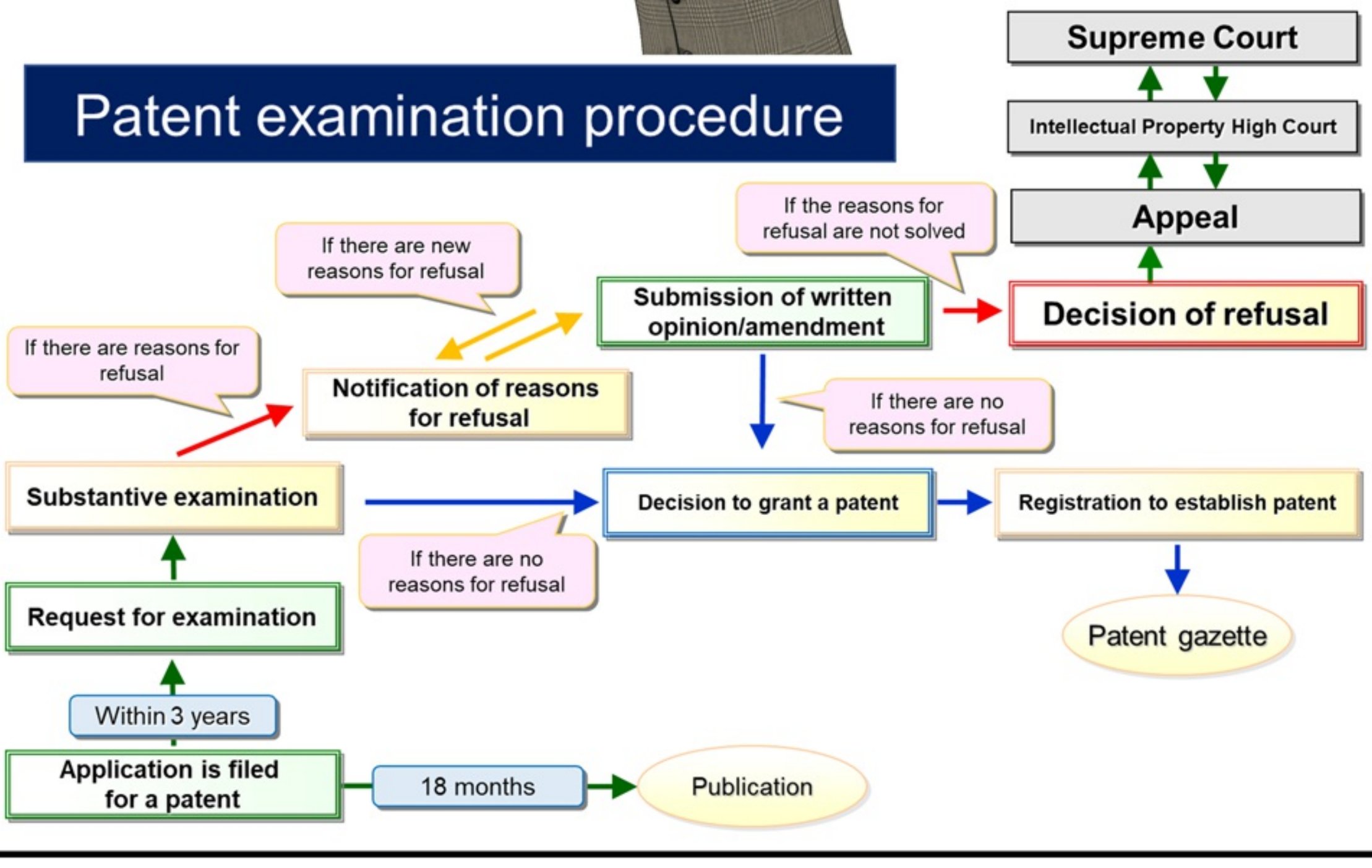
Chapter 1
Patent Examination for Beginners

Let's learn the basics of patent examination!
If you already know the basics of how it works,
you can skip this chapter.

Patent examination procedure



How to read this Manga

1
Hey,
look at this, Ota !

2
What seems to be
the problem?
Please calm down
a little bit as
e president

3
This article says that the
technology some companies
worked so hard to develop
can sometimes be easily
copied by oth panies!

4
Examples of how technology leaked
• Fake products are mad
• Spies steal informati n
(industrial espionage).
Collaborators betray their partners.
nployees take out confidential
mation of their offices.
are misconfigured.

5
Well, it's not only other
com anies, you know.
That could happen to us
because we also develop
AI software.

Have you read the AI and IoT Case Examples that Mr. Shinsaki gave us?

What???
Is it me again?

Claims…
Requirements for Description…
Inventive Step…
Patent Eligibility …
Hmmm….
That's a parade of terms I've never heard before in my life.

Who else could it be but you? Make sure you understand it all!

Is it on the JPO website?

There are lots of difficult technical terms unique to patents.
Before studying AI and IoT Case Examples, why don't you take a look at the JPO E-learning site?

I'll definitely try that with Ai!

Yes, you can learn the basics of patent examination by watching online videos.
All for free.
There are also exercises for you to try.

JPO E-learning site

JPO JAPAN PATENT OFFICE

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E-learning of IPR

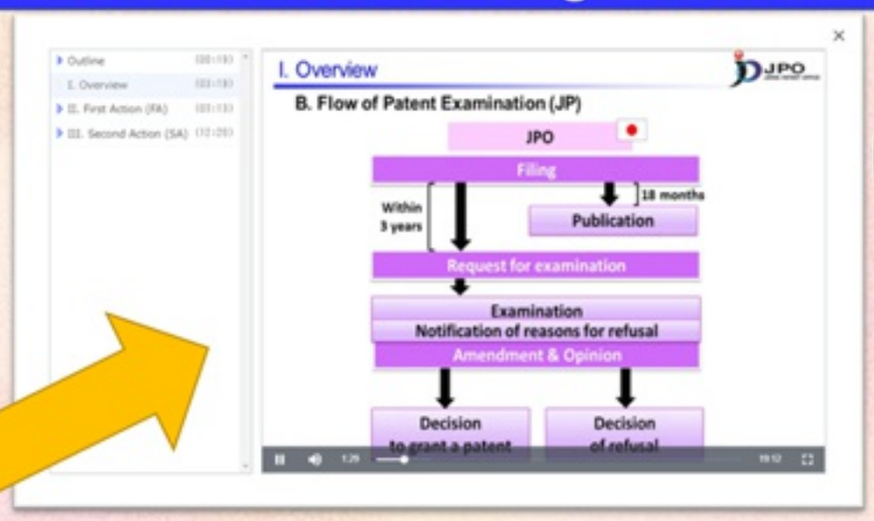
E-learning of IPR

These e-learning materials have been created as part of the JPO's Co
these, users can access videos via web-streaming as well as complete

