ATA Japanese Patent Translation Handbook Revised Chapter 5

Japanese-to-English Translation of Patent Documents for Filing in the US

Version 1.0, Last revised October 14, 2022

(This content, recently revised, was originally published March 1997 as Chapter 5 of the *Japanese Patent Translation Handbook* (ed. Yoriko Morita) by the American Translators Association's Japanese Language Division)

by William Lise

Preface to the Edited Version

Almost 24 years have passed since the ATA's Japanese Patent Translation Handbook was published. It went out of print years ago and, when questioned about it, the ATA did not indicate any intention to reprint the volume. That said, there have been changes in the interim that would render significant parts of the entire work, and certainly Chapter 5, quite stale. This provided the motivation for editing Chapter 5, which is presented here in its new version, nearly a quarter of a century after the subject work first appeared. The current version reflects the following:

- Total obviating of physically stored patent documents by the USPTO and JPO databases becoming available online.
- Changes in statutes and in the Manual of Patent Examining Procedure.
- The disappearance of some online sources for patents and appearance of others.
- Corrections of some mechanical problems that existed with the ATA printed version.
- Some changes in the author's view on the usefulness of dictionaries, particularly of those somewhat troubling two-*kanji* compounds.
- Some things I have personally learned since the first version.

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5.1 Introduction

Japanese-to-English translators working with Japanese patent documents in an effort to produce patent specifications for filing in the US face a set of requirements and problems that are quite different from those confronting their colleagues who translate patent documents "for information" (actually, a misnomer, better expressed as "for non-filing purposes"). Little has been written in English on this subject, and it is hoped that the following will serve to fill in some of the gaping holes in the literature.

5.1.1 Market Requirements

It is accepted common wisdom that JA-to-EN patent translation for non-filing use, the type mostly done in the US, should closely follow the style and content of the original, including such distinctly Japanese expressions as “characterized by,” which is rare in US patents. In translation for filing, however, following the original style could very well produce a patent specification that is not especially useful in the US. Because of this, the translator is often—and should be—given more freedom to adjust the style of the specification to conform to US practice. This fact cannot be overemphasized, although it might make JA-to-EN patent translators accustomed to strict adherence to Japanese patent style uneasy.

5.1.2 How Far Can the Translator Go?

The scope of the translator’s authority to manage the style of the translation is somewhat dependent upon the translator’s relationship with the client. This is a major distinction between non-filing translation and for-filing translation. In the former case, the original author is often 10,000 miles away and almost never accessible to the translator or the reader of the translation. In the latter case, however, the *benrishi* (弁理士) who wrote the specification is often just an email or a phone call away. With this access—and the ability for the client and translator to get to know each other—the relationship can be very different and depends on a number of factors, including how much the *benrishi* trusts the translator, how brave the *benrishi* is, and how confident the translator is. For example, I have sometimes re-ordered claims when their sequence violates US practice, in which case the client does not mind. I have had clients claim things you can't claim (for example, an effect or advantage of the

invention being recited as an element in a claim), and I have removed or changed them (with a notice to the client saying what I was doing, of course). However, there might be *benrishi* not willing to allow the translator this much freedom.

Although these facts of Japanese patent translation life are not easily knowable from outside Japan, some Japanese patent practitioners explicitly request that the JA-to-EN translator produce an English patent specification conforming to US patent practice. This obviously precludes translation in the strict sense of the term, and clearly requires the translator to have knowledge of US patent style.

The claims must claim the same invention, and to do so inevitably undergo considerable stylistic changes as they are transformed to US patent style. To be able to translate the claims, therefore, one needs to be familiar not only with what the Japanese claims mean in Japan, but also with the language necessary to claim the same invention(s) in accordance with the interpretation placed on US claims language.

For interpretation of the claims, the United States Patent and Trademark Office (USPTO) looks only at the English specification, and cannot be expected to allow an invention because it was claimed properly in Japanese. Using English to write a Japanese-style claim could cause trouble in a courtroom, where many of the most important patents in the US are eventually evaluated. In short, the US claims serve the same purpose as—and must claim the same invention as—the Japanese claims. When in doubt as to what the invention is, the translator should ask the *drafter* of the claims, who is usually a *benrishi*.

