

GAO

Testimony

Before the Subcommittee on International Trade, Committee on Finance, U.S. Senate

For Release on Delivery
Expected at
2:00 p.m., EDT
Thursday,
July 22, 1993

INTELLECTUAL
PROPERTY RIGHTS

U.S. Companies' Comparative
Patent Experiences in Japan,
Europe, and the United States

Statement of Allan I. Mendelowitz, Director
International Trade, Finance, and Competitiveness Issues
General Government Division



149632

05-773/149632

**INTELLECTUAL PROPERTY RIGHTS: U.S. COMPANIES' COMPARATIVE
PATENT EXPERIENCES IN JAPAN, EUROPE, AND THE UNITED STATES**

**SUMMARY OF STATEMENT BY ALLAN I. MENDELOWITZ, DIRECTOR
INTERNATIONAL TRADE, FINANCE, AND COMPETITIVENESS
GENERAL GOVERNMENT DIVISION**

In recent years, a number of U.S. companies have reported significant difficulties in obtaining adequate and effective protection for their patents in Japan. Since 1989, Japan has been on a U.S. Trade Representative watch list of countries that have inadequate protection for intellectual property, partly because of reported problems with its patent system.

GAO surveyed 346 U.S. firms that were top patent holders in selected sectors regarding their patent experience in Japan compared to their experience in the United States and Europe. More than three times as many of the companies were dissatisfied with their overall patent experience in Japan as compared with that in the United States and Europe. Further, 65 percent reported at least one major problem in obtaining patents in Japan, while 25 percent reported at least one major problem in Europe, as did 17 percent in the United States.

The problems cited in obtaining Japanese patents included the length of time involved, the cost, the scope of the patent protection granted, and the difficulty in obtaining patents for pioneering inventions. Some firms also told GAO they experienced problems in enforcing their patents in Japan.

U.S. companies are experiencing patent problems in Japan partly because of delays in patent issuance and the narrower scope of patent protection granted. However, another source of U.S. companies' patent problems in Japan may be their own patent practices. Both U.S. and Japanese patent attorneys told GAO that some of the problems encountered by U.S. firms are due to their lack of understanding of the Japanese patent system, translation difficulties, and poor communication between U.S. companies and their Japanese patent representatives.

Currently, multilateral efforts are under way to harmonize international patent procedures through the World Intellectual Property Organization, an agency of the United Nations. If a harmonization treaty is enacted, it could lead to significant changes in both the Japanese and U.S. patent systems. The proposed changes in the Japanese patent system under harmonization address many of the concerns raised by U.S. companies regarding patent protection in Japan. About two-thirds of the companies that responded to the GAO survey also supported changes in the U.S. patent system under harmonization that would align the U.S. system more closely with those of other countries.

Mr. Chairman and Members of the Subcommittee:

I am pleased to be here today to testify on U.S. companies' patent experiences in Japan as compared with those in the United States and Europe. I will also address the sources of U.S. companies' patent problems in Japan and practices that may be affecting their patent experiences in Japan. Finally, I will discuss progress in working toward greater international patent harmonization and U.S. companies' views on harmonization.

BACKGROUND

Patents are one of the primary forms of intellectual property rights in worldwide use.¹ A patent is the grant of a property right issued by a national government for an invention. While the nature of patent rights varies by country, a patent typically gives an inventor the right to exclude others from commercially making, using, or selling the invention during the patent term. Any violation of the right is considered an infringement.

In recent years, some U.S. companies have complained about difficulties in obtaining adequate and effective protection for their patents in Japan. Some of these firms have asserted that their Japanese competitors use the Japanese patent system as a weapon against foreign firms to appropriate their technologies.

Since 1989, Japan has been on a U.S. Trade Representative (USTR) watch list of countries that have inadequate protection for intellectual property, partly because of reported problems with its patent system.

DIFFERENCES BETWEEN THE U.S. AND JAPANESE PATENT SYSTEMS

There are fundamental differences between the U.S. patent system and those of other countries, including Japan. The United States, for example, is the only developed country that awards patents to the first inventor regardless of when the patent application is filed. Moreover, U.S. patent applications are kept secret until a patent is granted. Japan, like most developed countries, awards patents to the first inventor to file an application and publishes all patent applications 18 months after they are filed. In addition, the United States allows patent applications to be filed in different languages, whereas Japan only accepts applications in Japanese.

According to many U.S. and Japanese patent experts, patents are perceived and used differently in the United States than in

¹The other major forms of intellectual property rights are trademarks, copyrights, and trade secrets.

Japan. In the United States, the focus of the patent system is to protect individual patentees and provide them with exclusive rights to their inventions. By contrast, many experts contend that the focus of the Japanese patent system is to promote industrial development by disseminating technology.

