



**Press release**

## **Augmented Reality Hardware Startup OQmented Develops the World's Smallest Light Engine**

*The company integrates its micro projectors on miniature scale, delivering the enabling hardware system for Big Tech's realization of the Metaverse.*

**Itzehoe, Germany, February 25, 2022** – OQmented, a technology leader in MEMS-based AR/VR display and 3D sensing solutions, has set itself to enable stylish and light-weight AR smart glasses for the consumer market. To that end, the company has recently showcased its proof of concept demonstrations for their laser beam scanner light engine at several exhibitions and shows with overwhelmingly positive feedback from the industry, revealing the demand for a system supplier.

Several experts and tech entrepreneurs are predicting the next iteration of the internet, the so-called Metaverse; an immersive world, combining the real physical world with virtual and augmented realities. Ultimately, this vision goes hand in hand with the replacement of the smartphone by Augmented Reality smart glasses. However, there are several technical challenges in the development of all-day wearable smart glasses. Those glasses have to be of the right size, light-weight and stylish while at the same time delivering high quality images and very good battery life.

By providing fully integrated, complete projection display systems, OQmented takes on the relevant part of these challenges for the manufacturers. Leveraging laser beam scanning (LBS) technology allows for a very compact size and the lowest power consumption, at the same time delivering bright full-color images with high resolution and a large field of view. Furthermore, the company's proprietary wafer-level vacuum packaging technology enables the highly integrated packaging of the complete system on wafer scale, offering several advantages:

- it allows for a minimum size of the projection module
- the system does not require any relay optics
- it entails a very high parallelization in the manufacturing of the miniature projectors, i.e., it is suitable for mass production



With more than 20 years of experience in wafer-level packaging, OQmented's founders look back on a long history of massively parallel processing, making this one of the company's greatest strengths.

"We have hired extensively over the recent months and, in a short time frame, have achieved amazing results. In general, OQmented is very well positioned for the future. For example, only we are able to provide the necessary diameter for the rather large laser beams for diffractive waveguides", said Thomas von Wantoch, CEO/CFO and co-founder of OQmented. "We have observed that Augmented Reality has gained a lot of traction among laser manufacturers as well and we are discussing partnerships with top laser companies."

### **About OQmented**

OQmented is a deep tech company developing and selling ultra-compact LBS projectors for Augmented Reality devices and best in class 3D sensing solutions for mobile and stationary applications. The unique Lissajous scan pattern in combination with the vacuum encapsulation technology and proprietary electronics and software enable new product categories in consumer and various other industries. Further information can be found at [www.oqmented.com](http://www.oqmented.com)

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