Study & Materials

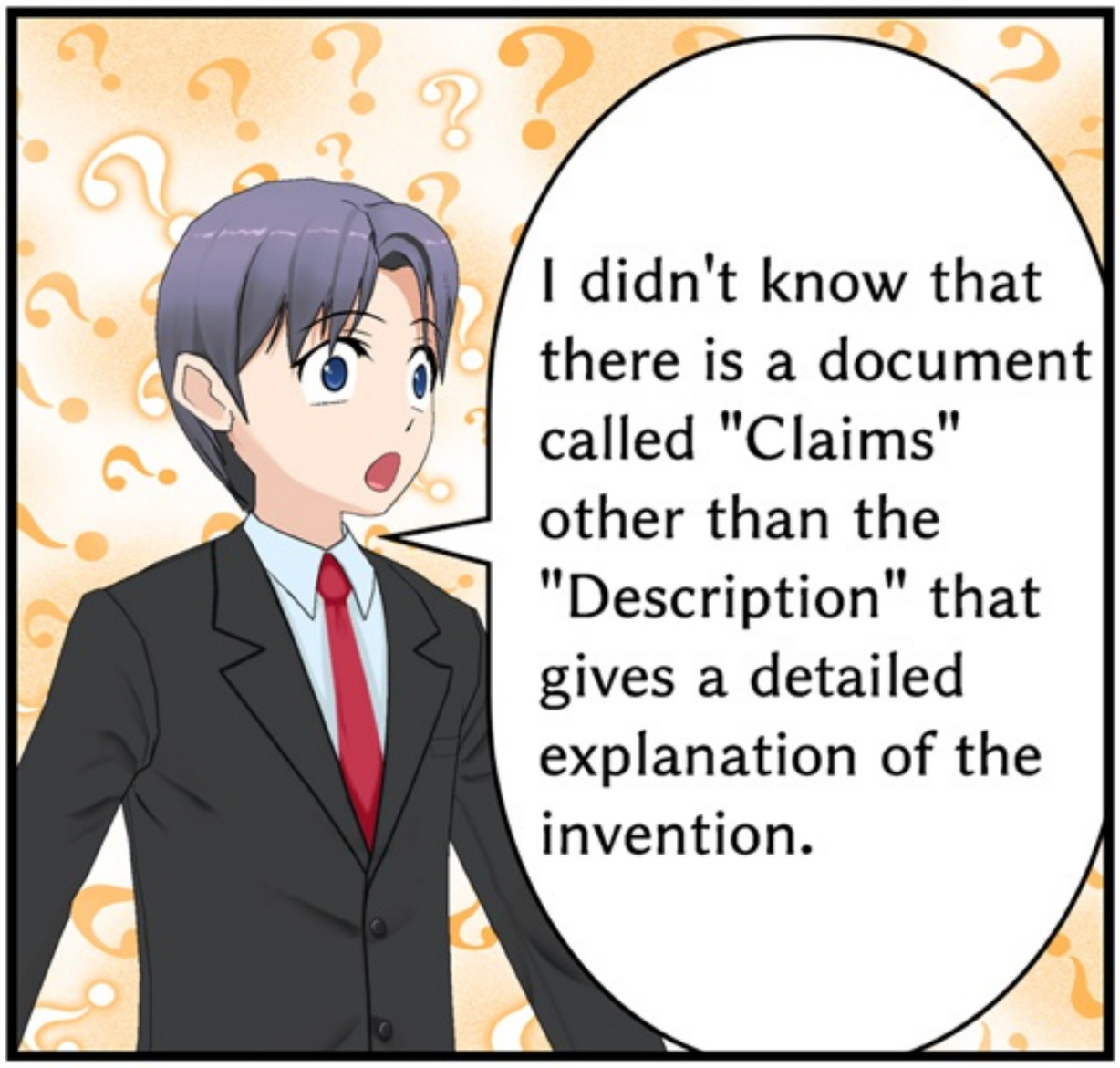
- Ammendments (2021)
- Utilization of Examination Results of Other Intellectual Property Offices (2021)
- Writing of Reasons for Refusal (2021)
- Requirements for Description (2017)
- Requirements for Claims (2017)
- Novelty (2017)
- Inventive Step (2017)
- Examination Procedure (2016)
- Patent Classification and Search key (2016)
- Prior Art Search (Entry level) (2016)
- Anti-Counterfeiting Measures (2015)
- Industrial Property Rights System in Japan (2014)

