



AI-related inventions in Japan

- Filing Trends, Examination, and Specification Drafting -

Hideyuki TANAKA
Japan Patent Attorneys Association
International Activities Center

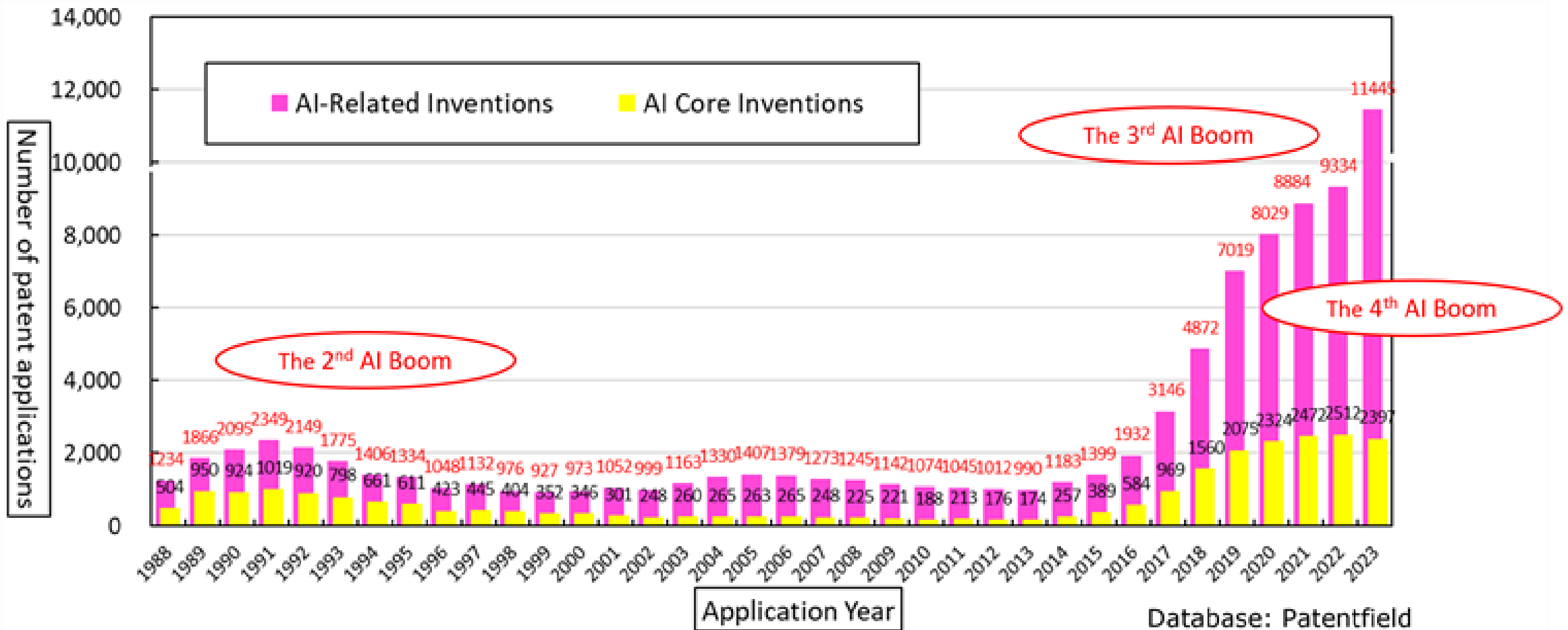
Contents

- 1. Trends of patent apps. for AI-related inventions in Japan**
- 2. Flow for Determining Eligibility**
- 3. Points for Drafting the Specification
-AI-related Inventions-**
- 4. Case Example**

Contents

- 1. Trends of patent apps. for AI-related inventions in Japan**
2. Flow for Determining Eligibility
3. Points for Drafting the Specification
-AI-related Inventions-
4. Case Example

