of the surface
- Compatible with haptic feedback systems
- Can be used in both capture and display modes
- Intrinsic capturing property allows real-time hand/eye tracking.

Dr Özgür Yöntem is a post doctoral researcher at the University of Cambridge, with over 10 years’ experience of working with 3D holography and light-field, glasses-free 3D multi-view auto-stereoscopic displays, diffractive components and digital lenses.

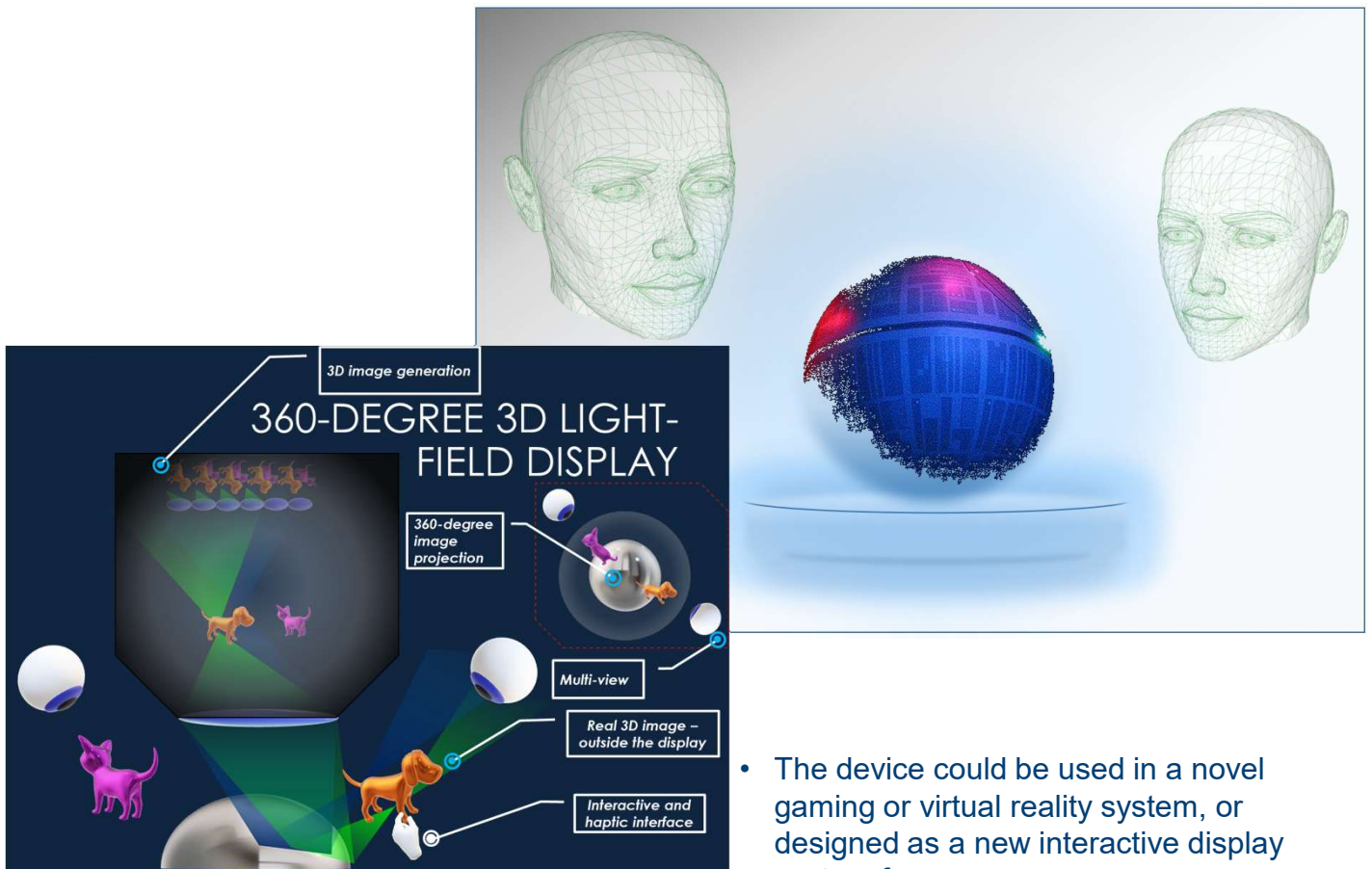


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Case Ref: Yon-3520-17



## Technology

- The novel 360° design allows for both filming the surroundings of the device as well as displaying a complete panorama which may be viewed from multiple angles.
- The unique 3D system allows for a more natural feel to viewing, as well as giving the illusion of the images “popping” from the display.
- The device may be used in combination with haptic feedback systems, allowing the users to fully interact with the display device.

## Applications

The potential applications for the device are varied and could open up new market spaces.

- The device could be used in a novel gaming or virtual reality system, or designed as a new interactive display system for museums.
- The ease of using the device as both capture and display systems has the potential to revolutionise videoconferencing.
- The technology has the potential for use in education and medical applications as well.
- The standalone system can be integrated in vehicles as a shared infotainment interface in concept of autonomous driving.

## Next Steps

This technology is protected by a PCT application, WO2019135087. We are now looking for partners to help us develop the device for a range of applications. Please contact us if you would like to explore this opportunity.