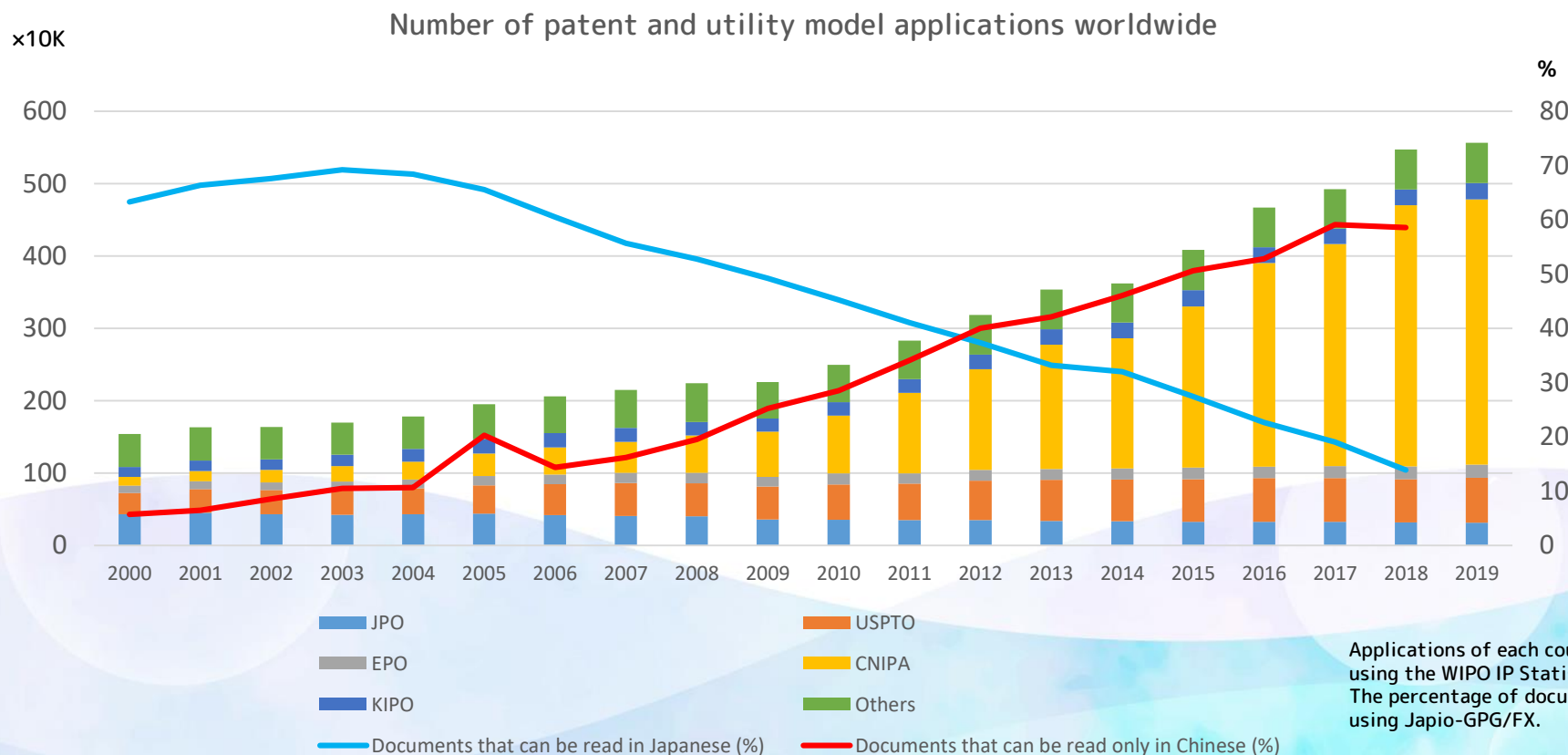


1. Global trends in patent and utility model applications

The figure below shows the global trends in patent and utility model applications since 2000. The bar graph shows the number of applications filed with national offices or regional offices. In recent years, the number of patent and utility model applications, particularly to the Chinese Patent Office, has been increasing rapidly. Even if a Japanese patent family exists in Chinese patent documents, it may not be exactly the same content as Chinese documents, so we have to read the original Chinese document for deep understanding.

