

# RECORD OF INVENTION: HOW TO FILL IT IN ITALIAN INSTITUTE OF TECHNOLOGY

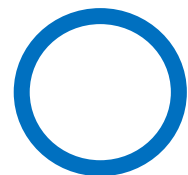
INTELLECTUAL PROPERTY MANAGEMENT OFFICE  
Lorenzo ROSSI, Chiara GNOCCHI, Lorena QUIRICO,  
Gioia VENTUROTTI



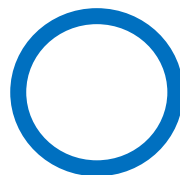
# INTELLECTUAL PROPERTY MANAGEMENT OFFICE

## HOW WE CAN HELP YOU?

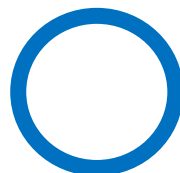
Team:  
Engineers  
Materials Scientists  
Chemists  
Biotechnologists



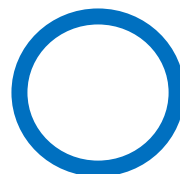
Preliminary technical assessment



Ownership and agreements negotiation

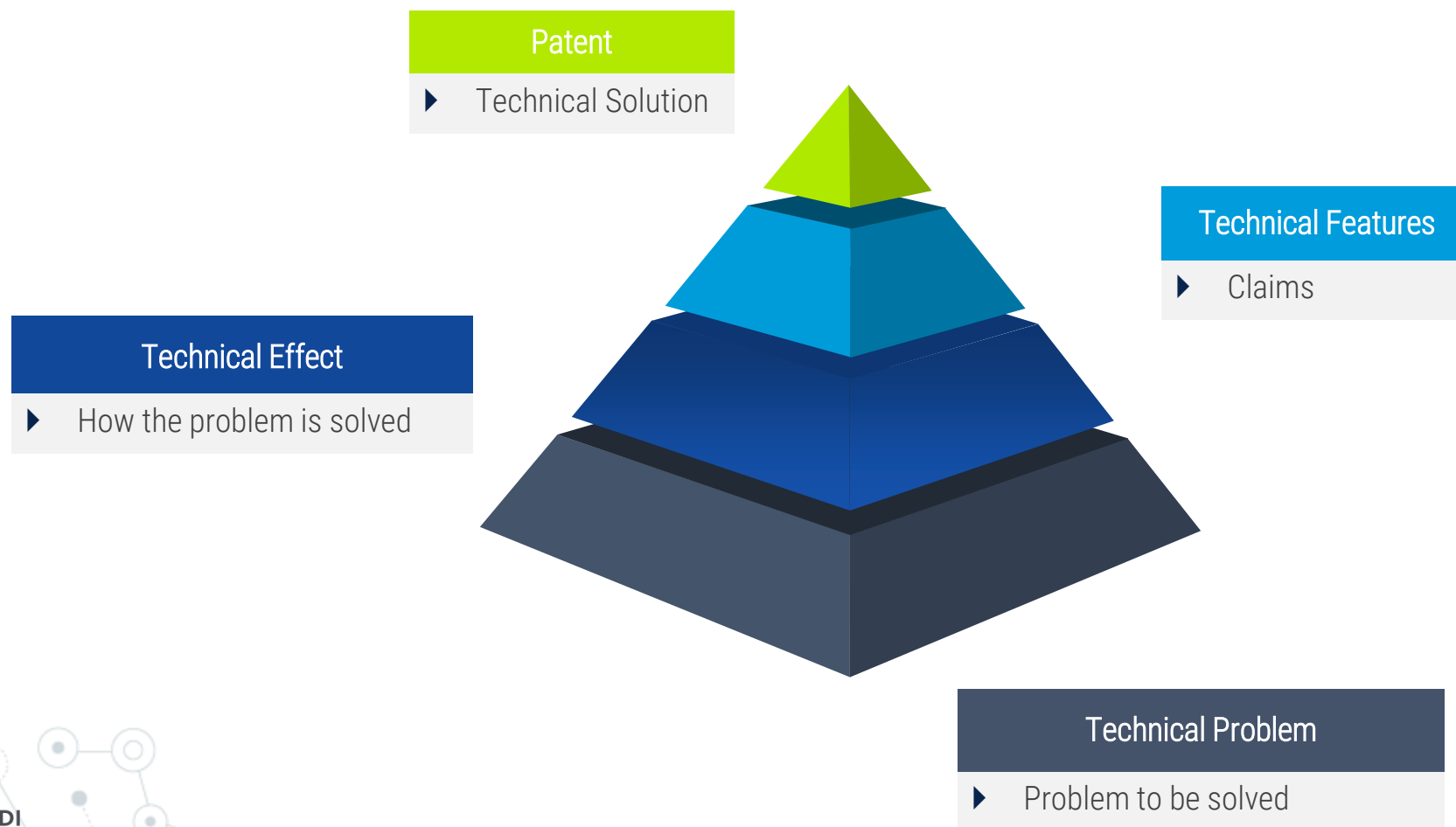


Patent attorney selection and coordination



Prosecution strategy and patent portfolio management

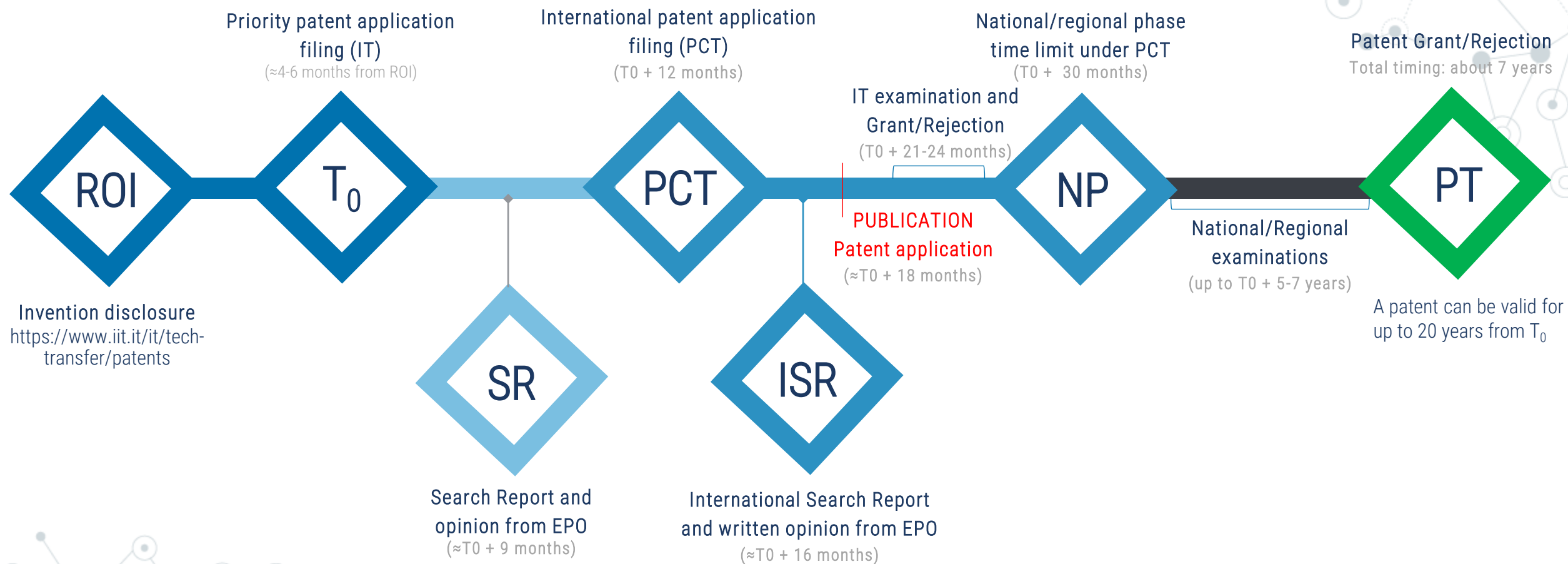
# PATENT: A TECHNICAL SOLUTION TO A TECHNICAL PROBLEM



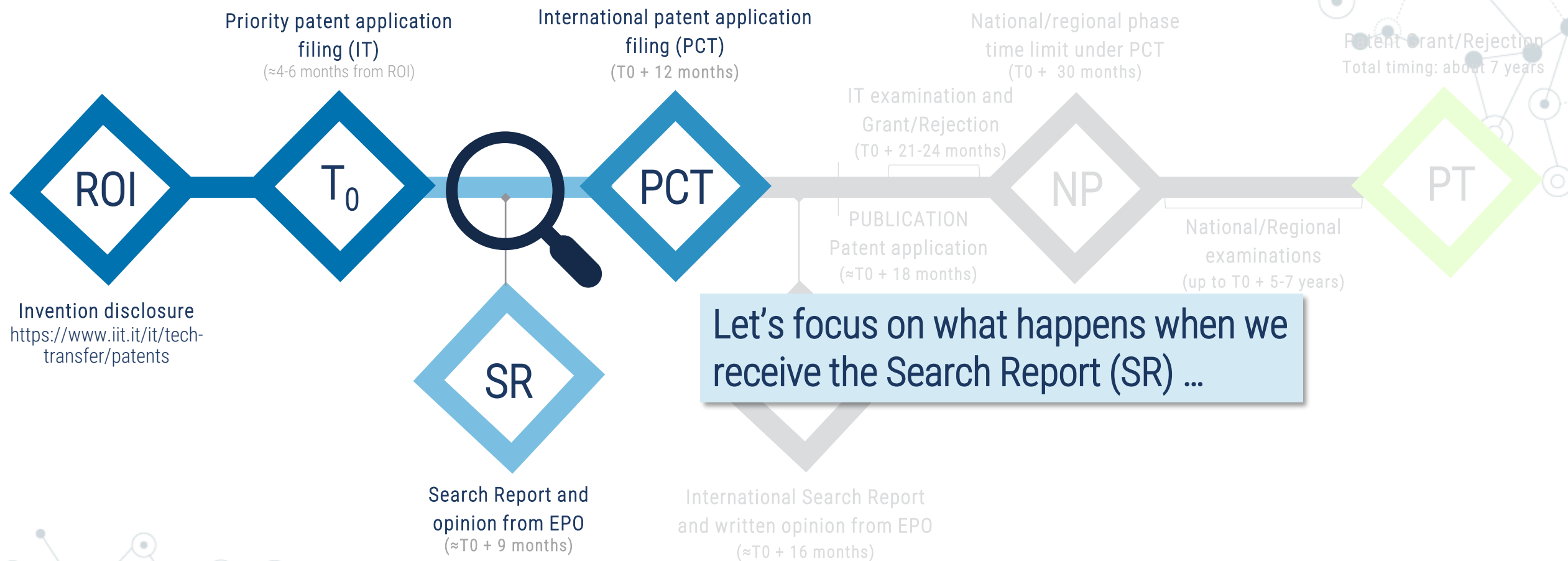
# PATENTABILITY REQUIREMENTS (ANALYSED BY IPMO)

- **NOVELTY:** the invention must be new and not have been disclosed in any prior art, meaning it must not be something that is already known or used by others in the public domain.
- **INVENTIVE STEP:** the invention must be non-obvious to someone with ordinary skill in the relevant field, based on the prior art. It must involve an inventive step that makes it non-obvious.
- **INDUSTRIAL APPLICABILITY:** the invention must be capable of being used in some kind of industry, trade, or commerce, and it must have a practical utility or application.

