

Confidential

INVENTION DISCLOSURE

This document is an essential preliminary to any procedure related to the protection of research results.

The purpose of this document is to collect the information required to understand the results of scientific research and to evaluate these results for protection and commercial potential. To this end, it contains a technical section and a section concerned with the economic opportunities afforded by the results. These aspects in combination will enable a decision to be made as to the best method of exploitation.

Any university is faced with choices when it intends to disseminate and exploit the results of its scientific research. Should they publish the results, keep them secret or exploit them by means of a spin-off, collaborative research with industry. Should they protect them by means of a patent, a drawing and model, or a brand?

It is important to realize that the entire exploitation process can prove costly. In order to maximize the return on the effort, time and money expended by knowledge transfer officers and researchers, it is appropriate to clarify a few points:

1. Usable results are a set of new results that can be exploited industrially or commercially, it is therefore inadvisable to begin a complete process of exploitation when the commercial potential is limited (for example, more advantageous alternatives are already on the market; the market is too restricted or immature, etc).
2. An invention does not necessarily form the subject of a patent application. It is important to bear in mind that other methods of exploitation can be taken up, depending on the context. The non-technical section of the invention disclosure therefore proves its worth here, since it makes it possible to specify the general context and evaluate the opportunity to select one method of exploitation over another.
3. The exploitation procedure is a long-term partnership between researchers and the Knowledge Transfer Office (KTO). As such, both parties need to assess the importance of investing time and effort in the process.
4. Any researcher wishing to give an industrial dimension to his research will need to show prudence in reporting his results and in making use of the tools provided material transfer agreement (MTA), confidentiality agreements, etc.

The role of knowledge transfer officers is to support the researcher in the exploitation process. Thus, we remain at your service for any assistance you think it might be useful to obtain.

DISTRIBUTION: Please submit the completed disclosure form by e-mail or via postal mail to your KTO.

I. General information

To be completed by the researcher

Title of the invention:

Inventor in charge of the file

Last name:

First name:

Institution:

Unit:

E-mail:

Phone:

For KTO (Knowledge Transfer Office) use only

File number:

File manager:

Date:

KTO recommendations:

Co-ownership:

ULB

UNamur

ULg

UCL

UMONS

USaint Louis

ADISIF – HE: to fill in

Other: to fill in

Other: to fill in

Methods of exploitation contemplated:

Publication

Patent

License

Software

Research project

Spin-off

Biological material

Other :

I. General information

1.a. Description of the invention: provide a brief general description of the invention, list 5 keywords and if required include a schema/picture.

(Please include full description in English in an appendix).

1.b. Scientific sectors and application: list the scientific and the application sectors that you think that might benefit from your invention.

