

1 Requirement for Description and Claims

2 Novelty

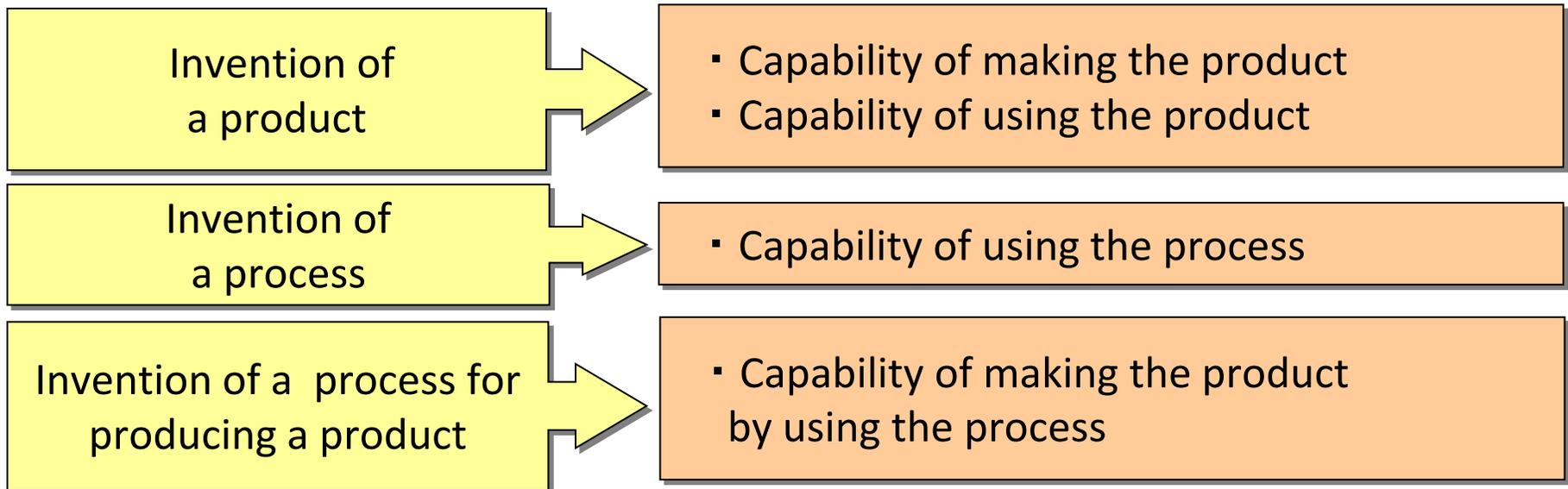
3 Inventive Step

4 Eligibility for Patent

Requirement for Description

Enablement Requirement (Act. 36(4)(i))

The statement in the description must be clear and sufficient to enable a person skilled in the art to carry out the claimed invention based on the statements in the description and drawings in light of the common general knowledge at the time of filing.



A determination on the enablement requirement in Computer software (CS) Inventions shall be made according to "Part II Chapter 1 Section 1 Enablement Requirement" of the Examination Guidelines.

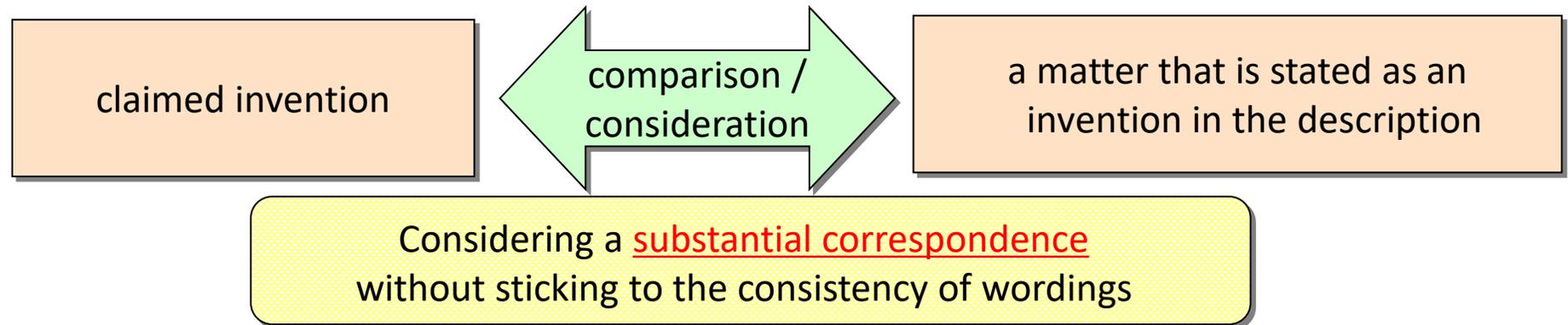
✓ See Annex B "CS Inventions" of the Examination Handbook as a supplement.

