

VIRTUAL REGIONAL SEMINAR ON THE PATENTABILITY OF COMPUTER-IMPLEMENTED INVENTIONS

ORGANISED BY WIPO IN COOPERATION WITH THE ESTONIAN PATENT OFFICE

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09.12.2022

TALLINN UNIVERSITY
OF TECHNOLOGY



STRATEGIES FOR TECHNOLOGY TRANSFER OFFICES (TTOS):

PATENTING AND LICENSING OF SOFTWARE

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UNIVERSITY TECHNOLOGY TRANSFER

Process of transferring (disseminating) technology from the University to another person or organization to transform inventions and scientific outcomes into new products and services that benefit society.

Research Results Evaluation IP Marketing Business deal EOL



SOFTWARE AND COMPUTER IMPLEMENTED INVENTIONS (CII)

- On one hand, business as usual: over 50 per cent of Taltech's granted patents and pending patent applications for CIIs:
 - Several research groups studying human body, measuring different parameters using different sensors, where the invention is about clever signal/data processing
 - By optical means, e.g., determining substances or lack of substances from blood and other bodily fluids, or measuring pulse, pulse wave, oxyden saturation, etc.
 - Bioimpedance based determining conditions of body tissues, controlling pacemakers, artifical hearts, etc
 - Using motion sensors, e.g., determining how the body moves, e.g., for training or rehabilitation or diagnosing purposes
 - From heart and brain waves
 - Communication protocols, e.g., in 5G networks
 - Autonomous (self-driving) vehicles
 - Cryptography, cybersecurity, blockchain, inventions related to / using AI, etc.
- Licensing CII patents business as usual?



SOFTWARE AND COMPUTER IMPLEMENTED INVENTIONS (CII)

- First challenge: University researchers must publish. By publishing a clever signal processing method, broadly (mathematical method not patentable as such), its different applications may become obvious (non-inventive, thus not patentable)
- Second group of challenges: software is protected by copyright
 - Often, group of authors proper agreements needed
 - Author's moral rights cannot be transferred in Estonia / Europa, only licensed (unlike, e.g., USA)
 - Software either based on earlier software (derivative works) must be distributed under same the provisions (like GNU GPL)



SPECIFIC CHALLENGE

- Research supported by the EU (Horizon Europe, etc):
 - Balancing the principles of Open access / Open Science and Dissemination of Results vs Intellectual Property Rights and (commercial) Exploitation of Results
 - **Dissemination** public disclosure of the results by appropriate means (other than resulting from protecting or exploiting the results), including by scientific publications in any medium.
 - Exploitation use of results in further research and innovation activities other than those covered by the action concerned, including inter alia, commercial exploitation such as developing, creating, manufacturing and marketing a product or process, creating and providing a service, or in standardisation activities.



HORIZON EUROPE (TO SUMMARIZE)

- Most of the project Results are Intellectual Property, which may, if appropriate, be protected by Intellectual Property Rights
 - Including patents, including for CIIs
 - Including software (implementing the invention)
- Project beneficiaries must engage in exploitation activities
- Plan for (Commercial) exploitation of the Results must be included already in the proposal
- Dissemination of the Results must be Open Access / Open Science (mandatory Open Science practices and recommended Open Science practices)
- Results: 'As open as possible, as closed as necessary'
- Software: CC0, free licenses by Free Software Foundation, open source by Open Source Initiative: many such licenses include free patent license

=> Make sure your Exploitation Strategy is in line with your Open Access / Open Science Strategy





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