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Research on the Characteristics of English Patent Language and Chinese Translation

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Abstracts: With the developing of science and technology, paten is becoming more and more important in science and economic society, especially in the field of modern language literature and patent English literature. In this paper, the aim is to explain the language use characteristics of patent literature from the aspects of article structure, vocabulary usage and language features of patent English, as well as the issues that should be paid attention to by translators in the process of Chinese translation. The comparative research method was used to evaluate and analyze the characteristic of English language and Chinese language in paten. In conclusion, the translation of patent documents is the basic link of the transformation of technical achievements and the introduction of technology. High-quality patent translation can help the overseas patent layout of Chinese enterprises. At the same time, it also plays a positive role in technology introduction and technology utilization of Chinese enterprises. High-quality translation of patent documents can avoid patent litigation disputes. Patent litigation disputes caused by wrong translation of patent documents occur from time to time. Therefore, the translation of patent documents has attracted more and more attention from Chinese enterprises. It is hoped that this paper will enable readers to grasp the stylistic features, translation patterns and translation techniques of patent documents to avoid unnecessary losses caused by translation problems to a certain extent. So accuracy and credibility of translating patent documents, improving the importance of translating patent documents, and providing certain theoretical guidance and practical value for the translation practice of English patent documents.

Keywords: Article Structure, Vocabulary Using, Language Features, Chinese Translation

1. Introduction

In the past few years, the market saw a new group of users of patent information emerging [1]. With the continuous development of industry, technology and trade in various countries, knowledge-based economy has gradually replaced manufacturing industry as an important driving force of the world economy. As an important productive force of social progress, science and technology have been paid more and more attention. In order to ensure the healthy and stable development of science and technology, regulate and regulate the order of social interests, patents arise. Patent literature becomes the specification of technological achievements recording new inventions and creations in various countries. Patent literature has a high reference value of use value, which is not only the prior technical information to promote the development of technology, but also the "right information" and "economic information" to deal with patent disputes or commercialization of new technologies, as well as to investigate whether the existing patent rights are infringed.

Patent documents are documents that record various related documents produced in the process of patent application, examination and approval. Patent document is a kind of document that integrates technical, economic and legal information. Patent documents in the broad sense include patent gazette, patent abstracts, and various reference books for indexing and searching. In the narrow sense, patent documents refer to the documents of patent application including patent claim, specification, patent claim, abstract, and approved patent specification. According to the patent category, the patent literature is divided into three categories: invention patent specification, utility model patent specification and appearance design patent literature. According to its law, patent literature can be divided into two categories: application specification and patent specification. So patent language should order some rules (Table 1) [2].

***Table 1.** Patent language rules.*

Rule notes Compliance	Rule notes	In patents
Sentences should be short	Around 25-30 words	Patent sentences are usually very long, a single sentence can be up to 500 or more words.
Sentences should be grammatically complete	Sentences should not be written in telegraphic or nominal style, they should not lack a subject or a verb	Patents often make use of nominal or telegraphic style, especially in titles.
Sentences should use the active form	Passive forms are more difficult for a MT system to deal with	Passive forms are preferred in patents as in other scientific texts.
Sentences should have a simple syntax	The usage of gerunds, past participles, relative clauses and other implicit constructions is a source of ambiguity for MT	Patents make use of formal and legal language, which is rich in gerunds, participles, relative and other subordinate clauses.
Sentences should express one idea only	Combining more ideas in the same sentence has the natural consequence of complicating its grammatical structure	Patent abstracts, some parts of descriptions and claims concatenate many ideas in the same sentence.

With the deepening of reform and opening up, the continuous exchanges of science, culture, technology and economic trade among countries have attracted more and more attention. As more and more people have access to patent literature, it is more and more important to understand and learn patent English. The translation of patent English has become a major problem facing English literature [3].

Patent English is an English expository language used in the fields of patent application, patent exchange and intellectual property research. As the patent literature needs to be written in accordance with the relevant provisions of the national Patent Office, and it is required to be written in a uniform format (basically uniform around the world), the content layout is basically the same, so the language use of patent English is also similar. Next, the author discusses the patent specification and its translation.

2. Language Features of English Patent Literature

2.1. Use technical Vocabulary Extensively

Patent literature is a technical literature, which is a detailed record of new inventions, new technologies, new materials, new methods, new products, new equipment, etc. The advantage of using a general technical word that is commonly used by all majors and a specialized technical word that is used by a particular specialty is that it can be defined and expressed accurately without any context [4].

2.2. Inertia Phrases are Widely Used

All patent descriptions use the same or similar set of idiomatic phrases. Such as Field of Invention (technical Field of the Invention), Background of the Invention, Objects of the Invention, Summary of the Invention, The Drawing (legend) and so on. These useful phrases are usually subtitles to the patent specification.

2.3. Extensive Use of Compound Words in Legal and Document Language

Patent document is a kind of technical document, and also a legal document with legal effect. It is the combination of technology and law. It has a set of compound adverbs in common use. By reason of this: Where, =in this. (=up to this time) Thereafter (= after that) after this, then, Therefor (=for that object). And so on [5].

These words can be seen not only in the text of the patent specification, but also in the title of the patent specification.

2.4. Repeated Use of Vocabulary

Patent literature is characterized by technical specificity, and because it is a new technology, the reproduction frequency of professional vocabulary is very high to illustrate the technology.

2.5. Limit the Use of Adjectives and Adverbs with Subjective Emotions

Adjectives and adverbs with subjective emotions may affect the seriousness and formality of the entire patent literature.

