

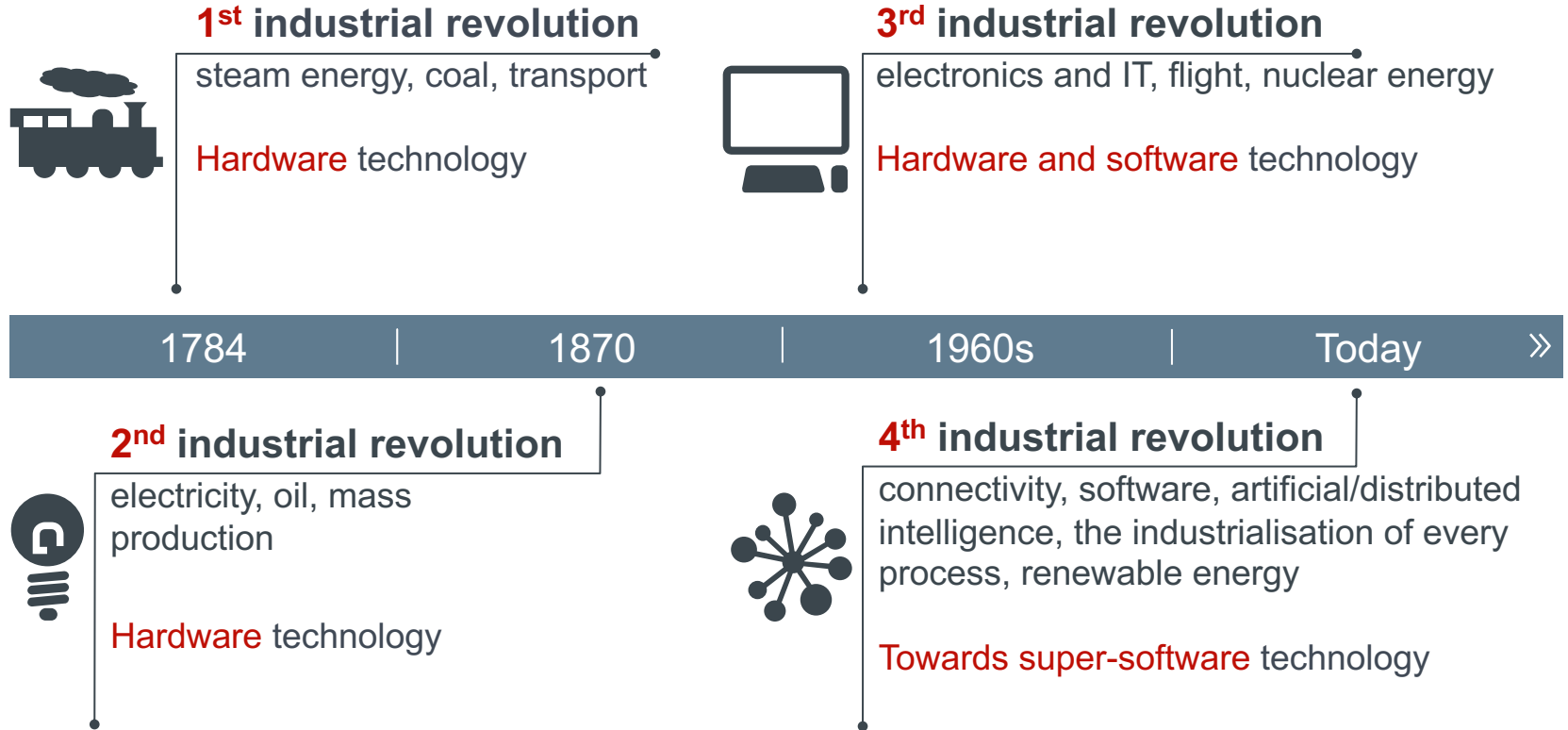


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