U.S. COMPANIES' PATENT EXPERIENCES IN JAPAN, THE UNITED STATES, AND EUROPE

To develop an understanding of U.S. firms' patent experiences in Japan, we surveyed 346 U.S. firms that were top U.S. patent holders (in terms of the number of patents held) in three sectors--chemicals, semiconductors, and biotechnology.² Over 90 percent of the 300 firms that responded to our survey had filed patent applications in Japan in the past 10 years, and two-thirds held 10 or more Japanese patents.³

As shown in chart 1 of our attachment, the majority of the responding companies were large, with almost 60 percent reporting annual sales of over \$1 billion. Ninety percent were U.S. companies or subsidiaries of U.S. companies; 10 percent were U.S. subsidiaries of foreign firms (1 percent of these were subsidiaries of Japanese firms). As shown in chart 2 of our attachment, 50 percent of the firms had filed for chemical patents, while 41 percent had filed for biotechnology patents, and 35 percent had filed for semiconductor patents.⁴

U.S. Firms Were More Dissatisfied With the Japanese Patent System

According to the survey results, U.S. companies generally reported more widespread patent problems in Japan than in the United States or Europe.⁵ As shown in chart 3 of our attachment,

²The companies that we surveyed included over 90 percent of U.S. companies that were among the top 200 patent holders in the United States in 1991.

³All subsequent survey results are based on responses from companies that had filed patent applications in Japan in the past 10 years.

⁴Percentages add up to more than 100 because some companies filed for patents in more than one sector.

⁵When we refer to U.S. companies' patent experience in Europe in this testimony, we are referring to their experience through the European Patent Office, a centralized organization founded in 1977 under the European Patent Convention. The European Patent Office issues "European patents" that are valid in up to 17 European countries.

more than three times as many of the companies were dissatisfied with their overall patent experience in Japan as compared with that in the United States and Europe. Thirty-nine percent of the companies that had filed for patents in Japan were dissatisfied with their overall patent experience, while 13 percent were dissatisfied with their patent experience in the United States, and 3 percent with that in Europe. These results indicate that U.S. companies were not necessarily partial to the U.S. Patent and Trademark Office (U.S. PTO), since the responding companies were generally more satisfied with their overall patent experience in Europe than in the United States.

As shown in chart 4 of our attachment, 65 percent of the companies reported at least one major problem in obtaining patents in Japan. In contrast, 25 percent reported at least one major problem in Europe, and 17 percent reported at least one in the United States.

The problems frequently cited in obtaining Japanese patents were

- the length of time involved,
- the cost,
- the scope of the patent protection granted, and
- the difficulty in obtaining patents for pioneering inventions (those involving important new technologies).

Forty-two percent of the companies said that "patent pendency" in Japan, or the length of time needed to obtain a patent, was a great problem. In contrast, only 6 percent said they had similar problems in Europe and 5 percent in the United States. As discussed in the following section, patents usually take about 6 to 7 years to be issued in Japan, compared with about 19 months in the United States. One clear result of the long pendency period in Japan is a shorter patent life, which begins at the time a patent application is filed in Japan. Several company officials noted that excessive delays in obtaining patents "eat into the effective patent life."

Forty-two percent of the companies said that the cost of processing a patent application in Japan was a great problem, while 20 percent said that this cost was a great problem in Europe, and 12 percent in the United States. According to a 1993 survey on patent filing costs in various countries, the costs of filing an application in Japan for foreign applicants are the highest in the world, due to translation costs and the fees charged by Japanese patent attorneys (Japanese patent attorneys have separate fee schedules for foreign and domestic clients).

The scope of patent protection outlines the boundaries of the invention for which the inventor holds exclusive rights. We asked companies to rate the scope of protection they received in Japan, Europe, and the United States. As shown in chart 5 of our

attachment, 71 percent of the firms indicated that the scope of protection granted in Japan was "too narrow." In contrast, only 25 percent said that the scope granted in Europe was too narrow, while 12 percent said the scope granted in the United States was too narrow.

Patent attorneys from several U.S. firms told us that the narrow scope of patent protection they have received in Japan makes it difficult for them to obtain adequate protection for their inventions. For example, one company official said that in two cases, where his firm's patents were successfully enforced in the United States, the scope of the corresponding Japanese patents for these products was too narrow to bring an infringement action in Japan.

Patents on Pioneering Inventions Face Particular Difficulties

Forty-four percent of the companies said that it was more difficult to obtain patents for pioneering inventions in Japan than in the United States or Europe, while only 3 percent said it was less difficult in Japan. Virtually all of the other companies (52 percent) said they were "not sure." Many company officials told us that it is particularly difficult to obtain patents on broad, commercially valuable technologies in Japan or on those that involve important new technologies. Several U.S. patent attorneys told us that the Japanese Patent Office (JPO) does not provide broad protection for emerging technologies until Japanese industry is well established in the field or unless there are no Japanese competitors.

In one widely reported case, Allied-Signal filed two patent applications in Japan in the 1970s related to a breakthrough amorphous metal technology.⁶ In the late 1970s, Allied-Signal officials said that Japan's Ministry of International Trade and Industry organized and subsidized a consortium of Japanese companies to develop amorphous metal technology. JPO granted the respective patents in 1984 and 1989. However, they were due to expire in 1993 and 1997 (20 years after the initial filing date). Thus, less than 10 years of patent life remained as a result of the delays in patent issuance.