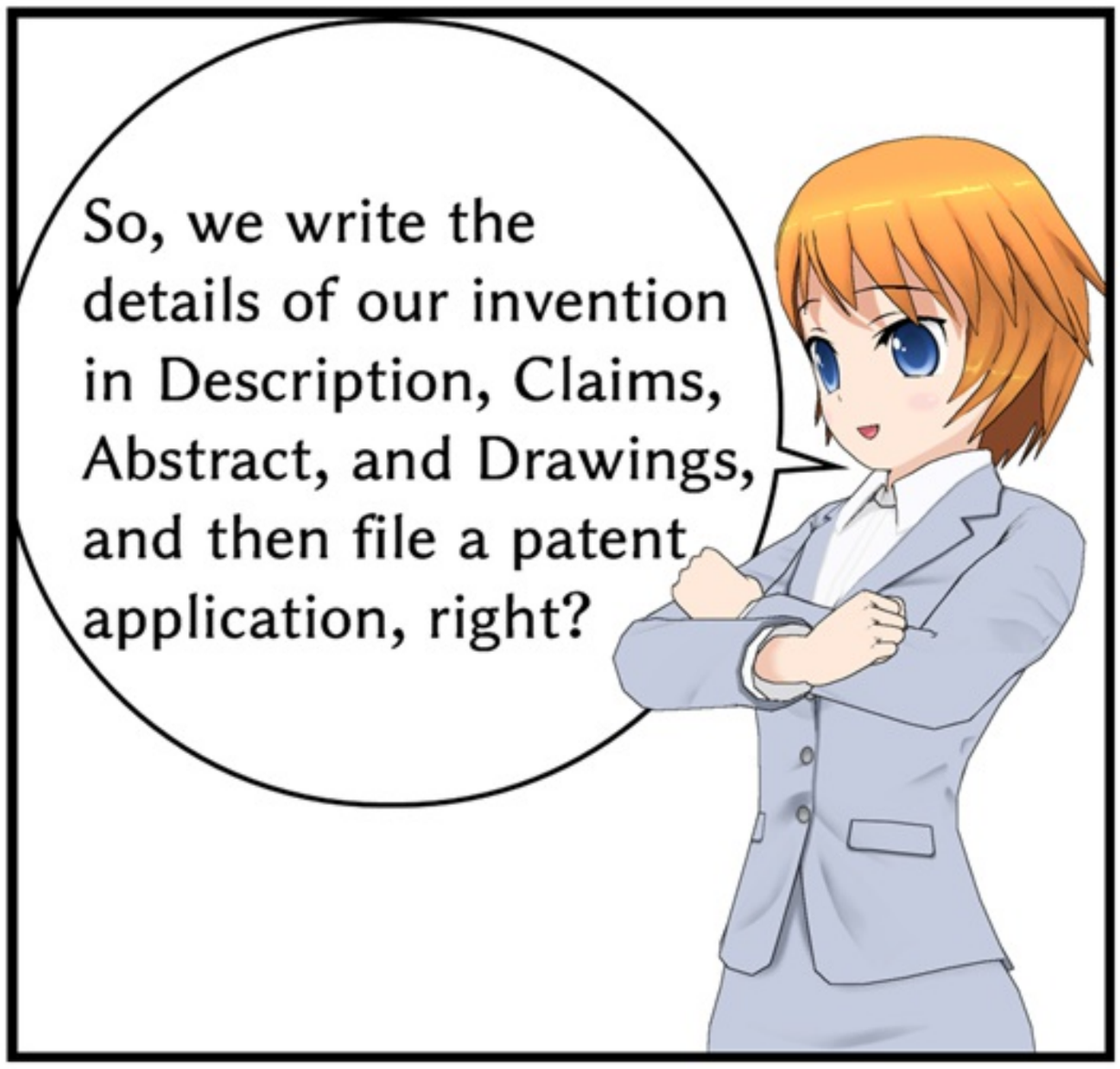
Online video training material



https://www.jpo.go.jp/e/news/kokusai/developing/training/e-learning/

There is no way I'm going to miss doing this!





Promoting innovation
through the protection and utilization of inventions

Patent Application

Claims

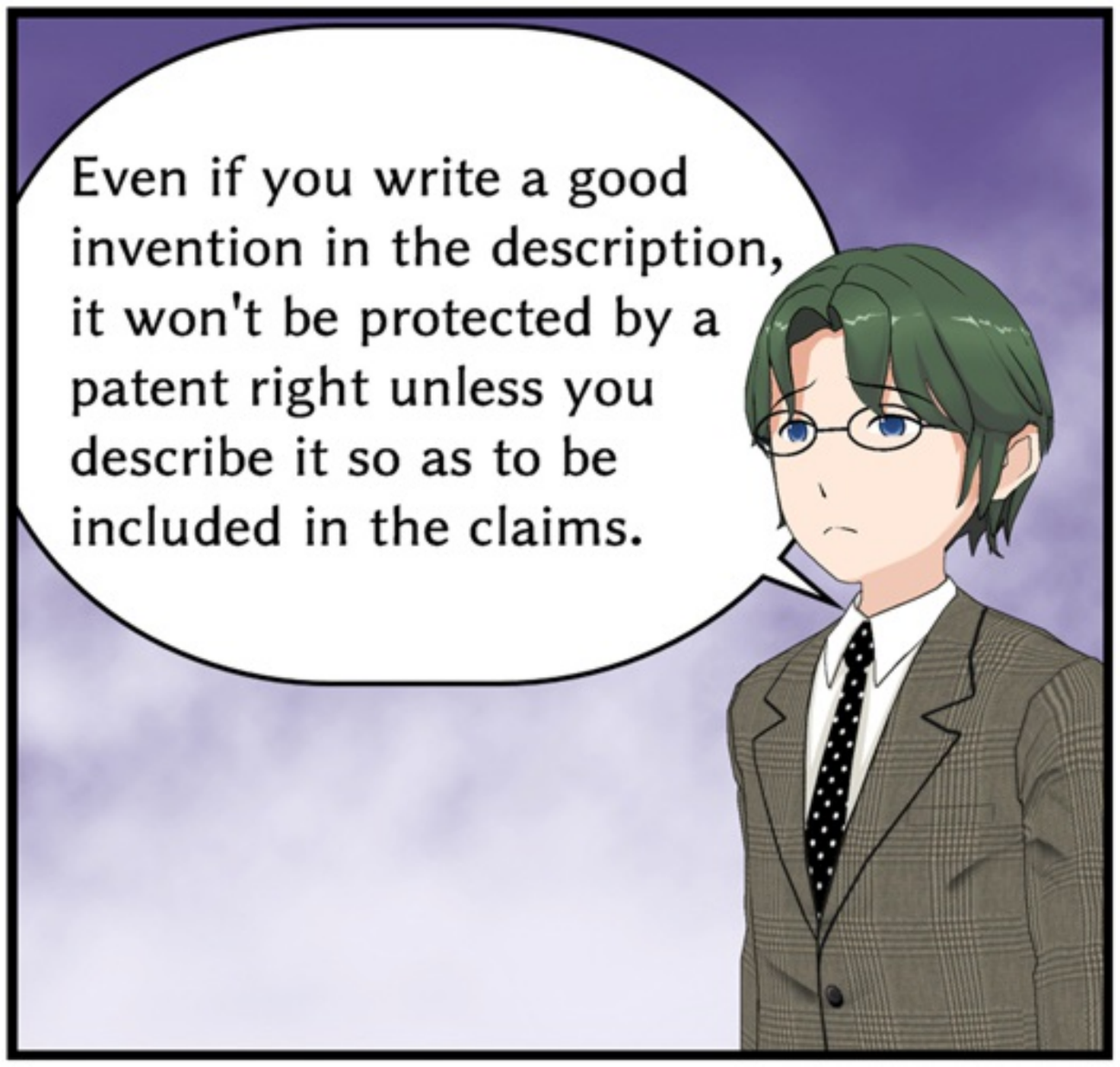
The scope of the patent rights for which protection is sought

Description +
Drawings (where required)

A detailed explanation of the invention

Protection of inventions

Utilization of inventions



How to consider the claims

Description

Title of the invention "Cup"

A detailed explanation of invention

An example of a cup made of aluminum

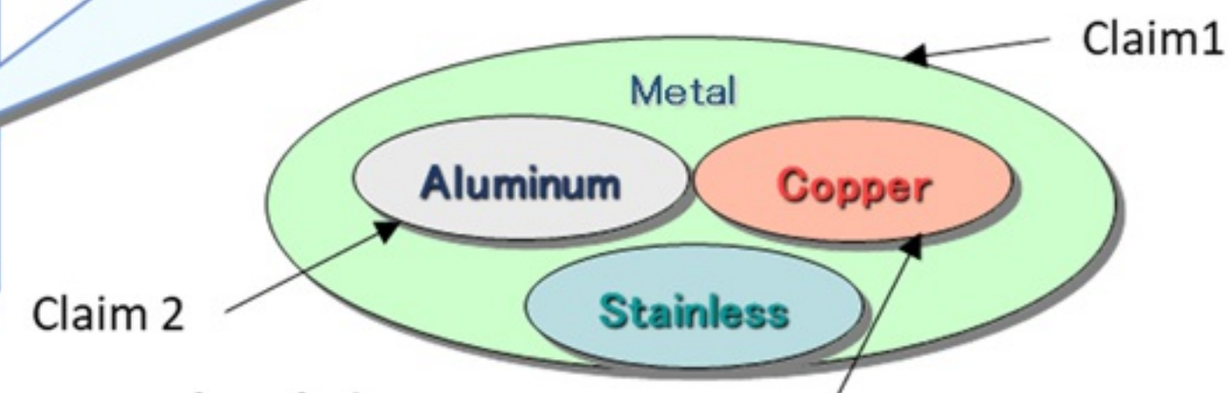
An example of a cup made of copper

Claims

【Claim 1】A cup made of metal.