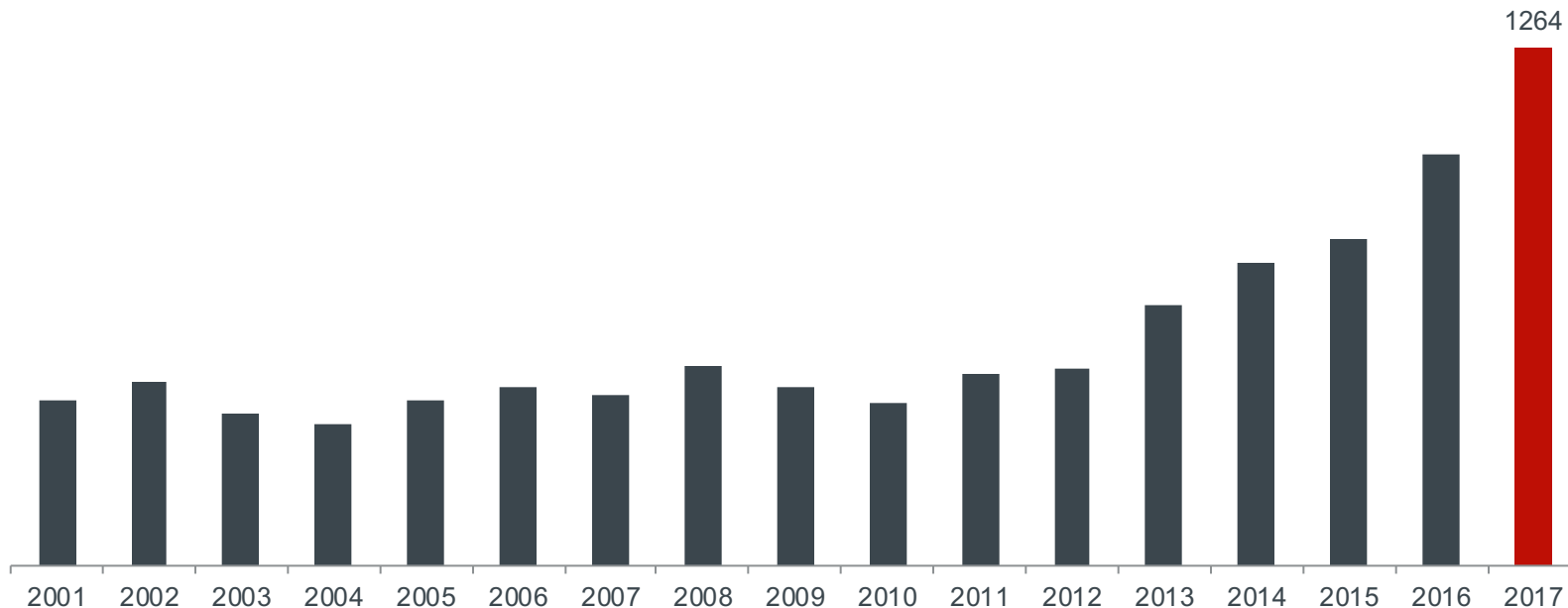
Patents and the 4th Industrial Revolution



