

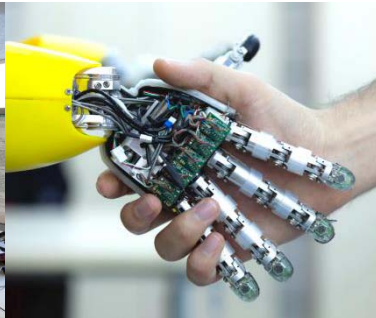


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# EPO and Industry 4.0



Benoît Battistelli

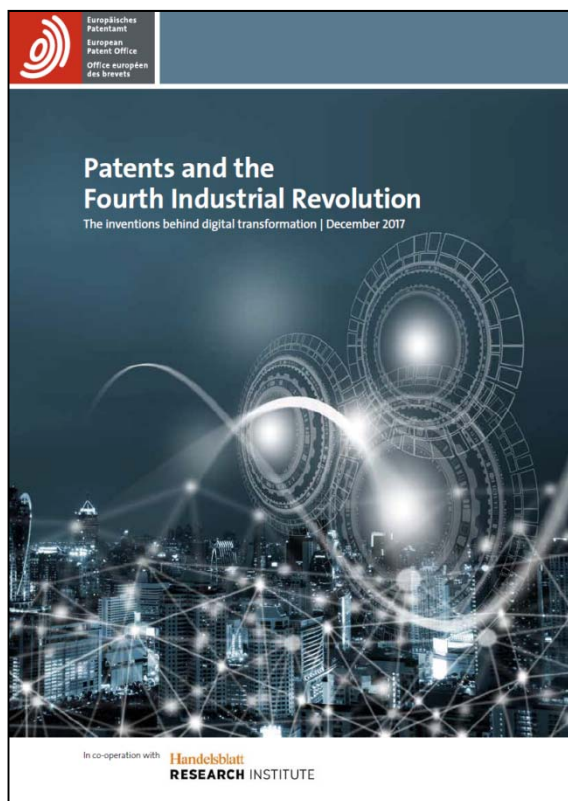


President European Patent Office



1 March 2018

# EPO study on patents and the 4th industrial revolution

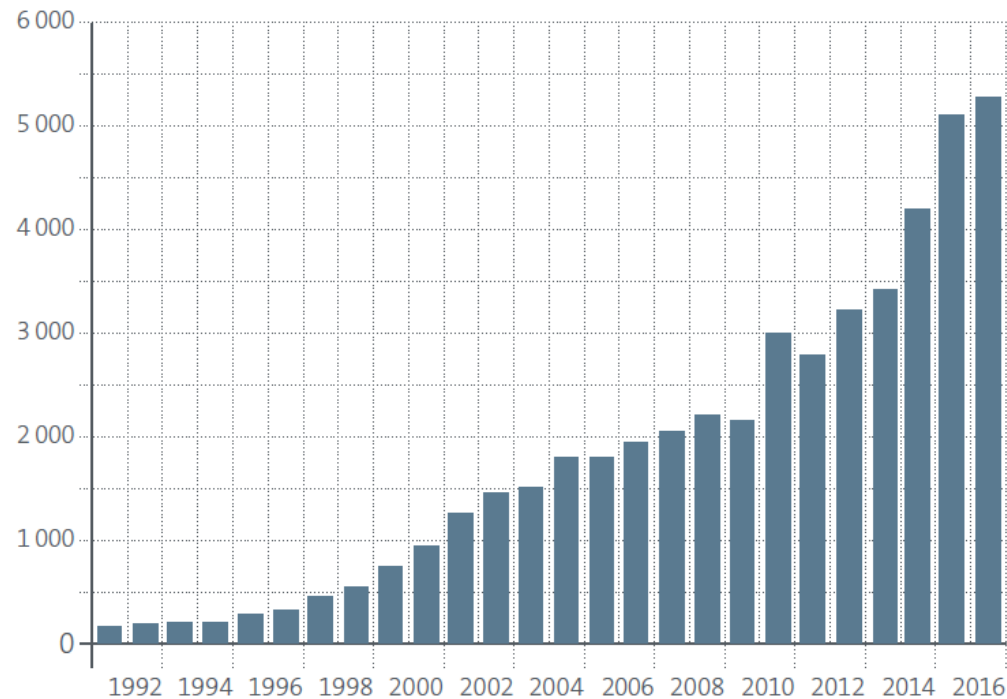


- Published in December 2017
- Patenting of 4IR technologies at the EPO has increased faster than other applications since the 1990s
- Europe, the USA and Japan are the established leaders, but China and Korea are rapidly catching up
- The fastest-growing fields are 3D systems, Artificial Intelligence and user interfaces