5.1.3 Differences between Clients

Most clients provide a Japanese source text that is nothing more than the patent specification as submitted to the Japanese Patent Office (JPO) for the same invention, and that sometimes requires the translator to make structural rearrangements and stylistic changes to conform to US practice; others write a patent specification with the understanding that it will be translated. In the latter case, the source text sometimes is organized like a US patent specification.

5.2 Market Characteristics

5.2.1 Size

Statistics from the USPTO indicate that Japanese inventors have in recent years been filing more than 55,000 US patent applications each year. Making fairly reasonable assumptions of 8000 words per patent, and about 240 working (translating) days per year, this equates to about 1.8 million words of patent specification translation daily to serve the demand for filing in the US. If the production of an average patent translator is a fairly low 2000 words/day (considering the demographics of the translators doing this work[1]), that equates to work for approximately 900 full-time translators[2].

5.2.2 Shift to Off-Shore Providers

Although it is difficult to know with certainty just what is going on in the JA-to-EN patent translation market, it appears that a slow shift is being seen to off-shore providers. Some work goes to anglophone countries, but other work is going to China and India.

An increasing awareness of the need for quality and the very small number of people who can provide that quality in Japan probably encourage ordering from anglophone countries, while low cost might encourage people to order JA-to-EN patent translation from places like China.

5.2.3 Shift Away from Using Patent/Law Offices in Japan as a Go-Between

Another factor in the shift to offshore providers is an increasing awareness on the part of Japanese manufacturers (employers of inventors) that Japanese patent firms often add price but not much value to translations, by engaging in the translation

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[1] There is little reason to doubt that the vast majority of Japanese-to-English patent translation for filing is executed by native Japanese speakers translating into the foreign (for them) English language.

[2] Because much Japanese-to-English patent translation for filing is done within patent firms in Japan, the number of arms-length translators is surely considerably fewer than 900.

business, including outsourcing translation, and merely acting as brokers for the services of US patent attorneys. Another factor encouraging this shift away from Japanese patent firms is the eagerness and efforts of translation providers in Japan and elsewhere to obtain work directly from Japanese entities that file for patents overseas.

5.3 US Patent Application Requirements

In the material below, the following abbreviations will be used in citing sources.

MPEP	Manual of Patent Examining Procedure. This huge document (or rather several hundred pages thereof) is a must for a patent translator, and is easy to obtain—for free, as noted elsewhere.
37 CFR	Title 37 – Code of Federal Regulations Patents, Trademarks, and Copyrights

The required parts of a patent application are:

- Written application
- Specification
- Drawings (when necessary)
- Oath by the applicant (the inventor(s) in the case of the US)

The specification and the accompanying drawings are virtually the only parts of the filing documentation that need the attention of the translator.

5.3.1 Parts of the Specification

Title of the Invention (MPEP 606)

The title of the invention is placed at the top of the first page of the specification (37 CFR 1.72). It should be brief but technically accurate and descriptive and should contain fewer than 500 characters.

Background of the Invention (MPEP 608.01(c))

The "Background of the Invention" usually has two parts:

1. Field of the Invention

A statement of the field of art to which the invention pertains.

2. Description of Related Art

Paragraph(s) describing to the extent practical the prior art or other information disclosed known to the applicant, including references to specific prior art or other information where appropriate. Where applicable, the problems involved in the prior art or other information disclosed which are solved by the applicant's invention should be indicated.

Summary of the Invention (MPEP 608.01(d))

This is a brief summary of the invention, indicating its nature and substance, which may include a statement of the object of the invention, and is located before the detailed description of the embodiments.

Brief Description of the Drawings (MPEP 608.01(f))

Description of the Preferred Embodiments (Detailed Description of the Invention) (MPEP 608.01(g))

A detailed description of the invention and drawings follow the general statement of invention and brief description of the drawings. This detailed description must be specific enough to enable any person skilled in the art or science to make and use the invention without requiring extensive experimentation (this sometimes being referred to as the *enabling requirement*). The applicant (and by extension, the translator) is ordinarily permitted to use his or her own terminology, as long as it can be understood. The examiner might require grammatical corrections to be made, but the MPEP makes it clear that the examination is not made for the purpose of securing grammatical perfection.