【Claim 2】A cup made of aluminum.

【Claim 3】A cup of Claim1, in which the said metal is copper.

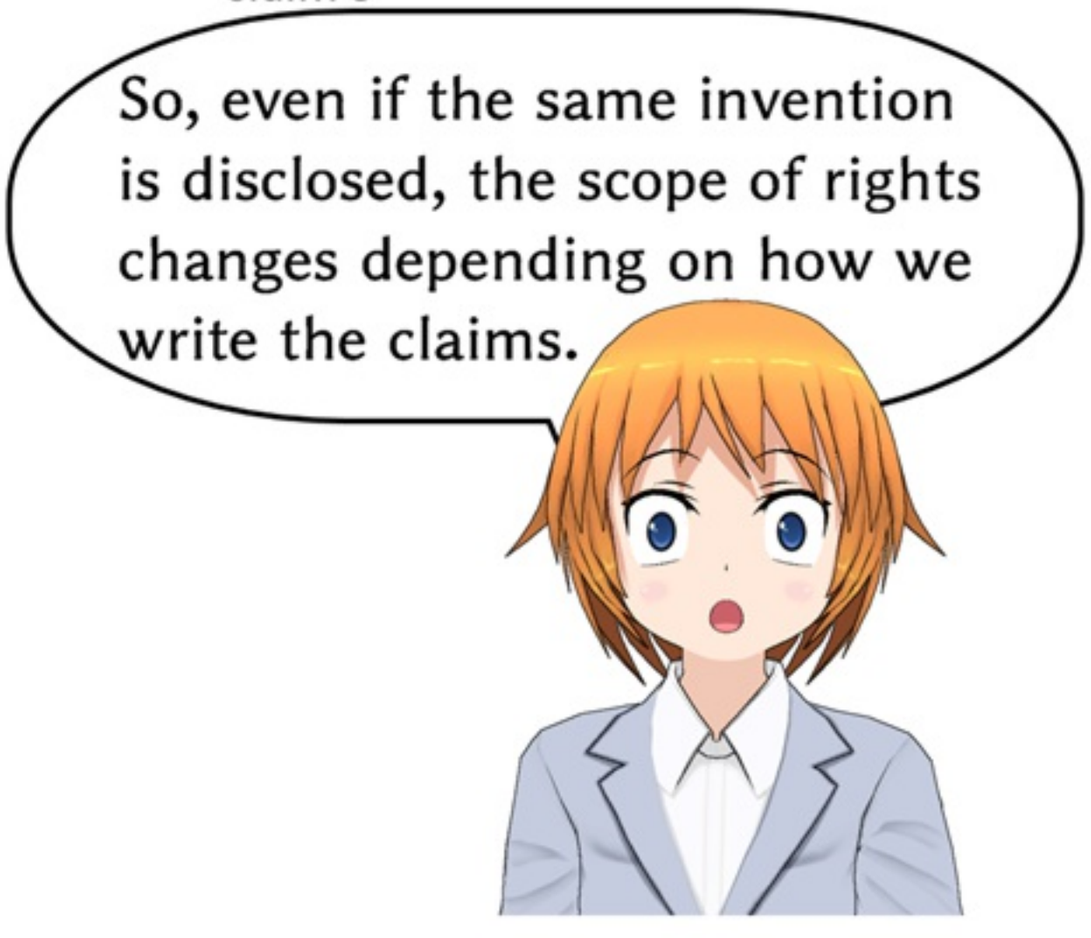


✓Describe the invention for each claim.

✓Claim 1 includes a cup made of any metal, including metals not explicitly mentioned in the Examples, such as stainless steel.

✓Claim 2 includes only a cup made of aluminum.

✓It is also allowed to describe the invention in the form of reference, as Claim 3.



Broad claims are likely to lack novelty or inventive step

Description

Title of the invention "Cup"

A detailed explanation of invention

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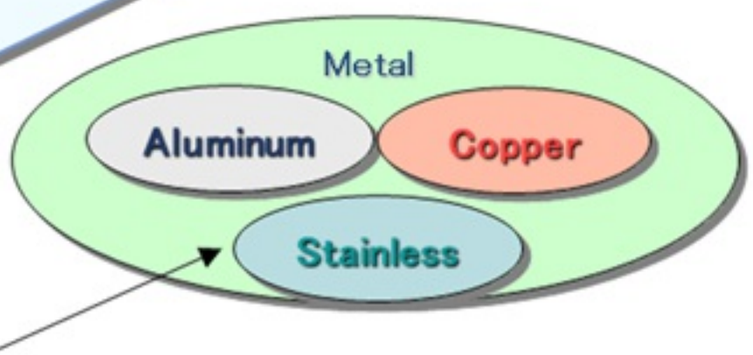
Claims

【Claim 1】A cup made of metal.

【Claim 2】A cup made of aluminum.



Stainless is not specified in the claims or descriptions of the application, but it is included in metal.

Prior art
A cup made of stainless.

Claim 1：lacks novelty
Claim 2：has novelty

Make sure you include in your claims the points that differentiate your invention from the prior art.

- ✓A broad claim is difficult to differentiate from the prior art, and is likely to be denied novelty or inventive step.
- ✓It is often the case for the applicants that a broad claim is initially tried and then amended to correspond to the prior art cited by the examiner.

Aren't there several types of description requirements?

Mr. Shinsaki, I heard that when writing a broad claim, we have to be careful about the description requirements. What does that exactly mean?

