SOLID-STATE LASER WITH COPV AS ACTIVE COMPOUND

PATENTED TECHNOLOGY

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ABSTRACT

The research group "Physics of condensed matter" of the University of Alicante has developed a new solid state laser (OSL) where the active compound comprises carbon-bridged oligo(p-phenylenevinylene) (COPV).

The main advantages of this technology are photostability, miscibility, processable in thin layers and effective for laser generation at different wavelengths. It can be used in the following industrial sectors: Spectroscopy, biosensors, chemical sensors and optical communications.

The research group is looking for companies interested in acquiring this invention or adapting it to their requirements.

ADVANTAGES AND INNOVATIVE ASPECTS

MAIN ADVANTAGES OF THE TECHNOLOGY

The laser developed material shows the following advantages :

- Suficientemente soluble y miscible para facilitar la fabricación de películas delgadas. Soluble and miscible in order to allow thin layer processing.
- Cheap.
- Photostable.
- Efficient for laser light generation.
- Ability for emission at different wavelengths.

INNOVATIVE ASPECTS

Same laser development combines:

- Efficiency
- Stability
- Wavelength tuning.
- Liquid solution procesable.

MARKET APPLICATIONS

- Spectroscopy
- Biosensors

- Chemical Sensors
- Optical Communications

COLLABORATION SOUGHT

Companies looking for technologies in order to commercially introduce or develop this product are sought. Cooperation sought:

- Licensing agreements.
- Joint R&D projects in order to adapt the developed technology to company needs.