

The best patented inventions from Slovenia

by selection of Inventors' Centre ASI – the association of Slovene inventors

(June 10th, 2014)

Top 3 patented domestic inventions in the XXI. Century

No.1

Inventors: dr. Janko Žmitek, dr. Mirko Prošek, dr. Andrej Šmidovnik, dr. Alenka Golc Wondra, dr. Samo Andrenšek, Maja Fir, dr. Monika Stražišar

Applicant: Institute of Chemistry, Slovenia

Invention: NEW WATER SOLUBLE FORM OF COENZYME Q10

Priority date: December 31st, 2005



The new form of CoQ10 exhibits increased water solubility and, consequently, better bioavailability in comparison to powder and oil-based CoQ10 preparations. This new form of CoQ10 has already been commercialized as a functional food additive for human nutrition. The invention was awarded with a gold prize of Ljubljana Chamber of Commerce and Industry in year 2006.



Image source: Institute of Chemistry

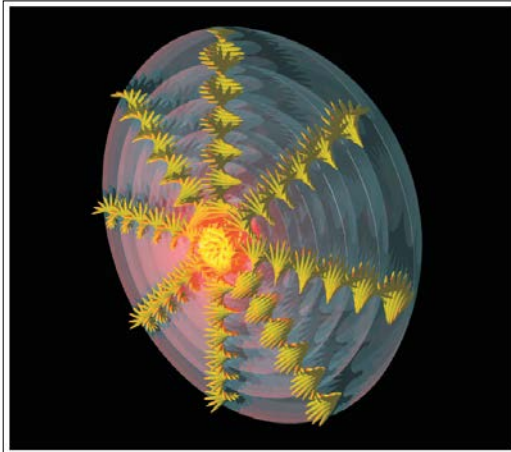
No.2

Inventors: dr. Igor Muševič and dr. Matjaž Humar

Applicant: Jozef Stefan Institute

Invention: SPHERICAL LIQUID CRYSTAL-LASER

Priority date: November 10th, 2010



The world's first practical omnidirectional micro-laser (3D microlaser) meets criteria required in modern versatile electronic gadgets being small in size, quick in operation, inexpensive to fabricate and deliver high precision output. The micro-droplet shaped laser resonator is formed spontaneously in a fraction of a second from special liquid-crystal in a carrier fluid. The laser is tunable, its production is simple and inexpensive. The 3D microlaser technology is applicable in optical and photonic devices, displays, imaging instruments, medical imaging instrumentation, optical communication systems etc. American association in the field of optics

American Optical Society has issued a special press release entitled "World's First Microlaser Emitting in 3D" and through the network Business Wire reported it to be one of the most important discoveries of the time.

Image source: M. Humar and I. Muševič. "Microlasers from self-assembled cholesteric liquid-crystal microdroplets" Optics Express Vol. 18 Nr. 26 (2010)

No.3

Inventors: Matej Andrejašič, Ivo Boscarol, Tine Tomažič, Boštjan Makovec, Jemej Pristavec

Applicant: Pipistrel d.o.o.

Invention: ADVANCED LIGHT AIRCRAFT

Priority date: May 18th, 2010



Pipistrel's advanced light aircraft have several new design solutions and three patents (Self-powered Yaw Control and Anti-Spin Device for Fixed Wing Aircraft, Novel User Interface for Control of Aircraft Trim System and Mobile Solar Powerplant). Pipistrel's products include the highest of technologies, including honeycomb techniques, which are used to build composites and best quality metal alloys.

Image source: www.pipistrel.si

Top 3 patented domestic inventions in the XX. Century

No.1

Inventor: Niko Kralj (1920-2013)

Invention: “REX” CHAIR

Priority date: June 22nd, 1953



The "REX" is a foldable wooden chair and it is one of the most internationally notable Slovenian designs. It is included in the collection of the Museum of Modern Art MOMA in New York and in Designmuseum, Denmark, the largest museum of design in Scandinavia. It became a cult object for design lovers around the globe with its calm contemporary elegance and a feeling of floating.

Image source: http://en.wikipedia.org/wiki/Rex_%28chair%29

No.2

Inventors: Jenny Milovac, Mateja Kovacic, Zdravko Kopitar, Janja Urbancic-Smerkolj, Andrej Lenardic, Mirjan Zorz, Bojan Kofler, Angela Vene-Mozina, Vida Nikolic, Marija Lampret, Breda Meden

Applicant: Lek Pharmaceutical Company d.d.

Invention: “REDERGIN« MEDICINE

Priority date: September 30th, 1988



The “REDERGIN” is a medicine that improves blood circulation, especially in the brain. In this way it improves the functioning of brain cells in old age.

Image source: <http://farmshop.ro/559-redergin-01-picaturi-orale-solutie-50-ml-sandoz-3838957492442.html>

No.3

Inventor: Peter Florjančič

Invention: SLIDE FRAME

Priority date: May 21st, 1963



The frame for a photographic slide is made of plastic material and has a pair of masks formed with parallel side and end portions. The invention gave work for 25 years to a large number of workers.

Author of image: Mirko Kunšič, image source:

<http://www.slovenskenovice.si/novice/slovenija/blejkam-bi-morali-postaviti-spomenik>