Industrial revolution of the patent system

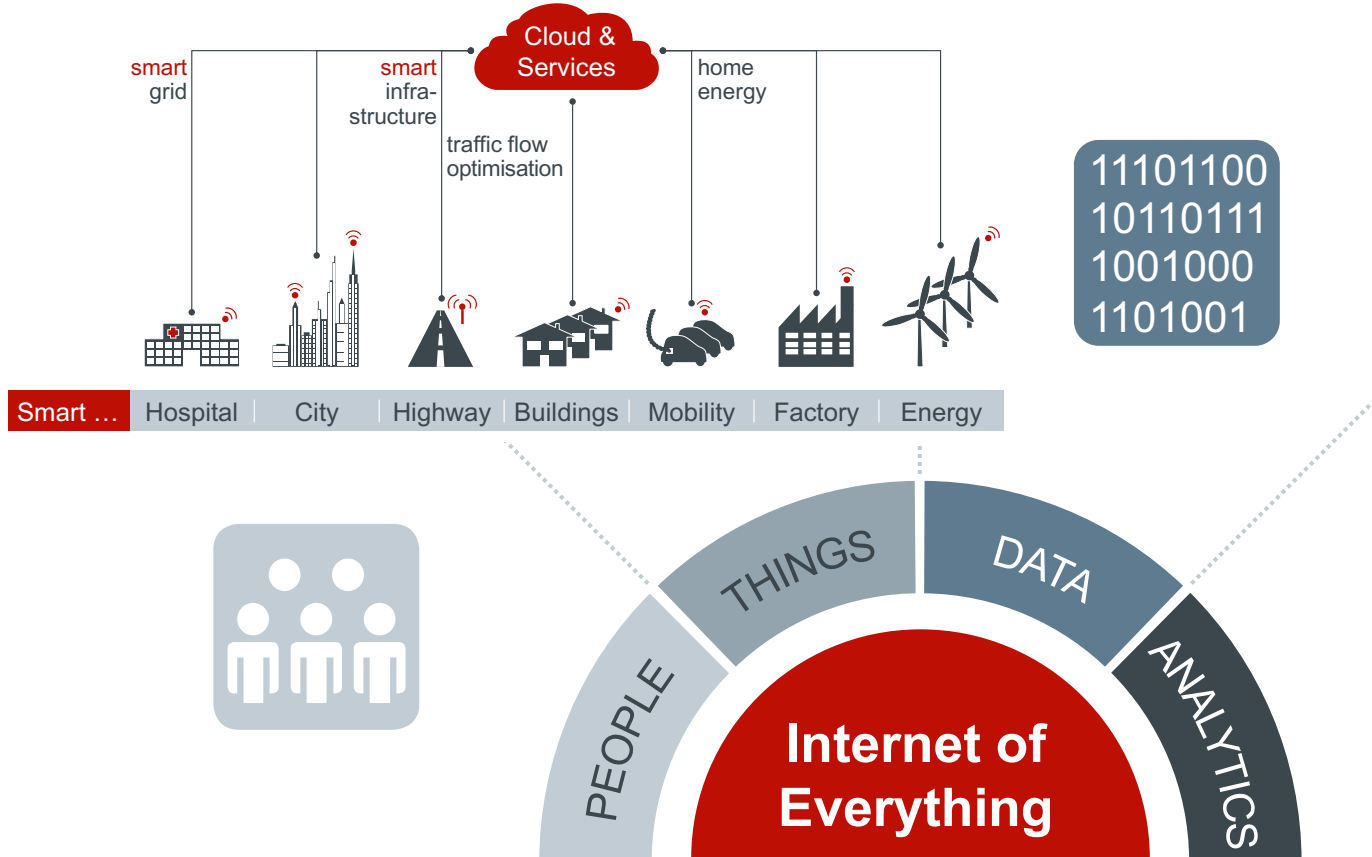


Patent applications on artificial intelligence at the EPO



Source: EPO. The number of European patent applications in AI technologies corresponds to EP/WO families in the CPC class G06N7, G06N5, G06N99 /005 and G06N3, corresponding to core AI. In addition, a set of class symbols related to AI was compiled also, based on the description of the classification symbol. The results are presented by oldest filing date.

The Fourth Industrial Revolution



Cartography of the Fourth Industrial Revolution

Core technologies

Embodied in connected objects
Collection and transfer of data



*Networked
sensors*



5G connectivity



Radio Frequency ID (RFID)

