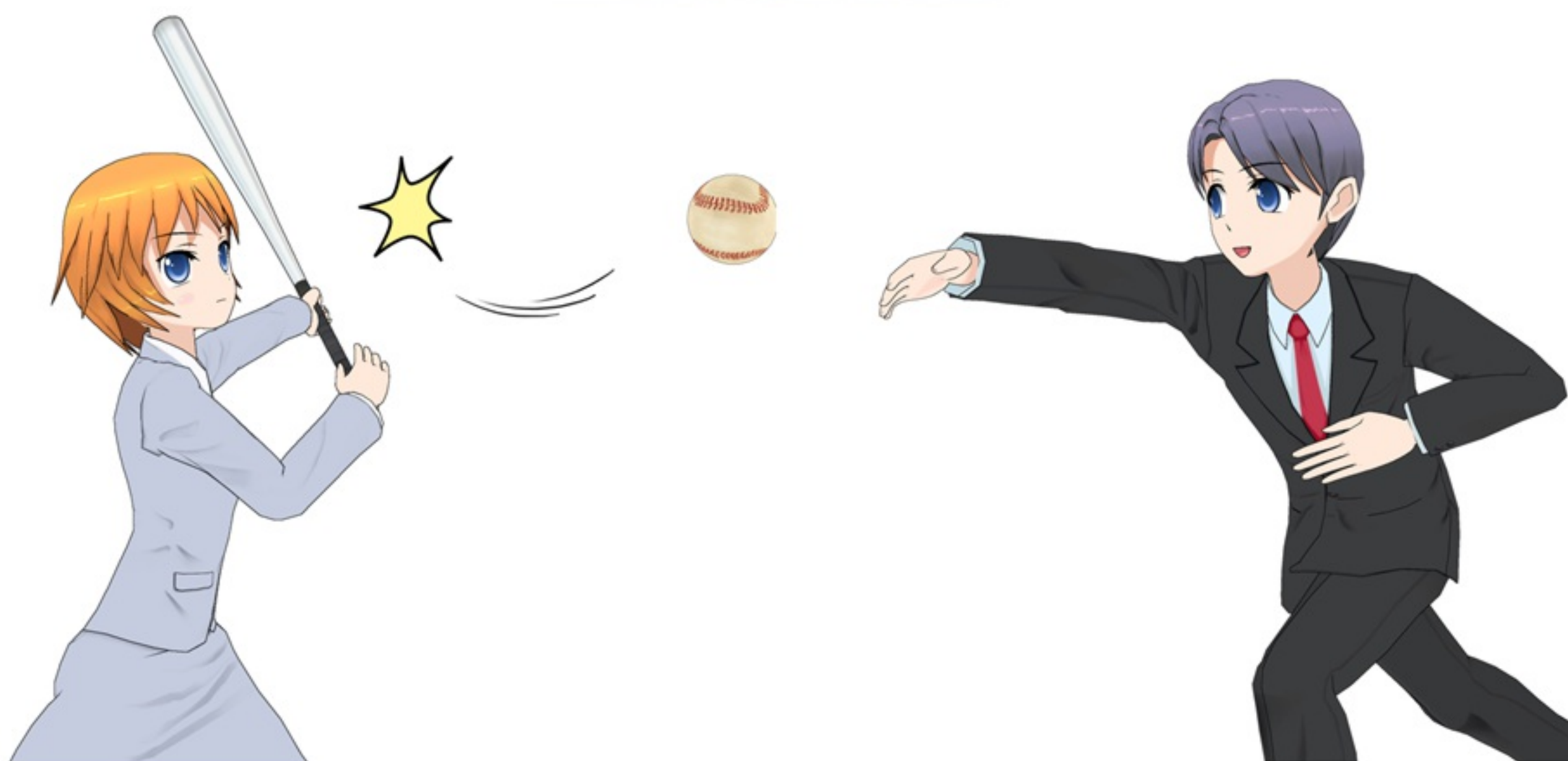


# **Annex to Chapter 4**

## **“Multi