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

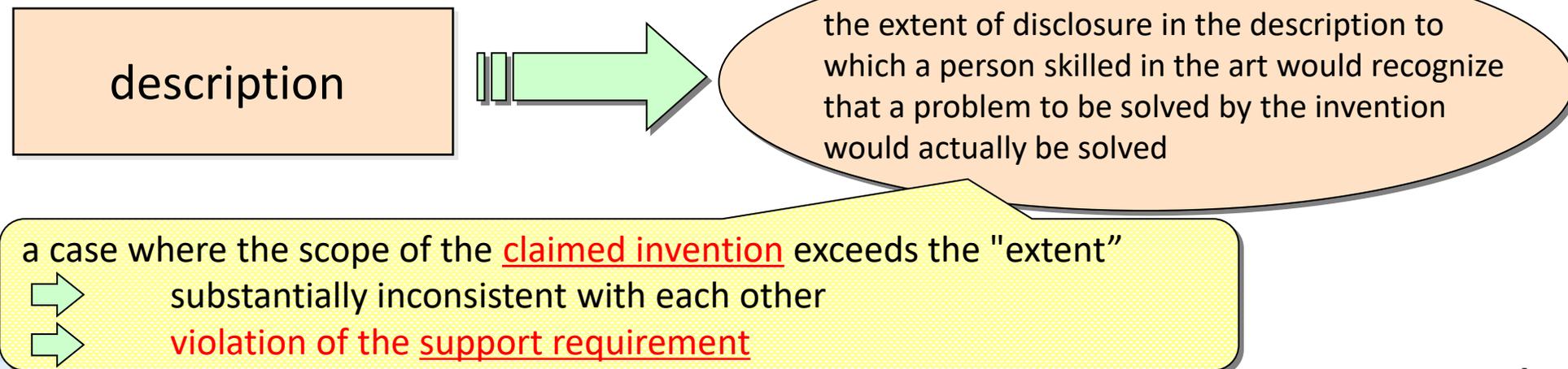
Requirement for Claims

Support Requirement (Act. 36(6)(i))

The scope of a claimed invention should not exceed the extent of disclosure in the description.



Examination on Substantial Correspondence



Overview of Enablement Requirement or Support Requirement (After addition)