1. Trends in Patent App. for AI-Related Inventions



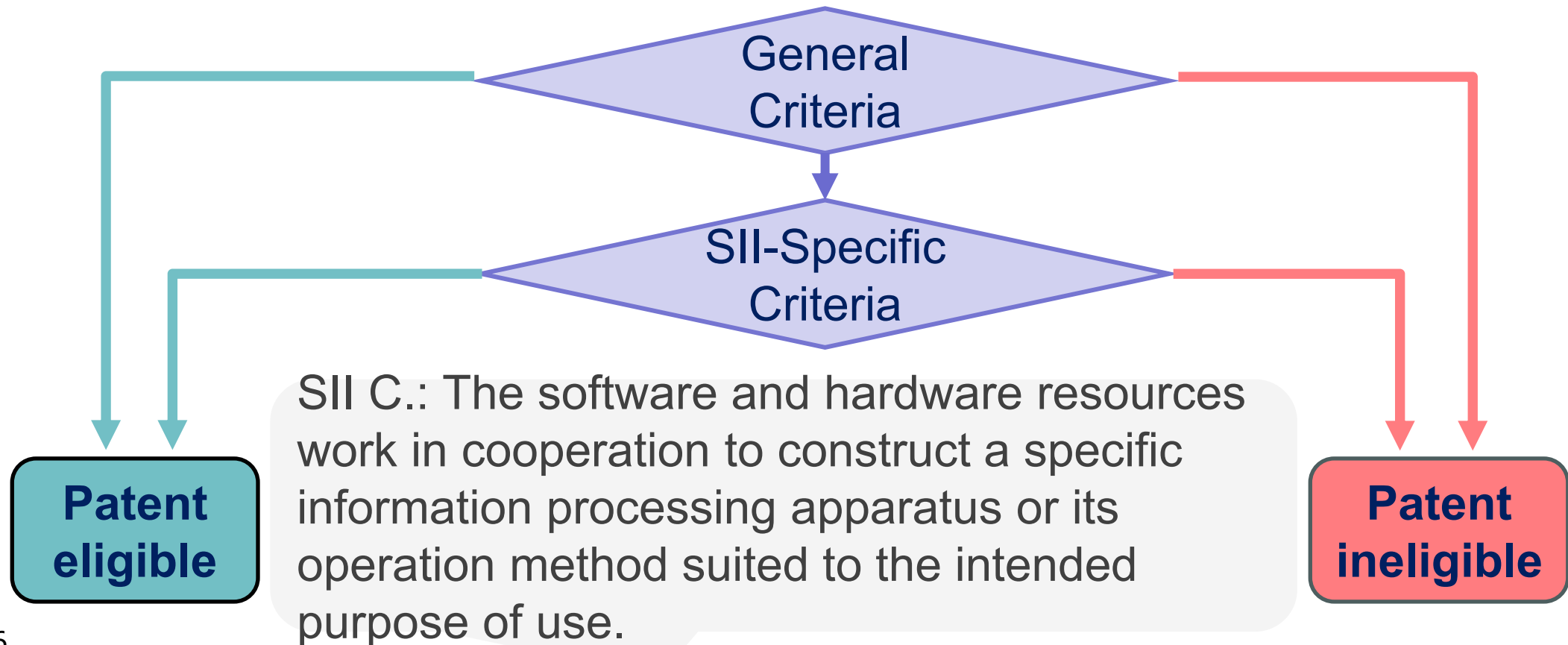
Contents

1. Trends of patent apps. for AI-related inventions in Japan
- 2. Flow for Determining Eligibility**
3. Points for Drafting the Specification
-AI-related Inventions-
4. Case Example

2. Flow for Determining Eligibility

Software-implemented inventions (SII) incl. AI-related inventions)

G.C.: Determination as to whether the claimed invention falls under the category of a "creation of technical ideas utilizing the laws of nature"



Contents

1. Trends of patent apps. for AI-related inventions in Japan
2. Flow for Determining Eligibility
- 3. Points for Drafting the Specification
-AI-related Inventions-**
4. Case Example

3. Points for Drafting the Specification -AI-related Inventions-

3.1 Meeting disclosure requirements
(Enablement and Support requirements)

3.2 Demonstrating "inventive step"

3.1.1 For Enablement Requirements

Point!

- Clearly disclose the relationship between input and output data
- Eliminating the "black box"

(Cont'd)

Point!

Describe the specific methods for creating training data and conducting training

- The process of transforming raw data into processed data
- The specific training process

3.1.2 Regarding support requirements

Point!

Include sufficient examples (data) to align the scope of the rights (claims) with the specification.

3.2 Regarding Inventive Step

Point!

Asserting "inventive step" beyond mere "application of AI"

- Description of "remarkable effects" resulting from the application of AI
- Argument regarding the difficulty of the combination

