

# Vortis to ring changes for the hard of hearing

Device aimed at taking buzz out of mobile phone use for impaired

MARK SMITH

AN entrepreneur from Silicon Valley in California is moving to Scotland's Silicon Glen to launch a company which aims to capture a global \$2bn market by drastically reducing the disruptive interference between mobile phones and hearing aids.

James Johnson, 53, has clinched £200,000 in seed capital loans – split evenly between Scottish Enterprise and the Bank of Scotland – to set up his new company, called Vortis, which will have its headquar-

ters in Glasgow and intends to employ 20 people within the next 18 months.

Its product, a micro interferometric array antenna called the vortis, is an accessory antenna that attaches to mobile phones and redirects the radio frequency emissions away from the user's head and hearing aid.

Radio frequency interference between mobile phones and hearing aids often makes the use of mobile phones by the hard of hearing almost impossible because of the disturbance of buzzing.

Johnson also said he plans to outsource the manufacture of the vortis to a Scottish-based company, and has already patented the intellectual property in Europe, the US, China and India.

"The problem with starting up a company in Silicon Valley

is that venture capitalists there aren't interested unless you want \$7m or \$8m worth of funding," said Johnson, who has worked in Silicon Valley for 30 years and plans to bring his wife over from San Francisco during the next few weeks to settle in Glasgow.

"The other main reason for setting up here is because the European cellphone market is so much bigger and further advanced than in the US.

"Globally, however, there are 18 million hearing aid users, and around half of them could use this product – that's about 1% of all cellphone users, which is worth about \$2bn.

"In three years, we intend to be selling five million of these things."

Andy McNab, a director of Scottish Enterprise's high-growth start-up unit, said the agency had invited Johnson to

set up in Scotland after being contacted by the Department of Trade and Industry's entrepreneurial investment team in London, which encourages entrepreneurs to establish businesses in the UK.

Johnson, who came up with the idea after observing his mother's difficulty using mobile phones, added the vortis also doubles a mobile's battery talk time by channelling the phone's energy in a more efficient way, and is expected have further applications with personal digital assistants, cordless land-line phones and other electronic devices.

He also said the device improves mobile phone coverage and reduces the number of dropped calls.

"I saw a problem and I saw I could bring a solution – so here we are," he said.



LISTEN GOOD: James Johnson surveys the Clydeside as a caller puts his H-shaped vortis device to work. Picture: Chris James