

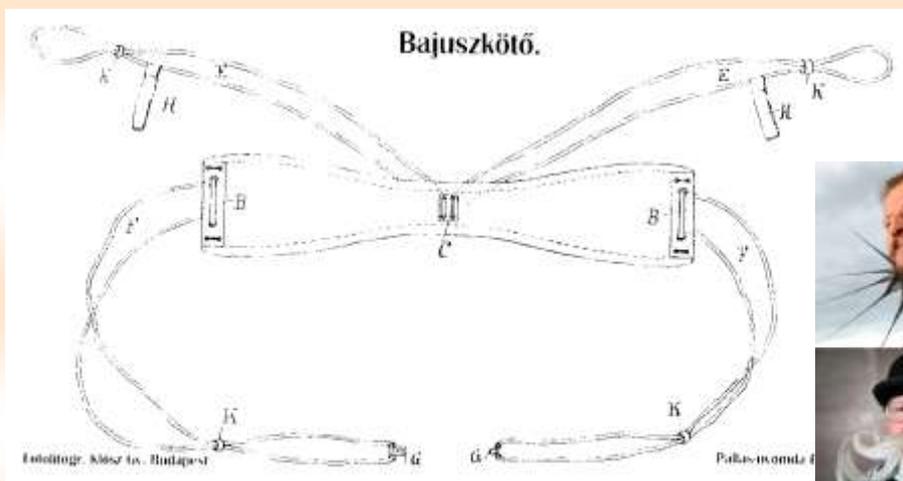


- 1.) Hungary – Association of Hungarian Inventors - MAFE
- 2.) Inventor of the first ever Hungarian patented invention
Endre KORÉNYI: Moustache-trainer; Pat. No.: 5802

The first ever Hungarian patented invention



Korényi Endre (Zilah):
Moustache-trainer (1896. February 10.)



The number of the first HU patent: 5802, why not numeral 1? The protection of intellectual property in Hungary established in 1896 by virtue of Article 23 of Act XXXVII of 1895 on Patents for Inventions. Before this year there was invention protection by the grace of the king without numbering. The patenting based on subjective rights was started in 1895 together Austria (then was in force Austrian-Hungarian Monarchy) and in 1896 the numbering started: 5802.

3.) Inventors of the 3 top patented domestic inventions in the XX. Century

3.1) Kálmán KANDÓ: Electric locomotive with 3-phase AC; Pat. No.: 21212

Kálmán Kandó (1869-1931)



Electric railway (64 HU patents; 1902-29)

Kálmán Kandó was one of the creators of the electric railway.

He attended high school in Budapest, and obtained his diploma as a mechanical engineer at the Budapest Technical University. He worked in France as a junior engineer designing and developing Tesla's induction motor. András Mechwart (the Ganz factory's managing director at that time) called him to return home in 1894. Shortly afterwards, Kandó designed the three-phase motor and generator series. Following these successful achievements at home he worked in Italy, later returning to Budapest to work at the Ganz factory where he became the managing director. On Kandó's initiative and under his leadership the factory began work on three-phase hauling for railways. Based on their design, the Italian Valtellina railway line was electrified, which became Europe's first electrified main railway line.

Kandó lived in Italy from 1907 to 1915, and returned home at the outbreak of war, but he was exempted from military service. He worked on the phase-converter system to the end of his life. His work is recognized abroad, as well, mainly for the 3-phase, electric railway supplied from the national grid system.

3.2) György JENDRASSIK: Gas turbine; Pat. No.: 100 249

György JENDRASSIK (1898-1954) 



35 patents for gas turbine 1929-1946)

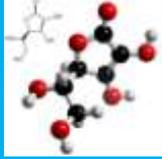
Jendrassik completed his education at Budapest's József Technical University. From 1927 he worked at Ganz Rt, where he invented the world famous Jendrassik engine without compression and with mixing chamber.

He invented gas turbine possessing its own independent combustion chamber, with low capacity, and good efficiency. It was an internal combustion engine, transforming the fuel's (gas) first to heat, then to mechanical energy. As opposed to piston-type engines, here the working process was stationary and each phase takes place in different parts of the machine (compressor, heat exchanger, combustion chamber, and turbine).