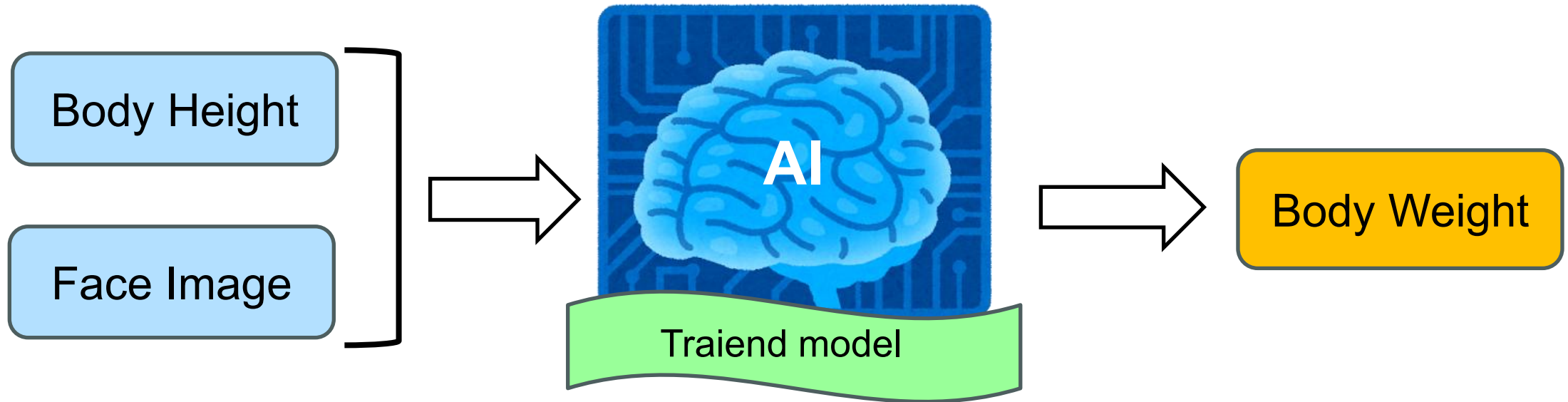
Contents

1. Trends of patent apps. for AI-related inventions in Japan
2. Flow for Determining Eligibility
3. Points for Drafting the Specification
-AI-related Inventions-
- 4. Case Example**

4. Case Example

“Body weight estimation system”

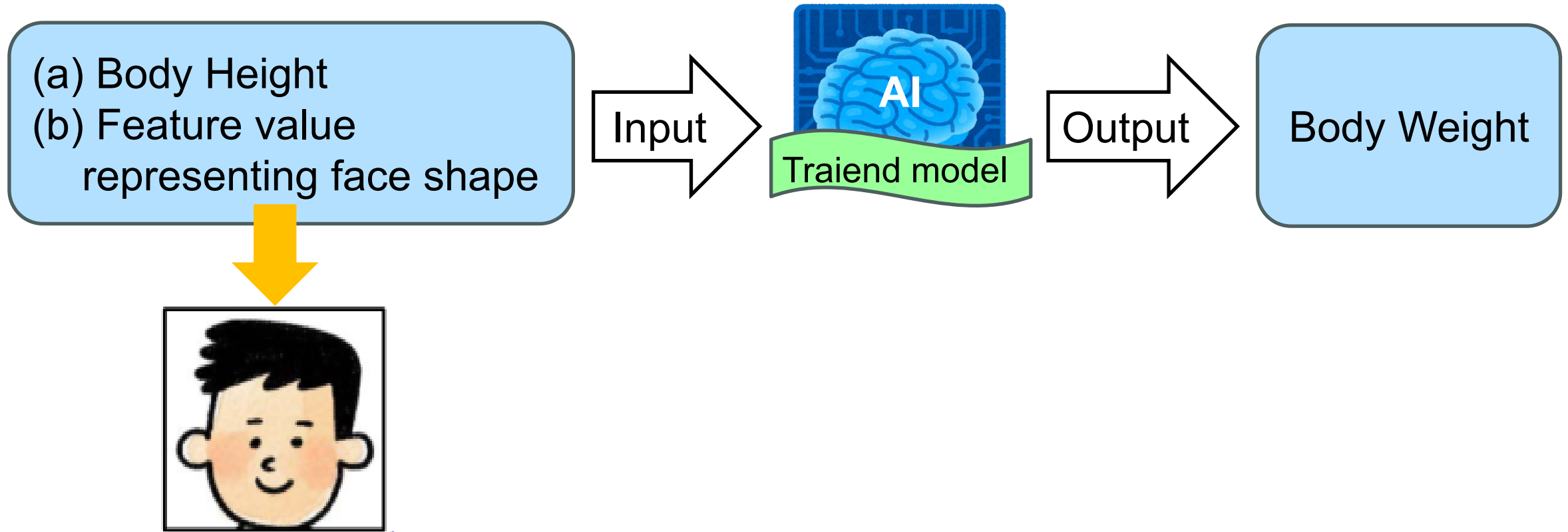
(Example 49, JPO Case Studies on AI-Related Technologies)



chrome-extension://efaidnbmninnibpcajpcglclefindmkaj/https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/document/ai_jirei_e/jirei_e.pdf