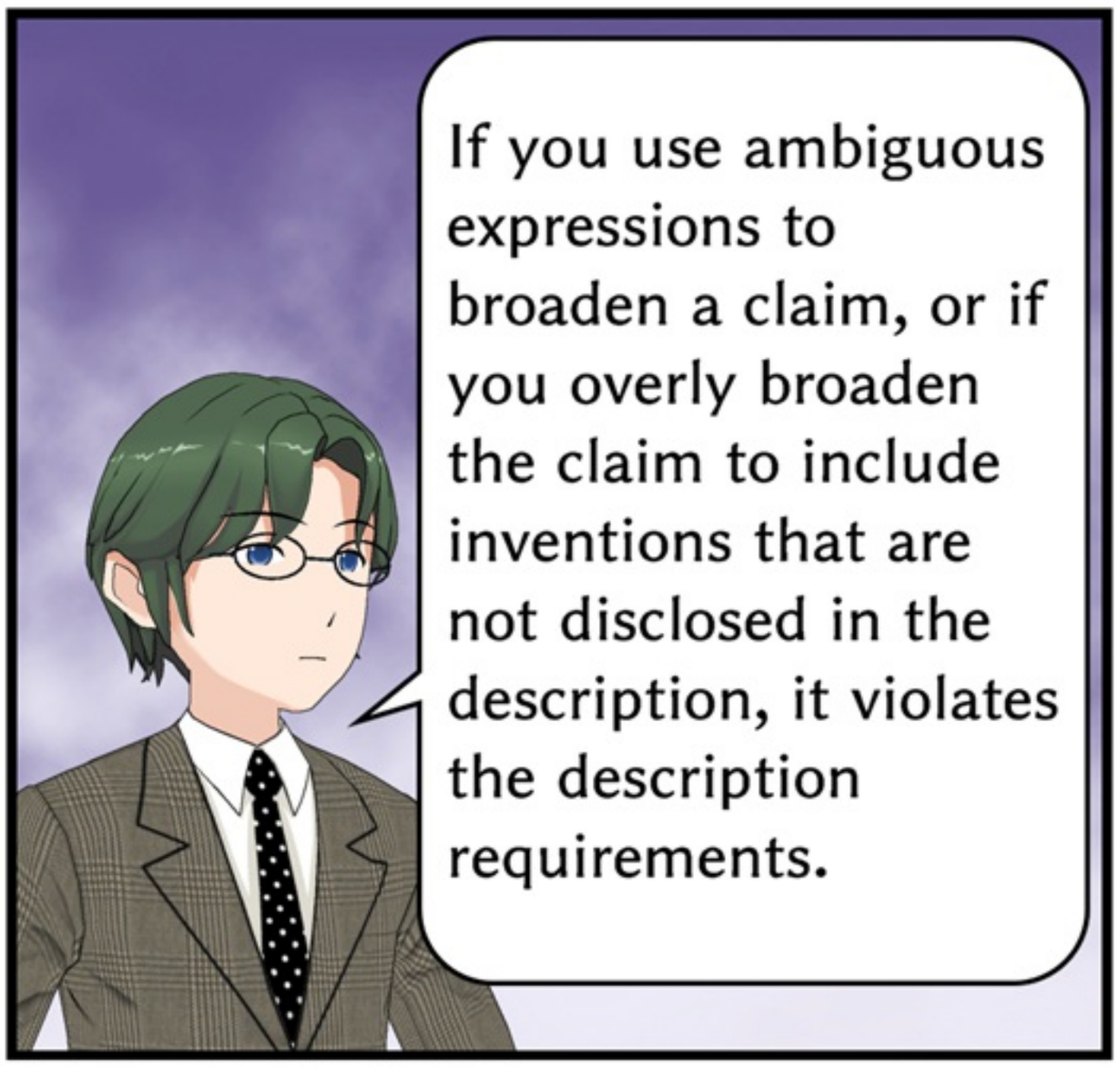
Wow, that's the president. You've been studying hard, haven't you?

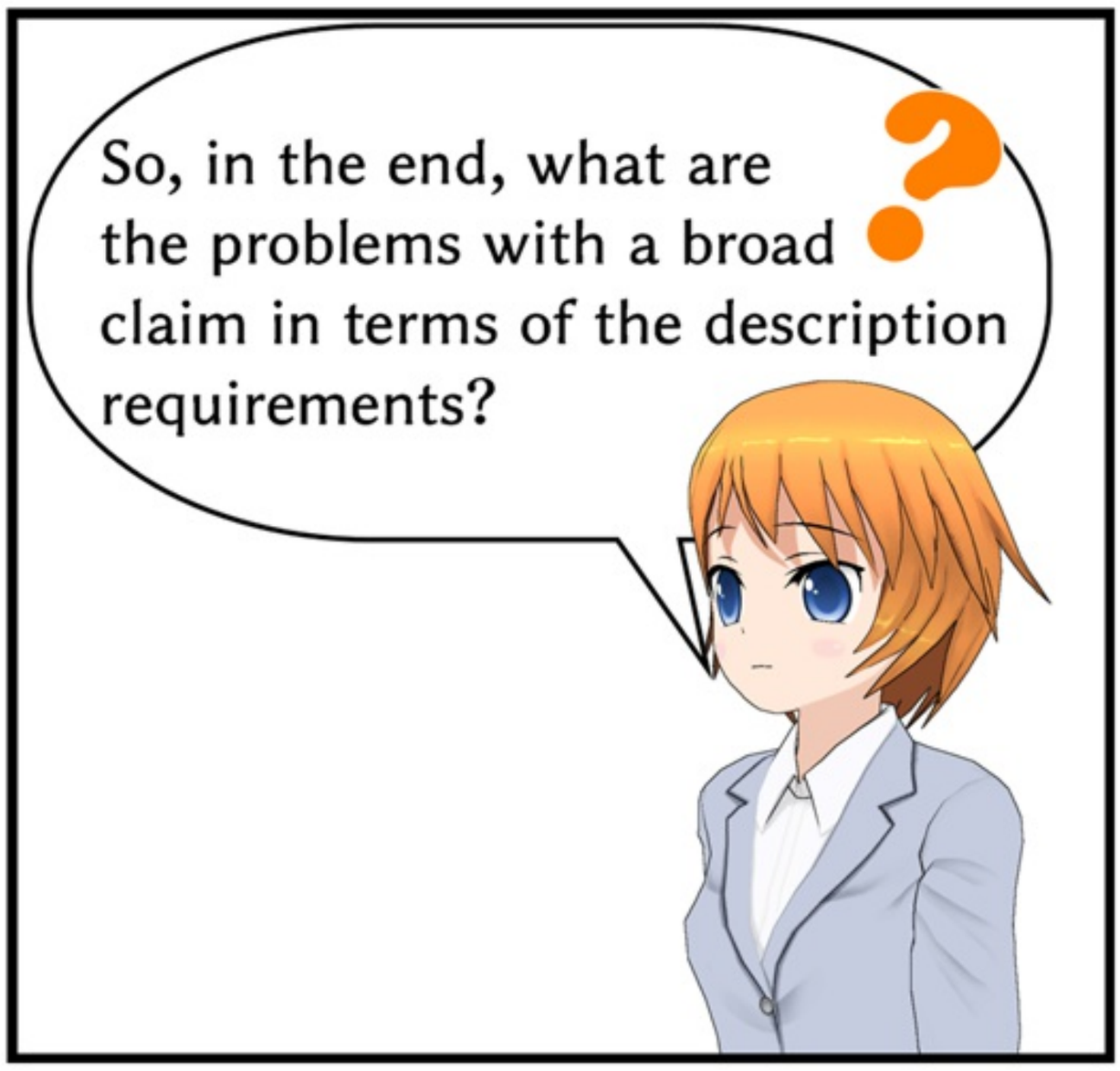
Yes, Clarity Requirement, Support Requirement and Enablement Requirement!!!