Allied-Signal officials maintained JPO intentionally reassigned examiners to their cases several times to delay patent processing. They also contended that JPO purposely delayed patent issuance to allow Japanese competitors time to catch up in

⁶An advanced material, amorphous metals are made of alloys of iron, boron, and silicon, giving them a glass-like structure. The most promising commercial use for amorphous metals is as cores for electric distribution transformers used by power utility companies.

developing amorphous metal technology and to lock Allied-Signal out of the Japanese market. According to company estimates, the value of the Japanese market during this time totalled \$90 million annually for electric utility transformers, the major product using amorphous metals. In 1990, Allied-Signal filed a complaint with USTR for an investigation under section 301 of the 1974 Trade Act.⁷ However, the case was settled when the Japanese government agreed to protect Allied-Signal's manufacturing rights until 1997 and to purchase a specified amount of the material.

In another case, the patent counsel at a U.S. electronics company said that in the early and mid-1980s, his firm had encountered no problems in Japan in obtaining the first 10 patents related to an important new telecommunications technology. In his view, "No one understood the technology's importance" at that time. Since then, however, he said that the technology has become the U.S. standard in its field, and Japanese companies have become interested in developing it. During the past 5 years, the firm suddenly stopped receiving additional Japanese patents on this technology, although the corresponding patents have been issued "all around the world."

Pre-grant Oppositions Add to Delays

Forty-five percent of the companies responding to the GAO survey said that at least one of their patent applications was opposed in Japan in the last 5 years. (In Japan, unlike the United States, third parties can file oppositions to patent applications that they believe should not be granted.) Of the companies that reported receiving at least one opposition, 10 percent said it had adversely affected their companies to a great extent. Many patent attorneys told us that applications for pioneering inventions are commonly the target of oppositions because of their high technological and commercial value. Moreover, several U.S. attorneys said they had firsthand knowledge of Japanese companies working together to oppose both domestic and foreign applications.

U.S. and Japanese patent attorneys also told us that pre-grant oppositions in Japan can delay patent issuance from 2 to 5 years, and in some cases extend the process of obtaining a patent beyond its useful life. For example, the patent counsel at a major U.S. chemical company told us that one of his firm's applications for

⁷Section 301 of the Trade Act of 1974, as amended, provides a procedure under which affected enterprises or individuals may petition USTR to initiate actions to enforce U.S. rights under trade agreements. It may also be used to respond to unreasonable, unjustifiable, or discriminatory foreign government practices that burden or restrict U.S. commerce.

a pigment encountered six oppositions, and the opposition period lasted 11 years. The patent was issued with 1 month of its term remaining. He noted that the process can take so long because Japanese patent examiners do not review oppositions concurrently, but consecutively.

Patent Flooding Is Not Rampant but May Be Targeted

"Patent flooding," the practice of filing many patent applications claiming minor, incremental changes surrounding another patentee's core technology, has been publicized as a widespread problem in Japan. Of our survey respondents, 12 percent said that patent flooding was a great problem in Japan. Five percent reported that it was a great problem in the United States and 3 percent in Europe.

Both U.S. and Japanese patent attorneys agreed that pioneering inventions and/or technology that promise high commercial return are the usual targets of patent flooding in Japan when it occurs. For example, a chemical company official described a case involving a breakthrough synthetic fiber, for which it had filed several applications in Japan in the 1970s. Within 10 years, a major Japanese competitor had filed 150 patent applications directed at making incremental changes in the U.S. company's claimed inventions. In the U.S. company official's view, the competitor's objective was to limit the U.S. inventor's use of its own technology. He noted that the Japanese company attempted to pressure the company into cross-licensing its technology, but the U.S. company refused.

Japanese Patent Office Treatment of U.S. Applicants

Twenty-one percent of the responding companies reported that they believed they had been treated differently by the Japanese Patent Office than Japanese applicants. A majority (63 percent) indicated that they were uncertain. One corporate patent counsel noted that the patent applications his firm co-owns with a Japanese company have been processed much more quickly by JPO than those his firm has filed only in its own name.

Asked whether the Japanese Patent Office's treatment of their company has changed in the past 5 years, the majority (56 percent) said that it has remained the same. Fourteen percent said it has improved, while 6 percent said it has worsened. Several companies noted that within the last 5 years, JPO has become more willing to hold interviews with applicants regarding patent applications.

U.S. Firms of All Sizes and Types Experienced Patent Problems in Japan

Our survey results indicated that U.S. companies of all sizes and types were experiencing patent problems in Japan. For example, of the firms with 1991 sales of less than \$100 million, 40 percent reported great problems with the scope of patent protection they received in Japan, while 40 percent of firms with 1991 sales of over \$1 billion responded similarly. Further, there was not a major difference in the severity of problems perceived among companies involved in different sectors (e.g., chemicals, semiconductors, and biotechnology) or among those that file frequently and, thus, have more experience filing in Japan and those companies that file less frequently.

