IP strategy ICMS

This document provides a concise overview of the TU/e Institute for Complex Molecular Systems (ICMS) IP strategy. ICMS has developed this strategy to optimise its impact for society and industry and ease the patenting process and procedures for its core members.

The role of IP in technology transfer

Intellectual Property (IP) can play a pivotal role in the transfer of innovation to society as it helps to protect the investments required to further develop an invention to a product. Patenting is one of the possible means to protect your intellectual property and usually the most relevant for ICMS researchers.

Workflow
The patent application procedure will only be initiated if the invention has not been disclosed via public abstracts, journal publications, poster presentations and other public means. The national phase will only be proceeded if appropriate funds through e.g. pre-seed funding and/or a license deal is in place at 24 months after patent application filing. Pre-seed funding opportunities may include: Eurostars, ERC Proof of Concept, STW Valorisation Grant, STW Demonstrator, NGI Pre-Seed grant and the Horizon 2020 SME Instrument. Please note that the application procedures for these grants can take up to 12 months.

**Commitment required from researchers**

**Before filing of the patent application:** The patent application can be filed within 1-4 weeks after invention and requires circa 10 hours from the researcher to provide necessary documentation and discuss the invention with a business developer and patent attorney. The patent attorney will require the researcher to submit:

- General description of the invention and its advantages / unexpected results;
- General description of the current golden standard or next best solution and its advantages / limitations;
- Experiments showing the advantages / unexpected results, preferably in comparison with the current golden standard or next best solution;
- Possible future experiments and what they are expected to show.

For a more elaborate description of what is needed for the patent attorney, please refer to the annex.

**After filing of the patent application:** As the further validation of the technological feasibility of the novel technology and/or its application requires time and money, the researcher has to commit to the next steps towards market introduction as outlined in the business case and has to allocate appropriate resources. This can include further technological validation, risk mitigation strategies and gathering sufficient funds for the national phase through e.g. pre-seed funding and/or a license deal.

**Commitment provided by TU/e ICMS**
The TU/e ICMS will commit to the process through:

- Continuous support of the process;
- Development of the business case by a business development expert;
- Submission of the patent application by a qualified patent attorney;
- Business development support throughout the first 30 months after filing of the patent application.

**Business case**
The business case will provide a preliminary assessment of the commercial feasibility of the invention through the following topics:

- Unmet technological need;
- Proposed application;
- Market potential;
- Competitive position;
- Next steps towards market introduction.
ANNEX

Extensive description of information required by patent attorney and example
In order for the patent attorney to file the patent application, he or she requires:

1. A general description of the invention and its advantages / unexpected results, including (i) all advantages and unexpected results, including those that are foreseen, (ii) all possible applications, (iii) preferable embodiments, (iv) possible alternatives, (v) essential elements of the invention and (vi) variable elements of the invention;

2. A description of the current golden standard and/or the next best thing and why this invention is better. It is important to describe all differences between the invention and these alternatives;

3. A description of experiments that have been performed and show the advantages / unexpected results of the invention, preferably in comparison to the current golden standard and/or the next best thing. Please include explanation of the experiment, its methodology and its results;

4. A similar description of possible future experiments that may be performed to further validate the added value of the invention;

5. The results of prior art searches if available;

6. Anything else that may be relevant.

Literature that must be submitted includes (this can consist of manuscripts, available scientific literature as well as existing patents):

- 1-3 pieces that describe the technology including relevant background information;
- 1-3 pieces describing the current state-of-the-art;
- 1-3 recent relevant publications (internet, poster, presentations, journals, proceedings, abstracts, etc) of the inventors including a description of the differences with the current invention.

More detailed overview of the patent life cycle

Based on a presentation from VO Patents