		Scientific sectors	Application sectors
1. Natural sciences	1.1 Mathematics <i>(includes research on statistical methodologies but excludes applied statistics which should be classified under the relevant field of application)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	1.2 Computer and information sciences <i>(hardware development to be 2.2, social aspect to be 5.8)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	1.3 Physical sciences	<input type="checkbox"/>	<input type="checkbox"/>
	1.4 Chemical sciences	<input type="checkbox"/>	<input type="checkbox"/>
	1.5 Earth and related environmental sciences <i>(includes oceanography, hydrology)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	1.6 Biological sciences <i>(medical to be 3, agricultural to be 4)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	1.7 Other natural sciences	<input type="checkbox"/>	<input type="checkbox"/>
2. Engineering and technology	2.1 Civil engineering	<input type="checkbox"/>	<input type="checkbox"/>
	2.2 Electrical, electronic and information engineering	<input type="checkbox"/>	<input type="checkbox"/>
	2.3 Mechanical engineering <i>(includes nuclear engineering but nuclear physics to be 1.3)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	2.4 Chemical engineering	<input type="checkbox"/>	<input type="checkbox"/>
	2.5 Materials engineering <i>(nanoscale materials to be 2.10, biomaterials to be 2.9)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	2.6 Medical engineering <i>(biomaterials to be 2.9)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	2.7 Environmental engineering	<input type="checkbox"/>	<input type="checkbox"/>
	2.8 Environmental biotechnology	<input type="checkbox"/>	<input type="checkbox"/>
	2.9 Industrial biotechnology	<input type="checkbox"/>	<input type="checkbox"/>
	2.10 Nanotechnology <i>(nanomaterials and nano-processes, biomaterials to be 2.9)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	2.11 Other engineering and technologies	<input type="checkbox"/>	<input type="checkbox"/>
3. Medical and health sciences	3.1 Basic medicine <i>(plant science to be 1.6)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	3.2 Clinical medicine	<input type="checkbox"/>	<input type="checkbox"/>
	3.3 Health sciences <i>(includes services, sport, social biomedical sciences, ethics)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	3.4 Medical biotechnology	<input type="checkbox"/>	<input type="checkbox"/>
	3.5 Other medical sciences	<input type="checkbox"/>	<input type="checkbox"/>
4. Agricultural sciences	4.1 Agriculture, forestry and fisheries <i>(agricultural biotechnology to be 4.4)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	4.2 Animal and dairy sciences <i>(animal biotechnology to be 4.4)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	4.3 Veterinary sciences	<input type="checkbox"/>	<input type="checkbox"/>
	4.4 Agricultural biotechnology	<input type="checkbox"/>	<input type="checkbox"/>
	4.5 Other agricultural sciences	<input type="checkbox"/>	<input type="checkbox"/>
5. Social sciences	5.1 Psychology <i>(includes therapy for learning, speech, hearing and other disabilities)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	5.2 Economics and business	<input type="checkbox"/>	<input type="checkbox"/>
	5.3 Educational sciences <i>(includes training, pedagogy, didactics)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	5.4 Sociology	<input type="checkbox"/>	<input type="checkbox"/>
	5.5 Law	<input type="checkbox"/>	<input type="checkbox"/>
	5.6 Political sciences	<input type="checkbox"/>	<input type="checkbox"/>
	5.7 Social and economic geography <i>(transport engineering to be 2.1)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	5.8 Media and communications	<input type="checkbox"/>	<input type="checkbox"/>
	5.9 Other social sciences	<input type="checkbox"/>	<input type="checkbox"/>
6. Humanities	6.1 History and archeology <i>(history of science and technology to be 6.3)</i>	<input type="checkbox"/>	<input type="checkbox"/>
	6.2 Languages and literature	<input type="checkbox"/>	<input type="checkbox"/>
	6.3 Philosophy, ethics and religion	<input type="checkbox"/>	<input type="checkbox"/>
	6.4 Arts, history of arts, performing arts, music	<input type="checkbox"/>	<input type="checkbox"/>
	6.5 Other humanities	<input type="checkbox"/>	<input type="checkbox"/>
7. Other	To describe	<input type="checkbox"/>	<input type="checkbox"/>

I. General information

1.c. NEED: in the related fields, which problem or need is addressed by this invention?

1.d. ADVANTAGES: define the solution this invention brings to solve this problem. What are the novel aspects of your invention? What's the "invention core"? (Technical features, functions and advantages/results?)

1.e. OTHER APPLICATIONS: try to think out of the box; which other applications might be envisaged if your invention would go through adjustments; and what would these adjustments be?

I. General information

1.f. BENEFITS: detail why this solution is different from existing ones and please explain why and/or how?:

Yes	No	?	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If NEW => The Invention meets an unmet need or answer an unsolved problem Why/How? and go directly to 1.g
If not NEW can you compare below your solution to existing ones			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CHEAPER. The invention is cheaper to make or use than currently available products or processes. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EASIER TO USE. The product or process is less complicated, less labor intensive, more user friendly than currently available products or processes. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EASIER TO MAKE. The product is less complicated to make, or its manufacturing process is less complex than those of currently available products. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SAFER. The product or process is safer for the operator, bystanders or animals than currently available products or processes. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MORE ECOLOGICAL. The product or process recycles materials that normally end up in landfill sites or is less polluting than currently available products or processes. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FASTER. The product or process works faster than currently available products or processes. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MORE PRECISE. The product or process yields more accurate results than those usually achieved using currently available products or processes. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MORE ATTRACTIVE. The product would appeal to a broader segment of the market than the products currently on the market. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CLEAR VALUE. Other products or processes are so similar that the virtue of this product/process will be readily apparent. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BETTER SIZE. The product is more compact, or is larger and with greater capacity, than currently available products. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BETTER WEIGHT. The product is lighter or heavier whichever is preferable, than currently available products. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MOST DURABLE. The product is more durable than currently available products. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MORE RELIABLE. The product breaks down less frequently, or the process is more consistently successful, than with currently available products or processes. If Yes, Why/How?:

I. General information

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EASIER TO FIX. The product is less complicated or costly to fix or adjust than currently available products. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	GROWING MARKET. There has been steady growth in the target market for your product or processes over a number of years. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	EASY FOR MANUFACTURERS TO SWITCH. The product or process is sufficiently similar to currently available products or processes that users or manufacturers will easily be able to switch. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HIGHER PROFIT MARGIN. Their product or process is easier and cheaper to make than currently available products or processes, but can be sold at a comparable price. If Yes, Why/How?:
1.g. specify the positioning of your invention on the market			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LASTING MARKET. The need or demand for the product will last for a very long time. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LARGE MARKET. There is already a large market for this product or process, or the appeal of the product or process can be expected to create a large market where none previously existed. If Yes, Why/How?:
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HARD TO DUPLICATE. Competitors will have difficulty producing an equivalent product or process, or in solving problems without it. If Yes, Why/How?:

2. Type of invention

- | | |
|---|--|
| <input type="checkbox"/> new compound, molecule | <input type="checkbox"/> new production process |
| <input type="checkbox"/> new product | <input type="checkbox"/> new use for a known product / process |
| <input type="checkbox"/> new device | <input type="checkbox"/> new method |
| <input type="checkbox"/> new service | <input type="checkbox"/> other, please explain: |

3. Oral and/or written public disclosures made by inventors

By checking the appropriate box, please indicate whether this invention, in full or in part, has been subject to a disclosure Yes No will be subject to a disclosure Yes No

Please supply copies of documents that have been or will be subject to a disclosure.

Type of disclosure ¹	Medium ²	Date of disclosure	Reference	NDA ³	Document
				<input type="checkbox"/> Yes	upload
				<input type="checkbox"/> Yes	upload
				<input type="checkbox"/> Yes	upload

¹ Type of disclosure : Written, past; Written, upcoming; Oral, past; Oral, upcoming

² Medium : Journal article, Private thesis (master or doctoral), Public thesis (master or doctoral), Abstract, Conference/seminar, Poster session, Project report, Grant application, Industry meeting, Other

³ Non-Disclosure Agreement. *Please supply a copy of the non-disclosure agreement.*

I. General information

- A sequence (DNA, protein, etc.) has been placed on a database or biological material (plasmid, micro-organism, ...) has been deposited in a collection? Yes No

If Yes please mention the database or the collection:.....

4. Funding. If you have benefited from funding, even if only in part, at any stage of the research, please state the source by filling in the appropriate boxes below. If the funding contract includes conditions relating to ownership of results of the research, please enclose the contract as appendix, together with a copy of the scientific program.

Type ¹	Name/acronym	Duration	Nature of the contract	Industrial sponsor/patron

¹ Type : European, Regional (Walloon Region, etc.), National (FNRS, etc.), Internal funding, Other

5. Contractual background:

- Does the invention incorporate any material supplied by a third party? Yes No
- Does the invention incorporate any confidential results supplied by a third party? Yes No

If yes, please supply a copy of the MTA (material transfer agreement) or CDA (confidential disclosure agreement)

6. Laboratory notebooks:

- Is the invention described in / supported by laboratory notebooks? Yes No
- If so, are those notebooks available on request? Yes No

NOTICE :

This page is to be completed following the procedures put in place by the various universities and universities of applied sciences. Please contact your KTO for further information.