Some U.S. Firms Transferred Technology to Avoid Patent Problems

Eight percent of the responding companies said that in the past 5 years, they had transferred their own technology to Japanese firms solely to avoid patent problems in Japan. The great majority (83 percent) indicated that they did not enter into technology transfer agreements in Japan solely to avoid patent problems.

However, in cases where firms responded that they definitely did transfer technology to avoid patent problems, significant technologies were generally involved. For example, the patent counsel at a chemical firm told us that about 10 years ago, his company filed an application in Japan for a breakthrough plastic material. Soon after, a Japanese competitor filed applications surrounding his firm's invention with minimal, alleged improvements on the material. The Japanese company later filed many oppositions to the chemical firm's application. The patent is still pending due to the opposition proceedings. When the Japanese firm began to sell a product using technology in the U.S. firm's pending patent, the company felt compelled to negotiate a licensing agreement or face losing its technology without gaining compensation. The U.S. attorney told us that when his company faces patent problems in Japan, it is generally forced to license its technology.

Patent Problems in Japan Generally Had Little Adverse Impact on U.S. Firms

Although many companies reported great difficulty in obtaining patents in Japan, only 6 percent said that these problems had adversely affected their firm to a great extent. We conducted follow-up interviews with several companies to ask why they reported significant patent problems in Japan but said that these problems had not caused adverse effects. Some corporate officials noted that it is difficult to isolate the impact of patent problems in Japan from other problems their companies face

in trying to penetrate the Japanese market. They noted that they currently had few or no sales in Japan, and therefore, patent problems had not yet had any severe consequences.

Some companies that reported they were adversely affected by patent problems in Japan told us that these problems contributed to their difficulty in establishing market share in Japan. The following are examples:

- A U.S. patent attorney for an electronics firm told us that there is a distinct difference between the number of patents that his firm has obtained worldwide and the number it holds in Japan. This situation is problematic because his company is involved in negotiating many licensing agreements with Japanese companies. He explained that the low number of patents his firm holds in Japan puts his company in a weak bargaining position when it comes to negotiating these agreements. He believes that this weakened position effectively prevents companies like his from gaining a dominant position in Japan and allows Japanese companies to monopolize the field.
- An official from a small U.S. biotechnology firm said that start-up firms like his face particular problems in Japan. He told us that the narrow scope of patent rights his firm has received in Japan allows competitors to enter the market and produce similar products without incurring the substantial research and development costs that firms like his have incurred. As a result, the value of his patents is diminished.

SOURCES OF U.S. COMPANIES' PATENT PROBLEMS IN JAPAN

Most of the patent problems in Japan experienced by the U.S. firms that responded to the GAO survey relate to the long pendency period and the limited scope of protection that their inventions have received. While it is difficult to compare the pendency period in Japan and the United States because of fundamental differences in the two systems, it is clear that the pendency period in Japan is significantly longer than in the United States. In Japan, the typical patent takes an average of 6 to 7 years to be issued, compared with about 19 months in the United States.

The longer pendency period in Japan is due to several factors, including the pre-grant opposition system, which allows rival companies to raise objections to a proposed patent before it is granted. Another problem leading to delays is the fact that JPO receives twice as many patent applications per year as its U.S.

counterpart while employing far fewer patent examiners. As shown in chart 6 of our attachment, the ratio of patent applications filed to patent examiners is about four times higher in Japan than in the United States.

Further, several Japanese patent attorneys told us that the scope of patent protection granted by JPO is narrower than that granted by U.S. PTO. According to many patent experts, under Japanese patent practice, Japanese patent examiners restrict patent claim scope as much as possible, frequently limiting the scope of protection to the specific examples provided in the application. In contrast, U.S. patent applications generally include broad claims, which U.S. PTO will allow even if they are not based on specific examples.

Recent Measures to Improve Japan's Patent System

In the late 1980s, JPO began implementing measures to improve Japan's patent system, including introducing accelerated examination procedures and encouraging Japanese companies to file fewer applications. Under the U.S.-Japan Structural Impediments Initiative, the Japanese government has agreed to reduce patent pendency time and to increase the number of patent examiners. It has decreased the patent examination period by several months and has hired a small number of additional examiners. However, according to USTR, JPO is still inadequately staffed.

U.S. FIRMS' PATENT PRACTICES CAN AFFECT THEIR PATENT EXPERIENCES IN JAPAN

While some of the problems U.S. firms are experiencing in Japan stem from aspects of the Japanese patent system, others result from U.S. companies' patent practices in Japan. Both U.S. and Japanese patent attorneys told us that a number of problems encountered by U.S. firms are due to their limited knowledge of the Japanese patent system, translation difficulties, and poor communication between U.S. companies and their Japanese patent representatives. For example, some U.S. companies do not fully understand the Japanese system or make sufficient effort to work with and oversee their Japanese patent attorneys.