Factor Reasoning”**

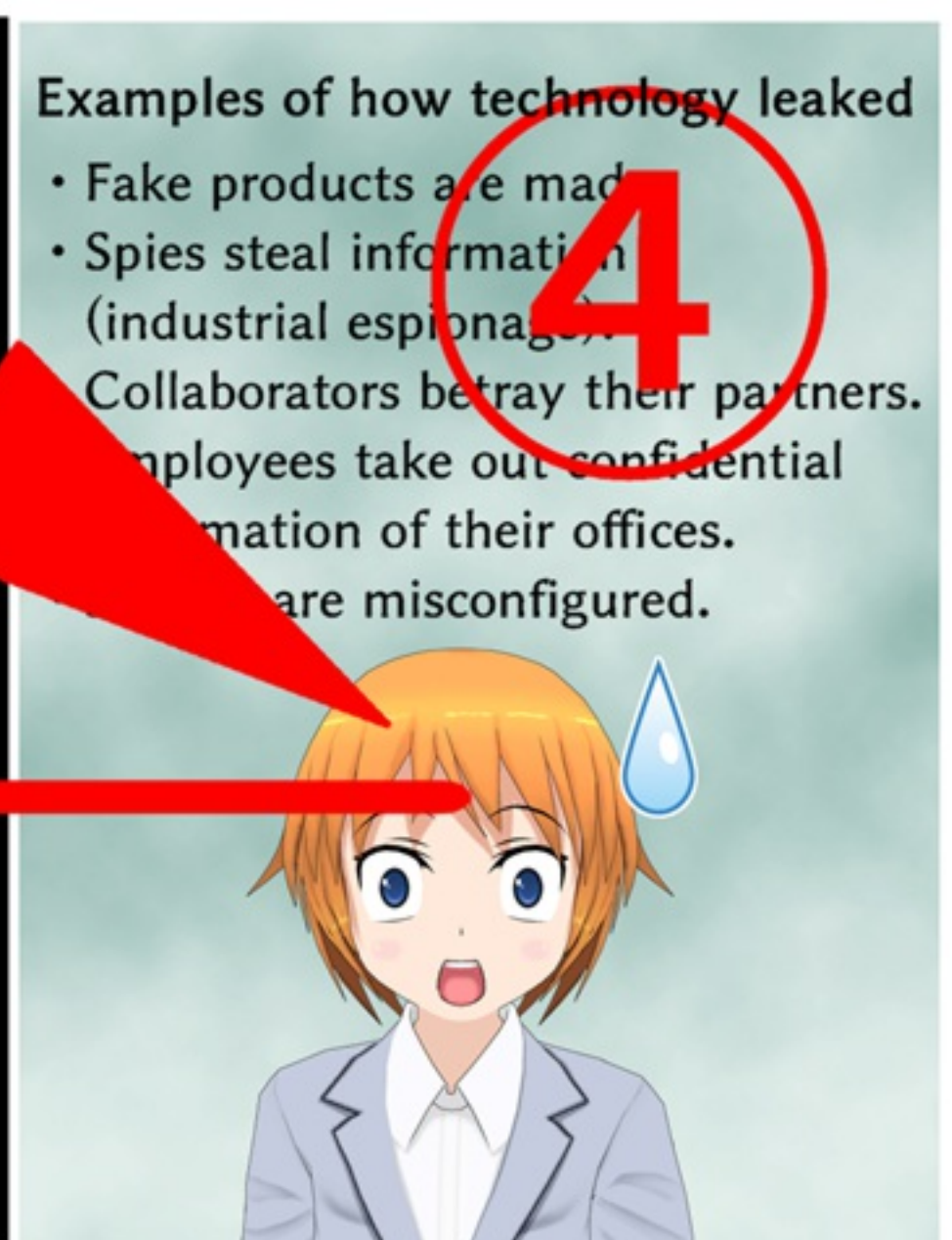