	Case that satisfies the requirement	Case that does not satisfy the requirement
Inventions of a product that are presumed to have a certain function by AI	<p>[Reference] <u>The fact that the invention is presumed to have a particular function by AI does not necessarily mean that the description requirement is not satisfied.</u> Any of (1)-(3) on the right can satisfy the description requirement. See claim 2 of Additional Case 5 for an example that satisfies the description requirement based on (1).</p>	<p>Additional Case 5 (Claims 1 and 3) Case 51</p> <p>Case in which a product is claimed which is presumed to have a certain function by AI, but the description requirement is not satisfied because it does not apply to any of the following: (1) the evaluation of the product actually manufactured is stated in the description, etc., (2) the estimation accuracy of the predicted value indicated by AI is verified in the description, etc., (3) the common general technical knowledge that the AI estimation result can replace the evaluation of the product actually manufactured was available at the time of filing.</p>
Those that create training data	<p>Additional Case 6 (Claim 3) (Support Requirement)</p> <p>Case in which, with respect to the training data to be created, the AI subject to machine learning and the content of the training data for machine learning are sufficiently specified in the claims, and the means for solving the problem of the invention stated in the detailed description of the invention is reflected.</p>	<p>Additional Case 6 (Claims 1-2) (Support Requirement)</p> <p>Case in which, with respect to the training data to be created, the AI subject to machine learning and the content of the training data for machine learning are not sufficiently specified in the claims, and the means for solving the problem of the invention stated in the detailed description of the invention is not reflected.</p>
Inventions that apply AI to various technical fields		
Those in which it can be presumed that there is a correlation between multiple types of data included in a training data in view of a common general technical knowledge at the time of filing.	<p>Additional Case 7 (Claim 2) (Support Requirement)</p> <p>Case 47, Case 48</p> <p>Cases in which a specific correlation between multiple types of data included in the training data is not stated in the description, etc., but it can be presumed that there is a correlation between them in view of a common general technical knowledge at the time of filing.</p>	<p>Case 46</p> <p>Case in which the fact that there is a correlation between multiple types of data included in the training data is not supported in the description, etc., and it cannot be presumed that there is a correlation between them even in view of a common general technical knowledge at the time of filing.</p> <p>Additional Case 7 (Claim 1) (Support Requirement)</p> <p>Case in which the input-output relationship of each data included in the training data is not specified in the claims, and thus the invention that cannot solve the problem of the invention is included in the claims, and the support requirement is not satisfied.</p>
Those in which a correlation between multiple types of data included in a training data is supported by explanations and statistical information stated in the description, etc.	<p>Case 49 (Claim 2)</p> <p>Case in which the fact that there is a correlation between multiple types of data included in the training data is supported by explanations and statistical information stated in the description, etc.</p>	<p>Case 49 (Claim 1)</p> <p>Case in which the fact that there is a correlation between multiple types of data included in the training data stated in the generic concept is not supported in the description, etc., and it cannot be presumed that there is a correlation between them even in view of a common general technical knowledge at the time of filing.</p>
Those in which a correlation between multiple types of data included in a training data is supported by the performance evaluation of the artificial intelligence model actually created.	<p>Case 50 (Claim 2)</p> <p>Case in which the fact that there is a correlation between multiple types of data included in the training data is supported by the results of performance evaluation of the artificial intelligence model actually created.</p>	<p>Case 50 (Claim 1)</p> <p>Case in which the fact that there is a correlation between multiple types of data included in the training data stated in the generic concept is not supported in the description, etc., and it cannot be presumed that there is a correlation between them even in view of a common general technical knowledge at the time of filing.</p>

*Cases marks as (Support Requirement) are for support requirement only.

Case Example: Body Weight Estimation System (1)

In case that Existence of correlation between input and output data is evident from the statistical data

[Claim 1]

A body weight estimation system comprising:

a model generation means for generating an estimation model that estimates a body weight of a person based on a feature value representing a face shape and a body height of the person, through machine learning using training data containing feature values representing face images as well as actual measured values of body heights and body weights of people;

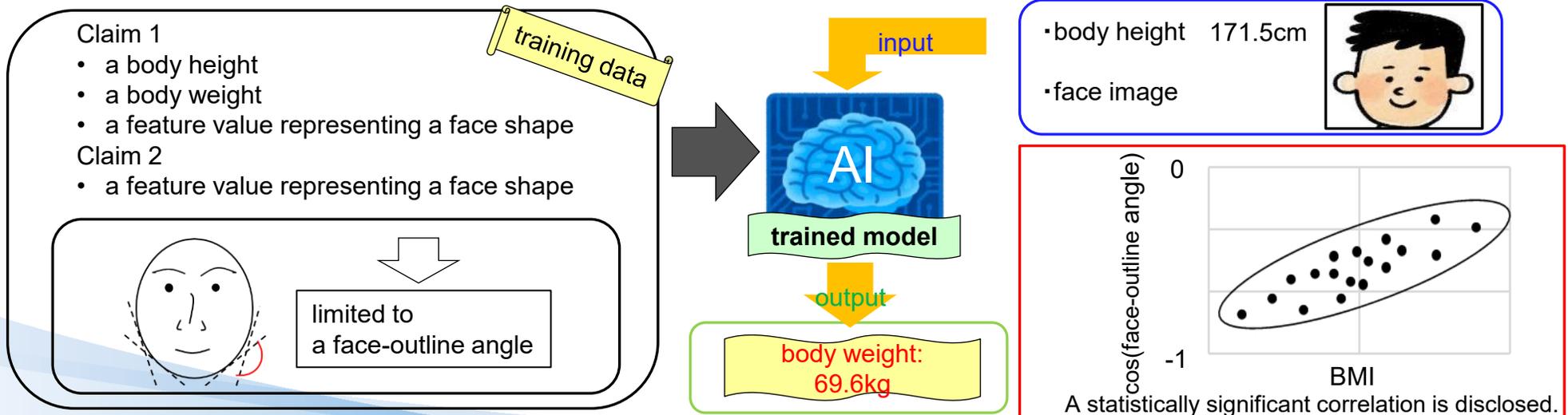
a reception means for receiving an input of a face image and body height of a person;

a feature value obtainment means for obtaining a feature value representing a face shape of the person through analysis of the face image of the person that has been received by the reception means; and

a processing means for outputting an estimated value of a body weight of the person based on the feature value representing the face shape of the person that has been received by the feature value obtainment means and the body height of the person that has been received by the reception means, using the generated estimation model by the model generation means.