# THE PATENT JOURNEY

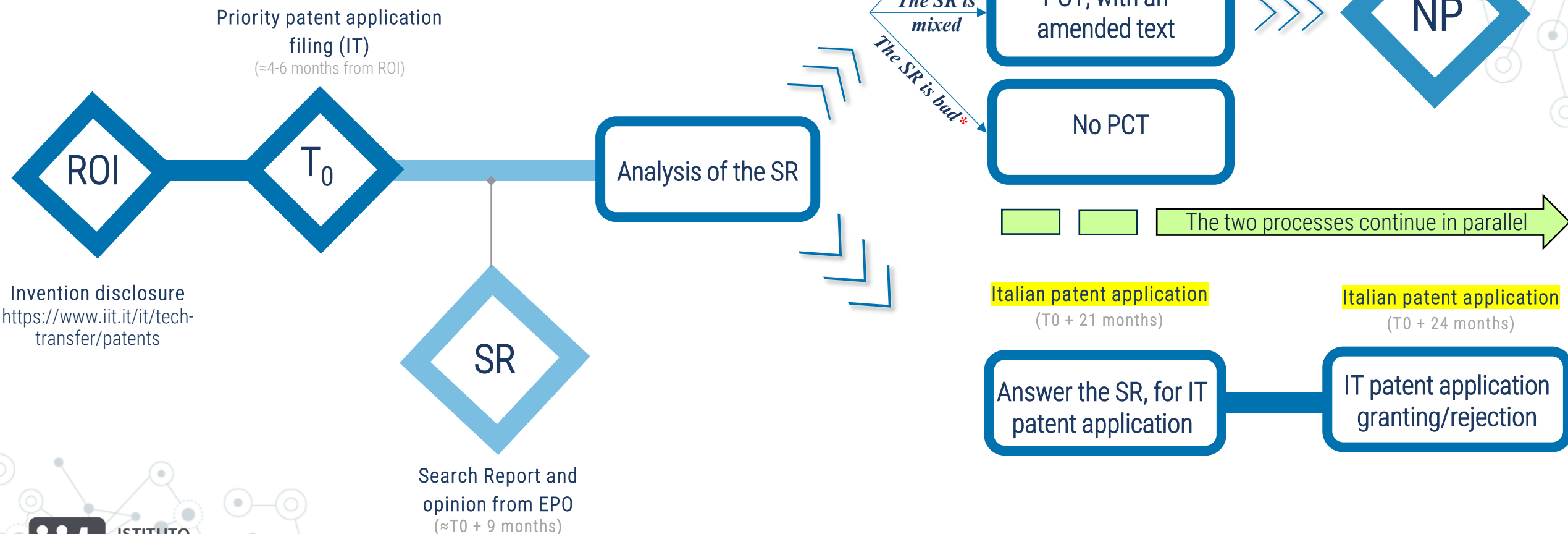


# THE PATENT JOURNEY



# THE PATENT JOURNEY

Let's focus on what happens when we receive the Search Report (SR) ...



Invention disclosure  
<https://www.iit.it/it/tech-transfer/patents>

# ROI – TITLE OF THE INVENTION

<https://www.iit.it/it/tech-transfer/patents>

**TITLE OF THE INVENTION**

Insert the title of your invention

Note to inventors:



- it can take up to 6 months from when the case number is assigned to the ROI before the application is filed
- To assign a case number, a completed PDF of the ROI, including the inventor's information and signatures, must be submitted. Please send us also a word copy of the ROI that will be used as a working document



# RECORD OF INVENTION (ROI): STEP BY STEP

<https://www.iit.it/it/tech-transfer/patents>

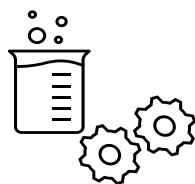
ROI  Several sections, four main types of data / information



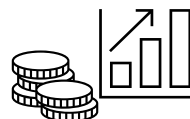
1. Personal



2. Legal



3. Technical



4. Marketing

# ROI – PERSONAL INFORMATION

<https://www.iit.it/it/tech-transfer/patents>

Name and SURNAME must exactly match your ID

The first person listed will be the lead inventor

INVENTORS AND APPLICANTS			
Inventors (Name, Surname)	Employer/Affiliation	Nationality	Inventorship percentage (%) <sup>1</sup>
[	[	[	[
[	[	[	[
[	[	[	[
[	[	[	[

**INVENTORS** <sup>1</sup>an **inventor** is the person who contributes to the claims of a patentable invention. If there is more than one inventor, please indicate the percentage contribution of each inventor to the invention.

- Who are the people involved in the disclosure?
- DECLARATION OF CONSENT TO PERSONAL DATA PROCESSING (pursuant to Art. 7 of EU Regulation 2016/679) – GDPR policy
  - **APPLICANT**
    - Are all the Inventors involved IIT's personnel?
    - Who are the Institution/s involved other than IIT?

*List them carefully in 'Employer/Affiliation'*

# RECORD OF INVENTION (ROI): STEP BY STEP

<https://www.iit.it/it/tech-transfer/patents>

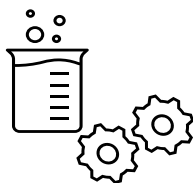
ROI  Several sections, four main types of data / information



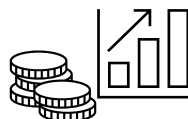
1. Personal



2. Legal



3. Technical



4. Marketing

# RoI – LEGAL INFORMATION

<https://www.iit.it/it/tech-transfer/patents>

Owner/Assignee	Ownership percentage (%)
<i>IIT or other legal entities owning the patent application fully or in part</i>	<i>Indicate in what percentage any single owner holds the IP title</i>
[ ]	[ ]
[ ]	[ ]
[ ]	[ ]

