

**Embargo: 7 June 2018, 11:45 CET**

**PRESS RELEASE**

**Re-inventing the tyre to make it "self-regenerating": Agnès Poulbot and Jacques Barraud† receive European Inventor Award 2018  
 in the Industry category**

* **European Patent Office (EPO) honours French inventors at Award ceremony in Paris for their self-regenerating tyre tread technology**
* **Obtained through 3D production technologies, the tread design enhances the performance of tyres throughout their lifespan and in all seasons**
* **The invention significantly decreases fuel consumption and CO2 emissions**
* **EPO President Benoît Battistelli: "Agnès Poulbot and Jacques Barraud's tyre tread innovation shows that European industry is up to the challenge of providing innovative solutions to some of our most pressing problems."**

**Paris, Saint-Germain-en-Laye/Munich, 7 June 2018 –** The European Patent Office (EPO) honoured French researchers Agnès Poulbot and Jacques Barraud with the European Inventor Award 2018 in the “Industry” category, one of five award categories, at a ceremony held today in Paris, Saint-Germain-en-Laye. Working at tyre maker Michelin, the two inventors created a patented tread design that enables vehicle tyres to regenerate as they are used. Their invention not only improves tyre durability while ensuring consistent performance and grip throughout a longer tyre lifespan; it can reduce fuel consumption and associated CO2 emissions.

"*New approaches are needed to keep up with increased transportation demands while simultaneously reducing our total environmental impact. This solution could be a step forward towards sustainable mobility*," said EPO President Benoît Battistelli. "*Agnès Poulbot and Jacques Barraud's tyre tread innovation shows once again that European industry is up to the challenge of providing innovative solutions to some of our most pressing problems*."

The European Inventor Award ceremony at the *Théâtre Alexandre Dumas* was attended by some 600 guests from the areas of politics, business, intellectual property and science. The Award is presented annually by the EPO to distinguish outstanding inventors from Europe and around the world who have made an exceptional contribution to social development, technological progress and economic growth. The winners were chosen by an independent international [jury](http://www.epo.org/learning-events/european-inventor/jury.html) from a nomination list of more than 500 individuals and teams of inventors put forward for this year's Award.

Agnès Poulbot is one of four women inventors being honoured with the 2018 Award, the highest number ever since it was launched in 2006.

**An unconventional approach**

Agnès Poulbot, a mathematician and expert in 3D modelling who works at Michelin's Research Campus in Ladoux, came upon the idea when talking to a client who wondered why partially worn tyres were more energy-efficient than newer ones

She developed a tyre design based on a vertically-layered collection of tread patterns within each tyre. Over time, each tread layer wears away to reveal a new, hidden tread from underneath: the tyre "self-regenerates" as it wears down. The tyre tread is optimised for minimal energy dissipation, reduced rolling resistance and maximum performance over its lifetime.

**Making a difference**

Together with Jacques Barraud, who before passing away in 2016 worked at Michelin as a senior expert in tyre design and production for heavy vehicles, Agnès Poulbot created a special mould to generate the tread patterns in three dimensions and enable their mass production. The regenerative tread design results in significantly fewer CO2 emissions over the lifespan of a set of tyres versus its predecessors: If all Michelin PL tyres in Europe were equipped with this tyre tread design, it could result in annual CO2 savings roughly equivalent to the amount of CO2produced by the city of Paris in one month, according to the inventor.

By 2022, Michelin expects 30% of the heavy-duty tyres it sells will incorporate the new tread design: "*With our patented technology we set the standard for the rest of the industry*," Agnès Poulbot says. "*This is how even a modest mathematician can make a big difference."*

### **Media materials for Poulbot and Barraud**

* [**Short video about the inventor**](https://www.youtube.com/watch?v=yIFolKVN6sw) (YouTube)
* Download broadcast-quality (HD) videos: [**English dub**](http://mediacentre.epo.org/razuna/assets/1/61CCDB2605714369B63C31E62948DDAC/vid/17CA8D4BFB37426D804BCC86E530C199/Poulbot_Industry_2018_EN.mxf), [**B-roll**](http://mediacentre.epo.org/razuna/assets/1/61CCDB2605714369B63C31E62948DDAC/vid/38D47CD8D9974EAA9A0D5D3E367B7AA9/Poulbot_Industry_2018_B-Roll.mxf) and [**clean feed**](http://mediacentre.epo.org/razuna/assets/1/61CCDB2605714369B63C31E62948DDAC/vid/4BA4B443FEB84EC5BC4C26EAA467D19D/Poulbot_Barraud_Industry_2018_CLEANFEED.mxf) (EPO media centre)
* [More video and photo material](http://www.epo.org/news-issues/press/european-inventor-award/2018/poulbot.html)
* [Read more about the inventor](http://www.epo.org/learning-events/european-inventor/finalists/2018/poulbot.html)
* **View the patent:** [**EP2379352**](https://worldwide.espacenet.com/publicationDetails/biblio?II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20111026&CC=EP&NR=2379352A1&KC=A1)

|  |
| --- |
| **Note to editors: availability of AV and photo materials on 7 June 2018** |
| * Print-quality **photos** from the Award ceremony in Paris, Saint-Germain-en-Laye will be successively made available from 11.30 CET onwards in the [EPO media centre](http://www.epo.org/news-issues/press/european-inventor-award/2018.html). * The EPO offers license and cost-free **audio-visual material** of the ceremony and winners available in HD and SD quality in the [EPO media centre](http://www.epo.org/news-issues/press/european-inventor-award/2018.html) starting at 15.30 CET. * **More information**about all 15 European Inventor Award finalists (including AV, photo and text materials) is available in the[EPO media centre](http://www.epo.org/news-issues/press/european-inventor-award/2018.html). * To **watch the ceremony**live or on demand, visit the [EPO website](http://www.epo.org/), the EPO's [Facebook](https://www.facebook.com/europeanpatentoffice) page or use the "[Innovation TV](https://www.youtube.com/watch?v=rYT_BqgAVIQ)" Smart TV app of the European Patent Office. |

* [About the European Inventor Award](http://www.epo.org/learning-events/european-inventor.html)
* [About the European Patent Office (EPO)](http://www.epo.org/news-issues/press/background/epo.html)

### **Contacts at the EPO in Munich, Germany**

Jana Mittermaier  
Director External Communication

Rainer Osterwalder  
Press Spokesperson

**EPO press desk**

Tel: +49 (0)89 2399 1820  
Mobile: +49 163 8399527  
[press@epo.org](mailto:press@epo.org)