### KLUNKER IP REPORT 5/23 - Protecting Software Inventions in Europe

# How the European Patent Office (EPO) examines Computer-Implemented Inventions

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## **Top 10 takeaways for practitioners:**

#### **Examination of CII (software claims)**

Sec. II.2

1. **"two hurdles" approach**: 1<sup>st</sup> hurdle: Is claimed subject-matter a non-invention "as such" (= patent eligibility)? If not, 2<sup>nd</sup> hurdle: Is technical teaching novel and inventive according to COMVIC approach?

#### **Technicality, Maths, AI, Software**

Sec. III.1, III.2, III.6

- 2. **Mathematical methods** are patentable if they **solve a technical problem by technical means**. That's the case if the claimed teaching is (*i*.) a technical **application** or (*ii*.) a technical **implementation**.
- 3. **AI/ML** handled as mathematical methods. That is, again, a technical application or implementation must be claimed that goes beyond mere data analysis or classification and solves a technical problem.
- 4. **Software** is patentable if the claimed method (CII) establishes a **further technical effect** beyond executing software on a computer. Again, a technical problem must be solved by claimed technical means.

#### Inventive step (COMVIC approach)

Sec. IV.2, IV.3

- 5. Extending the problem-solution approach, **COMVIC approach** is EPO's standard tool for assessing inventive step of software (CII). COMVIC is key to successfully draft & prosecute software or AI/ML inventions.
- 6. Difference over closest prior art must involve technical features. Otherwise, the claim is obvious per se. The **objective technical problem** is extracted from the technical difference features (= **technical solution**).
- 7. For **inventive step**, the **"gap"** between the objective technical problem and the claimed technical solution is assessed. The wider the gap, the more likely does the invention establish an inventive step.
- 8. **NOTE**: Non-technical features and in fact **any non-technical disclosure** is **deemed to be known** (= prior art) even if novel (!) and can therefore be utilized for construing the objective technical problem.
- 9. Therefore, **avoid non-technical disclosure** as much as possible, because it will likely narrow the "gap" between technical problem and solution and only jeopardize your chances of obtaining a grant.

Claim structure Sec. V.2

10. Begin with **method claims** and add claims for **apparatus/device**, **computer program**, **computer-read-able medium** referencing the method. If specific data processing means are used, add to method claims.