## - OWNER/ASSIGNEE

- The owner of a patent is who holds the legal rights and benefits granted by the patent.
- Employment contracts specify who owns these Intellectual Property rights

## - OWNERSHIP PERCENTAGE

- If all the Inventors involved are IIT's personnel, IIT owns 100% of the IP title
- If the inventors are affiliated to other institutions, ownership percentages will be defined with an Inter-Institutional Agreement (IIA)

[Ask to the IPMO team](#)

# FOCUS: WHO IS THE INVENTOR AND WHO IS THE OWNER/ASSIGNEE?

INVENTOR is ANYONE CONTRIBUTING TO THE INVENTION.

Inventors have the moral right to be nominated as inventor; this right is irrevocable and cannot be transferred

## IDENTIFY THE OWNER MAY BE LESS EASY

FOR IIT PERSONNEL THE ART. 64 OF THE ITALIAN CODE OF INDUSTRIAL PROPERTY APPLIES. SO:

ALL THE INVENTION MADE BY IIT PERSONNEL ARE OWNED BY IIT

What about people with double affiliation?

What about people working on a funded project?

What about PhD students?

### Art. 64

1. Quando l'invenzione industriale è fatta nell'esecuzione o nell'adempimento di un contratto o di un rapporto di lavoro o d'impiego, in cui l'attività inventiva è prevista come oggetto del contratto o del rapporto e a tale scopo retribuita, i diritti derivanti dall'invenzione stessa appartengono al datore di lavoro, salvo il diritto spettante all'inventore di esserne riconosciuto autore.

# RoI – LEGAL INFORMATION

<https://www.iit.it/it/tech-transfer/patents>

CONNECTED PROJECTS		
<i>LIST ANY EU PROJECT AND/OR COMMERCIAL PROJECT ORIGINATING THE IP, IF APPLICABLE. LIST ANY AGREEMENT BETWEEN ASSIGNEES REGARDING IP, IF APPLICABLE. Please add one line for each project and agreement as appropriate Attach any relevant IP document (grant agreement, consortium agreement, IP management Agreement, PhD agreement etc.)</i>		
Project	[	
Project's Partners Disclosure	<input type="checkbox"/> YES <input type="checkbox"/> NO	
Grant agreement	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> Attached
Consortium agreement	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> Attached
IP management Agreement	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> Attached
PhD agreement	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> Attached
Other	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> Attached
Has the present invention been partially or completely developed during any inventor's former employment?	<input type="checkbox"/> YES <input type="checkbox"/> NO	Name and surname of the inventor(s)..... Former employer.....

- Consider all the projects and agreements that have contributed to the IP title
- Attach all the documents to allow us to check them
- Are the partners of the project informed about this disclosure of the invention?

# RoI – LEGAL INFORMATION

<https://www.iit.it/it/tech-transfer/patents>

<b>FLAGSHIP</b>
<i>Has the invention been developed as part of the Flagship Projects?</i>
<input type="checkbox"/> YES
<input type="checkbox"/> NO
<b>If yes, please specify which one:</b>
[

Indicate whether the invention was developed within the Flagship Projects

Indicate one among:

- Brain and machines
- Technologies for Healthy Living
- Technologies for Sustainability
- Teaching Science to Computers
- RNA Technologies

# FOCUS: OWNERSHIP IN JOINT LABS, AGREEMENTS, FUNDED PROJECTS

WHEN IIT ESTABLISHES A PARTNERSHIP WITH A COMPANY, UNIVERSITY, RESEARCH CENTER, SPECIAL ATTENTION TO THE INTELLECTUAL PROPERTY MANAGEMENT IS NEEDED, AS WELL AS ACCESS TO THE LABS FOR SECRECY.