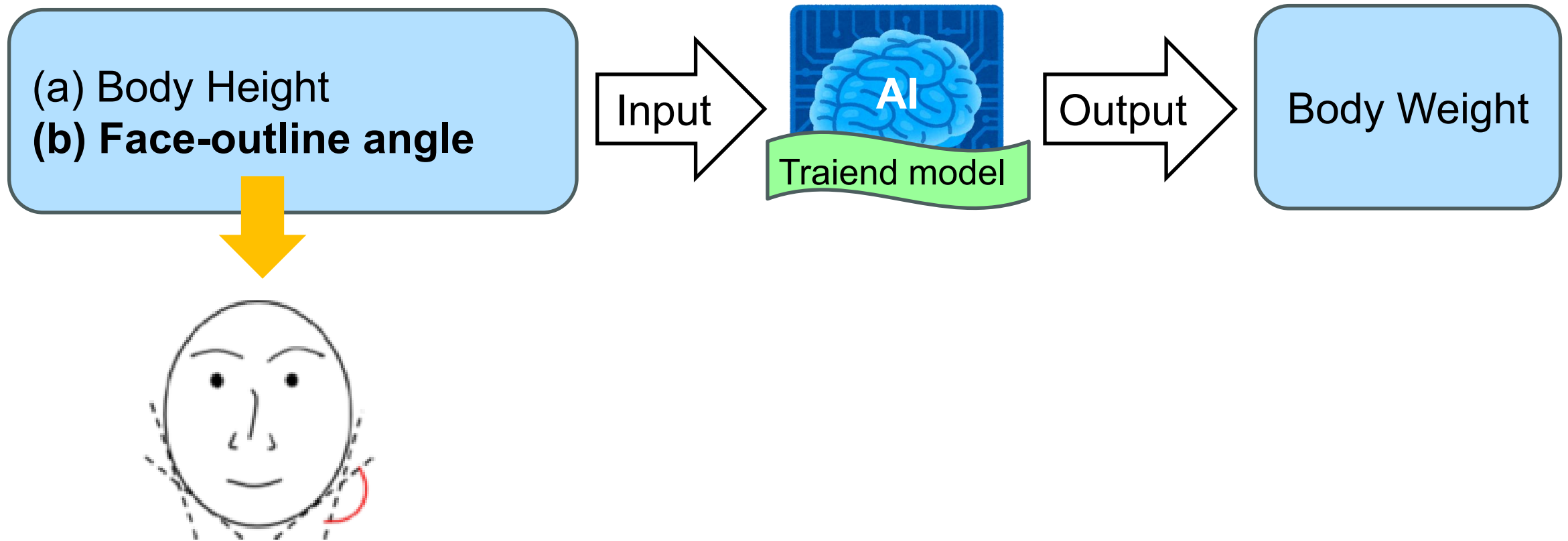
4.1 Case Example – Summary of Claim 1

Claim 1

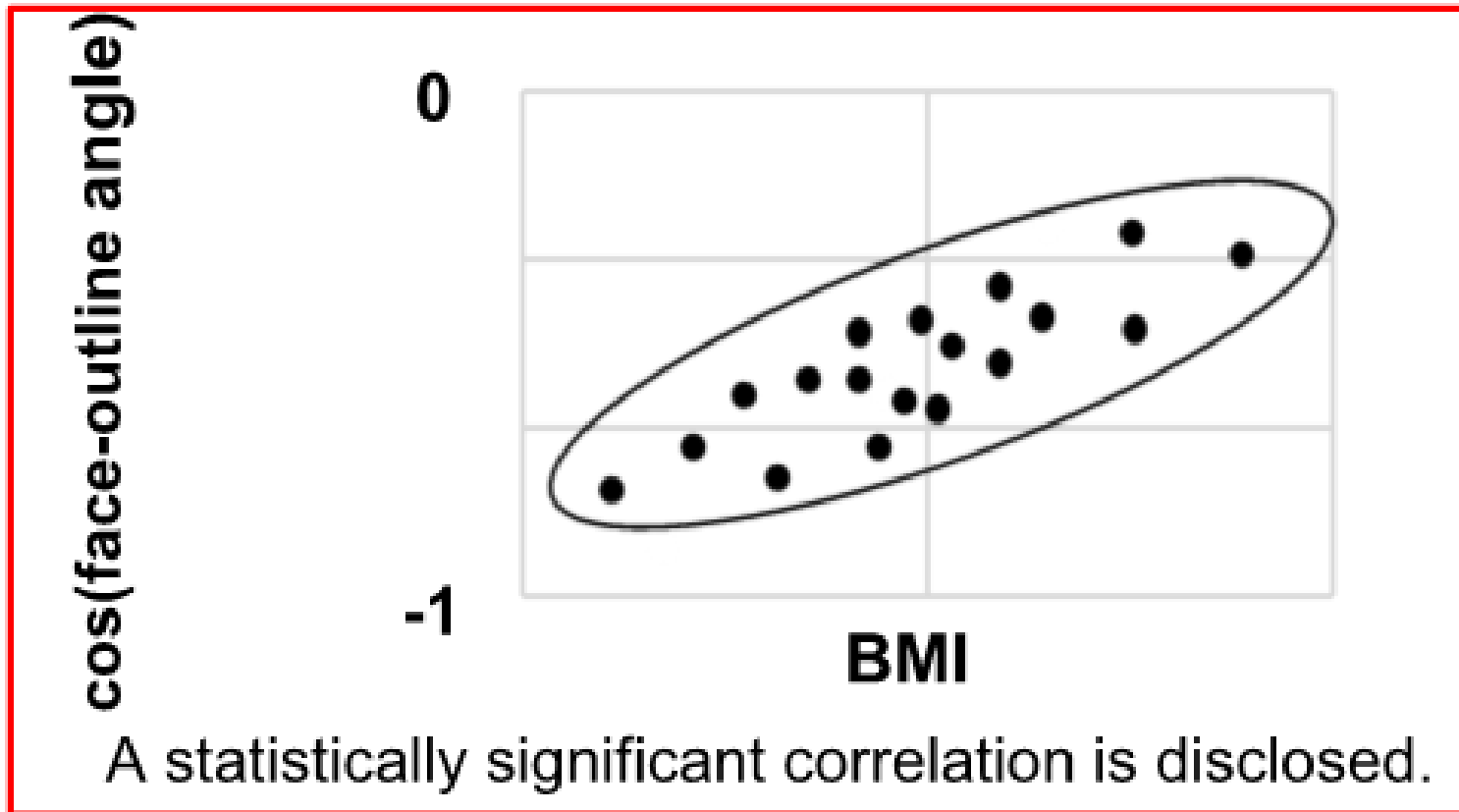


4.2 Case Example – Summary of Claim 2

Claim 2



4.3 Case Example – Summary of Description (1)



← This is not
state of the art

$$\text{BMI} = H/W^2$$

H: Height

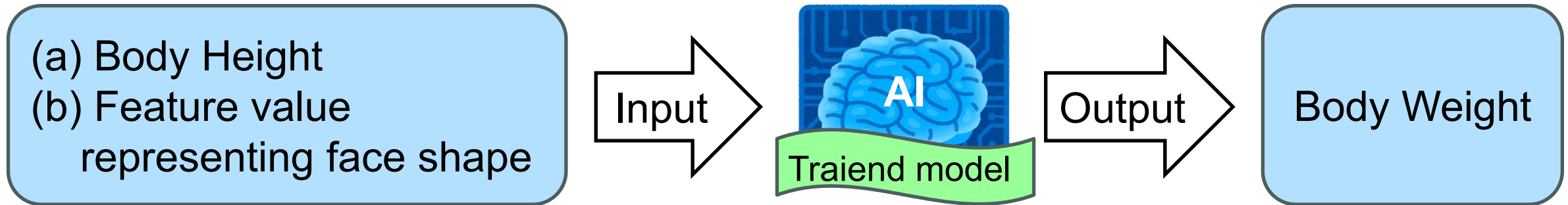
M: Weight

4.4 Case Example – Summary of Description (2)

- Description states:
 - The face-outline angle is one example of the feature value representing the face shape.
 - Any feature value representing the face shape may be used.

4.5 Case Example – Question 1

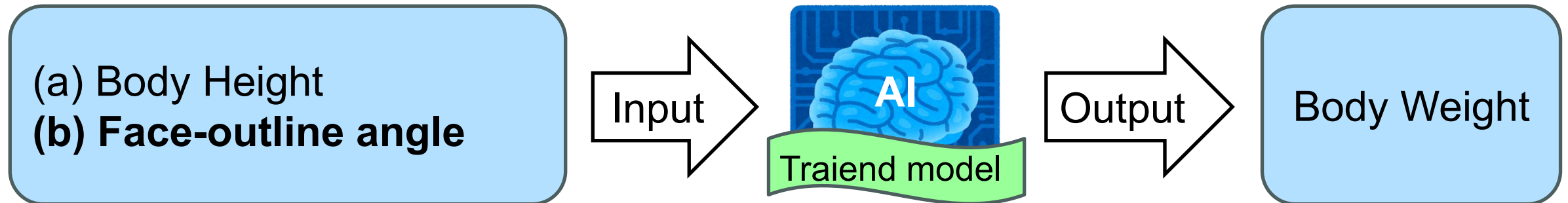
Claim 1



4.6 Case Example – Question 2

Q. Does Claim 2 satisfy the Support or Description Requirement?

Claim 2



4.7 Case Example – Office Action Summary

	Support	Enablement
Claim 1	NG	NG
Claim 2	OK	OK

4.8 Case Example – Office Action Claim 1 (Support)

- Support Requirement: NG
 - The scope of description cannot be expanded or generalized to the invention of Claim 1.
- Reason
 - The feature value representing the face shape includes a feature value other than the face-outline angle in Claim 1.
 - **No disclosure of a correlation** between (i) a feature value other than the face-outline angle and (ii) body height and weight of a person and the BMI.

