

WaveOptics secures £12m in Series B funding round

Biggest UK funding round in AR hardware 2017

London, 17th July 2017 – WaveOptics, the UK company committed to pushing the boundaries of optical science to make stunningly immersive Augmented Reality (AR) commercially viable and accessible to multiple industry partners, today announced a £12m Series B funding round. WaveOptics' existing investors, Octopus Ventures, Touchstone Innovations plc and Robert Bosch Venture Capital GmbH reinvested and were joined by China's Gobi Ventures who came on board as a new investor.

'WaveOptics is reinventing the AR market, by developing a series of new AR display tech that enables a wider field of view and brighter full colour images – a unique combination in today's market', said Martin Harriman, Chairman, WaveOptics. "This funding round further accelerates development of our industry-leading technologies and enables us to launch programmes in new markets and territories. We are excited about the team of investors we have on board who share our vision.'

The AR market is expected to be worth more than [\\$55 billion](#) by 2020, which clearly indicates the great potential of this technology and its anticipated benefits, in the enterprise and consumer space. WaveOptics' Series B funding round is a true testament to this, as it's the biggest of its kind this year in the UK, leading in the AR hardware space.

WaveOptics is a global business with headquarters in Abingdon, Oxfordshire in the United Kingdom. It is developing novel optical waveguide technology and modules for augmented reality displays. Augmented reality (AR) devices enable people to view the world around them, overlaid with relevant digital content.

Whilst a number of major manufacturers are building the full AR systems (including the optics, sensors, camera and head mounted unit), WaveOptics is focused on developing the underlying optics to deliver an enhanced AR experience, whilst solving some of the performance and cost challenges currently limiting AR technology adoption.

The core of the WaveOptics technology is a novel design of waveguide that is able to channel light input from a micro display positioned at the periphery of a glass, or in future plastic, lens. Unlike conventional technologies that rely on cumbersome prisms, mirrors or scarce materials, WaveOptics' optical design harnesses waveguide hologram physics and photonic crystals, which enables lightweight design with unrivalled optical performance.

Robert Bahns, Director of Technology Investment at Touchstone Innovations, said: "WaveOptics has made significant technical and commercial progress since the investment round we led in October 2015, with very positive feedback from industry on its initial beta products. This new funding will allow the company to complete its product development and position itself as a leader and key technology enabler of highly compelling AR experiences."

Simon King, Principle at Octopus Ventures continued, "There are a number of technical hurdles that need to be overcome before AR is widely adopted and getting the display right comes high at the top of that list. We are very excited to continue to back the talented team at WaveOptics as we believe they have the skills and technology to deliver an experience that will unlock the next revolution in personal computing"

Hongquan Jiang, Partner at Robert Bosch Venture Capital GmbH added, "AR optics with great user experience and affordable cost in the mass production is the key for market adoption of AR products. WaveOptics' wave guides could become a game changer in this respect for the AR

industry. We are very excited about the company and expect much synergy between Waveoptics and Bosch in a variety of AR applications.”

Michael Zhu, Managing Partner at Shanghai based Gobi Partners continued, “The massive global potential for AR is likely to emerge within the Asian markets where the desire for this technology is significant. It is clear that WaveOptics have unlocked the combination of performance, compact form factor and scalability and present a highly compelling solution for the crucial optical element of headworn AR solutions”.

Martin Harriman, Chairman, WaveOptics concluded ‘Until now, there has not yet been a mass market product; we’re confident that we can capitalise on the expansion of the market. WaveOptics is the only AR company in the world right now that has solved an industry-wide challenge - the display element of AR that provides a compelling visual performance, possesses a compact form factor and is inexpensive to manufacture at scale.’

Notes to Editors

About WaveOptics

WaveOptics is a UK company committed to pushing the boundaries of optical science to make stunningly immersive Augmented Reality (AR) commercially viable and accessible to multiple industry partners. Working at the cutting edge of current AR visual challenges, WaveOptics uses unique and patented waveguide physics to produce AR lenses with unparalleled display performance and all-day ergonomics, designed for real-world AR applications. Founded by Sumanta Talukdar and David Grey in 2012 and headquartered in Oxfordshire, WaveOptics’ aim is to deliver on the acknowledged potential of AR by creating superior optics that are highly scalable and designed specifically to the requirements of the end user. For more information, visit: www.enhancedworld.com or follow us on [LinkedIn](#).