It is IPMO duties to:

- Consider internal regulations and policies of the partner entities
- Try to harmonize them with IIT IP policy
- Research contracts and joint labs agreements have a special set of clauses regarding NON-DISCLOSURE, PUBLICATIONS and IP RIGHTS AND EXPLOITATION
- European, national and regional funded projects have usually a joint policy regarding IP protection and management and access right to the joint results
- Special calls funded by entities (INAIL, AGENCIES, ...) usually have IP recommendations in the call



# FOCUS: IP MANAGEMENT TOOLS - POSSIBLE IP CLAUSES IN DIFFERENT COLLABORATION FRAMEWORKS

FELLOWSHIP AGREEMENT

IP CLAUSES

CONTRACT RESEARCH AGREEMENT

IP CLAUSES

JOINT LAB AGREEMENT

IP CLAUSES

LICENSE AGREEMENT

THE FULL CONTRACT

EUROPEAN PROJECT

GRANT AGREEMENT AND Ca

NATIONAL AND REGIONAL PROJECTS

CALL, IP AGREEMENT

VISITING STUDENT

AGREEMENT WITH PARTNER INSTITUTION  
NDA

# ROI – LEGAL INFORMATION

<https://www.iit.it/it/tech-transfer/patents>

**GENERAL SUBJECT MATTER**  
*Please check all applicable checkbox*  
☐ Product or Device  
☐ Process

- Tick what you want to patent:  
product or device/process/both

**IIT RELATED PATENT APPLICATIONS**  
*LIST ALL THE PATENT APPLICATIONS RELATED TO THIS RECORD OF INVENTION*  
*Please add one line for each patent application as appropriate*

Patent Application Number	Internal Reference Number	Filing Date (optional)
<input type="text"/>	<input type="text" value="PT"/>	<input type="text"/>
<input type="text"/>	<input type="text" value="PT"/>	<input type="text"/>

- If the ROI is linked to other prior IIT patent application, list them here → we will check them!



# RoI – LEGAL INFORMATION

<https://www.iit.it/it/tech-transfer/patents>

PUBLIC DISCLOSURE	
<i>LIST ALL THE PUBLIC DISCLOSURES OF THIS INVENTION (oral, in writing, by actual use, demonstration or posters)</i> <i>Please add one line for each disclosure as appropriate</i>	
1.	[ ]
2.	[ ]
<i>LIST ANY DEADLINE FOR FUTURE PLANNED DISCLOSURES (public events, meeting with companies or potential partners, conferences, paper submission, PhD dissertations, thesis defence, etc.)</i> <i>Please add one line for each disclosure as appropriate</i> <i>Please note that, before PhD/thesis dissertations, the secrecy procedure is required. For further information contact IP office.</i>	
1.	[ ]
2.	[ ]

## PAST PUBLIC DISCLOSURE

- Public disclosures may compromise novelty. We need to evaluate which secrecy procedures were activated.

## PLANNED PUBLIC DISCLOSURE

- Patent application should be filed before any public disclosure. If not possible, the secrecy procedure must be activated

*Ask to the IPMO team*

# RECORD OF INVENTION (ROI): STEP BY STEP

<https://www.iit.it/it/tech-transfer/patents>

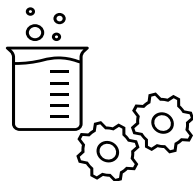
ROI  Several sections, four main types of data / information



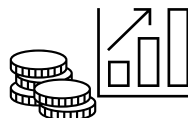
1. Personal



2. Legal



3. Technical



4. Marketing

# RoI – TECHNICAL DATA

## BACKGROUND OF THE INVENTION

Define the scope of the invention and the problem solved by the invention; describe all known solutions, including related IIT work, which bears on the invention

- Field of the invention
- “Identification” of a problem (to solve) in the field of invention
- “focusing” of the needs for improvement in the art

The background of the invention provides a general overview of what the new invention brings to the market that other (similar) inventions already part of the state of the art do (may) not provide.

### EP 0 941 666 B1

#### FIELD OF THE INVENTION

**[0001]** The present invention relates to a reduced fat agglomerated chocolate and to a process for its preparation.

**[0002]** Conventional milk chocolate contains about 30-31% fat. It may contain more or less but rarely less than 27% fat. Calorie-conscious consumers demand a chocolate with lower calories and one way of reducing the calories in chocolate is by reducing the fat content. However, there are technical difficulties in reducing the fat content of milk chocolate causing the quality, taste and texture to be inferior to that of conventional milk chocolate.

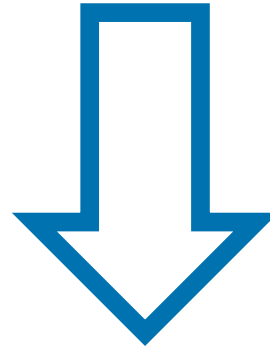
What existing **technical problem** does the invention **solve**?

