

Sprawozdanie z udziału w

Prix Eiffel International Invention Contest 2022

Paryż 16-18 Nov. 2022

W ramach ministerialnego projektu "Nauka dla Społeczeństwa" realizowanego w Akademii Górniczo-Hutniczej odbył się wyjazd na międzynarodowy konkurs wynalazków

Prix Eiffel International Invention Contest 2022



Który odbył się w Paryżu w dniach 16-18 Listopada 2022. Najwyższą nagrodę tj

Platynowy Medal zdobył wynalazek K. Marszałka i A. Rydosza pt Osobiste

urządzenie do pomiaru glukozy z analizy wydychanego powietrza (rys 3 i 4).

Wynalazek został dodatkowo Nagrodzony **statuetką wieży Eiffla** (rysunek 5)

oraz **złotym medalem** World Invention Intellectual Property Association

(rysunek 6 i 7)

International Invention and Innovation Contest „PRIX EIFFEL” and International Economic Mission to France for a technology fair



Competition online + international economic mission to France for International Technology Fair Paris /France

The mission and contest is addressed to individual inventors and institutions
from the field of science and SMEs.

International Economic Mission to France for technology Fair combined with the International Competition of Inventions "PRIX EIFFEL". Organizers are French Federation of Inventors, the French Association of Inventors Europe France Inventeurs and Haller Pro Invention Foundation. We heartily invite to participate in the economic mission.

IN THE MISSION PROGRAM:

- Promotion of inventions and innovations by participating in the **International Competition "PRIX EIFFEL" 2022**
- Participation in the technology fair as a visitor
- Visiting the Fair as VIP guests and participation in Fair conferences
- Ceremonial presentation of awards and medals to the winners of the **"PRIX EIFFEL" 2022** competition

INTERNATIONAL INVENTION COMPETITION „PRIX EIFFEL”

The patron of the competition is Gustave Eiffel, a brilliant innovator and constructor, a major figure of the industrialization age of Europe and rest of the world, an author of the tower which has become the icon of Paris and other innovational implementations created both in France and other countries.

AWARDS

All inventions submitted to the Prix Eiffel competition will be evaluated by a jury representing both science and industry. The awards include medals: platinum, gold, silver and bronze.

The honorary chairman of the jury is Philippe Couperie Eiffel, Honorary President of the E.F.I. F.F.I. and a descendant of the patron of the Competition. Also, on the presidium are Gérard Roquillon, President of the Federation of French Inventors Associations, Patrick Herbault - President of Europe France Inventeurs and representing Poland prof. Krzysztof Biernat.



Rys.1. Nazwa i logo Konkursu na uroczystości wręczania nagród.



Rys.2. Logo konkursu i klasyfikacja nagród



Rys.3. Dyplom platynowego medalu



Rys.4. Zdobyty platynowy medal



Rys.5. Zdobyta statuetka wieży Eiffla



Rys.6. Dyplom do zdobytego złotego medalu WIIPA



Rys 7. Złoty medal WIIPA



Rys.8. Honorowi goście tarów wynalazków Prix Eiffel



Rys.9. Filip Couperie Eiffel (wnuk twórcy wieży Eiffla) wręczający Platynowy medal Konkursu Profesorowi Konstantemu Marszałkowi



PRIX EIFFEL International Invention Contest |

15th Nov.2022

**Portable device for detection of biomarkers in exhaled air
and method of biomarker detection in exhaled air**

APPLICANT



**ADVANCED
DIAGNOSTIC
EQUIPMENT S.A.**

*Weissa Str 7/C1,
31-339 Cracow, Poland*

PATENT EP 3561509 B1.

INVENTORS



**Artur
Rydosz**



**Konstanty W.
Marszałek**

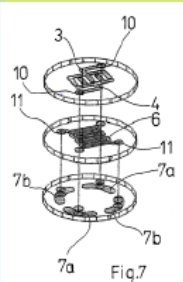
What for?

for glucose level measurements of diabetes with:

**no pain !
no blood !
no stress !**

for kids, older people, anyone
It is necessary only to analyze your breath and results are on the display

SENSOR DESIGN



Sensor consists of three levels. Top one it is thin film semiconducting capacitor. Middle one it is a level of heater and bottom one it is level of electrical path and contacts. All thin and thick film are deposited on LTCC substrates.
3-sensor, 10,11,7 –metallic contacts, 6-heater

HEALTH

DOCUMENTS

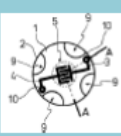
Device components:
Awards & Patents Granted

- **IFIA Award Hong Kong 2017**
- **GOLD MEDAL IWIS 2017**
- **GOLD MEDAL Hong Kong 2017**
- **GOLD MEDAL Bangkok 2018**
- **GOLD MEDAL Skopje 2018**
- **PLATINUM MEDAL IWIS 2018**
- **GOLD MEDAL Nurnberg 2018**
- **GOLD MEDAL Skopje 2018**
- **GOLD MEDAL Seul 2018**
- **GOLD MEDAL Bangkok 2019**
- **Bulgarian Innovators Soc. Award 2017**
- **Chinese Innovators Soc. Award 2017**
- **Thailand NRC Award 2017, 2018**
- **British Innovators Soc. Award 2018**
- **Minister of Science & HE Award 2018**

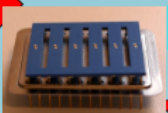
Microconcentrator of gases PL 225138 B1
Integrated gas sensor matrix PL 229704 B1
Mouthpiece connector PL 69 839 Y1
Preconcentrator of gas samples PL 69 938 Y1

From gas detection to diagnosis

single sensor



via integrated sensor matrix



to portable device



Analysis of diabetes markers concentration (extremely low level ppm or less) in human breath gives us data for glucose in blood content determination. Idea is simple but device is more sophisticated and data are analysed by artificial intelligence (AI) unit and could be transferred to patient's mobile, his doctor or medical center by LVB



ACKNOWLEDGEMENTS

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Rys.10. Poster prezentujący nagrodzoną innowację.