U.S. Applications Do Not Always Conform to Japanese Application Style

JPO officials told us that Japanese patent examiners frequently have difficulty understanding U.S. patent applications because of the style in which they are written. They explained that U.S. applicants tend to draft their Japanese applications based on U.S. patent law and format rather than on Japanese patent laws.

They noted that some U.S. patent applications fail to adhere to Japanese procedure; for example, in some cases they do not discuss the "advantageous effect" of the invention, or how it is superior to previously patented inventions, as is required by JPO.

U.S. Firms Often Submit Late Applications to Japanese Patent Attorneys

Several Japanese patent attorneys told us that their U.S. clients frequently submit applications for filing in Japan only a week or two before their priority year deadline.⁸ This practice is problematic because applications generally have to be translated into Japanese. In such cases, the attorneys divide the application among a number of translators and consolidate the application just before filing it by the deadline. They acknowledged that this practice often results in applications with numerous translation errors and poor overall coherence. This situation can be a significant problem because under Japanese patent law, translation errors cannot be corrected if such a correction is deemed to change the gist of the invention.

Poor Communication Between U.S. Firms and Their Japanese Patent Representatives

Some Japanese patent attorneys told us their U.S. clients do not clarify their expectations or give them clear instructions on how they would like their applications to be prepared. Moreover, some Japanese attorneys noted that their U.S. clients rarely tell them which of their applications they consider to be most important or give them any guidance on the scope of patent protection they expect to receive from JPO. A few U.S. patent attorneys said that their U.S. clients do not commit adequate time and staff to learning about the Japanese patent system.

On the other hand, the Japanese patent attorneys we interviewed did not appear to take a proactive role in filing applications for their U.S. clients. Most of the Japanese attorneys told us that they will give advice to their clients only when

⁸Under the Paris Convention for the Protection of Industrial Property, foreign applicants have 1 year after filing in their country of origin to file in member countries without losing their claim to novelty. As of 1993, 108 countries were party to the Paris Convention, including the United States, Japan, and most European countries. The convention requires each contracting country to grant the same protection to nationals of other contracting countries as it grants to its own nationals.

specifically asked. For example, one attorney told us that he will advise a client about how to get an application processed through JPO as quickly as possible only if he is specifically asked.

Some U.S. patent attorneys noted that the roles and duties of Japanese patent attorneys differ significantly from those of U.S. patent attorneys. The former will usually only translate and file an application in Japan, whereas the latter will generally take a more proactive role, rewriting an application to conform to the U.S. style and actively advising the client about filing.

Some U.S. Firms Have Adopted Strategies That Have Improved Their Patent Experience in Japan

To address these problems, some U.S. firms have adopted strategies that have improved their patent experiences in Japan. These strategies include establishing patent offices in Japan, translating their Japanese applications back into English to ensure their accuracy, and tailoring their applications to better conform to the Japanese application style.

U.S. FIRMS HAD PROBLEMS WITH PATENT ENFORCEMENT IN JAPAN

According to many patent experts, the Japanese legal system poses difficulties for a plaintiff in a patent infringement case that do not exist in the United States. These difficulties include the lack of discovery procedures,⁹ lengthy court proceedings, the courts' narrow interpretation of patent claims, and the adverse Japanese attitude toward litigation. According to several U.S. patent attorneys, these difficulties make it harder for a patent holder to enforce a patent in Japan than in the United States. About 20 percent of the firms that responded to our survey indicated they had experienced infringement problems in Japan but had not filed infringement suits in the Japanese courts. The most common reasons they cited for avoiding litigation in Japan included (1) the amount of time it takes to conclude cases and (2) the cost and difficulty of managing a suit in Japan.

Officials from some of the firms we interviewed said that the difficulties they had in enforcing their patents in Japan had adversely affected their companies. Of the 14 firms we

⁹Discovery refers to legal procedures that can be used by one party before a trial to obtain facts and information about the case from the other party in order to assist in preparation for the trial.

interviewed that had filed patent infringement suits in Japan, several corporate patent counsel told us that their firms had suffered from some of the problems associated with enforcing patents in Japan. The following are examples:

- A representative from a large chemical company said his firm had filed a patent infringement suit in Japan in 1980. After 10 years of litigation involving 30 hearings, there appeared to be no prospect of receiving a decision. The company representative said that the judge pressured his firm to settle the case for a very low royalty. The U.S. firm subsequently decided to drop the suit in exchange for a 0.5-percent royalty. According to the company official, another licensee was paying a 25-percent royalty for use of this patent.
- An official from another company told us that his firm had filed an infringement suit on a chemical process patent in Japan in the early 1980s. He said that three sets of judges and three sets of appeal examiners have been assigned to the case since it began. However, the biggest problem his firm has had in proving infringement has been the lack of discovery procedures. The suit is still ongoing.
- A representative from another company said his firm was forced to settle an infringement suit because by the time it reached trial, the patent term in Japan had expired.

