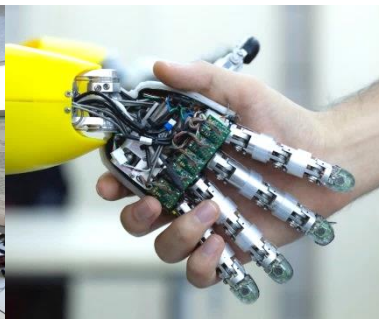




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# Legal aspects of patenting inventions involving artificial intelligence (AI)

Summary of feedback by EPC contracting states



# Background

- AI is one of the main drivers of the present Fourth Industrial Revolution
- AI poses challenges for patenting
  - inventorship and ownership of AI inventions
  - patent eligibility
  - assessment of inventiveness
  - sufficiency of disclosure
- Common understanding of AI patenting is essential to address the surge in the patent applications related to AI
  - conference on patenting AI on 30 May 2018
  - round table discussion within IP5 on 31 October 2018
  - discussion among the EPC contracting states

# Discussion among the EPC contracting states

- In preparation for the discussion the EPO invited the contracting states to provide information on their law and practice on AI patenting (questionnaire CA/PL 10/18)
- 27 replies were received
  - broad understanding of the issues relating to AI patenting
- A corresponding questionnaire was shared with the IP5 Offices. Their replies show a similar understanding of AI patenting



# Inventorship/ownership

- The inventor is the person who created the invention by their own creative activity
- The inventor must be a human being
  - GB: the inventor can be a legal person
  - CY, MC: law does not restrict inventorship to human beings

# Inventor's rights

- The inventor has moral and property rights
  - moral right to be mentioned (except CY and SM)
  - property rights to invention, application and patent (except FR)
- Rights to the invention can be transferred
  - automatic transfers (majority)
    - inheritance
    - employee inventions (except DE, NO and FI)

# Patentability

- No special rules on patentability of AI inventions
  - AI inventions are computer implemented inventions (CII)  
(majority: CH, DE, ES, FI, GR, HR, HU, IT, NL, NO, PT, RS, SE, SK)
- Abstract ideas including mathematical methods are not patentable
  - exceptions and limitations reported correspond to Art. 52, 53 EPC
  - CH: no exceptions or limitations
  - NL: no exceptions or limitations specific to AI
  - PL: computer programs are not patentable,  
only computer related inventions are patentable

# Inventive step

- Does the claimed invention solve a problem in a manner that would not be obvious to a person skilled in the art?
  - problem-solution approach (majority)
  - person skilled in the art (all respondents)
- Use of AI may lead to the increase in the skilled person's knowledge which might be difficult to establish
- The skilled person will need to be an interdisciplinary team able to use AI
- Policy question: Can a machine be recognised as the skilled person?  
(GB, SE)

# Sufficiency of disclosure

- Invention must be disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art
- Challenges in relation to AI
  - describing how the AI algorithm works  
(BE, CH, DE, FI, GB, HR, IS, IT, MC, PT, RS, SK)
  - difficulty to protect both the process and the outcome (HR)
  - claims are often not supported by the description and are unclear  
(ES, FR, GR, RS)
  - establishing the field of invention (IS)



# Sufficiency of disclosure

- Means to avoid “black box” patenting
  - consequent application of the requirement of sufficiency of disclosure (majority)
  - strict application of the clarity requirement (GR and SM)
  - application of the requirement of industrial applicability (CH)
  - early publication (6/12 months) (CH)
  - policy question: modification of legislation to allow patentability of algorithms? (CZ)

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