The percentage of documents that can be read in Japanese is decreasing every year (blue line), while the percentage of documents that can be read only in Chinese is increasing (red line). Therefore, it is insufficient to read patent documents only in Japanese or in Japanese/English.



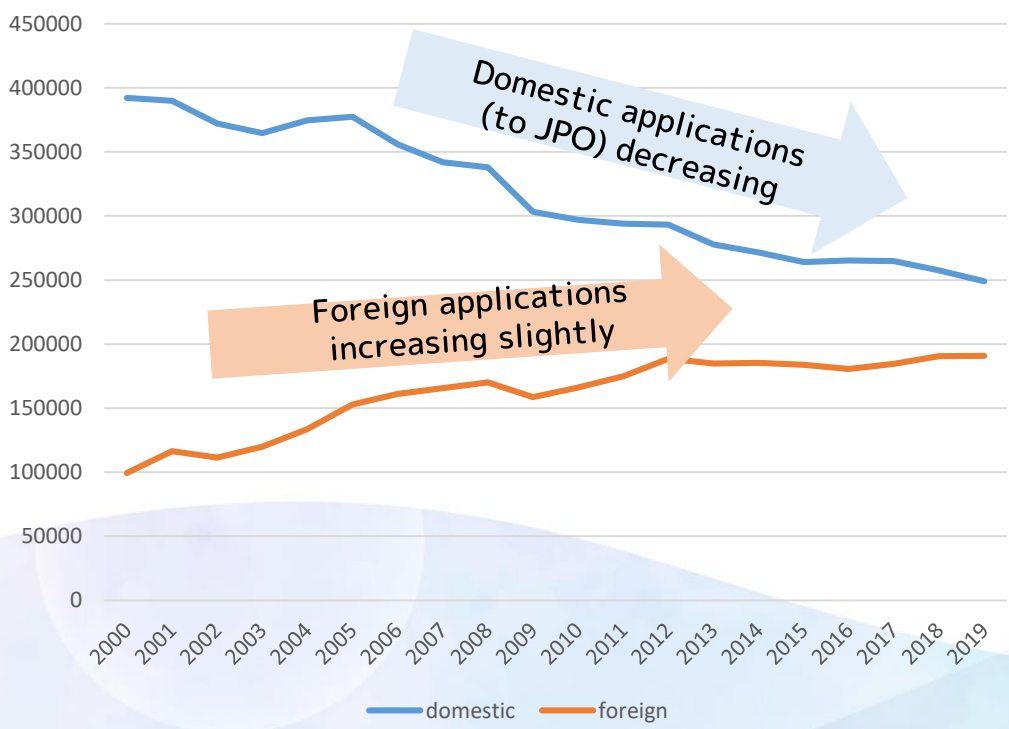
Applications of each country is calculated using the WIPO IP Statistics Data Center. The percentage of documents is calculated using Japio-GPG/FX.

2. Applications trends by Japanese applicants

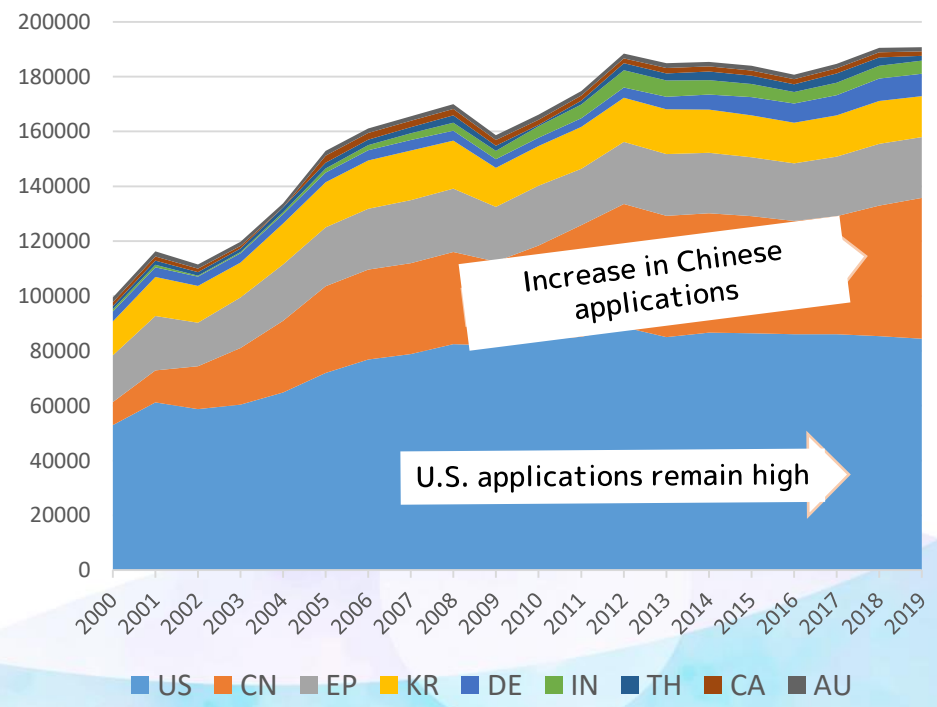
The figure below shows the trend in applications by Japanese applicants. In recent years, the number of domestic applications (applications to the JPO) by Japanese has been decreasing, while that of foreign applications has been increasing slightly. The largest number of applications is filed in the United States, followed by China, Europe, and South Korea.

