



Inventions GALORE

In 2010 Poland's universities, companies and individuals submitted a total of 3,387 inventions for registration with the Polish Patent Office. The figure was 12 percent higher than in 2009. The number of applications for the protection of utility models also increased—by 7 percent.

However, European Patent Office statistics show that in Poland only 0.86 of a patent on average is registered per 1 million residents. In Greece the figure is 2.23 patents and in Portugal 2.24.

It takes 18 months on average to obtain a patent in Poland.

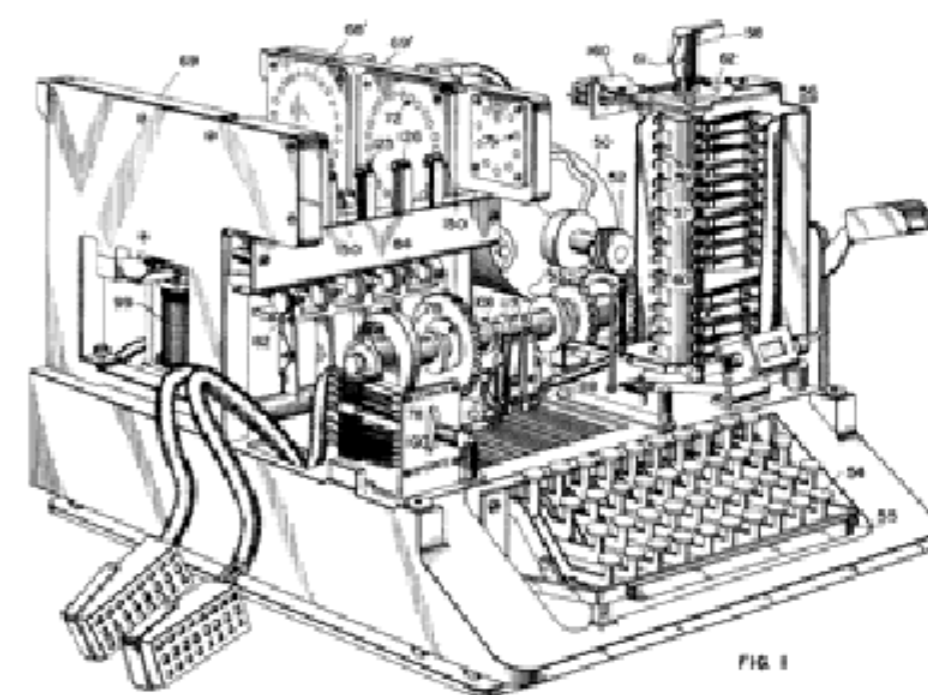
Among Polish university-level schools, the largest numbers of inventions are submitted by the Warsaw University of Technology and the Wrocław University of Technology, followed by the AGH University of Science and Technology in Cracow. Other universities active in this area include the West Pomeranian University of Technology in Szczecin and the Poznań University of Technology. Medical schools also submitted more inventions than in previous years. There were more applications in fields such as chemistry, biotechnology and nanotechnology.

With 11 patents, ABB topped the list of companies in Poland in terms of the largest number of patents obtained in 2010. The company also led the way in terms of the number of patents obtained in 2005-2009, at 63. A total of 194 companies obtained patents in Poland last year. Those ranking from second to fifth place in the league table each obtained from seven to four pat-

ents; most of the others patented one invention each.

The Innovation Union Scoreboard for 2010 published recently by the European Commission shows that Poland is 22nd among the European Union's 27 member countries. The Scandinavian countries and Germany lead the way. Of the new EU members, Estonia and Slovenia have more patents than the other countries.

Experts from international consulting firm Deloitte warn that, in the longer term, such a technological gap will cause the Polish economy to become less competitive, which makes it essential to raise funds for research and development. The number of small and medium-sized enterprises investing in R&D has dropped significantly since 2008, as has the number of projects financed with the use of venture capital, which enables high-risk innovative projects to be carried out.



A number of Polish inventions that have been won praise abroad were recently showcased at a special exhibition of prize-winning inventions. Exhibits included an ultra-fast SVB synchronized vacuum circuit breaker for high-speed railways developed by Marek Bartosik, Ph.D., from the Technical University of Łódź.

Other inventions from the same university included a system for identifying the alarm signals of priority vehicles in traffic, a telenavigation system for the blind, and a computer controlled by eye winks for disabled and paralyzed people who are unable to use a mouse or keyboard.

The Poznań University of Technology showcased a method for locating cancer-related and atherosclerotic changes using electron paramagnetic resonance imaging (EPRI) and a “sedimentation drainage trough”

designed by Daniel Słyś, Ph.D.—an invention thanks to which waste water from transport depots, parking lots and car washes will not be discharged into rivers.

The Military University of Technology (specifically a team led by Prof. Jerzy Gawinecki) has developed the National Encoder, a device that encodes information into an unbreakable code. Other inventions from the same university include an optoelectronic biohazard sensor, an engineering robot for supporting EOD/IED (explosive ordinance disposal/improvised explosive device) missions, and a rail car with a rotating platform for a container trailer.

The Częstochowa University of Technology has found a way to improve the properties of ceramic superconductors by developing a method for destroying pathogenic microbes in living organisms. The Institute of Precision Mechanics in Warsaw has developed an advanced technology for the thermal processing of cardiological stents used in treating coronary disease. A company based in Kajetany near Warsaw has developed a Sensory Organ Examination Platform for the screening of hearing, sight and speech in children, teenagers and people with special education needs.

Individual presentations at the exhibition included that of Anna Dorota Potocka, Ph.D., and Marzanna Marcinkowska, M.Sc., who have developed a special kind of paper containing almost 70 percent of silk fibers. The paper, made from waste left over from the production of silk, is ideal for repairing damaged historical fabrics and as a material for artists, the designers say.