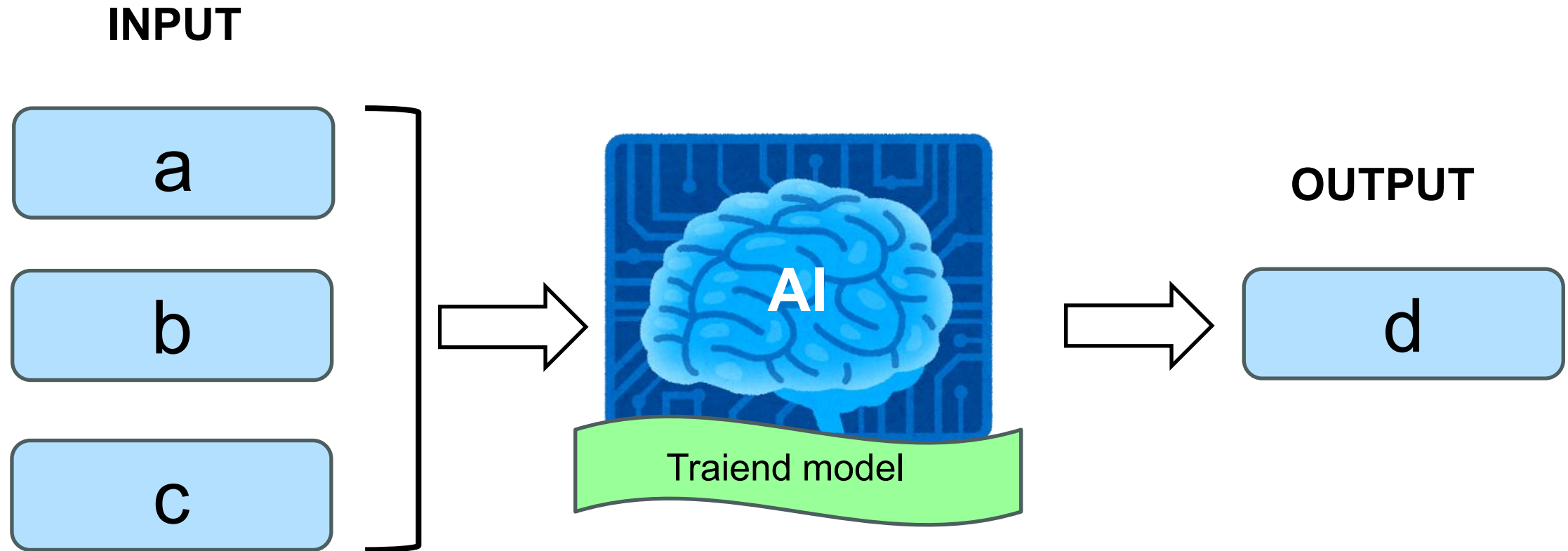
4.9 Case Example – Office Action Claim 1 (Enablement)

- Enablement Requirement: NG
 - Part of the invention of Claim 1 cannot be carried out.
- Reason
 - The feature value representing the face shape includes a feature value other than the face-outline angle in Claim 1.
 - **No performance evaluation result disclosed** on the estimation model that has actually been generated using a feature value other than the face-outline angle.