Reference characters must be properly applied to elements of the invention. No single reference character, of course, can be used for two different parts or for a given part and a modification thereof.

Every feature specified in the claims must be illustrated, but

there should be no superfluous drawings. The translator should keep in mind these requirements, as Japanese patent specifications, as given to the translator, are often less than perfect in this respect. Wrongly applied reference characters are a particular problem.

Important statutory language for the translator:

> The description (of the preferred embodiments) is a dictionary for the claims and should provide clear support or antecedent basis for all terms used in the claims.

Claims (MPEP 601.01(i))

The specification must conclude with a *claim particularly pointing out and distinctly claiming* the subject matter which the applicant regards as his invention or discovery.

This says it all: the claims (supported, of course, by the preceding descriptive part of the specification) are the invention. This and the fact that claim structure differs so greatly between Japan and the US present the most difficult challenges to the patent translator.

Abstract of the Disclosure (MPEP 608.01(b))

The abstract of the disclosure is added as a convenience for searching. The translator should use a style that is close to that of the descriptive part of the specification, and should not use the word "said." The abstract preferably should not exceed 150 words.

5.3.2 Statutory Classes of Inventions

It might seem unnecessary to the translator to worry about what statutory classes of inventions exist; it is not, as will be demonstrated.

- Machine or apparatus
- Process or method
- Article of manufacture
- Composition of matter

For the purpose of translation, machine or apparatus inventions

and articles of manufacture inventions are very similar, but process or method inventions are quite different in terms of the elements of the invention as recited in the claims.

5.4 Converting a Japanese Specification into a US-Formatted Specification

The basic sequence of a US patent specification as requested by most of our clients and the locations of equivalent content in a Japanese patent are given below. This sequence differs slightly from the published sequence you will encounter in already-granted US patents, for example with regard to the placement of the abstract. The following is only what is normally requested by most of our clients. The actual sequence desired should be verified with the client before you start a job.

TITLE OF THE INVENTION [from 発明の名称]

BACKGROUND OF THE INVENTION

1. Field of the Invention [from 産業上の利用分野]

2. Description of the Related Art [from 従来技術]

SUMMARY OF THE INVENTION [from 発明が解決するための手段]

BRIEF DESCRIPTIONS OF THE DRAWINGS [from 図面の簡単な説明, which it should be noted appears after 実施例 in Japanese patent publications]

DESCRIPTION OF THE PREFERRED EMBODIMENTS [from 実施例]

What is claimed is: [or similar language—see Section 5.8]

[Claims themselves—taken from 特許請求の範囲]

ABSTRACT [from 要約, but does not include a separate 目的 section as found in Japanese patent publications]

[Drawing material inserted here. The formatting of the material within the drawings can be very client-dependent, because of the different ways in which the drawings can be prepared.]

Again, the actual overall sequence called for will often be specified by the client, and will not necessarily be the same as the sequence you see in published US patents.

5.5 Object of a US Specification

For the translator, the purposes of the specification are:

- to inform the examiner of the invention as perceived by the inventor; and
- to convince the examiner that the applicant should be granted a patent.

5.6 Terminology

Although patent terminology is often discussed as if there were some magic set of patent terms that translators need to learn the English equivalents for, there is surprisingly little technical terminology that is unique to patents. Most patent glossaries also include much terminology that the patent translator would have needed to know even before thinking about starting patent translation. The *Japanese-English Dictionary of Patent Terms* by Yukisato Iida and the accompanying English-Japanese volume are examples of this mix of patent and general technical terminology.

5.6.1 Statutory Guidelines

MPEP 608.01(g)

An applicant is ordinarily permitted to use his or her own terminology, as long as it can be understood.

MPEP 608.01(o)

The meaning of every term used in any of the claims should be apparent from the descriptive portion of the specification, with clear disclosure as to its import; and in mechanical cases, it should be identified in the descriptive portion of the specification by references to the drawing, designating the element or elements therein to which the term applies. A term used in the claims may be given a special meaning in the description.

