



NATIONAL RESEARCH, DEVELOPMENT
AND INNOVATION OFFICE
HUNGARY



SMART HUNGARY

SCIENTISTS, INVENTORS, INNOVATORS

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THERE ARE DIFFERENT WAYS OF ADDRESSING CHALLENGES

- Scientists ask questions and create new knowledge.
- Inventors transform this knowledge to find the answer to a practical problem.
- Innovators add special value to the knowledge so as to create genuine marketable solutions.

THE SCIENTIFIC-EXPLORATORY-ENTREPRENEURIAL MIND-SET OF HUNGARIAN SCIENTISTS, INVENTORS AND INNOVATORS IS THE KEY TO OUR SOCIETY'S FUTURE.

- Let's have a look at some outstanding achievements of Hungarian scientific and innovative talents in the past and see how their legacy lives on today in the recent innovations of their contemporary counterparts.
- The primary concept of the Smart Hungary exhibition is to demonstrate a living connection between the past and the present.
- You will understand that mankind has always faced similar challenges throughout the centuries and the approaches to solving the challenges have also shown similarities.

BALLPOINT PEN

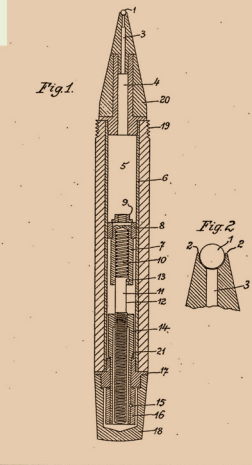
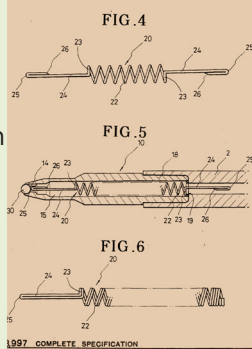
BY LÁSZLÓ JÓZSEF BÍRÓ
HUNGARIAN NEWSPAPER EDITOR
1938

No need to fill up your pen every now and then

ball-socket mechanism in pen-point to allow controlled flow of ink

cleaner and more reliable alternative to fountain pens, became the world's most common writing instrument

influenced art and graphic design and spawned an artwork genre



Picture Post, December 8, 1945

Biro

MARKS A TURNING POINT IN THE HISTORY OF Writing

more without refilling—according to the amount you write. To replenish "BIRO" for a similar period of trouble-free service a refill unit is inserted while you wait.

"BIRO" is unique; it writes with a ball-bearing point—a point that never goes wrong, never floods, bends or splutters a point that rolls your writing on to the paper with effortless ease. "BIRO" ink dries as you write; you cannot smudge it; you need no blotter.

"BIRO" lasts six months or more without refilling—according to the amount you write. To replenish "BIRO" for a similar period of trouble-free service a refill unit is inserted while you wait.

The demand for "BIRO" has far exceeded production capacity. Consequently you may have to be patient until your turn comes round.

Retail Price 55/- including purchase tax.

LEONAR3DO

BY DÁNIEL RÁTAI
2010

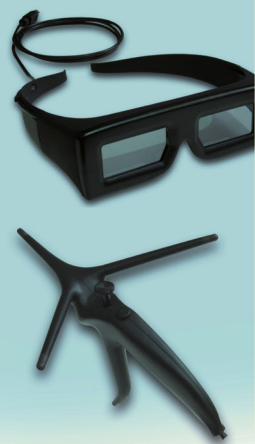
Bridging the gap between real and virtual worlds

Leonar3Do's virtual reality kit is an integrated software and hardware platform

Leonar3Do transforms the flat dimensions of a screen into a 3D work environment

Leonar3Do provides a convenient tool to create, demonstrate and visualize virtual objects in real space

www.leonar3do.com



HYPERBOLIC GEOMETRY

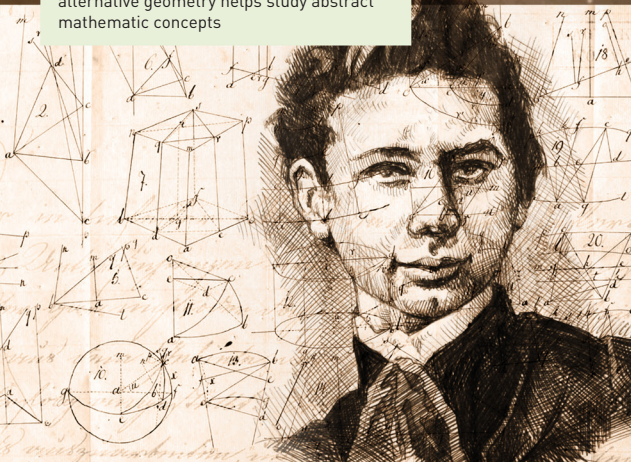
BY JÁNOS BOLYAI
HUNGARIAN MATHEMATICIAN
1832

First constructor of
a Non-Euclidean geometry

attempt to describe the structure
of the physical universe

sole mathematical reasoning proved
insufficient to decide whether the universe
follows Euclidean or non-Euclidean geometry

alternative geometry helps study abstract
mathematic concepts



GÖMBÖC

BY GÁBOR DOMOKOS
AND PÉTER VÁRKONYI
2006

Physical solution to a lasting
mathematic enigma

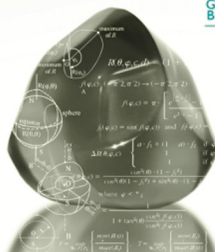
the first known homogenous object
with just two static equilibrium points.

always rights itself when tipped over

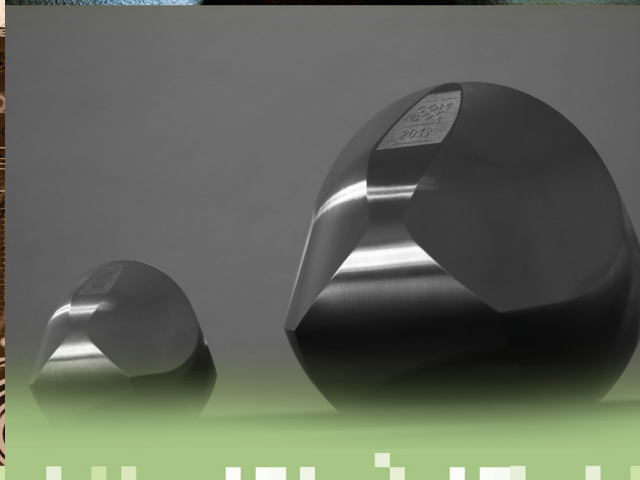
helps to understand the wonders of nature
such as the geometry of tortoise shells
and the evolution of pebbles on Mars

individually numbered pieces are on permanent
exhibit at science centres worldwide

www.gomboc.eu



GOMBOC





Not only the content but also the manufacturing of the installations testify to Hungary's innovative entrepreneurship. All parts of the exhibition are made of recycled cardboard and are uniquely produced by Terbe Design, an advanced Hungarian SME.

Smart Hungary is an exhibition compiled and supervised by the **NATIONAL RESEARCH, DEVELOPMENT AND INNOVATION OFFICE**, the organisation being responsible for governmental RDI policy and acting as the funding agency for R&D and innovation in Hungary.

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