What is the final **usefulness** of the invention?

# RoI – TECHNICAL DATA

To define the background of invention

To establish if the invention is new (and inventive)



State of the art (or prior art) search

*The state of the art is everything made available to the public by means of a written or oral description, by use, or in any other way, before the date of filing of the [...] patent application.*

[https://www.epo.org/en/legal/guidelines-epc/2024/g\\_iv\\_1.html](https://www.epo.org/en/legal/guidelines-epc/2024/g_iv_1.html)

# RoI – TECHNICAL DATA

<b>PRIOR ART (<u>PATENTS</u> AND <u>PAPERS</u> OR OTHER RELEVANT DOCUMENTS)</b>	
<i>PROVIDE AT LEAST ONE DOCUMENT AS THE CLOSEST PRIOR ART AND IDENTIFY THE TECHNICAL PROBLEMS UNRESOLVED BY THE PRIOR ART (you can search in public Patent databases as <a href="#">Espacenet</a> or others, paper DB etc.)</i>	
<b><u>Maximum 4 documents.</u> Every cited document must be attached to this Record <u>Of</u> Invention</b>	
Reference 1	Attached
	<input type="checkbox"/>
<b>Main features of the reference and differences with proposal (bullets)</b>	
<ul style="list-style-type: none"><li>•</li><li>•</li></ul>	

Search both patent and non-patent literature (PL and NPL) to the subject matter and define the **closest** patent (Closest Prior Art)

*Highlight the differences between your proposal and the cited Prior Art*

*In selecting the closest prior art, the first consideration is that it should be directed to a similar purpose or effect as the invention or at least belong to the same or a closely related technical field as the claimed invention.*

# RoI – TECHNICAL DATA

## **ABSTRACT (BRIEF DESCRIPTION OF THE INVENTION)**

*Short description of the invention and main technical characteristics*

- Brief description of the invention (the abstract in the RoI has a similar purpose to the abstract in papers)



- Short explanation of the problems that the proposed invention solves



## AND KEYWORDS

- To identify the field of your invention

### **KEYWORDS**

*Identify possible keywords and synonyms*



# RoI – TECHNICAL DATA

## DESCRIPTION OF THE INVENTION

*Detailed description of the invention*

*Included figures and/or tables must be in black and white*



Describe the details of the invention, with great accuracy:

- A device/a product: how is it built? How does it work? Which techniques are used?
- A process: how does it take place? Which are the steps? Which materials are needed?



Figures are necessary: production schematics, molecule structures, flow charts, experimental data...

# ROI – TECHNICAL DATA

Fundamental technical features of the invention, listed with bullet points...



## TECHNICAL FEATURES

*Identify the distinctive features of the invention*

## TECHNICAL ADVANTAGES

*Identify the advantages and problems solved by distinctive features above*

...AND TECHNICAL ADVANTAGES

...that ensure the technical advantages of the invention, listed with bullet points.

In general, to each technical feature corresponds one technical advantage.

# RoI – TECHNICAL DATA

## PROOF OF CONCEPT

*Do you have prototype, lab tests, experimental data and simulations?*

*Please provide technical details*

*Included figures and/or tables must be in black and white*

[

Evidence to support the feasibility of a project

Show us that what you are proposing actually works



# RoI – TECHNICAL DATA

Evidence to support the feasibility of a project



Show us that what you are proposing actually works

1. Description of the sample(s) you have produced and its (their) characterization
2. Effectiveness of a new molecule
3. ...

Include data!  
(in black and  
white)

# ROI – TECHNICAL DATA

## FURTHER DEVELOPMENTS

*Describe (possible) further developments*

[

Do you have any ideas on how to further develop/ameliorate your invention?



BE CAREFUL:  
important and real  
development may  
be worth to be kept  
secret



NO possibility  
to develop  
another patent



You stop people from taking your ideas (because they are no longer new), BUT you also stop yourself (for the same reason).



possibility to  
develop another  
patent



BUT someone else can develop the same idea after your patent becomes public (18 months).