The number of his different inventions on record in Hungary is 77. In recognition of his scientific work he was elected in 1943 corresponding member of the Hungarian Academy of Sciences. After the Second World War he was not able to continue developing gas turbines in Hungary. Distrust surrounded him, and therefore he did not return from one of his travels abroad. He lived in Argentina and in England, where he established his own workshop.

3.2) Albert SZENT-GYÖRGYI: Preparation of Vitamin C; Pat. No.: 133 789

Albert Szent-Györgyi (1893-1986)
Hungarian citizen awarded Nobel prize



First Vitamin C patent (1941)

Born in Budapest, he obtained his diploma in medicine in 1917. For more than 10 years he toured the world, and at Cambridge he obtained his Ph. D. in chemistry.

After returning home he took up a professorial position and headed a department at the University of Szeged, where shortly he set up a biological research laboratory.

During experiments on cell respiration he succeeded in isolating a reducing agent from plants such as oranges and lemons, which blocked the effect of the peroxidase-type enzymes. This substance, similar to heuronic acid, he named ascorbic acid (due to its efficacy in eliminating scurvy), or vitamin C. The paprika produced around Szeged was an ample source for its production.

In 1937 he received the Nobel Prize in physiology and medical science for "discoveries in the area of biological combustion processes, particularly in regard to vitamin C, and the fumaric acid catalysis".

He patented the first vitamin C preparation method in June 13, 1941.

After the war he actively joined in Hungarian scientific life and the reorganization of the Academy, but in 1947 fearing political terror he went abroad.

He lived in America for almost 40 years. He conducted research mainly on muscles and cell regulation problems; furthermore, his cancer research activities were significant.

He wrote more than 200 studies and many books.

Both his scientific and human activities reflected his optimism for life and hatred for destruction.

4.) Inventors of the 3 top patented domestic inventions in the XXI. Century

4.1) Csaba SZÁNTAY et al.: Vinpocetin synthesis; Pat. No.: 175 527

Szántay Csaba
275 pharmacochemical patents



Brain oxygenator

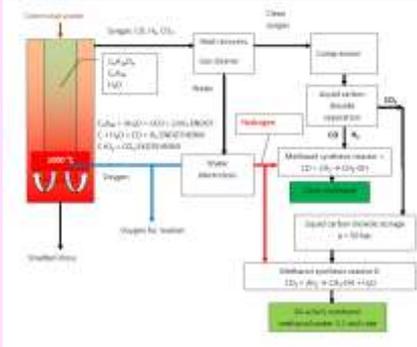
He is the President of the Association of Hungarian Inventors, professor emeritus and member of the Hungarian Academy of Science. His main inventive activity is connected to the alkaloid chemistry. He invented several alkaloid like compounds having interesting pharmaceutical effects. One of them is “Vinpocetin - Cavinton” which is a valuable medicine on several countries.



Raisz Iván dr.



Methanol from communal waste





RAISZ Iván dr. and BARTA István dr.: Methanol synthesis from communal waste

This is modified syngas production. The oxygen source is clean oxygen, we not used direct steam flow, and the raw material has the necessary water for CO production and used modified gas flow direction and high carbon bed temperature. In this regime the syngas has not toxic organic and inert components. We spare the communal waste deposit gas, and use the CO₂ for synthesis.

4.3) János Szöllősy: Humic acid preparations and FluxMap

Szöllősy János

**Humic acid preparations and
Non destructive metal testing**

Magnetic Image Reading Method

Digital 3D Magnetic "Photo"

SZÖLLŐSY, János: Food supplement removal heavy metal contamination (Humicin) (Pat. appl. No.: P0303225)

The active ingredient of the Humicin is the humic/fulvic acid, which is a natural organic material. Its isolation is invented too. Due to its natural origin and conformity, it is particularly suitable for the interaction with the biological processes without any side effects, as well as for the transportation (taking in or removing) elements into or from the metabolism.

SZÖLLŐSY, János, FARKAS, Tibor and GASPARICS, Antal: FluxMap measurement system (Utility model No.: 3012)

It has been developed for manual scanning and displaying three dimensional magnetic field distributions. This new invention allows us to produce monochrome or colorful “photos” of the magnetic field over any inspected surface. The manual scanning and magnetic imaging ability makes it possible to recognize the cracks or any defects even in specimens having inhomogeneous, complex internal structure. The probes are suitable for testing both conductive and magnetic materials.