How Are IP Practitioners Implementing AI?

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March 28, 2019
Use of AI (ML) in IP firms

• Translation tools
• Speech recognition
• E-Mail sorting
• Case law search
• Trademarks: Assessment of similarity of marks/goods and services
• Patents: Prior art search (?)
• Litigation: Document review, argument assistance
Example: Trademark Portfolio Management

• Scores of trademark similarity and trademark strength
Example: Trademark Portfolio Management

Analysis of trademarks in the search classes and regions having common text with the searched trademark name.

Identical brand names

<table>
<thead>
<tr>
<th>BRAND NAME</th>
<th>NUMBER OF MATCHING LIVE AND DEAD TRADEMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;zk&quot;</td>
<td>9 574</td>
</tr>
</tbody>
</table>

Word or text fragment in common

<table>
<thead>
<tr>
<th>TEXT</th>
<th>NUMBER OF MATCHING LIVE TRADEMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>zk</td>
<td>159 4 165</td>
</tr>
</tbody>
</table>

3 related words you should be aware of

- zK
  - Translingual
  - 1. (SI-unit: Abb zepto kelvin thermodynamic temperature)

- ZK
  - Translingual
  - 1. (SI-unit: Abb zetta kelvin thermodynamic temperature)

- ꜰ (zk)
  - Hebrew
  - 1. pure, clean
  - 2. clear
Example: Trademark Portfolio Management

Dangers/Risks:

• Lack of transparency of assessments
• Global availability of data
• Lock-in/platform effect: The global TM community relies on a single data set/ML system
• Possible hidden bias in data/ML system

➢ There should always be access to a human appeal instance
Example: Patent prosecution

• Prior art search (?)
• Novelty assessment (?)
• Assessment of inventive step (?)
• Determination of Standard-essentiality (?)
Problems of the Patent Prosecution Procedure

• High costs of prosecution
• Duplication of work
• Slow procedures
• Bureaucratic procedures (priority docs, assignments)
• Legal uncertainty (validity, infringement, standard-essentiality)
• High enforcement costs
Consequences for the Patent Prosecution Procedure

➢ Lack of access to the global patent system (in particular for SME’s)
➢ Popularity of Open Source innovation frameworks
➢ Patents are an illiquid asset class

Potential Remedies (using AI):

➢ Harmonization and Standardization, avoiding duplication of work
➢ Formal language for patent claims (?)
➢ Tokenization of patent assets (?)
Conclusions

➢ AI/ML can be a powerful tool enabling automization of IP-related work
➢ Automization and standardization can bring substantial efficiency gains
➢ The working of an ML system will often be hidden
➢ Transparency and access to data is essential
➢ Access to human appeal instance