

# UI Octoson and Ausonics

The Octoson was a unique machine which enabled the rapid production of panoramic, leading-edge, grey scale images with wide degrees of freedom for the selection of scanning planes. Demand for this technology led to the formation of Ausonics Pty Ltd and creation of a new, high-tech export industry for Australia.

- 1973 Construction began on the UI research Octoson scanner, in which eight annular array transducers were mounted on an arm and mechanically swept in a simple sector scan motion. The transducers were energised sequentially to provide a compound scan in one second. The anatomy was examined through a membrane in the tank. This comfortable position and water temperature made it particularly suitable for the examination of infants. The membrane could be removed to examine deformable organs such as the breast and testes.
- 1974 The research prototype UI Octoson was installed at RHW
- 1974 The Commonwealth Department of Health called for tenders to manufacture the UI Octoson. Nucleus Pty Ltd was selected as the successful tenderer, and formed Ausonics Pty Ltd to manufacture the UI Octoson.
- 1977 UI Octoson/Ausonics was commercially released and subsidiary companies were formed in the USA, Japan and Europe to distribute the equipment
- 1977-1982 Some two hundred UI Octosons were sold worldwide generating revenue in excess of \$20M. The Commonwealth collected three quarters of a million dollars in royalties.
- 1983-1985 Ausonics released the System 1 breast and small parts scanner; around one hundred of this "mini" version of the UI Octoson were sold worldwide.



UI research prototype Octoson



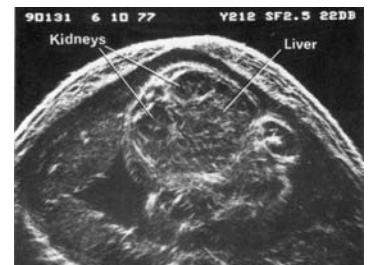
The commercial UI Octoson scanner



The Ausonics System 1 breast and small parts scanner which employed four 4 MHz transducers for the scanning.



Examination of the kidneys of an infant on the UI Octoson installed at the University of Wisconsin, Madison. This photo was featured in *Life* magazine in May 1984.



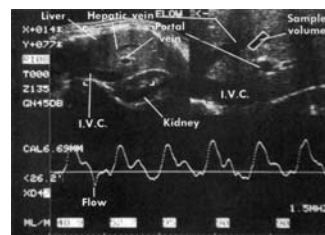
1977 Normal intrafetal anatomy



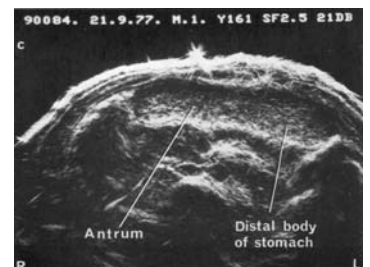
1975 The laughing musketeers: Paul Trainor AO, Chairman of Nucleus Pty Ltd, George Kossoff AO, Dave Robinson AM and Keith Daniel, CEO of Ausonics Pty Ltd.



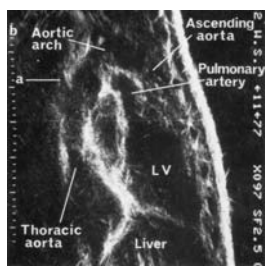
1977 Normal breast



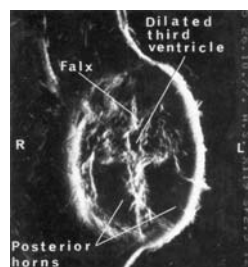
1980 Volumetric Doppler blood flow



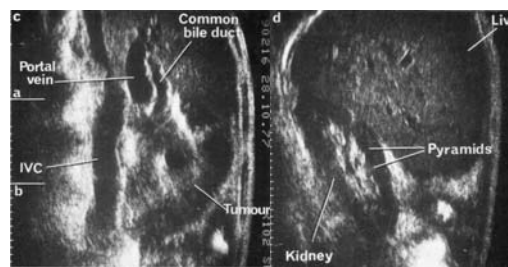
1977 Fluid filled stomach as window to the pancreas



1977 Corrected transposition – child aged 13 years



1977 Hydrocephalus



1977 Upper abdomen echograms on the UI Octoson



1980 Hydatid cyst