[epo.org/4IR](http://epo.org/4IR)

# EPO study on patents and the 4th industrial revolution

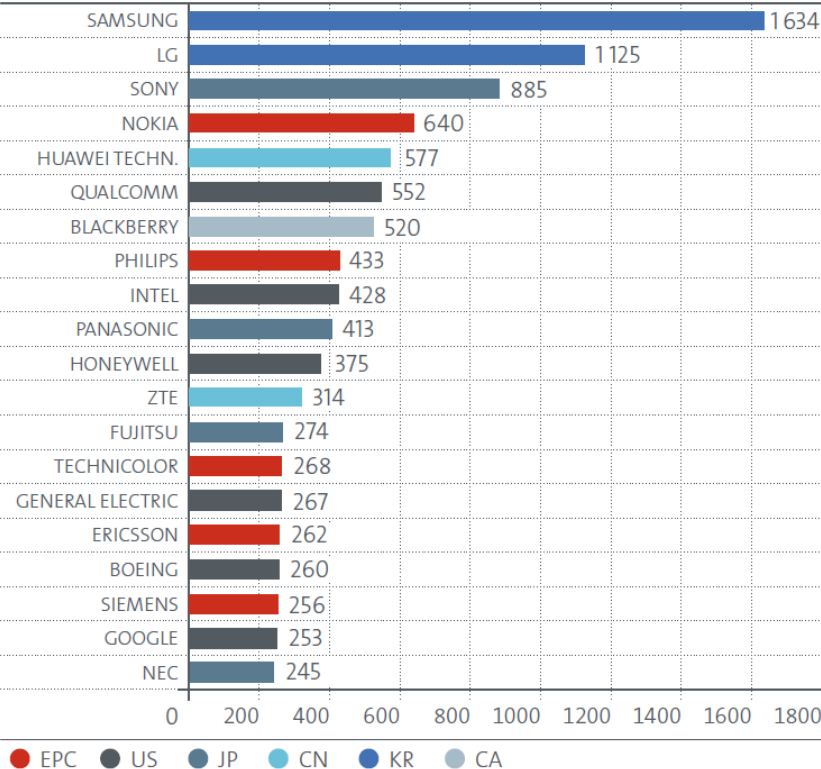
4IR patent applications at the EPO 1991-2016



- More than 5 000 patent applications for inventions relating to autonomous objects were filed at the EPO in 2016
- In the last three years, the rate of growth for 4IR patent applications was 54%

# EPO study on patents and the 4th industrial revolution

Top 20 4IR applicants at the EPO 2011-2016



- Twenty companies, most of them located in Asia, accounted for 42% of all 4IR patent applications filed with the EPO between 2011 and 2016.
- Innovation in core technologies is mainly led by a limited number of large companies focused on information and communication technology (ICT)

## The EPO is prepared for the 4<sup>th</sup> industrial revolution

- **Speeding up EPO's work processes:** to accommodate fast technological progress with short innovation and product cycles (e.g. Early Certainty initiative)
- **Stable and predictable approach to Computer Implemented Inventions (CII):** established approach, more and more a standard being followed worldwide
- **Re-organisation of ICT area:** creation of a broad ICT COO
- **Focus on CII:** focus on CII training throughout the entire EPO operational area, annual improvements to the CII content of the Guidelines for Examination for a consistent, harmonised procedure
- **Automated pre-search moving towards Artificial Intelligence:** development and use of advanced IT solutions to support examiners. Increasingly powerful tools for automated searching, and pre-classification and machine learning techniques

# EPO conference on patenting Artificial Intelligence (AI)



- Challenges and opportunities of patenting AI
- AI examination practice at the EPO
- Lectures and panel discussions
- Connecting stakeholders from business, academia, the judiciary, policy making and patent offices
- **30 May 2018**
- Save the date!

[epo.org/AI2018](http://epo.org/AI2018)