**PRESS RELEASE**

**Ukrainian scientist Valentyn Frechka secures second place for Young Inventors Prize 2024 with sustainable paper-making solution**

* **Valentyn Frechka came in second place for the ‘Young Inventors Prize’ of the European Inventor Award 2024 out of three finalists**
* **The European Patent Office (EPO) honours the young Ukrainian inventor for his method of turning fallen leaves into sustainably made paper**
* **Frechka’s Releaf Paper company can produce one tonne of cellulose from 2.3 tonnes of fallen leaves - the same amount of cellulose that would require cutting down 17 trees**

**Munich, 9 July 2024** – Today, the European Patent Office (EPO) **awarded 23-year-old Ukrainian inventor Valentyn Frechka with second place for the ‘Young Inventors Prize’** at the European Inventor Award 2024, securing a prize of 10,000 EUR. **Frechka developed a method for recycling leaf litter into paper, thus combating deforestation and offering a convenient and cost-effective way of managing organic waste in urban areas.** He was runner-up to Dutch scientist Rochelle Niemeijer, who won first place and 20,000 EUR for her portable AI-driven chemistry kit designed to detect bacteria. The third place and a prize of 5,000 EUR were awarded to a young Tunisian team led by Khaoula Ben Ahmed, Ghofrane Ayari, Souleima Ben Temime and Sirine Ayari for their innovative smart wheelchair control system.

Frechka was inspired by his childhood expeditions to the Carpathian Mountains and his chemistry teacher to use fallen leaves for paper, aiming to reduce deforestation. Following the invasion of Ukraine, Frechka relocated to France in 2022 and expanded his business, now collaborating with global clients like L’Oréal and Chanel.

*“We’re grateful to the scientific and technology community for supporting and believing in our innovation! Such events and nominations are crucial for young innovators. They provide the encouragement and motivation needed to continue developing and implementing groundbreaking projects*,” Frechka says. “*This award is a powerful source of energy for the entire Releaf Paper team to keep pushing forward.*”

**Annually, 1.4 billion trees become landfill waste due to packaging and paper waste,** escalating global warming, air pollution, and biodiversity loss. This deforestation also worsens water cycle disruption and increases environmental management costs. **This is the challenge Frechka sought to address.**

**Recycling fallen leaves into paper with new technology**

*“Releaf is a good example of what happens when experience, inspiration, knowledge, and the right moment in the right place all meet. When I was 16 years old in school, we learnt about biopolymers like cellulose and natural polymers and how trees are cut down to convert these into paper. This is when I thought, ‘Why not try to use something else?*” Frechka recounts.

Releaf Paper, founded in 2020 by Frechka, converts fallen leaves into biodegradable paper, reducing the need for deforestation. The company uses advanced technology to process leaves without harmful chemicals, creating pulp from cleaned leaves for paper bags and boxes. Future plans include using bio-waste from agriculture like pineapple stems. Impressively, **Releaf Paper produces as much cellulose from 2.3 tonnes of leaves as would be obtained by cutting down 17 trees**, and their products degrade in just 30 days, much faster than traditional paper.

**All the winners of the 2024 edition of the European Inventor Award were announced at a hybrid ceremony today** in Malta. You can stream the ceremony [online](https://www.epo.org/en/news-events/european-inventor-award/streaming?mtm_campaign=EIA2024&mtm_keyword=pressrelease&mtm_medium=press).

[Find out](https://www.epo.org/en/news-events/european-inventor-award/meet-the-finalists/valentyn-frechka?mtm_campaign=EIA2024&mtm_keyword=pressrelease&mtm_medium=press) more about the invention’s impact, the technology and the inventor’s story.

**Next generation of the Young Inventors Prize in 2025 to take place in Iceland**

During today's ceremony in Malta, the European Patent Office (EPO) was excited to announce a new concept for the award, starting in 2025. From next year onward, the award will be held biennially, with the upcoming edition focusing on young innovators below 30 years-old whose inventions address one or more United Nations Sustainable Development Goals (SDGs). An independent jury of former finalists will evaluate the entries, ensuring a fair and insightful selection process that honours the innovative spirit and achievements of the next generation of inventors. The 2025 edition will be celebrated in Iceland, marking the first of these newly biennial-focused awards, and the [nominations period](https://www.epo.org/en/news-events/young-inventors-prize/nominations?mtm_campaign=EIA2024&mtm_keyword=pressrelease&mtm_medium=press) for all technological fields remains open from today until the end of September.

In alternating years, starting in 2026, the EPO will return to the original concept of the European Inventor Award, featuring its traditional categories of ‘Industry’, ‘Research’, ‘SMEs’, ‘Non-EPO countries’, ‘Lifetime Achievement’ and ‘Popular Prize’.

**Media contacts European Patent Office**

**Luis Berenguer Giménez**   
Principal Director Communication / EPO spokesperson

**EPO press desk**

[press@epo.org](mailto:press@epo.org)   
Tel.: +49 89 2399-1833

**About the inventor**  
  
Born and raised in a rural village in Western Ukraine, Valentyn Frechka demonstrated a restless curiosity about nature and life and a desire to protect it. At the age of around 12, his chemistry teacher encouraged him to delve deeper into experiments, research and innovation. At age 16, while hiking in the Carpathians the idea emerged to avert deforestation by repurposing dead leaves, making them a valuable resource in paper production while reducing carbon emissions that occur during decomposition. After participating in national Olympiads, he became a member of the Junior Academy of Sciences of Ukraine, where his journey toward his own invention began.

After Russia’s invasion of Ukraine in 2022, Frechka relocated to France and found new partners to expand the company’s opportunities. Currently, the production of paper from leaves is outsourced from Ukraine, and Releaf sells its product in Europe and other countries, having acquired clients such as L’Oréal, Chanel, Schneider Electric, Samsung, Weleda, Nestle, LVMH lab and Ariston.

**About the European Inventor Award**

The European Inventor Award is one of Europe's most prestigious innovation prizes. Launched by the EPO in 2006, the award honours individuals and teams, who have come up with solutions to some of the biggest challenges of our time. The finalists and winners are selected by an independent jury comprising former Award finalists. Together, they examine the proposals for their contribution towards technical progress, social and sustainable development, and economic prosperity. All inventors must have been granted a European patent for their invention.

**About the EPO**

With 6,300 staff members, the [European Patent Office (EPO)](https://www.epo.org/?mtm_campaign=EIA2023&mtm_keyword=EIA-pressrelease&mtm_medium=press&mtm_group=press) is one of the largest public service institutions in Europe. Headquartered in Munich with offices in Berlin, Brussels, The Hague and Vienna, the EPO was founded with the aim of strengthening co-operation on patents in Europe. Through the EPO's centralised patent granting procedure, inventors are able to obtain high-quality patent protection in up to 45 countries, covering a market of some 700 million people. The EPO is also the world's leading authority in patent information and patent searching.