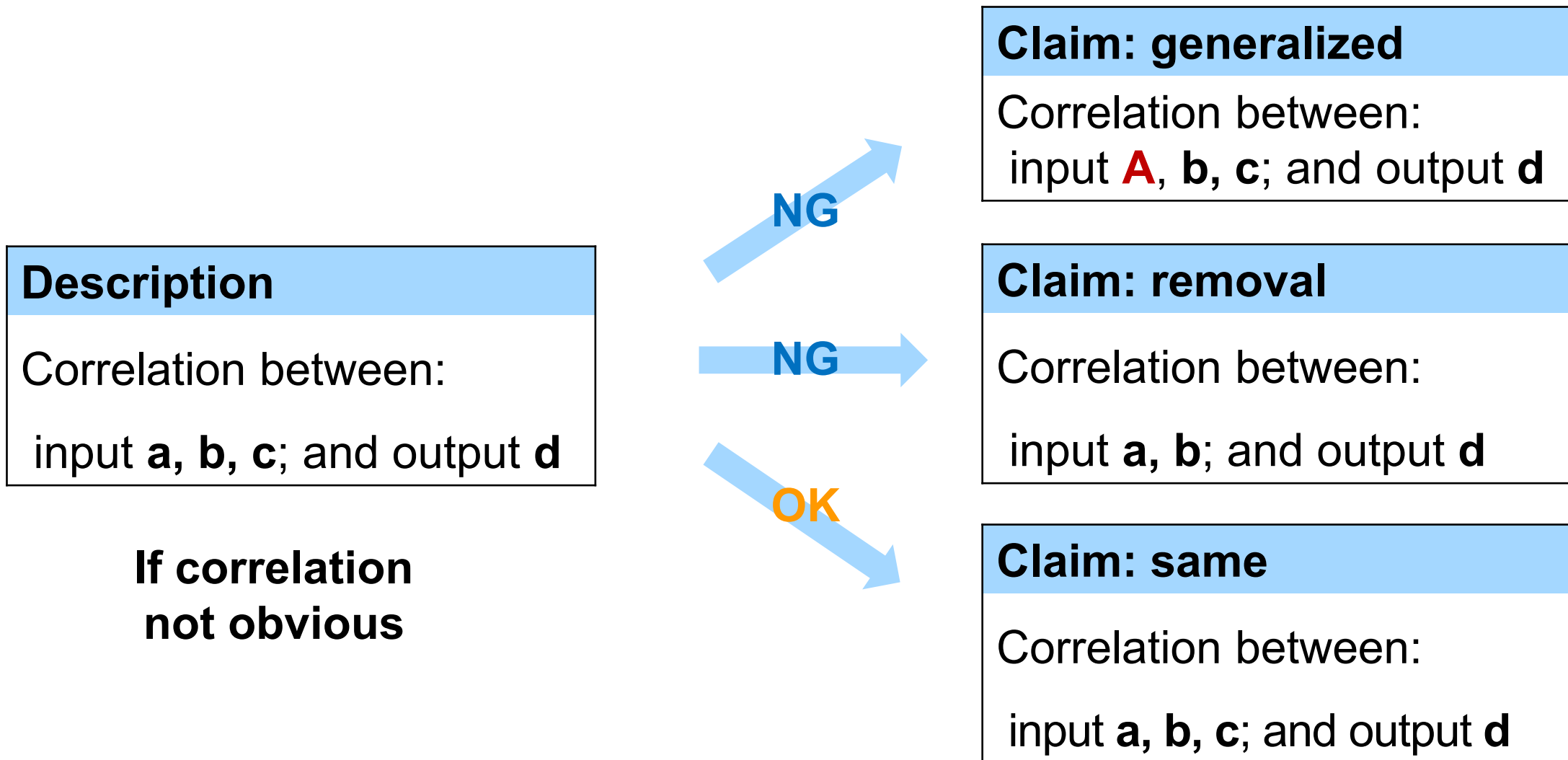
4.10 Case Example – Office Action Claim 2

- Support and Enablement Requirements: OK
- Reason
 - The feature value representing the face shape is limited to the face-outline angle in Claim 2.
 - **The correlation between (i) the face-outline angle and (ii) body height and weight of a person and the BMI is disclosed.**