[Claim 2]

The body weight estimation system as in Claim 1, wherein the feature value representing a face shape is a face-outline angle.



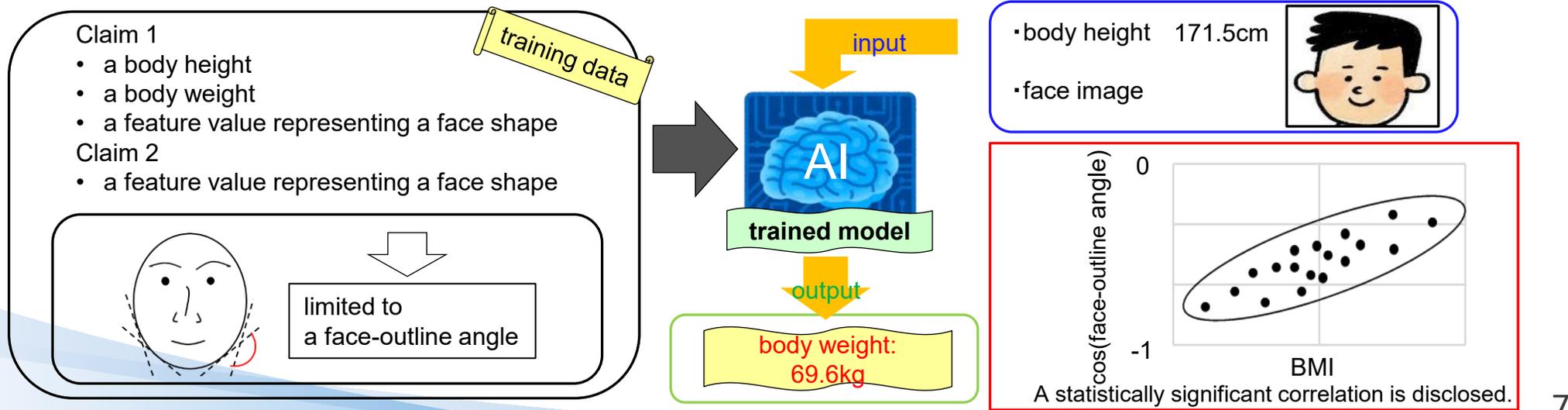
Case Example: Body Weight Estimation System (2)

In case that Existence of correlation between input and output data is evident from the statistical data

[Overview of the Description]

There is a certain degree of correlation between a face feature and physical size of a person. ..., the inventor found a statistically significant correlation between a cosine of a face-outline angle and BMI (defined as a body weight divided by the square of a body height) of a person. The face-outline angle here means an angle defined between a tangent line to a jaw and a tangent line to a cheek. This suggests a certain degree of correlation between a body height and weight used for BMI calculation and a face-outline angle. Accordingly, an estimation model with a highly accurate output can be generated through machine learning, using a known machine learning algorithm such as a neural network with a training data. The training data contains actual measured values of face-outline angles, body heights, and body weights. The face-outline angles are obtained through analysis on face images of people. A feature value representing a face shape of a person is a face-outline angle in this embodiment, but it is not limited to this. Any feature value representing a face shape may be obtained from a face image and used.

(Note) In this case, it is assumed that, even in view of a common general technical knowledge at the time of filing, a person skilled in the art can presume a certain relation such as a correlation between (i) a body height, weight, and the like of a person and BMI based on these and (ii) a feature representing a face shape such as a face-outline angle is not a common general technical knowledge at the time of filing here.



Case Example: Body Weight Estimation System (3)

In case that Existence of correlation between input and output data is evident from the statistical data

✘ **Claim 1: Violation of the support/enablement requirements**

A certain correlation among each data in a training data disclosed in a generic concept is not supported by the description and is not a common general technical knowledge at the time of filing. Therefore, the support/enablement requirement is not satisfied.

○ **Claim 2: No reason for refusal**

A certain correlation among each data in a training data is supported by the statistics in the description. Therefore, the support/enablement requirement is satisfied.