1. Bibliographical search

Are there other research or industrial teams who work in the field of the invention? Yes No

If yes, please list and attach copies of any publications (oral or written) most closely related to the invention :

- 1.
- 2.
- 3.

What were the **keywords** used to perform the search?

A. Concepts	B. Keywords/synonyms
Concept 1:	
Concept 2:	
Concept 3:	
Concept 4:	
Concept 5:	
Exclusion concept :	

2. Patent search

➤ Was a first search carried out by PICARRE in collaboration with the researchers

Yes date:.....

No

If yes, please enclose the search strategy in an appendix, together with an analysis of previous work that is relevant in terms of its difference in relation to this invention and the drawn conclusions.

If not, has a search been carried out based on patents databases ?

Yes

No

If yes, complete the following table:

ID	Keywords or classification code	Search tool	Search field	Number of documents	Number of relevant documents
1		to fill in	to fill in		
2		to fill in	to fill in		
3		to fill in	to fill in		
4		to fill in	to fill in		

➤ Select the most relevant document(s) (1-3 docs) and explain in a few words the technical differences with your invention.

The most relevant document is generally the one that corresponds to a similar use and requires the minimum of structural and functional modifications to come to the invention

3.a. Technology Readiness Level (TRL). Select the most suitable TRL for the technology (TRLs may be not perfectly adapted to your specific technology, select what seems closest

IDEA	<input type="checkbox"/>	TRL 0 :Idea	Unproven idea/proposal. Paper concept. No analysis or testing has been performed.
LAB SCALE	<input type="checkbox"/>	TRL1 : Research and Development begins	Basic functionality/principles demonstrated by analysis. Shall show that the idea is technologically conceivable.
	<input type="checkbox"/>	TRL 2 : Basic principles confirmed	Analytic studies, small scale testing in laboratory environment. Shall show that the technology can is likely to meet specified objectives with additional development. Practical applications can be invented. Applications are speculative and there may be no proof or detailed analysis to support the assumptions.
	<input type="checkbox"/>	TRL 3 : Validation at lab scale	Analytical studies and/or laboratory studies deliver results that validate predictions/objectives. If relevant, validation of separate elements of the technology. (Examples may include components that may not yet be integrated or representative)
PILOT SCALE	<input type="checkbox"/>	TRL 4 : Prototype(s) available, first tests	Prototype(s) is/are built and functionality demonstrated through testing over a limited range of operating conditions. If scalable, these tests are realized on scaled versions.
	<input type="checkbox"/>	TRL 5 : Prototype results at full scale	Prototype first use at full-scale: technology qualified through testing in intended environment, simulated or actual. The new hardware is now ready for first use.
	<input type="checkbox"/>	TRL 6 : Prototype validated in relevant environment	A representative model/prototype is tested and validated in relevant environment. Represents a major step up in a technology's demonstrated readiness (Examples may include testing a prototype in a high-fidelity laboratory environment or in simulated operational environment).
MARKET SCALE	<input type="checkbox"/>	TRL 7 : Operating system in operational environment	Technology integration is tested in operational environment. Full-scale technology is integrated for test into intended operating system with full interface and functionality. Requires demonstration of an actual system prototype in an operational environment.
	<input type="checkbox"/>	TRL 8 : Technology is proven to work	Test program is realized in intended environment: the technology shows acceptable performance and reliability over a period of time.
MARKET	<input type="checkbox"/>	TRL 9 : Market	Actual application of technology is in its final form - Technology proven through successful operations.

3.b. RESOURCES: what are the key resources that are required to continue the development of your invention: people (yourself, lab team,...), lab involvement (team, identified research program,...), funding, need for external partner? Please indicate whether these resources are -and will remain- available.

3.c. ACTIVITIES: What are the key activities (lab analysis, prototyping, scaling-up, methods, know-how...) that are required to continue the development of your invention?

3.d. COMPETITORS: Why are the benefits significantly better than the competition? What are the alternatives?