4.11 Wrap-up - Support Requirement (1)



4.12 Wrap-up - Support Requirement (2)



4.13 Wrap-up - Enablement Requirement

Description

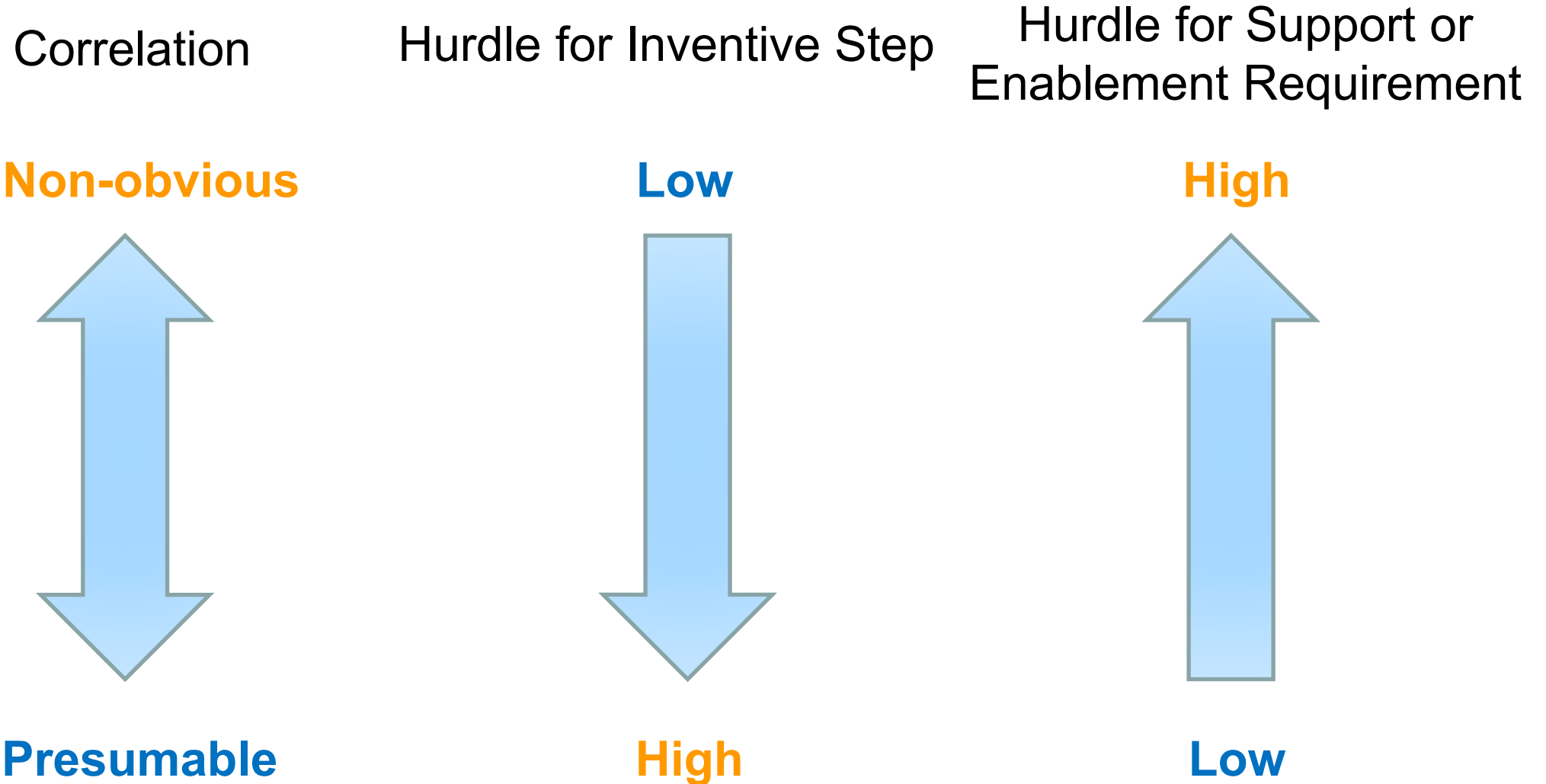
Correlation between:
input **a, b, c**; and output **d**

**correlation
not obvious** →

Description should include

Indication for proving existence
of correlation between:
input **a, b, c**; and output **d**

4.14 What learned from JPO's example





Thank you very much!

Hideyuki TANAKA
tanakapatent@mbf.nifty.com
Tanaka International Patent Firm

References

- **Recent Trends in AI-related Inventions**

https://www.jpo.go.jp/e/system/patent/gaiyo/ai/ai_shutsugan_chosa.html

- **Patent Examination Case Examples pertinent to AI-related technologies**

https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/ai_jirei_e.html

- **Case Examples pertinent to AI-related technologies**

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/document/ai_jirei_e/jirei_e.pdf

- **Newly Added Case Examples for AI-Related Technologies March 2024**

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/document/ai_jirei_e/jirei_add2024_e.pdf

- **Newly Added Case Examples for AI-Related Technologies January 30, 2019**

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/document/ai_jirei_e/jirei_add2019_e.pdf

- **Examination Guidelines pertinent to IoT related technologies**

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/document/iot_shinsa/01.pdf

- **Examination Guidelines on computer software-related inventions pertinent to examination of AI-related inventions**

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.jpo.go.jp/e/system/laws/rule/guideline/patent/document/ai_jirei_e/point_of_update_1803.pdf

Disclaimer

The materials prepared and presented here reflect the personal views of the author and do not necessarily represent any other individuals or entities. The materials prepared and presented here reflect the personal views of the author and do not necessarily represent any other individuals or entities.

It is understood that each case is fact specific and the materials are not intended to be a source of legal advice. It is understood that each case is fact specific and the materials are not intended to be a source of legal advice.

The author and the Japan Patent Attorneys Association cannot be bound to the statements given in these materials. However, every attempt was made to ensure that these materials are accurate, errors or omissions may be contained herein and any liability is disclaimed.