When a translator is asked to translate only the claims of a patent, the above language should be recalled, as it clearly indicates that the USPTO recognizes the importance of the descriptive portion of the specification in understanding the meaning of the claims, and understanding the claims is an

obvious requirement for translating them.

5.6.2 Two-Character Japanese Compounds

One type of Japanese terminology that troubles some patent translators is the two-*kanji* compound form often used to describe how elements of an invention are connected or otherwise related.

Examples:

突設　　枢設　巻設　係止　螺合

Many of these terms will not appear in general technical dictionaries, perhaps because they are assumed to be obvious. And that assumption is correct in many cases. There have been a few published compilations of such compounds, but their usefulness is in doubt, since the meaning is often clear, given the context and the meanings of the constituent characters.

That said, a Japanese patent firm client once asked us to translate a list of over 300 of this class of compound. They placed the translated list on their website and have since expanded their online glossary to include terms related to patent practice.

5.6.3 There + [preposition | participle] Constructions[3]

"There + preposition" constructions include such things as:

> thereafter, thereagainst, therealong, therealmongst, therearound, therebecause, therebefore, therebeneath, therebetween, therebeyond, thereby, thereduring, therefor, therefrom, therein, therethrough, therethroughout, thereto, thereunder, thereupon, therewith, and therewithin

The above are all very official sounding, and there are reasons for having even some of the most bizarre of these terms, including avoiding repetitions and avoiding having to use both the singular and plural forms in a case in which either the singular or the plural conditions are to be encompassed.

Example:

[3] We did a study was done of such expressions shortly after the publication of the original Chapter 5, and an expanded study is underway as of October 14, 2022.

> Plate 23 has one or two apertures, a bushing passing therethrough.

versus

> Plate 23 has one or two apertures, a bushing passing through the aperture or apertures.

5.6.4 Generic Terminology

Patent drafters make use of an arsenal of terminology that is broader than normally found in technical writing. Some of it appears superfluous, and some is indeed superfluous. Yet some of the arcane terms used in US patents have gained a foothold for reasons that the translator should know. In the world of patents, the drafter of the specification (and, most certainly, the drafter of the patent claims) wishes to keep the language used as generic as possible to avoid limiting the scope of the claimed invention.

In the interest of maintaining the generic nature of the terminology, and therefore the broadest possible scope of the invention, opening or aperture will often be seen for hole. "Cutting means" allows the author to include scissors, a razor blade, nail-clippers, and virtually any other device that can cut in the language describing an element that cuts. "Propulsion means" can include an internal combustion engine, a jet engine for a fighter plane, a battery-driven motor for a toy, or a spring in a spring-driven mechanism. The diligent translator should be aware of such terminology, as well as the many precise and many purposefully imprecise terms which are encountered in US patents.

The translator should strive to develop not only a stock of such terms, but also the sense of when to use them. The best way to do this is simply to read as many US patents as you can. Obtaining them from the USPTO website is easy. Obtaining a patent Japanese/English pair is as simple as going to the JPO website to look at the underlying Japanese patent cited for priority in a US patent.

5.7 General Style and Structure

5.7.1 Referring to the Invention

The invention can be referred to in a few ways. The translator does not need to spend much time worrying about this. Some of the ways are:

- the present invention
- the invention (first use, followed by, for example, the present invention)
- this invention (first use, followed by, for example, the present invention)
- the disclosed invention (sometimes used in the abstract)
- the instant invention (rare)

Our choice is *present invention*, which is the most common expression used.

5.7.2 One-Sentence Rule

The one-sentence rule—essentially the rule that says that a claim is a single sentence (more precisely, a noun phrase which forms a sentence when appended to the introduction to the claim)—has no effect on the way the translator treats sentences in the descriptive part of the specification. In translating for filing, outside of the claims, the translator may split or combine sentences as appropriate to the translation task and the target US patent style. In this respect, translation for filing is clearly different than translation for non-filing purposes. The application of the one-sentence rule to claims language will be discussed as part of the claims problem.