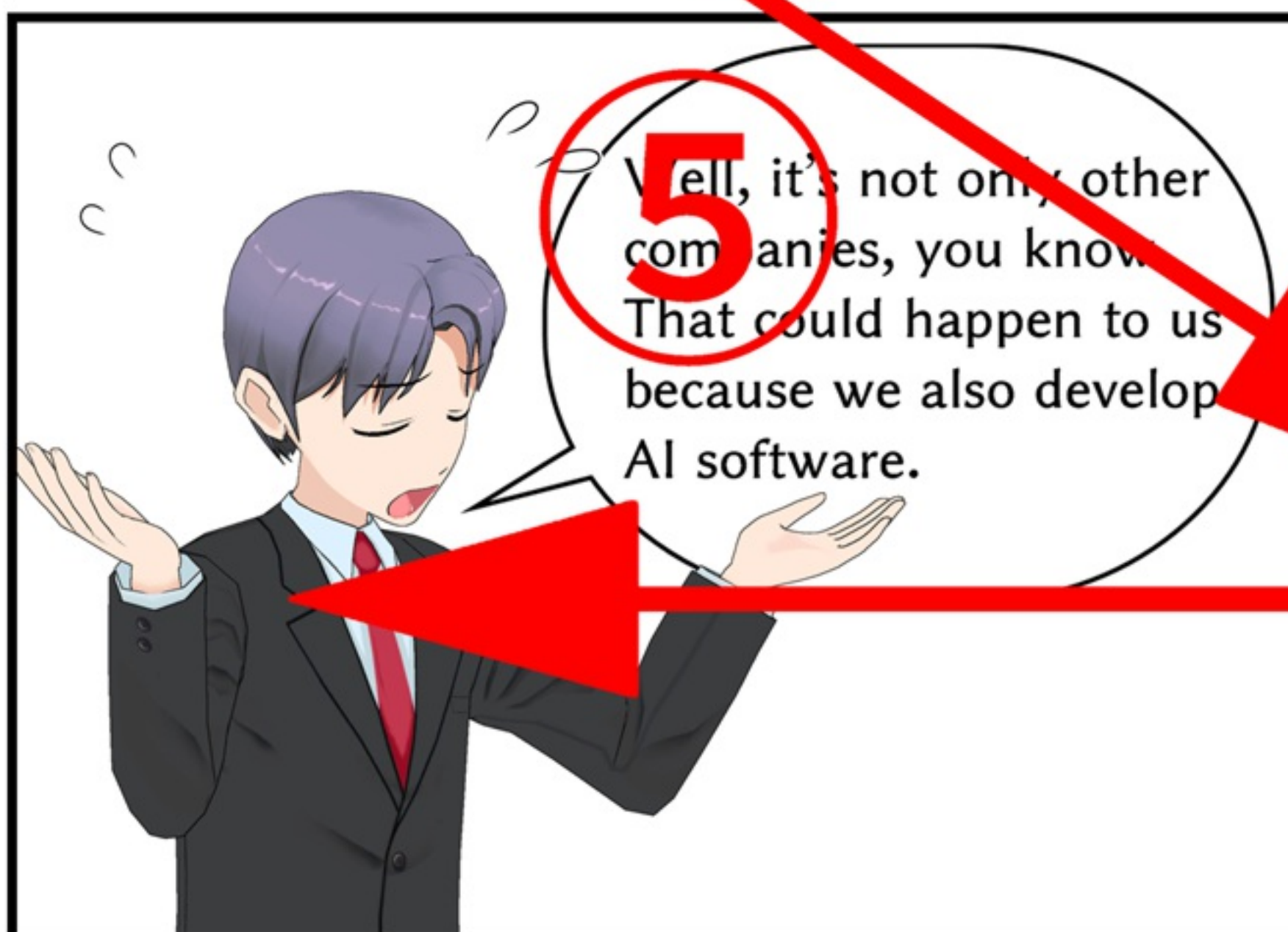
### **in the Determination of Inventive Step**