About Touchstone Innovations – www.touchstoneinnovations.com

Touchstone Innovations plc (formerly Imperial Innovations Group plc or just “Innovations”) creates, builds and invests in pioneering technology companies and licensing opportunities developed from outstanding scientific research from the ‘Golden Triangle’, the geographical region broadly bounded by London, Cambridge and Oxford.

This area has an unrivalled cluster of outstanding academic research and technology businesses, and is home to four of the world’s top 10 universities, as well as leading research institutions, the cream of the UK’s science and technology businesses and many of its leading investors.

Innovations supports scientists and entrepreneurs in the commercialisation of their ideas through protecting and licensing out intellectual property (through its Technology Transfer subsidiary, Imperial Innovations Limited), by leading the formation of new companies, by recruiting high calibre management teams and by providing investment and encouraging co-investment. Innovations remains an active investor over the life of its portfolio companies, with the majority of Innovations’ investment going into businesses in which it is already a shareholder.

Since becoming a public company in 2006, Innovations has raised more than £440 million of equity from investors, which has enabled it to invest in some of the most exciting spin-outs to come out of UK academic research. In addition, post period end the Group has drawn down the outstanding £50.0 million from the European Investment Bank (EIB) taking the total loan to £80.0 million.

Between Innovations' admission to AIM (August 2006) and 31 January 2017, Innovations has invested a total of £335.7 million across its portfolio companies, which have collectively raised investment of £1.5 billion.

About Octopus Ventures

Octopus Ventures is a London and New York based venture capital firm, focused on identifying unusually talented entrepreneurs. In recent years we have been fortunate to back the founding teams of over 60 companies, including Conversocial, graze.com, LOVEFiLM, Property Partner, Secret Escapes, Sofar Sounds, SwiftKey, Swoon Editions, Uniplaces, tails.com, Zoopla Property Group and Zynstra.

We can invest from £250,000 to £25 million in a first round of funding and will look to follow in subsequent rounds. We are proud to be known as one of the most entrepreneur friendly investors in Europe and a significant part of our portfolio consists of referrals from teams we have already invested in or serial entrepreneurs who we have previously backed.

Octopus Ventures is part of the Octopus group. Octopus is a fast-growing UK fund management business with leading positions in several specialist sectors including property finance, healthcare, energy and smaller company investing. Founded in 2000, Octopus manages more than £6 billion of funds on behalf of 50,000 investors.

www.octopusventures.com

About Robert Bosch Venture Capital GmbH

Robert Bosch Venture Capital GmbH (RBVC) is the corporate venture capital company of the Bosch Group, a leading global supplier of technology and services. RBVC invests worldwide in innovative start-up companies at all stages of their development. Its investment activities focus on technology companies working in areas of business of current and future relevance for Bosch, above all, automation and electrification, energy efficiency, enabling technologies, and healthcare systems. RBVC also invests in services and business models that are relevant to the above-mentioned areas of business.

The Bosch Group is a leading global supplier of technology and services. It employs roughly 390,000 associates worldwide (as of December 31, 2016). The company generated sales of 73.1 billion euros in 2016. Its operations are divided into four business sectors: Mobility Solutions, Industrial Technology, Consumer Goods, and Energy and Building Technology. As a leading IoT company, Bosch offers innovative solutions for smart homes, smart cities, connected mobility, and connected manufacturing. It uses its expertise in sensor technology, soft-ware, and services, as well as its own IoT cloud, to offer its customers connected, cross-do-main solutions from a single source. The Bosch Group's strategic objective is to deliver innovations for a connected life. Bosch improves quality of life worldwide with products and services that are innovative and spark enthusiasm. In short, Bosch creates technology that is "Invented for life." The Bosch Group comprises Robert Bosch GmbH and its roughly 440 subsidiaries and regional companies in some 60 countries. Including sales and service partners, Bosch's global manufacturing and sales network covers nearly every country in the world. The basis for the company's future growth is its innovative strength. At 120 locations across the globe, Bosch employs some 59,000 associates in research and development.

About Gobi Partners

Founded in 2002, Gobi Partners is a leading venture capital firm with an investment focus on early-stage, digital media, IT and TMT companies. Headquartered in Shanghai, Gobi has seven offices

across China, Hong Kong, Singapore, Kuala Lumpur, and Jakarta. The firm has raised eight funds to date, and has invested in over 170 portfolio companies across China and ASEAN. For more information, please visit www.gobivc.com