5.7.3 Articles

In the claims, the indefinite article is used upon the first occurrence of an element, and the definite article is used at subsequent occurrences.

Outside of the claims, however, this rule is not always followed, especially when a number of embodiments are being described, each having a repetition of elements from a previous embodiment. A patent author might very well describe valve 23 as "a valve 23" on its first occurrence in the second embodiment, even if it has already appeared as "a valve 23" in the first

embodiment.

5.7.4 "Said"

This almost universally used substitute for the definite article need not be used. The word "the" serves the same purpose. An investigation of recent US patents indicated that "the" is slowly gaining ground, although many patent practitioners and translators probably still cling to "said." I suspect that Japanese clients would be more fearful of using "the" than US practitioners, and the translator might want to think about that before becoming a pioneer in patent claim style reform.

Having said the above about "said," remember the following rules:

- Don't use "said" outside of the claims, regardless of how much the Japanese patent document uses 該, 当該, 前記 or similar "said-evoking" expressions in the detailed description of the invention; "said" is out-of-place except in the claims, and can even be eliminated from the claims, according to authorities (*Landis*).
- Never use the redundancy "the said," unless comic relief is needed.
- In the claims, be consistent in using "said" or "the" (one possible exception being discussed in the section on claims).

5.7.5 Drawings

The patent translator is blessed with something translators sometimes do not have: a full set of drawings describing the subject of the text.

In the brief description of the drawings (and sometimes when referring to drawings thereafter in the specifications) it is best to refer to the drawings by the type names that are used in 37 CFR, as examiners are accustomed to seeing those names. This list of names includes the following types of views.

- Plan, elevation, section, perspective, exploded, partial, sectional (37 CFR 1.84)
- Other types of drawing names: block diagram, flowchart

The translator should strive for consistency in referring to views of drawings.

When drawings are referred to in text, the most common form is the abbreviation "FIG. N," although there is nothing in the rules that calls for this. For indicating a contiguous range of drawings, rather than making a plural form of FIG, it is best to render these as a range, such as FIG. 3 through FIG. 7.

5.7.6 Reference Characters

The normal style for reference characters is a simple integer. If an element assigned a reference character is further broken up into sub-elements, lower-case letter suffixes (e.g., "12a", "12b") are sometimes attached to the parent reference character, in contrast to the upper-case letters sometimes used to label parts of a drawing (e.g., "FIG 2A" or "FIG. 2(A)). Again, nothing in the rules calls for this; it is simply what is commonly done. Another perhaps more-often seen method these days is to use the most significant digit of a multiple-digit reference numeral to refer to an element consisting of a plurality of sub-elements and change lower-order digits to indicate sub-elements. Thus, 300 could be a shelf assembly that includes a 310 shelf plate and a 320 mounting bracket.

A reference character should not be allowed to appear at the beginning of a sentence—common-sense style, but sometimes violated by translators overeager to maintain the structure of the Japanese-language specification. If this stylistic problem lurks near (e.g., because of a Japanese sentence which starts, for example, with "34 は蓋 33 の上面に取り付けられる温度検出手段"), rearrange the sentence to avoid the problem; as the translator you have the freedom to do that.

When two or more of the same element appear in a sentence adjacent to one another, phrases like "widgets 45, 45 ..." are sometimes seen in US patents, even when these two widgets are not physically close or connected to one another. It appears that some US patent practitioners have adopted this as a conventional shorthand notation.

5.8 Claims

5.8.1 Purpose

> To particularly point out and distinctly claim the subject matter which the applicant regards has his invention or discovery. (MPEP 608.01(i)(a)).

5.8.2 Relationship to the Description of the Invention in the Preceding Part of the Specifications

As discussed above, the claims are the invention, but depend upon support from the descriptive part of the specification, for both the structure of the invention and the meaning of the terms used. The meaning of names of elements in the claims should be clear from the earlier parts of the specification.

5.8.3 General Structure

Strange as it might seem, there is no set statutory form for claim language, but the present USPTO practice is to insist that each claim complete a sentence which starts with "I [or we] claim," "The invention claimed is," or an equivalent phrase. It begins with a capital letter and ends with a period. Periods may not be used elsewhere in the claims except for abbreviations (MPEP 608.01(m)). It is this last sentence, of course, that is the one-sentence rule.