In Chapter 4, we explained the basic idea of determination of inventive step and its name, **“Multi-Factor Reasoning”, MFR.**  
In this annex, we will review the details.

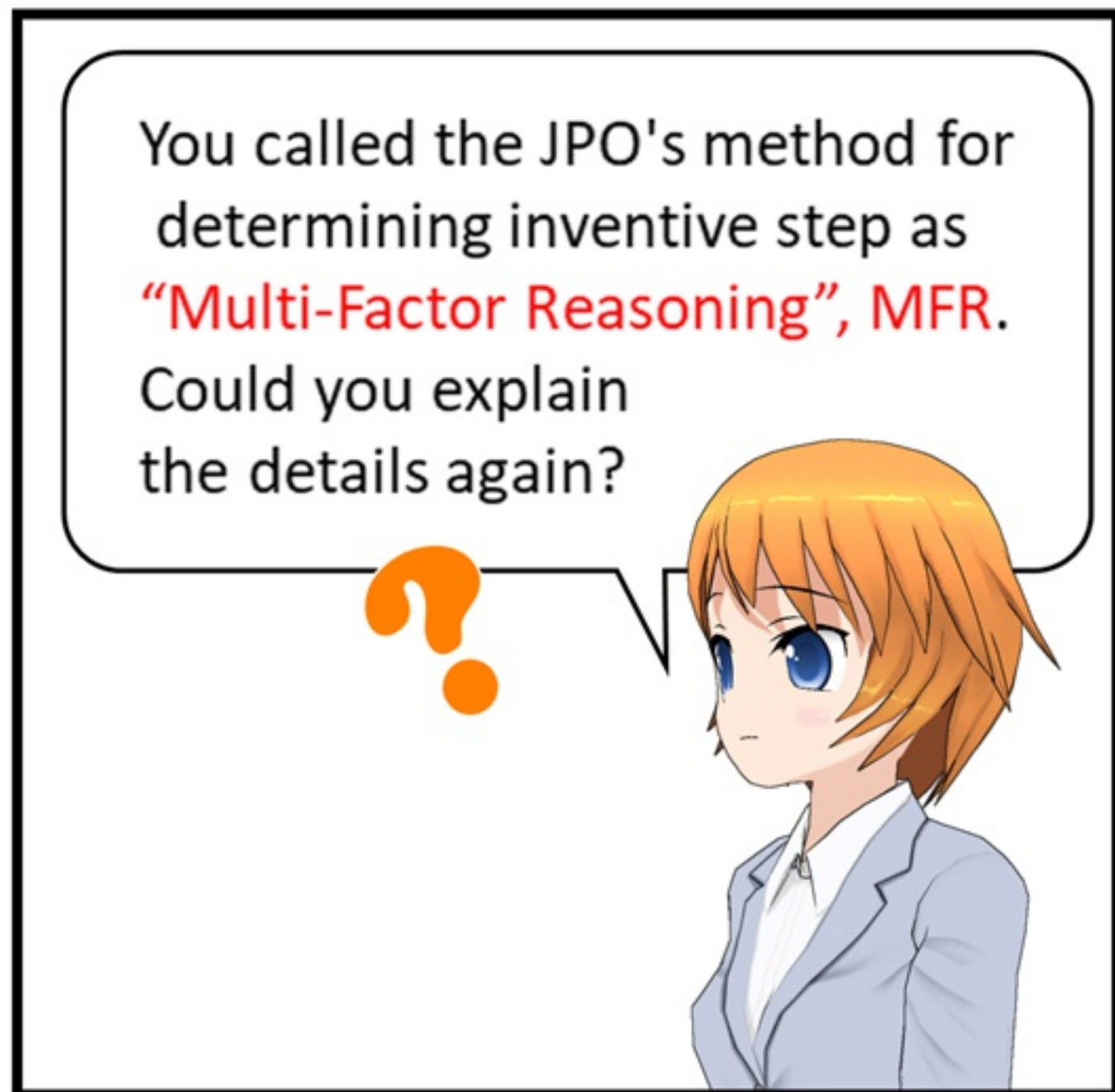




# How to read this Manga



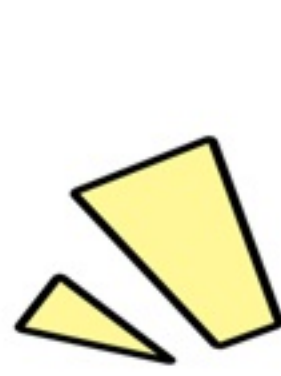




## Method for determining inventive step, so-called "Multi-Factor Reasoning"







Let's look at the details in the flowchart.