Ta-da!

I have no idea what all those requirements mean, though!

I was a little drowsy and….





What are Description Requirements?

Requirements for Claims

Clarity Requirement

- ✓ Claimed inventions must be clear.
- ✓ It should be avoid to be unclear what constitutes patent infringement due to unclear scope of rights.

It violates Clarity Requirement if the scope of the rights become unclear in an attempt to broaden the claims.

Support Requirement

- ✓ Claimed invention must be described in the description (detailed explanation of the invention).
- ✓ It is against the purpose of the patent system to grant protection to inventions which are not described in the description as available technical information.

As a result of broadening the claims, it violates Support Requirement if it includes a configuration that cannot solve the problem of the application.

Requirements for Description

Enablement Requirement

- ✓ The detailed explanation of the invention in the description must enable **a person skilled in the art** to work the invention.
- ✓ Otherwise, the invention will not be available as technical information.

As a result of broadening the claims, if the claimed invention includes something that cannot be carried out by a person skilled in the art even by referring to the detailed explanation of the invention, it will be a violation of Enablement Requirement.

No. I'm saying that you should write a claim that is consistent with what you disclosed in the description.
If you want to write a broad claim, you should enrich the embodiments or examples in the detailed explanation of the invention in the description.

Patent Application Documents

Compared with a research report

Title of Research		
Field of Research		
Conventional technology level, background of the research		
Research themes and goals		
Research tools and methods		
Experimental results, research results		
Examples of experiments, experimental data, etc.		
Equipment diagram, flow diagram, etc.		
	Description — Detailed Explanation of the Invention — Title of Invention	◎Express the content of the invention in a simplified manner
	Field of Technology	◎Related field of the invention (field of industrial application)
	Background Technology	◎Conventional technology as a basis for improvement
	Prior Art Document	◎Patent Document, Non-Patent Document
	Summary of Invention — Problem to be solved by the invention	◎Problems with conventional technology. Emerging needs.
	Summary of Invention — Means to solve the problem	◎What means to be used to solve the problem
	Summary of Invention — Effect of the Invention	◎Advantages over conventional technology
	Brief explanation of the drawings	◎Explanation of each figure. Explanation of letters or numerals.
	Embodiments or examples for carrying out the (claimed) invention	◎Examples of actual experiments and prototypes. Logical explanation of them. An explanation of how the invention can be used in industry if it can be implemented by deduction from the theory.
	Industrial applicability	◎Industrial applications
	Explanations of letters or numerals, etc.	
	Claims	◎Technical Scope of the Patent
	Abstract	◎Key points of the overall invention (to be published in the publication of unexamined applications)
	Drawings (where required)	◎Helps to understand the wording of the description

For example, if you write a claim with a broad conceptual term such as "metal", describe embodiments or examples of various metals to the extent that a person skilled in the art would recognize that the problem of the invention would be solved with metals in general.

The inventive step is also examined based on the standard of a person skilled in the art!

It's a hypothetical person who has the common general knowledge in the technical field of the invention.
In fields involving cross sectional technologies or complex technologies, the hypothetical person would be a team composed of experts.

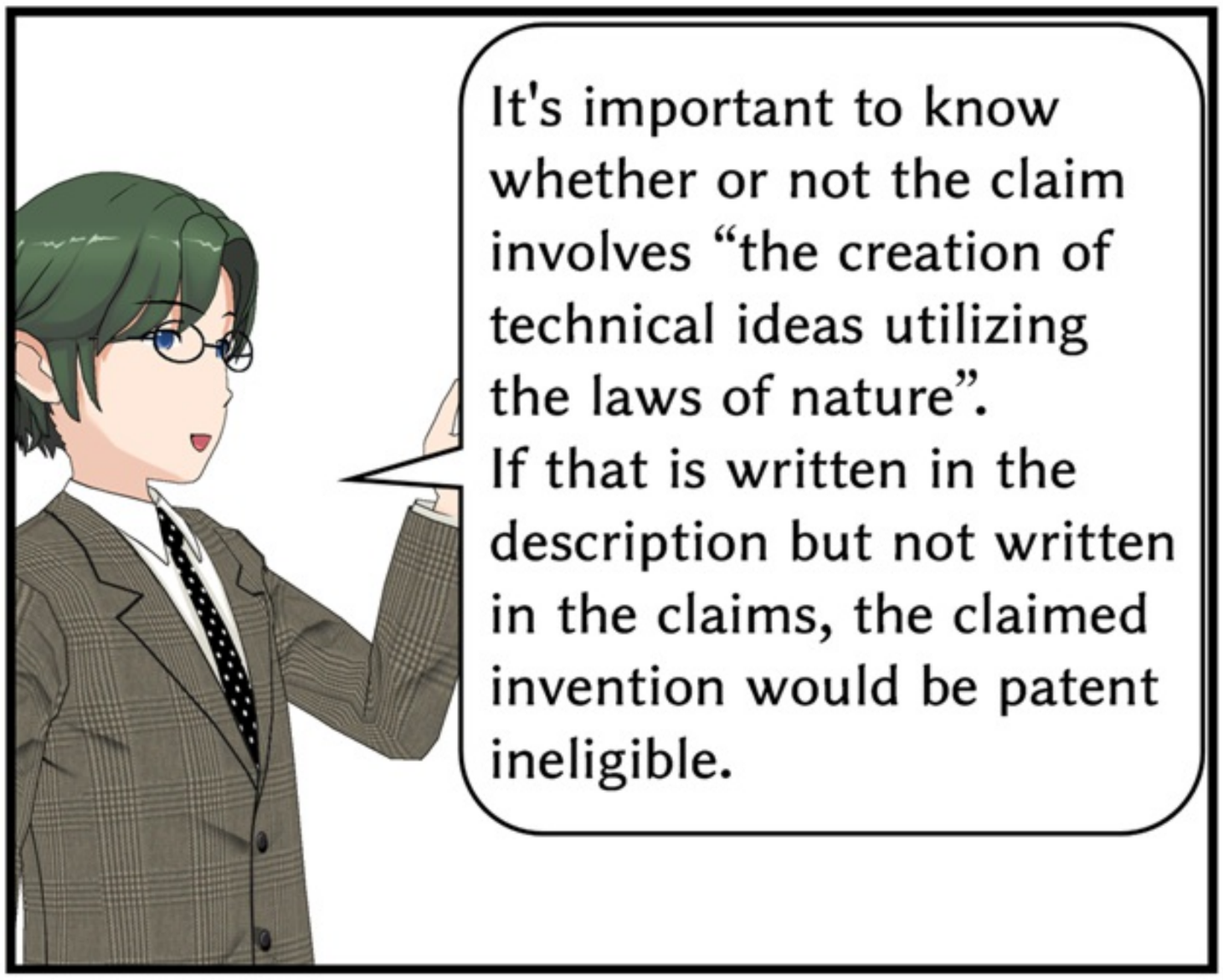
By the way, who do you mean by "a person skilled in the art"? Do you mean someone who is smart or great?
You know, someone who is a representative of the company, like me?

