



Continuous-wave yellow laser

BACKGROUND

Over the past decade, researchers at Macquarie University have been at the forefront of Raman laser research and have pioneered the design, development and application of these laser systems in fields such as dermatology and defence.

The group has been highly successful at combining high impact, cutting edge research (evidenced by publications, citations, and invitations to present at conferences) with industry partnerships and commercialisation.

There has been a recent surge in interest for continuous-wave, solid-state yellow laser sources, for a diverse range of application including ophthalmology, biomedicine, guide stars and visual display.

OUR SOLUTION

The scientists at Macquarie were aware of the potential of the yellow laser for ophthalmic applications from the outset.

The reasons were clear - by means of patented Raman laser technology, one could construct a continuous-wave (CW) yellow laser using essentially the same components as the market-dominating and ubiquitous green laser.

At the same time, a yellow Raman laser had market advantages of power and/or affordability and simplicity over emerging and competing yellow technologies (i.e. 561nm and 577nm ophthalmic products).



APPLICATIONS

- ✓ ophthalmic industry
- ✓ medical retinal imaging
- ✓ biomedicine
- ✓ visual display

INVENTORS

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INTELLECTUAL PROPERTY POSITION

Continuous-wave laser

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COMMERCIAL OPPORTUNITY

Seeking a partner to commercialise this technology in the applications listed above.

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ADVANTAGES

Doctors can use much lower (up to 50%) laser powers with the yellow laser compared to the conventional green laser.

BENEFITS

Reduced side effects, collateral damage and less pain for patients.