## Flowchart for Multi-Factor Reasoning

① Considering various **factors** in support of the **non-existence** of an inventive step

※**Reasoning** that a person skilled in the art would easily arrive at the claimed invention.

**Reasoning** (※) is possible?

Y

N

Involve an inventive step

② Considering various **factors** in support of the **existence** of an inventive step

**Reasoning** (※) is possible?

Y

N

Lack an inventive step

Involve an inventive step

The examiner attempts the **reasoning** by comprehensively assessing various factors ① and ②, i.e., **multiple factors**.

① Factors in support of the **non-existence** of an inventive step

② Factors in support of the **existence** of an inventive step

When did you become a patent examiner!  
Ota.





Let's also review the multiple factors in support of

- ① the non-existence and
- ② the existence of an inventive step.



Given some keywords,

**"Reasoning"** and **"Multiple Factors"**,  
now I understand why it's called **"Multi-Factor Reasoning", MFR.**



## ① Factors in support of the non-existence of an inventive step

Motivation for applying secondary prior art to primary prior art

Comprehensively consider the following points of views:

- (i) Relation of technical fields
- (ii) Similarity of problems to be solved
- (iii) Similarity of operations or functions
- (iv) Suggestions shown in the content of prior art

Design variation

- (i) Selection of optimum materials from publicly known material
- (ii) Optimally or preferably modified numerical ranges
- (iii) Materials replaced by equivalents
- (iv) Design variation or design choice associated with an application of specific techniques

Mere aggregation of prior art

Functions or operations of claimed elements are not related to each other



I think these are "negative" factors to support the existence of an inventive step ...

It's OK to understand it that way.







Next, let's review ② factors in support of the existence of an inventive step.

## ② Factors in support of the existence of an inventive step

### Advantageous effects

- (i) The claimed invention has an effect of the different nature from that of the prior art and a person skilled in the art is not able to expect the effect of the claimed invention on the basis of the state of the art at the time of filing.
- (ii) The claimed invention has an effect of the same nature but significantly superior to that of the prior art and a person skilled in the art is not able to expect the effect of the claimed invention on the basis of the state of the art at the time of filing.

### Obstructive factors

- (i) The secondary prior art applied to the primary prior art cannot achieve the purpose of the primary prior art.
- (ii) The secondary prior art applied to the primary prior art cannot adequately function.
- (iii) The secondary prior art which is considered to be excluded from application and unable to be adopted by the primary prior art.
- (iv) The secondary prior art which a person skilled in the art would not apply due to a publication disclosing that the secondary prior art is inferior to the other embodiment in respect of operations and effects of the prior art.



We can call them “positive” factors to support the existence of an inventive step.



That is the job of a patent examiner, a professional in technology and law! However, examiners do not always come to the conclusion of inventive step right away.



I understand the theory, but it's a tough work to consider so many factors, isn't it?



The examiner will carefully reconsider the (amended) claims based on the applicant's response.



When the examiner finds that the claimed inventions do not involve inventive step, he/she will give the applicant an opportunity to respond or amend the claims. You know, the applicants and inventors are most familiar with the claimed invention so that they can make a persuasive response to the examiner.

I'll go to the JPO and explain our inventions to examiners!



※ Basically, you go to an interview together with your patent attorneys.

Furthermore, at the JPO, the applicants can request interview with examiners On-site and Online.