To avoid worrying about the number of inventors, our choice is the commonly used "What is claimed is:". This avoids uncertainty as to whether there multiple inventors, something that is only sometimes explicit in the Japanese.

From the above MPEP language, what is normally called a claim is clearly a noun phrase. Each claim is assigned an integer number. In the case of a single-claim patent (which is very rare), the claim does not have a number.

Each claim is formed by a preamble, a transition phrase, and a body, the type of elements making up the body depending upon the statutory class of the invention. More on that later. The general form, then, is:

> Preamble [usually a form of the name of the invention]
>
> +
>
> Transition [usually "comprising"]

+

Body [catalog of elements and the relationship between them]

The sample below is that of an apparatus claim format.

1. A high impedance, high frequency input circuit for an instrument suitable for measuring AC signals whose frequencies are within a predetermined frequency range, comprising:

   (a) an input terminal for receiving the AC electric signals that are to be measured and an output terminal;

   (b) an input resistor having a first end coupled to said input terminal;

   (c) an operational amplifier having an amplifier input coupled to a second end of said input resistor and an amplifier output coupled to said output terminal;

   (d) a feedback path coupled from said amplifier output to said amplifier input, said feedback path having a first resistor and a voltage divider, wherein said input resistor, first resistor and voltage divider determine the gain for said input circuit and both the resistance of said first resistor and the total resistance of said voltage divider are significantly less than the resistance of said input resistor such that when said AC electric signals are within said predetermined frequency range said gain of said input circuit is unaffected by stray capacitance associated with said first resistor and voltage divider.

Several things can be said about the style of the above claim (from US Patent 5,332,963; High input impedance buffer with low feedback resistance"). It has sub-paragraphs and these sub-paragraphs have been assigned symbols. These devices are usually not seen in Japanese claims, most of which are just single, long paragraphs, appearing as a sea of characters with no distinguishing features to help the reader navigate. Sub-

paragraphing and the assignment of symbols is an aid to reading and understanding the structure of a claimed invention. As the translator in charge of writing the English patent specification, you should be free to use these tools of organization, especially for extremely long and complex claims having many elements and sub-elements. Naturally, you should check with your client first. One exception might be when a Japanese version of the specification has been rushed to the USPTO before submitting your English translation, which case visual dissimilarity might be cause for concern.

Note that the drafter of the above claim uses "said" in second references to elements of the invention, but uses "the" for gain. In *Landis*, there is mention that some practitioners make a habit of using "said" with elements of the invention and "the" with things that are not elements of the claimed invention. In this case, gain, which is an abstract characteristic, is not (and cannot be) an *element* of this apparatus invention, so the drafter's use of "the" here might reflect the type of usage policy to which *Landis* refers. With the exception of this type of purposeful differentiation, the translator should maintain consistency, using either "said" or "the," but not mixing the two without reason.

5.8.4 Preamble

The preamble is simply an introductory phrase which names or defines (generally) the invention recited in a particular claim. In general, the simpler the better. Since the foregoing descriptive part of the specification must clearly define the subject matter of the invention and describe to someone skilled in the art how to practice the invention, there is no particular need for detail in the preamble. Thus, the preamble for even a complex semiconductor claim might be extremely simple.

Example:

18. A semiconductor device ...

When the claimed invention is a machine that operates on a workpiece, details of the workpiece must not be put into the body of the claim in such a manner that they appear to be elements of the invention (since the workpiece is not part of the invention). This information can be included in the preamble.

Example:

1. A rotatable bollard for use in securing a rope or hawser, which comprises …

3. A device for connecting a first pair of wires to a second pair of wires, comprising …

In the above claim 1, neither the rope nor the hawser is an element of the invention, and in claim 3, the pairs of wires are not elements of the invention.

5.8.5 Transition

The most commonly (and almost universally) used transition is "comprising" or "which comprises." Both of these expressions are "open," meaning that they precede a list of elements that the invention includes but is not necessarily limited to. This makes it more difficult for a potential infringer to develop a workaround by merely adding elements.