PROPOSED CHANGES UNDER HARMONIZATION MAY ADDRESS U.S. COMPANIES' CONCERNS

The United States is currently involved in two sets of multilateral negotiations on intellectual property rights that may lead to significant changes in both the Japanese and U.S. patent systems. First, the United States has been negotiating a patent harmonization treaty through the World Intellectual Property Organization, an agency of the United Nations. Second, the United States has been involved in the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), which includes negotiations on intellectual property issues. The patent harmonization negotiations have been postponed until mid-1994 because of the change in administrations in the United States, and the Uruguay Round of GATT is in a stalemate.

Proposed Changes in the Japanese Patent System

JPO is considering a number of major revisions in its system within the context of the multilateral negotiations to harmonize patent systems. The changes being contemplated include

- allowing patent applications to be filed initially in English (and other languages) and to rely on the original language version when errors are found in the translations;
- completing patent examinations within 2 years; and
- eliminating the pre-grant opposition system.

The largest number of the U.S. companies responding to our survey (70 percent) said that the allowance of patent filing in English (and the ability to rely on the English-language original when errors are later found in the translations) would greatly improve their patent experience in Japan. Fifty-two percent of the companies felt that having JPO complete patent examinations within 2 years would greatly improve their patent experience in Japan. However, only 29 percent of the companies felt that the elimination of the pre-grant opposition system in Japan would improve their patent experience to a great extent.

Proposed Changes in the U.S. Patent System

The United States is also considering a number of changes in its patent system within the context of international patent harmonization, most notably (1) the adoption of a system in which the first inventor to file an application is entitled to receive the patent and (2) the publication of all patent applications after 18 to 24 months. About two-thirds of the companies that responded to our survey supported these changes in the U.S. patent system in the context of a harmonization treaty. Many of the companies we interviewed emphasized that they would not support changes in the U.S. patent system unless JPO agreed to make significant changes in its system under harmonization.

Japanese Patent Office Views on Harmonization

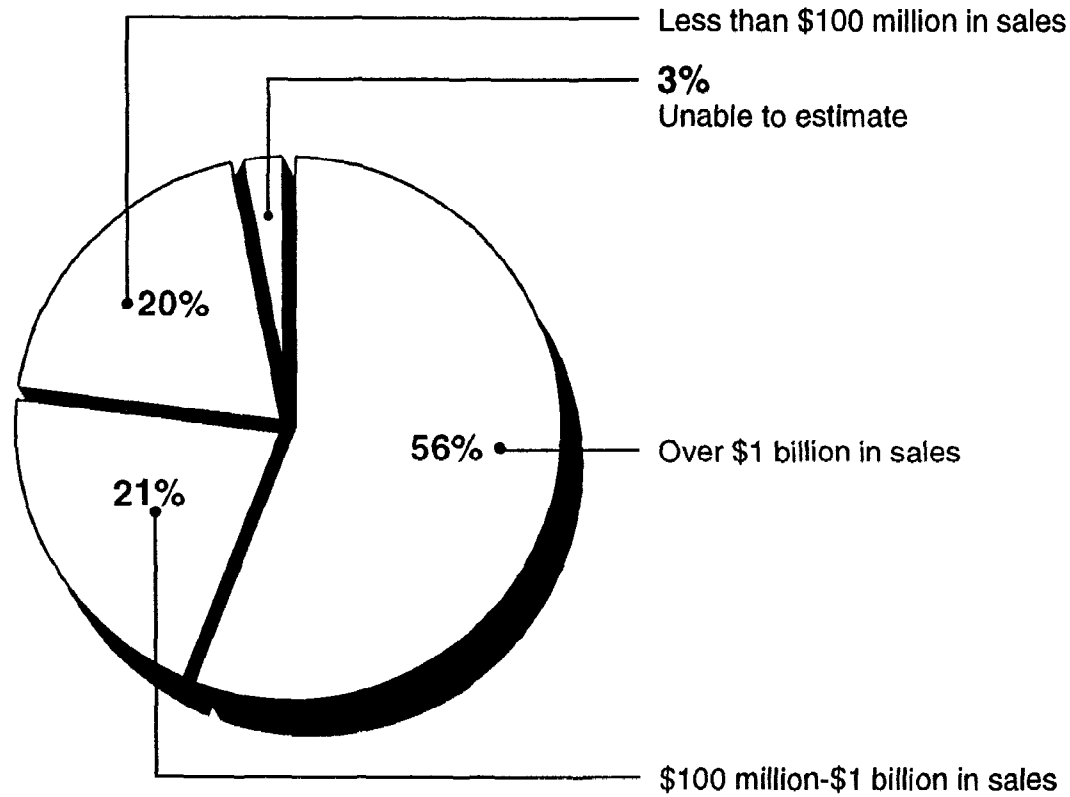
JPO officials told us they support most of the changes in the harmonization treaty and the proposed GATT agreement. However, they said that they would not make the changes in their system called for in the harmonization treaty, such as allowing the initial filing in English, unless the United States agrees to (1) adopt a first-to-file system and (2) publish patent applications before they are granted.

- - - - -

Mr. Chairman and Members of the Subcommittee, this concludes my prepared statement. I will be pleased to respond to any questions you might have.