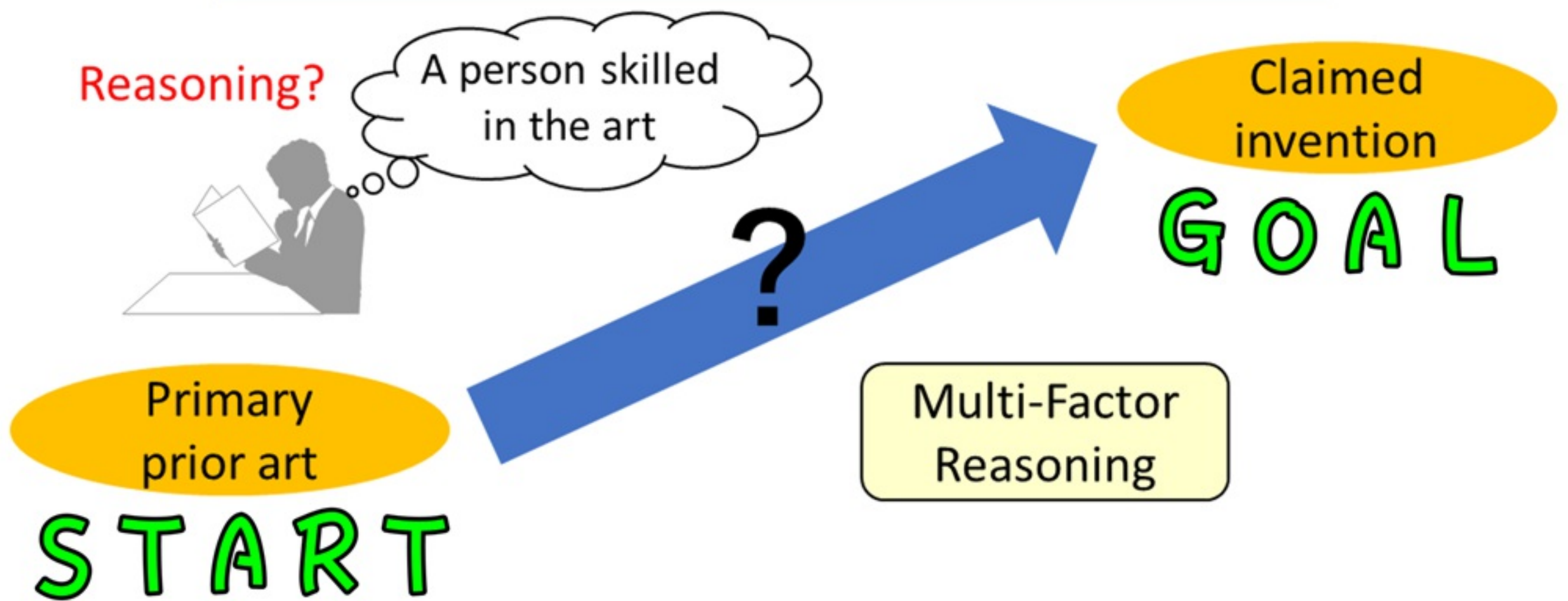


(Interview Examination)

<https://www.jpo.go.jp/e/system/patent/shinsa/junkai.html>



# <Summary> Multi-Factor Reasoning (MFR)



The examiner attempts the **reasoning** that a person skilled in the art easily arrives at the claimed invention by comprehensively assessing various factors, i.e., **multiple factors**.

## ① Factors in support of the **non-existence** of an inventive step

### 1. Motivation for applying other prior art to primary prior art:

- (1) relation of technical fields;
- (2) similarity of problems to be solved;
- (3) similarity of operations or functions; or
- (4) suggestions shown in the content of the prior art

### 2. Design variation of primary prior art

### 3. Mere aggregation of prior art

## ② Factors in support of the **existence** of an inventive step

### 1. Advantageous effects

### 2. Obstructive factors

Example: It is contrary to the purpose of the primary prior art to apply other prior art thereto.

The examiner comprehensively assesses multiple factors of ① and ②, and reaches to a conclusion of inventive step!

Perfect!