

Flexible semiconductor based ultra fast lasers



Value Proposition

VCSEL based pulse source with the following advantages

- Short pulse-width (or tailorable multipulse, triangel etc), every sweep can be made different)
- High peak power
- Low repetition rate (for a semiconductor device)
- Low production cost

Business Opportunity/Commercial Perspectives

Possible applications: Multiphoton spectroscopy, Material processing (with SOA amplification), Femtochemistry, Sampling systems, THz generation.

Technology Description

A completely new type of semiconductor based optical pulse source with basic properties similar to low repetition rate mode-locked lasers, which are the types of lasers most used today. On top of being semiconductor based, the new source allows a fast electrical tailored emission that is not achievable by standard lasers and may open up for completely new application areas.

Development Phase/Current State

TRL 3-4

The inventor

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Seeking

- Commercialisation partners