Therefore, there is a growing need to translate Japanese to English, Chinese and Korean for foreign applications.

Number of patent and utility model applications by Japanese applicants (domestic/foreign)



Number of patent and utility model applications by Japanese applicants (details of foreign applications)



Calculated with WIPO IP Statistics Data Center

3. Translation fees for patent documents

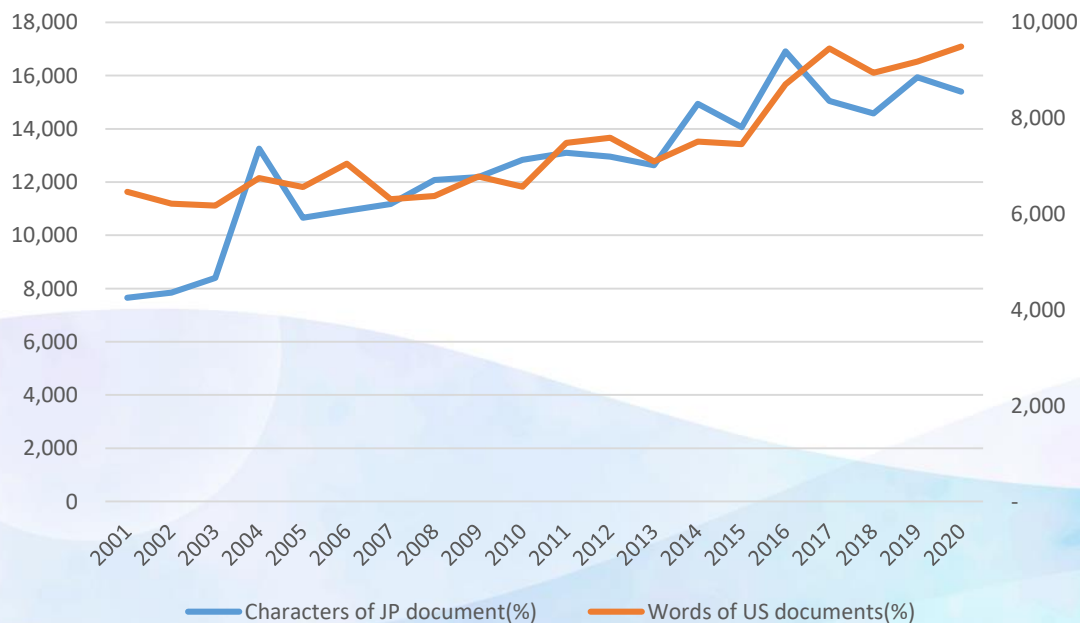
According to the Japan Translation Federation, the translation fee of a patent document for an English to Japanese is 26 yen per English word, and that for a Japanese to English is 30 yen per Japanese character. (See “Standard translation fee” <https://www.jtf.jp/tips/price>.)

The figure below shows the average number of characters and words in the patent specification. The number has been increasing in both JP and US applications. In recent years, the average US document consists of about 9,200 words, and the average JP document consists of 16,000 characters (according to Japio IP AI Research Center). Manual translation of a patent specification can be expensive: about 240,000 yen per document for English to Japanese translation, and about 480,000 yen for Japanese to English translation. In addition to the translation work, manual translation involves other steps such as estimate, ordering, and delivery, which are time-consuming.