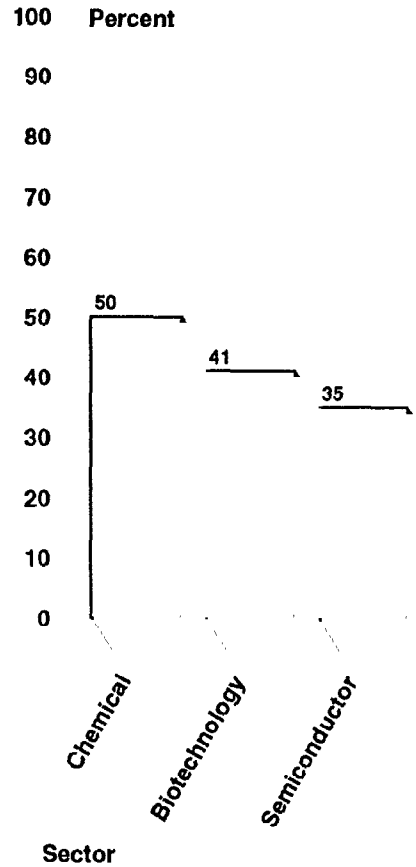
(483624)

GAO Size of Responding Firms, 1991 Sales



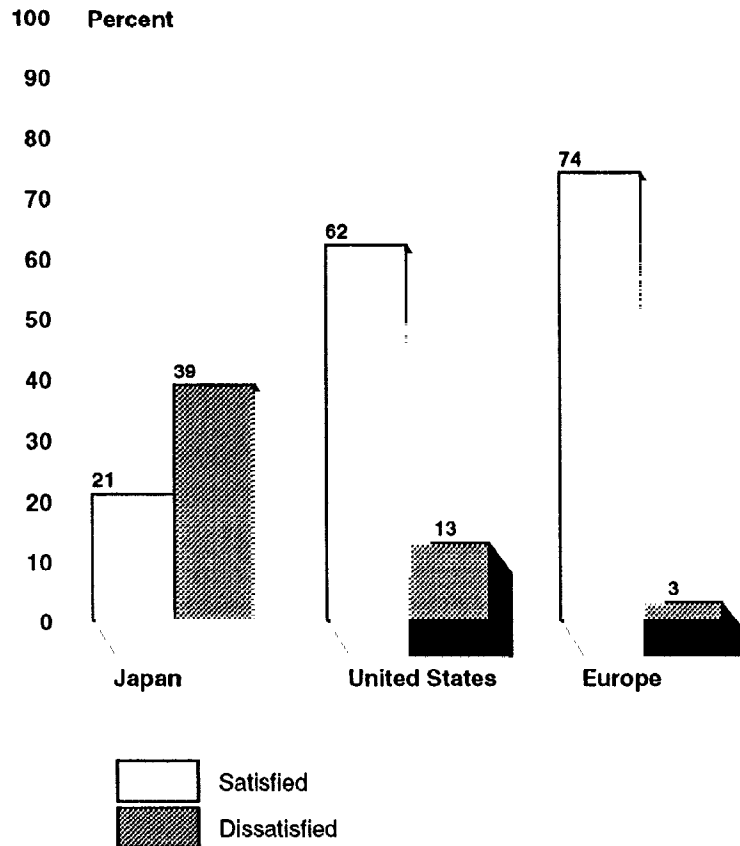
Source: GAO survey of U.S. firms.