Enabling technologies

Used in combination with connected object
Store, process and analyse the data



*Cloud
computing*



3D systems

Artificial Intelligence



Application domains

Combinations of core and enabling technologies



*SMART
health*



*SMART
Home*



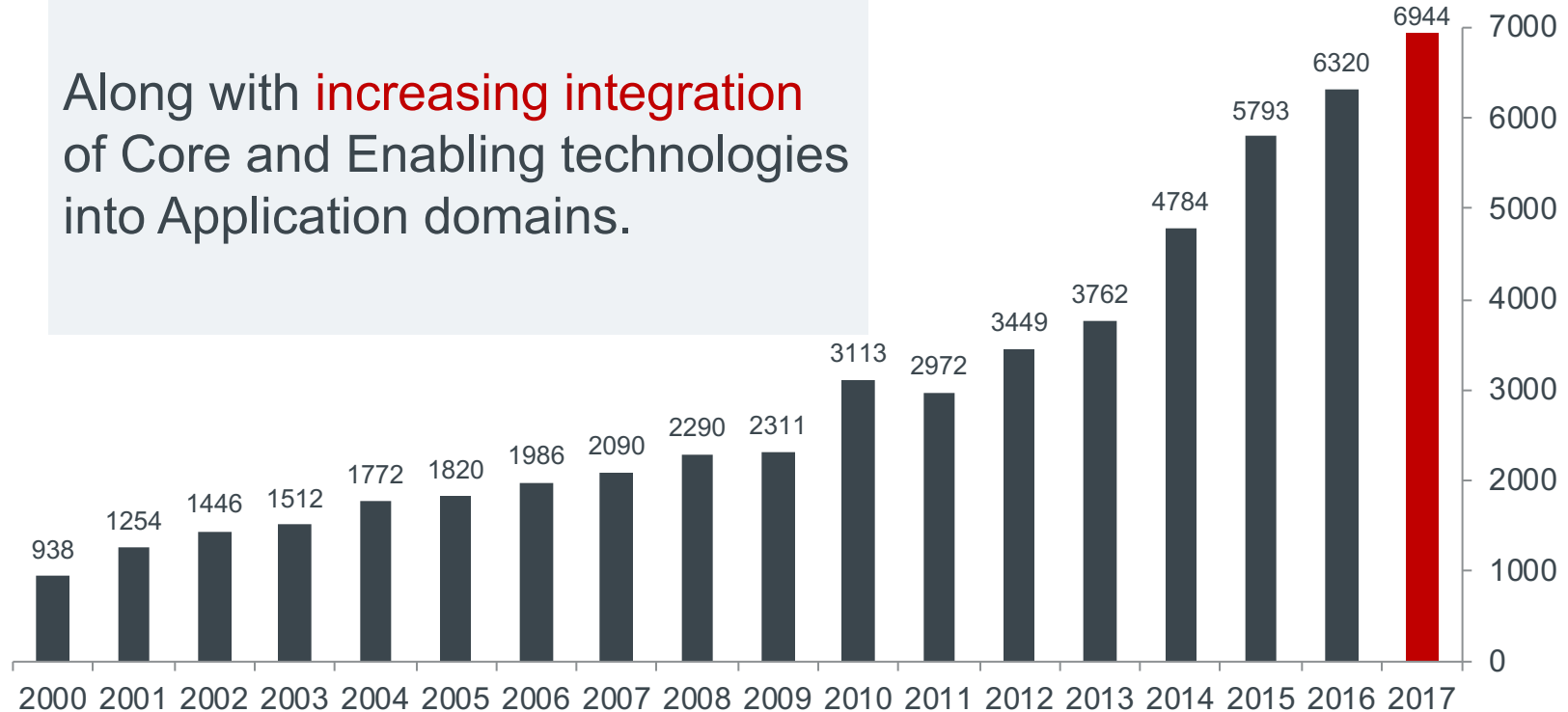
*SMART
infrastructure*

*SMART
manufacturing*

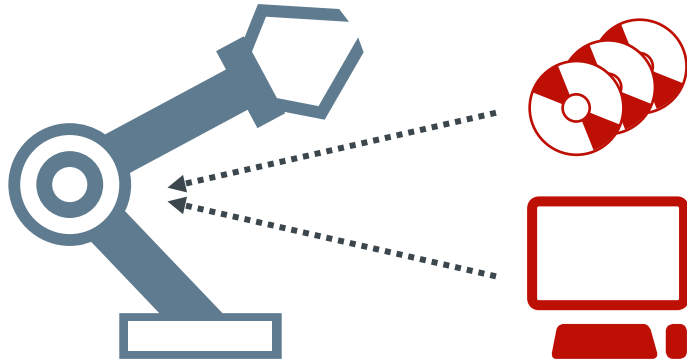


Steep rise of 4IR applications at the EPO

Along with **increasing integration** of Core and Enabling technologies into Application domains.



It's all about software!

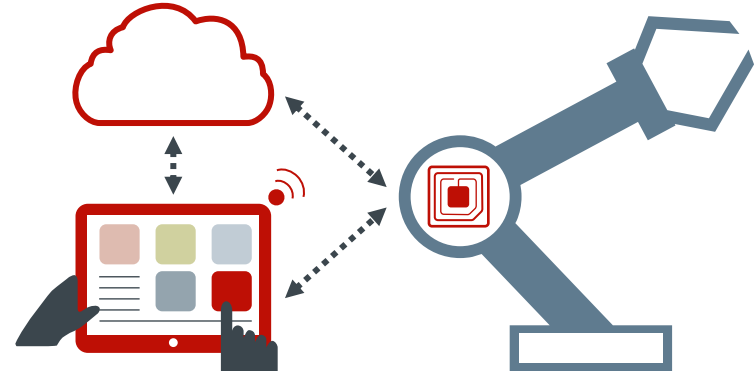


Industry 3.0

Advanced machines using standard software
(advances from improving the machine)

Industry 4.0

Advanced software using standard machines
(advances from improving the software)



Where does software go from here?

4th Industrial revolution:

SOFTWARE



AI



SUPER-SOFTWARE



EVERYWHERE – in Every field of technology, well beyond ICT



EPO approach to 4IR

Computer Implemented Inventions (CII)
must solve a technical problem



An understanding of “technicality” and CII procedures is necessary
in all fields

Early certainty from search (6 months), examination (12 months) and opposition (15 months)



www.epo.org

Thank you for your attention!

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