By utilizing Japio-AI Translation, the cost and time for translation can be greatly reduced.

Average number of characters (JP document)

Average number of words (US document)



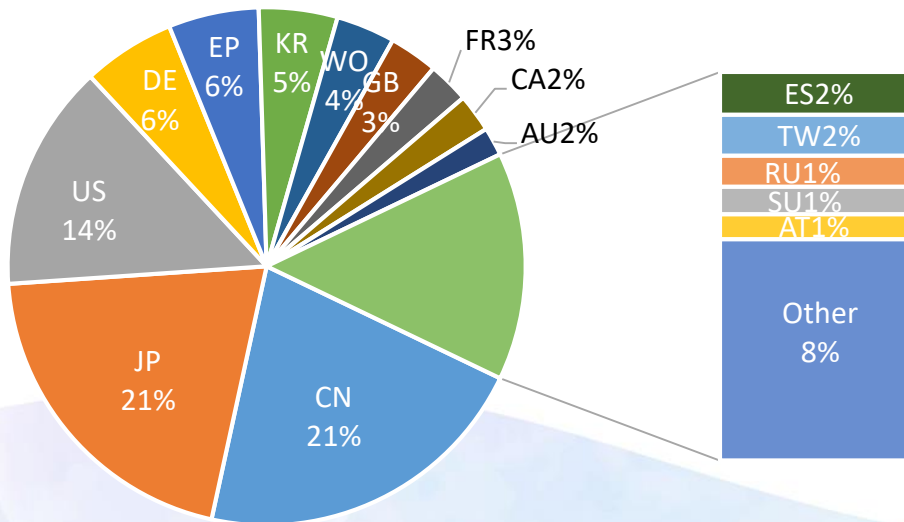
- The horizontal axis shows the year of publication of the document.
- In each year, 2000 documents were randomly selected and the average number of characters or words in the specification was counted.

4. Advantages in Japio-AI Translation

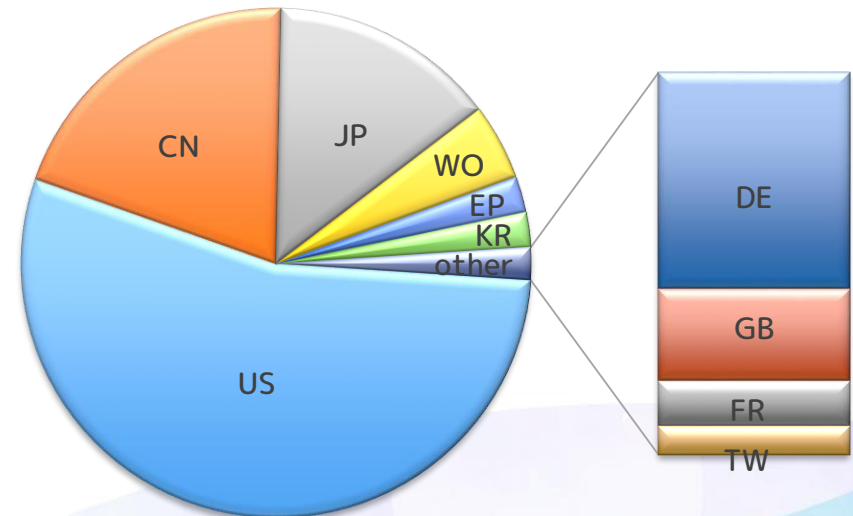
Japio-AI Translation allows machine translation from English, Chinese, Taiwanese, Korean, French, Russian, German to Japanese. This covers more than 92% of the languages used in the world's stored patent documents. It also covers all the languages used in the top 10 countries' patent documents cited by the IP5 (JPO, USPTO, EPO, CNIPA, and KIPO) over the past 10 years.

In addition, as introduced in "2. Application trends by Japanese applicants", we can also provide machine translation from Japanese to English, Chinese, and Korean, which are highly demanded in the patent field.

Ratio of stored patent documents worldwide



Top 10 countries/organizations' patent documents cited by IP5 over the past 10 years



※Calculated by Japio based on DocDB.

The term "citation" includes not only the examiner's citation but also documents provided by the applicant. It also includes all citation categories (X, Y, A...).