GAO Current Filing Activity of Responding Firms, by Sector



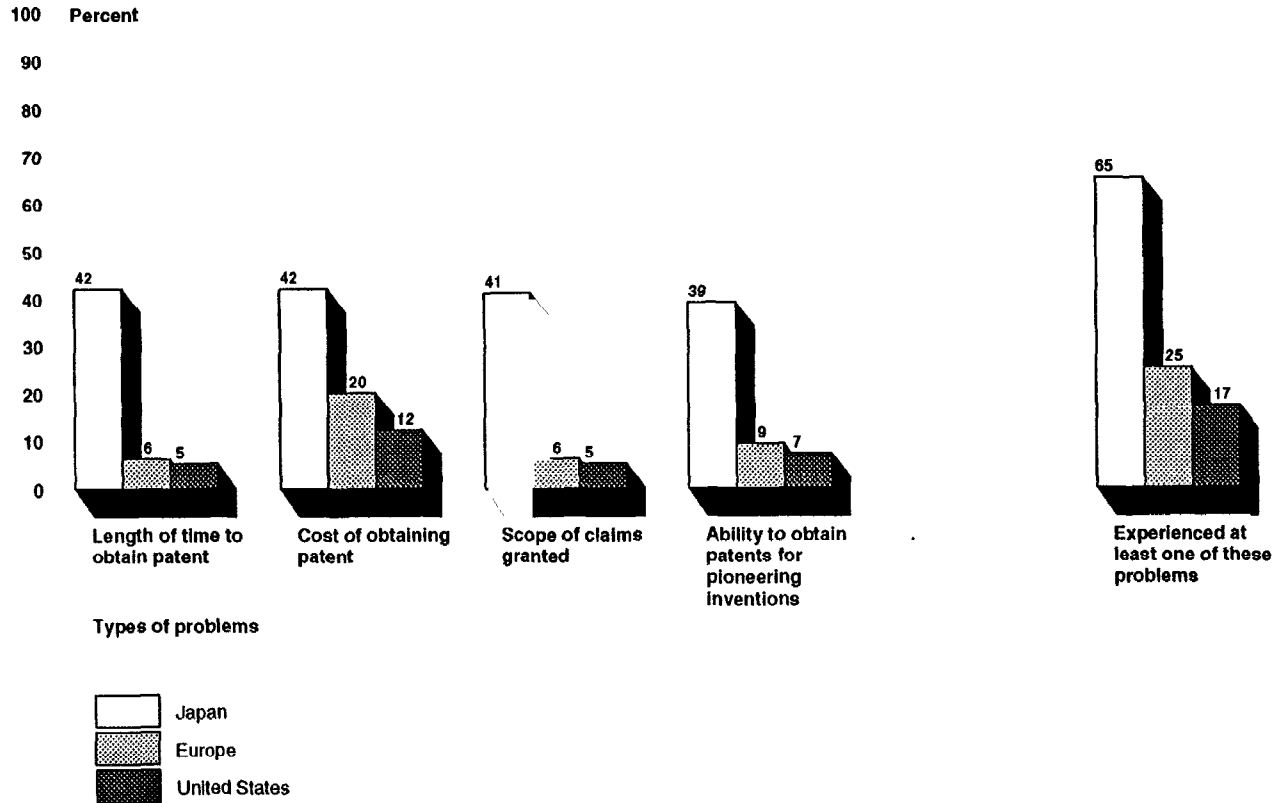
Source: GAO survey of U.S. firms.

GAO Firms' Overall Satisfaction With Patent Experience



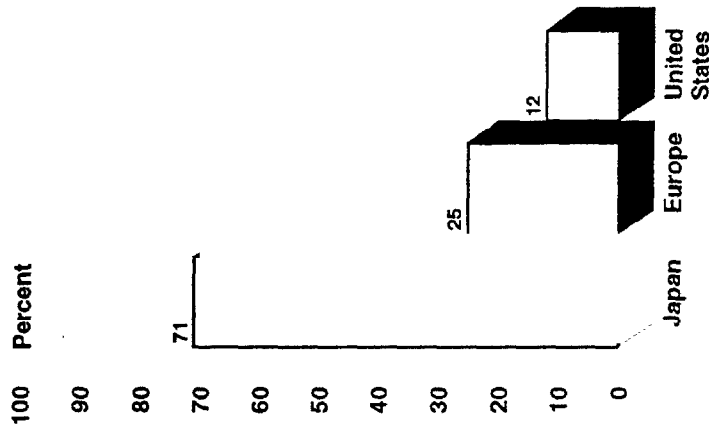
Source: GAO survey of U.S. firms.

GAO Firms With Great Patent Problems in Japan, Europe, and the United States



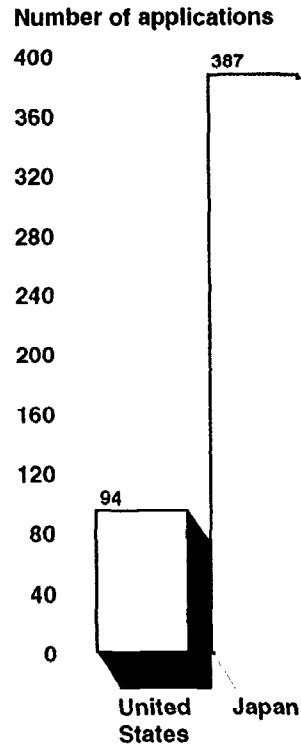
Source: GAO survey of U.S. firms.

GAO Firms That View Scope of Patent as Too Narrow



Source: GAO survey of U.S. firms.

GAO Number of Patent Applications Per Patent Examiner, 1991



Source: U.S. Patent and Trademark Office and Japanese Patent Office.

Ordering Information

The first copy of each GAO report and testimony is free. Additional copies are \$2 each. Orders should be sent to the following address, accompanied by a check or money order made out to the Superintendent of Documents, when necessary. Orders for 100 or more copies to be mailed to a single address are discounted 25 percent.

Orders by mail:

**U.S. General Accounting Office
P.O. Box 6015
Gaithersburg, MD 20884-6015**

or visit:

**Room 1000
700 4th St. NW (corner of 4th and G Sts. NW)
U.S. General Accounting Office
Washington, DC**

**Orders may also be placed by calling (202) 512-6000
or by using fax number (301) 258-4066.**

**United States
General Accounting Office
Washington, D.C. 20548**

**First-Class Mail
Postage & Fees Paid
GAO
Permit No. G100**

**Official Business
Penalty for Private Use \$300**