Regardless of how many times people have said that a transition of "characterized by having" is patent language, it lies clearly in the domain of translation for non-filing purposes, and has limited use in specifications for filing in the US. There is no need to slavishly translate it as is into an English claim.

5.8.6 において

A phrase that sometimes makes a claim look like a Jepson-type (improvement) claim is "において" immediately following a brief description of the invention. The drafter might have intended everything before the "において" to be prior art, in which case we would have a Jepson (improvement) claim, but it is not at all certain in many cases. In fact, において is so common that it is very unlikely that any great portion of these claims are for improvement inventions. The section before the "において" is usually a general statement of the invention that is very similar to the preamble in a US claim. Again, you sometimes must ask the drafter of the claim to be certain about this. For information on Jepson claims, refer to *Landis*.

5.8.7 Body

The body of the claim is generally a catalog of the elements of the

invention, but cannot be merely a catalog of the elements. It must also include the manner in which the elements are related to and interact with one another in order to achieve the object of the invention. Thus, it is not allowable to have an element named but not defined in terms of such a relationship to at least one other element.

An examination of Japanese *kokai* will reveal that the body of a Japanese claim sometimes does not follow this convention very closely. Fortunately for the patent translator, however, when *benrishi* draft claims for the purpose of US filing, they tend to follow US practice when writing the claim in Japanese. Thus, there is very often a very well-organized string of noun phrases representing the elements of the invention, this string ending with something like "を有する事を特徴とする..." If the translator is presented, however, with the Japanese claims as filed in Japan, they might need to rearrange things, again usually well within the translator's authority in this type of translation, although notification to the client is usually called for.

Referring to the sample apparatus claim given earlier, note that there are four major elements in this claim (invention), and also note that the fourth element, a feedback path, is described as having two further sub-elements (a first resistor and a voltage divider). It is common to use sub-elements to describe the detail of each element as it appears in the catalog of elements that is presented in the body of the claim. Sometimes there are sub-sub-elements in a three-tier structure.

The usual format for the catalog of elements these days is a string of paragraphs, each ending with a semicolon, the last semicolon being followed by "and" just before the last paragraph (element).

5.8.8 Sub-Paragraphing and the Japanese-Language Filing Problem

It is possible to file a patent application in the US with a Japanese-language specification, to be followed by an English specification. The requirement for the English specification is that it be a "literal" translation of the Japanese version. What exactly this means still appears to be open to interpretation. This could create problems for both a Japanese patent applicant and

the translator. Since there are hints that the USPTO does some checking of at least the appearance of the translation to see that new matter was not added to the specification at the time of the translation (i.e., to check that the applicant has not changed the invention after the Japanese-language specification was submitted), the introduction of sub-paragraphing or other structural changes, although possibly improving readability, could cause problems, since this would create an English specification that might be suspected because of its different structural appearance.

We have only encountered one translation job following the preliminary submission of a Japanese-language specification, but can say that it cramps the style of the translator and can result in a patent specification that is quite difficult to understand, and also probably equally difficult to examine.

The translator should always make sure that the client knows enough to mention if the above type of filing has occurred.

5.8.9 Apparatus Claims

In an apparatus claim, the elements are physical objects which are interrelated, often forming what can be characterized as a machine operating in according with some set of rules. The elements are n*ot functions or capabilities*; they are *physical elements*. Sometimes a sloppily written Japanese claim will present a problem in this respect. For example, a recent dependent claim we translated included the language "する事によってXXを省略することができる事を特徴とする" as if the possibility of eliminating XX (an element in the invention in the independent base claim) from the invention was itself a part of the invention. The claim should have been written to describe a version of the invention in the base claim from which the element XX was indeed omitted, without giving any extraneous background as to how or why the element was omitted or was able to be omitted. This background information belongs not in the claims, but rather in the description of the preferred embodiment. In the above-noted case, I corrected the problem in the English claims and wrote a note to the drafter of the claim. It was accepted, resulting in a better claim.