Patentability

1. Novelty

2. Inventiveness

3. Industrial applicability

# ROI – TECHNICAL DATA

## MARKET ANALYSIS & APPLICATIONS

*Describe the market scenario and possible applications of the invention. List one or more companies that might be interested in acquiring the technology, specify if you have personal contact or state if the inventors are interested in creating a start up based on such patent.*

[COMPANY A]

[COMPANY B]

List the companies that are likely to be interested in your technology

Possibility of licensing (once the patent has been granted)

Economic return

# RoI – TECHNICAL DATA

## DESCRIPTION OF THE INVENTION

*Detailed description of the invention  
Included figures and/or tables must be in black and white*

References cited in the description of invention can be listed in “Bibliography”. Only **few relevant documents**.

## BIBLIOGRAPHY

*List only the most relevant documents*

*“the works or a list of the works referred to in a text or consulted by the author in its production”*



# RoI – GDPR



By signing this part,  
the undersigned state  
that no contributors  
have been excluded  
from the invention!

INVENTORS DATA	
THE FIRST PERSON LISTED WILL BE CONSIDERED THE "LEAD INVENTOR" Please add One Table for each inventor as appropriate	
Name, SURNAME <sup>2</sup>	<input type="checkbox"/> PhD Student <input type="checkbox"/> Undergraduate Student
Conferring University <small>(only for PhDs and Undergraduate Students)</small>	
Email (work)	
Email (other)	
Research Line <sup>3</sup>   PI <sup>3</sup>	
Inventor Residence <small>(only Country)</small>	
Nationality	
Assignee <sup>4</sup>   Assignment date <sup>5</sup>	
<b>DECLARATION OF CONSENT TO PERSONAL DATA PROCESSING</b> (pursuant to Articles 7 of EU Regulation 2016/679)	
By checking the following, you agree that you have read, understand and accept the hereafterin enclosed "INFORMATION ON THE PROCESSING OF PERSONAL DATA FOR THE "RECORD OF INVENTION"" and the information referred to in Articles 12 and 13 of EU Regulation 2016/679 and that you are aware of the rights set out in Article 13, letter b) and Articles 15, 16, 17, 18 and 20 of the Regulation.	
<input type="checkbox"/> I agree	
You are asked to give explicit consent to the processing of personal data, carried out according to the ways and purposes specified in the hereafterin enclosed "INFORMATION ON THE PROCESSING OF PERSONAL DATA FOR THE "RECORD OF INVENTION"", always within the limits in which it is required for the specific purpose.	
<input type="checkbox"/> I, hereby give my consent	
<input type="checkbox"/> I, hereby DO NOT give my consent	
Date	
SIGNATURE	



# RoI – GDPR

The Name and Surname must exactly match your ID

Complete with the email you use for work and the personal one (this is because a patent lasts 20 years and we need to contact you over the time)

Only for IIT researchers. Please indicate your IIT Research Line and Principal Investigator. Please refer to the following Intranet link [https://intranet.iit.it/research-organisation-office/doc\\_download/7998-research-lines-matrix.html](https://intranet.iit.it/research-organisation-office/doc_download/7998-research-lines-matrix.html) (if the link doesn't work, please copy and paste the address in your browser).

Insert the country where you have the residence

Usually the employer institution or company (e. g. Fondazione Istituto Italiano di Tecnologia).

For IIT, please indicate your contract starting date at the time the invention was conceived

INVENTORS DATA	
THE FIRST PERSON LISTED WILL BE CONSIDERED THE "LEAD INVENTOR" Please add One Table for each inventor as appropriate	
Name, SURNAME <sup>2</sup>	<input type="text"/>
<input type="checkbox"/> PhD	<input type="checkbox"/>
Conferring University (only for PhDs and Undergraduate Students)	<input type="text"/>
Email (work)	<input type="text"/>
Email (other)	<input type="text"/>
Research Line <sup>3</sup>   PI <sup>3</sup>	<input type="text"/>
Inventor Residence (only Country)	<input type="text"/>
Nationality	<input type="text"/>
Assignee <sup>4</sup>   Assignment date <sup>5</sup>	<input type="text"/>

# IT SEEMS REALLY COMPLICATED



Just send  
us the  
completed  
RoI



# THANK YOU

INTELLECTUAL PROPERTY MANAGEMENT OFFICE  
Lorenzo ROSSI, Chiara GNOCCHI, Lorena QUIRICO,  
Gioia VENTUROTTI

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chiara.gnocchi@iit.it  
lorena.quirico@iit.it  
gioia.venturotti@iit.it