3.e To whom (users, customers, industry) is this invention dedicated? List the names of companies you think might be interested in using your technology to make, use or sell products or services. Please specify with examples (company names, press articles...) + Applications?

If you have a contact at any of these companies, be sure to provide name, position, e-mail and telephone. (We will obtain your permission before contacting anyone).

Company	Have you had contacts with this company?	Contact Name	Position/Title	E-mail	Phone	Does this company already offer a similar product?
	<input type="checkbox"/> Yes <input type="checkbox"/> No					<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No					<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No					<input type="checkbox"/> Yes <input type="checkbox"/> No
	<input type="checkbox"/> Yes <input type="checkbox"/> No					<input type="checkbox"/> Yes <input type="checkbox"/> No

3.f. Prototype availability: Is a prototype available? If no, how much time is needed to obtain a prototype / sample / demonstration tool?

3.g. Are you interested by the creation of a spin-off company for the valorization of this discovery? Yes No

Who could be involved in that spin-off project?

3.h. If the invention is licensed, would you be willing to collaborate with the licensing company as a principal or as a technical advisor? Yes No

CONTRIBUTORS

Please list all contributors to the invention known at this time. The list of inventors will be finalized later, after consultation with your Knowledge Transfer Office.

Last Name		Description of contribution to the invention
First Name		
Institution		
Research unit		
Phone		
Email		
Last Name		Description of contribution to the invention
First Name		
Institution		
Research unit		
Phone		
Email		
Last Name		Description of contribution to the invention
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First Name		
Institution		
Research unit		
Phone		
Email		

SIGNATURES

WARNING: inventorship is a matter of law and the below list should include the name of all persons who may qualify as legal inventor. An incomplete list of inventors, or a list that includes persons who have not in fact contributed to the inventive work, may therefore result in the lapse or invalidity of a patent.

Inventors (to be signed before witnesses)

I have acquainted myself with the University's rules, which I accept.

My signature at the foot of this document confirms my agreement to the Research Department's administrative procedure for an invention disclosure. I agree to co-operate fully with the KTO by supplying any document or information required for the registration, upkeep and possible defense of patents, negotiations of license contracts and the exploitation of the results of my research. I undertake to sign any document required for the registration or issue of patent applications, also an inventor's agreement, whose purpose is to settle the method of distributing income earned by exploiting the invention. **I undertake not to disclose the invention either orally or in writing during the priority period of the patent application without notifying the KTO.**

Inventor #1		Inventor #2	
Last name:	First name:	Last name:	First name:
Inventor's share (%):	Nationality:	Inventor's share (%):	Nationality:
Private e-mail:		Private e-mail:	
Private phone no.:		Private phone no.:	
Legal address:		Legal address:	
Position:		Position:	
Funding: to fill in if other, precise:		Funding: to fill in if other, precise:	
Date & signature		Date & signature	
Inventor #3		Inventor #4	
Last name:	First name:	Last name:	First name:
Inventor's share (%):	Nationality:	Inventor's share (%):	Nationality:
Private e-mail:		Private e-mail:	
Private phone no.:		Private phone no.:	
Legal address:		Legal address:	
Position:		Position:	
Funding: to fill in if other, precise:		Funding: to fill in if other, precise:	
Date & signature		Date & signature	
Inventor #5		Inventor #6	
Last name:	First name:	Last name:	First name:
Inventor's share (%):	Nationality:	Inventor's share (%):	Nationality:
Private e-mail:		Private e-mail:	
Private phone no.:		Private phone no.:	
Legal address:		Legal address:	
Position:		Position:	
Funding: to fill in if other, precise:		Funding: to fill in if other, precise:	
Date & signature		Date & signature	

Witnesses. To be signed by two witnesses, including the head of department and an external witness (the last-named to be subject to a confidentiality agreement) who have understood the invention solely on the basis of this document.

On **(date)**, I read this invention disclosure and understood its content.
 Last name, first name Signature

On **(date)**, I read this invention disclosure and understood its content.
 Last name, first name Signature