

COMPETITIVE ADVANTAGES

- Wide range of performance in pulse duration and repetition rate;
- Mo modelocked laser, easy to use;
- Wall-plug efficiency: 1%;
- Restricted wavelengths linked to doped fibered (Ytterbium Er, Th, Ho...): 1.064 μm , 1.55 μm , 1.95 μm ...

APPLICATIONS/MARKETS

- Semiconductor engineering;
- Telecom;
- Biological and Chemical Science;
- Optical Metrology;
- Lasers manufacturers.

INTELLECTUAL PROPERTY

- N°1350331: Device and process to generate optical pulses;
- WO 2011/121213A1: Device and method for processing an optical device.

LABORATORY

- Laboratoire Interdisciplinaire Carnot de Bourgogne (ICB)

CONTACT

Ludovic GOBY
Development officer
Materials, Processes, Chemistry
Tel.: 03.80.40.34.97 - 06.43.65.51.20
Mail: ludovic.goby@sattge.fr

PRESENTATION

Optical sources emitting picosecond pulses at very high repetition rates start to be used in many scientific applications, such as waveform measurement, ultrahigh capacity telecommunication systems, clock generation, metrology, or component testing.

The ICB laboratory has developed a new modular design based on the progressive compression of an initial beat-signal through a multiple FourWave Mixing (FWM). It allows the generation of high quality ultrashort pulses (ps and sub ps) with repetition rate ranging from 20 GHz up to 2 THz and output power at W-levels.