Be careful about Patent Eligibility.

Is there anything else we should be careful about the AI-related inventions we are developing?

The patent system protects technical ideas.
A claim that does not contain technical elements is not patentable and is rejected on the grounds that the claimed invention is not an "invention", i.e., it is patent ineligible.

Yes, it was mentioned in the AI and IoT Case Examples, but it was difficult for me.



Patent Eligibility

Act. 29(1) A person that invents an invention with industrial applicability may obtain a patent for that invention, ….
Act. 2(1) The term "invention" as used in this Act means a highly advanced creation of technical ideas utilizing the laws of nature.

Utilizing the laws of nature

Technical idea

Creation

Highly Advanced

(NO) Laws of nature per se
(NO) Anything going against laws of nature
(NO) Artificial arrangement in addition to not utilizing laws of nature

Study method

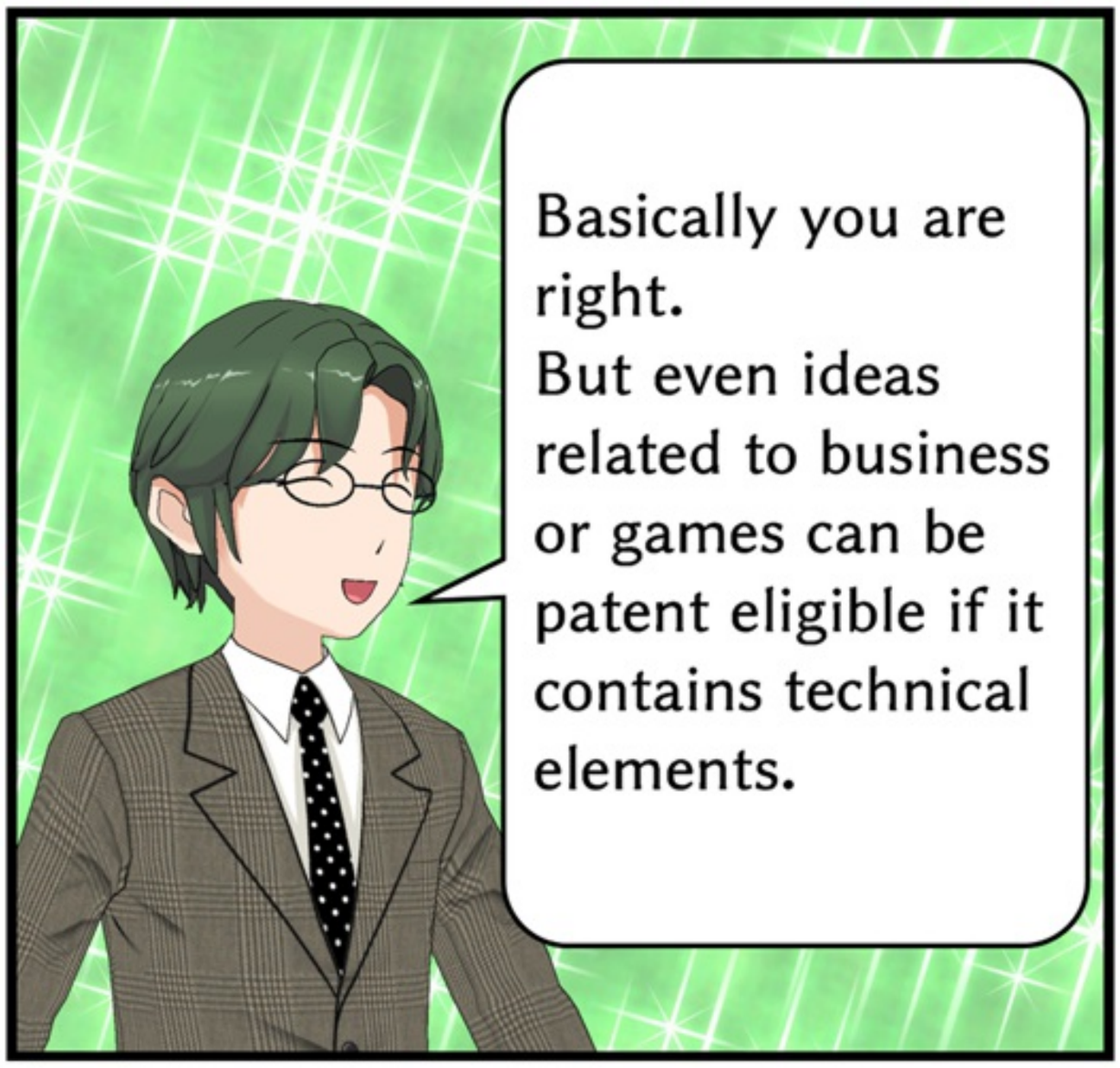
(NO) Personal skills (such as those acquired through personal experience and which cannot be shared with others as knowledge due to lack of objectivity)