5.8.10 Article of Manufacture Claims

Although an article of manufacture, unlike a machine, might not have moving parts, the claims therefor appears to be in virtually the same format and should not need to be of special concern to the translator.

5.8.11 Means

To maintain the generic nature of an element, one common device is the use of a means element.

Example:

> means for cutting said plate to a length responsive to said control voltage;

The general form is "means for [verb]-ing..."

Note that no indefinite article is used before means in this format. Subsequent citing of this element often is a shortened form with an article, such as "the cutting means."

5.8.12 Method or Process Claims

The translator must remember that the subject matter of a method or process claim is neither the object or substance produced by, nor a workpiece processed or acted on by the process or method. Nor is it the machine used to perform the process or method; it is the *method or process itself*.

Generally, the elements in a method claim are gerundial phrases.

Examples:

> grinding said rock ...
>
> cutting said prescribed length of wire ...
>
> multiplying said constant by ...
>
> detecting the ambient temperature of ...

Unless it is necessary for the achievement of the object of the invention, the sequence of steps should not be specified. This can present a problem, since it is not generally clear whether or not a "—て、—て、—て、" series (common in Japanese method claims) should be taken to imply any particular sequence of steps. When in doubt, ask the drafter of the claims. Fortunately, in this type

of translation, the author (*benrishi*) is usually available.

Thus, unless there is some basis for them, gratuitous additions such as "then," or "after which" might add limitations that could reduce the scope of the invention, since specifying an unnecessary limitation of sequence could invite a workaround by using a different sequence of steps that achieves the same object.

5.8.13 Dependent Claims

A dependent claim places added restrictions on the territory staked out by the independent claim on which it is based. It includes by reference all the elements and restrictions of the parent (independent) claim.

There are some conventions of practice with regard to the sequence of dependent and independent claims. This is covered in *Landis on Mechanics of Patent Claim Drafting*.

Since a dependent claim must refer to a preceding claim, it usually starts out by renaming the invention, sometimes in an abbreviated form, followed by a phrase giving the parent claim number.

Examples.

35. The spittoon recited in claim 34, wherein said aperture is elliptical.

45. The optical fiber cutting method according to claim 44, wherein cutting the fiber includes holding the fiber in a clamp.

Note that the definite article is used at the start of a dependent claim.

5.9 Where to Go for More Information[4]

5.9.1 US Patents

It is highly unlikely that a JA-to-EN translator, even a translator

[4] This section was drastically changed to reflect the availability of online sources not available or available in limited form at the time of original publication and the disappearance of some previously available sources.

who has done considerable patent translation for non-filing purposes, will miraculously wake up one morning and be endowed with the ability to write in good US patent style. It takes diligence and a willingness to sacrifice at least some immediate income while you are studying. One of the best ways to learn what is acceptable style is to read US patents issued to US entities (i.e., drafted originally in English).

US patents can be searched and downloaded, including drawings, from the USPTO website:

http://patft.uspto.gov/

The above webpage also allows you to search on published patent applications that have not yet resulted in issued patents.

When looking to learn what is acceptable style, avoid patents that have been translated from Japanese, as they are likely to retain the stylistic aspects of their underlying Japanese counterparts.

Another searchable source for patents is Google Patents:

https://patents.google.com/

5.9.2 Japanese Patents

Although the JPO website is still a bit clunky compared to its US counterpart, the JPO has come a long way in providing patent documents online. The relevant website can be found here:

https://www.j-platpat.inpit.go.jp/

5.9.3 Laws and Regulations

The single most valuable document the JA-to-EN patent translator can obtain from the USPTO is the *Manual of Patent Examining Procedure*. I suggest that patent translators download Section 600 (and particularly Section 608) first, as this contains most of the information the translator needs with respect to the structure and content of a US patent specification. This document is available at:

https://www.uspto.gov/web/offices/pac/mpep/mpep-0600.html

5.10 Concluding Comments

The foregoing is a very scanty survey of a topic which could occupy an entire book. Most of the content follows a presentation I made at IJET-7' (Seventh International Japanese/English Translation Conference, held in Yokohama in 1996) organized by the Japan Association of Translators, and the author thanks that organization for permission to reuse that material.

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