2.6. Use several Synonyms in Parallel

In order to explain the new technology and invention in the patent literature, fully explain the detailed content of the technology and demarcate the scope of patent protection, there will be a large number of word juxtaposition phenomena in the legal documents, especially the use of synonyms or synonyms [6].

3. Structure and Language Features of Patent Specification

3.1. Main Content

According to its content, the patent specification can be divided into three aspects: the summary part, the detailed part and the claim.

The main content of the overview section is to present the problems, compare the deficiencies in the current technology application, or the composition of relevant facts, for the purpose of a comprehensive presentation. According to the content, the overview can be divided into three main contents:

First is the technical field of the invention. And they say, 'Field of the Invention,' or 'Our present Invention relates to'.

Second is the background technology of the invention. It's usually labeled "Background of Invention." The main contents are the historical background and current situation related to the invention, and the development level and existing problems of the technical field of the invention are introduced.

Third is the object of his invention. It is often marked as "Objects of the Invention" [7].

3.2. Detailed Part

The detail part is the core of the patent specification. It clearly and completely describes the detailed content of the technology. Most have use value and reference value. The degree of disclosure of the invention is based on the understanding of the technical problem and solution by ordinary technicians in the technical field. Accordingly, this part is divided into four main aspects:

(1) Summary of inventions. The principle and solution of the invention are outlined. It is often marked "Summary of the invention".

(2) Detail your invention. This part describes the principle of the invention in detail according to the invention profile. It is often marked with "Detailed Description of the Invention" or "Specific Description".

(3) The appended drawings. Facilitate the accurate understanding of the invention by others. Any Drawings are usually referred to as "The Drawings" or "Brief Description of The Drawing".

(4) Is the best embodiment. The best specific conditions for the implementation of the invention are described in detail. It is often marked "Detailed description of the preferred Embodiment" (details of the optimal Embodiment).

4. Problems to be Paid Attention to in Chinese Translation

The translation of English patent documents will be introduced from two aspects: translation skills and precautions.

4.1. Translation Skills

4.1.1. A conjunction

Conjunctions can be used to express various relationships and are useful clues for analyzing topics. It is equally important to compare two conjunctions to emphasize the similarities between them. For example: likewise, similarly. Contrastive conjunction emphasizes the difference between the two themes, indicating the turning point of the theme, and both of them illustrate the theme of a higher plane. Such as: in contrast, on the other hand [8].

In the process of translation, attention should be paid to the use of conjunctions and the grammatical means of highlighting the subject. It is of great help to the translator to clarify the different functions of different means, to understand the text, and to analyze the theme and logical structure.

4.1.2. Technical Abbreviations

With regard to the translation of technical abbreviations, the principle of literal translation with the form of abbreviations is adopted. The over-frequent abbreviations should be annotated by liberal translation. In the following quote should try to use the abbreviation in the original.

4.1.3. Equivalent Effect

In patent English discourse, causality is relatively common, and sentence fragments are also unique. Generally, translators are not allowed to make use of their own association and creativity when performing the translation equivalent in the sense according to the deep structure of modern Chinese language. The translator shall input all the information of the source language into the target language, retain the description and concept of the source language, and obtain the maximum equivalent effect. Consider adding the necessary comments to supplement the technical notes only if the understanding is flawed [9].

4.1.4. Fuzzy

If the restriction on the intellectual property rights of patented technology is too specific, people will think that the application of patented technology is too narrow, the technology as a profession can't be effectively protected, and even be used by speculators to damage the legitimate rights and interests of patent owners. The ambiguity exists because it is impossible for the patent owner to fully list the application potential of the patent technology, so the patent documents are ambiguous.

The translator has no responsibility or need to eliminate the ambiguity. Instead, he or she considers how to use the corresponding words in the native language to retain the fuzzy concepts and accurately grasp the literal meaning so as to protect the rights of patent owners.

4.2. Matters Needing Attention

4.2.1. Main Language Structure

The patent specification belongs to the technical style. In order to avoid mentioning the inventor too much and make the content concise and clear, passive voice is widely used in the paper.

Non-predicate verbs, especially the v-ing and v-ed forms, it is... that, it is... to, as and other structures, inversion, ellipsis, compound sentences and long sentences are frequently used.

We should pay special attention to the present participles, the past participles as attributive, the independent participles as adverbial, and which compositional elements are connected with and.

4.2.2. The Claim Partt

The patent application document in our country is an independent document, which does not belong to the content of the specification, but the British and American countries put it in the content of the patent specification.

This part of the claim is not technically important, it is just a summary of the previous part. But it is legally most important. The scope of protection within the patent right is subject to the

content of the approved claim. That is, the content of the claim is the basis for judging whether others infringe. Therefore, the claim is an important part of patent literature.

In translating the "claim", translators should pay attention to two issues:

First, the claims are generally itemized. One (or two) is an independent claim. The rest are dependent claims. The foregoing part of the independent claim is divided into the existing technology and the feature part is the improvement technology of the invention. It reflects the main content of the technology and records the necessary technical features of the invention.

Second, for each claim, in order to emphasize its technology, no matter how much content, no matter how long, the middle can only be separated by commas, colons, semicolons, etc., not by periods, a claim can only be at the end of another period (both in Chinese and English) [10].

5. Conclusion

This paper points out the language use features of English patent literature and the matters needing attention in Chinese translation, which can be used as the theoretical basis for the later translation of English patent literature, so as to accurately and faithfully reproduce the patent literature to Chinese readers. With the continuous development of China's science and technology and the increasing exchanges between China and the world, patent exchanges will certainly inject strong impetus into the development of China and the world.

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