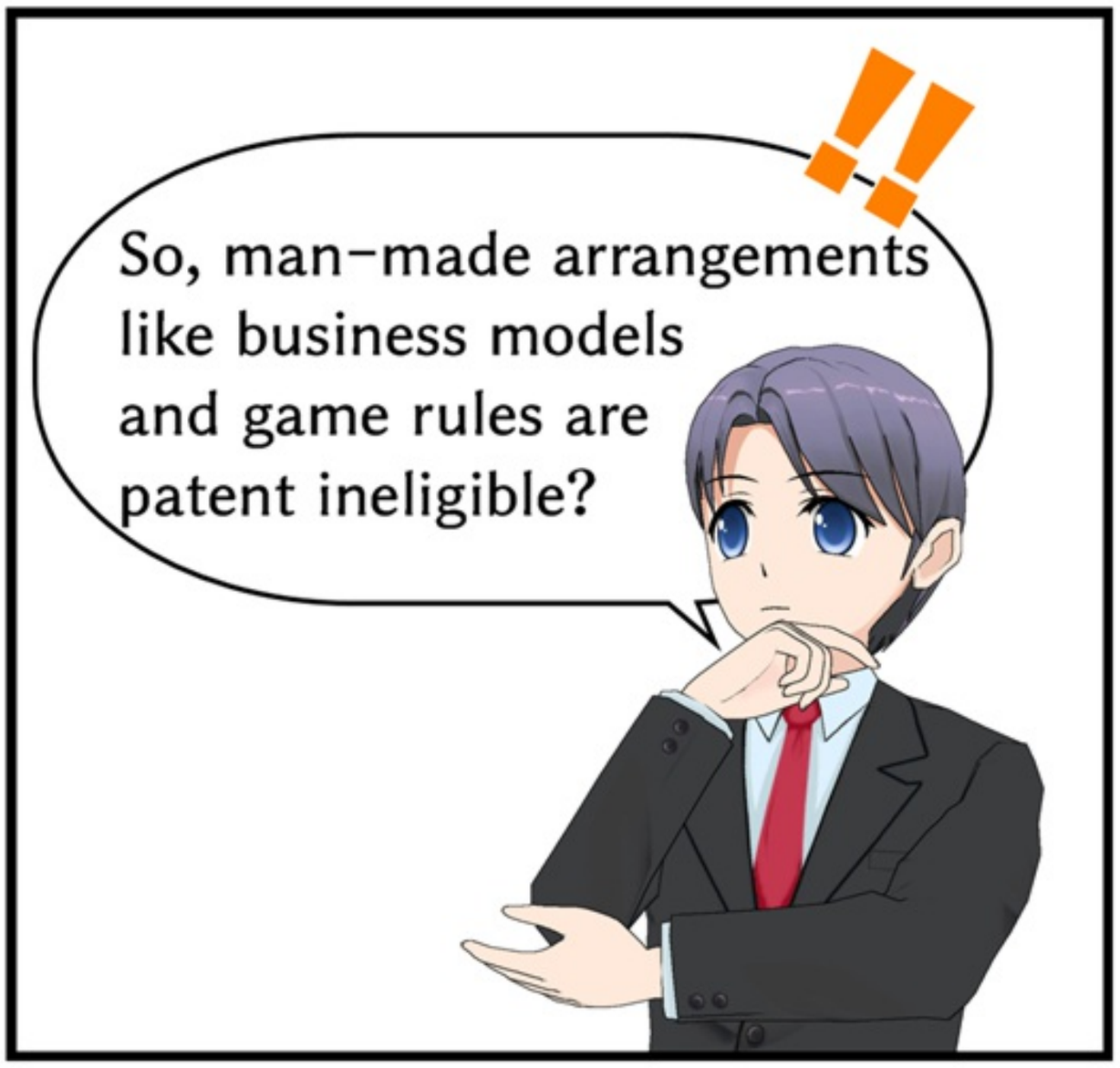
Method of throwing fork ball

(NO) A mere discovery of a microorganism in nature
(OK) A microorganism that is artificially isolated from a natural product

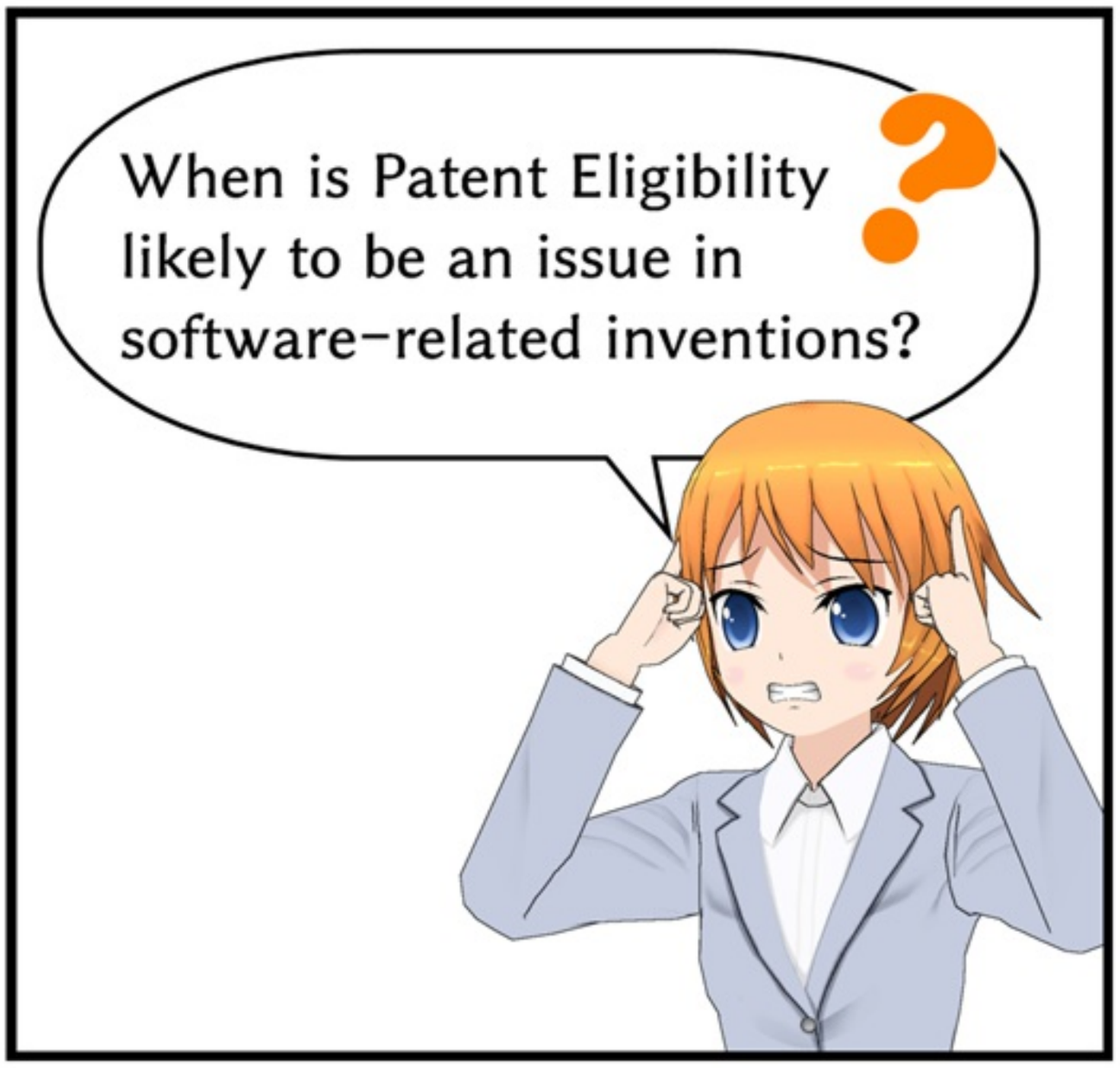
Discovery of X-ray

This is used just to differentiate "invention" from "device" under the Utility Model Act, and is disregarded in determination.





In software-related inventions, the technical element is what kind of information processing the computer is supposed to perform.
However, if the claim only describes the purpose of use of the computer without describing the specific information processing, the claimed invention would be patent ineligible.



Summary

- ✓ A patent application contains the description, claims and abstract.
  - ✓ Drawings are not essential.
- ✓ The claims describe the scope of the patent rights for which protection is sought.
- ✓ The claims must meet the Clarity and Support Requirements.
- ✓ The description should include a detailed explanation of the invention.
  - ✓ The description must meet the Enablement Requirement.
- ✓ Broad claims are more likely to be rejected as novelty or inventive step.
  - ✓ Also be careful of the Description Requirements for the broad claims.
- ✓ The Patent Act protects "inventions".
  - ✓ A highly advanced creation of technical ideas utilizing the laws of nature.