

## PATENT PROSECUTION

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Unlike other sorts of intellectual property, patents come into existence only through the intervention of the government. The entity assigned the task of approving patent applications is an agency entitled the United States Patent and Trademark Office, or PTO. The administrative process through which an inventor acquires a patent from the PTO is known as prosecution is also the task assigned to most entry level patent lawyers. Even those engaged exclusively in patent litigation need to be thoroughly practice in the patent law may also find themselves more frequently approached by inventors wishing to obtain a patent than by patent proprietors who wish to enforce their intellectual property rights. For all these reasons, a basic grasp of prosecution mechanisms is elemental to an understanding of the patent law.

### § 19.1 Introduction to the Patent and Trademark Office

The Patent and Trademark Office, or PTO, is an administrative agency of the federal government. The PTO is organized within the Department of Commerce and is under the policy direction of the Secretary of Commerce. A Director, who is appointed by the President by and with the consent of the Senate, heads the PTO. The Secretary of Commerce also appoints a Commissioner of Patents with the specific responsibility of managing the PTO's patent operations. The PTO is currently housed in several office buildings in northern Virginia, near Washington, DC.

The examining corps itself is organized into various Examining Groups, which are further divided into Group and Individual Art Units. A Group Director heads each of the Examining Groups, while the various Group Units are directed by a senior official entitled the Supervisory Primary Examiner, or SPE. Front-line examiners are classified as either primary or assistant. Primary examiners possess considerable experience and are authorized to make decisions pertinent to patentability on an independent basis. Each primary examiner acts, in a sense, like a one-person patent office. Assistant examiners tend to be more recent hires who work under the

supervision of primary examiners. At the time this book went to press, the PTO employed over 3000 patent examiners.

Several additional entities within the PTO are worthy of note here. The PTO maintains a Board of Patent Appeals and Interferences. The Board hears appeals in panels of three, although sometimes the PTO convenes expanded panels to hear important cases. The PTO also maintains an Office of the Solicitor. The PTO Solicitor and his or her staff of attorneys represent the PTO in judicial proceedings, in particular appeals to the Federal Circuit by aggrieved applicants. Finally, the American Inventors Protection Act of 1999 established a Patent Public Advisory Committee. The Committee has nine voting members appointed by the Secretary of Commerce for three-year terms. The Committee meets to discuss policies, goals, performance, budget and user fees that bear upon the PTO's patent operations, and prepares an annual report.

The PTO is virtually unique among federal agencies in its licensing of practitioners. Before someone may prepare and prosecute patent applications on behalf of others, he must pass a difficult test administered by the PTO. The PTO waives the testing requirement for former patent examiners with sufficient experience. PTO registration and practice is open to lawyers and nonlawyers alike. Registered nonlawyers are termed patent agents.

## § 19.2 The Mechanics of Prosecution

### 19.2.1 Preparation of Applications

An inventor who wishes to obtain patent protection must first prepare an application. Although inventors may represent themselves before the PTO, the vast majority engage the services of a patent attorney or agent for this purpose. Applicants may choose to prepare either a provisional or nonprovisional application. Most inventors opt for nonprovisional, or regular applications. In this text, as in patent practice, a reference to a patent application should be taken as referring to a nonprovisional application.

An application must include a specification, at least one claim, and the proper filing fee. The filing fee as of January 1, 2003, was \$750. The Patent Act also requires that the applicant submit an oath or declaration stating that he believes himself to be the original and first inventor of the invention for which he seeks a patent. Drawings should be included when necessary. PTO regulations further provide that the elements of a patent application should appear in the following order:

- (1) the title of the invention;
- (2) a cross-reference to any related applications;
- (3) a reference to a microfiche appendix containing a computer program;

- (4) a brief summary of the invention;
- (5) a brief description of any drawings;
- (6) a detailed description;
- (7) at least one claim;
- (8) an abstract;
- (9) a signed oath or declaration; and
- (10) any drawings.

Inventors possess no duty to perform a prior art search prior to filing a patent application. However, if an applicant does know of a prior art reference that is material to the patentability of the claimed invention, he must disclose it to the PTO. Any prior art that the applicant wishes the PTO to consider should be listed in a so-called Information Disclosure Statement, or IDS. An IDS includes a copy of all patents, publications or other information submitted for consideration. References not available in the English language must be accompanied by a concise English explanation.

#### 19.2.2 Provisional Applications

Commencing on June 8, 1995, the PTO began to accept provisional patent applications. The fee associated with a provisional application is only \$160, considerably less than that required to file a nonprovisional application. Provisional applications also need not include claims, nor must they be accompanied by an inventor oath or declaration. Although provisional applications are less expensive and simpler to prepare than nonprovisional applications, they also provide fewer benefits. The PTO does not examine provisional applications. In addition, the PTO will consider the applicant to have abandoned a provisional application twelve months after it is filed.

The value of filing a provisional application is that the applicant may gain the benefit of its filing date. If an applicant files a nonprovisional application within twelve months of the provisional application, he may claim the benefit of the earlier filing date. Importantly, the pendency of a provisional application does not subtract from the term of any subsequent nonprovisional application does not subtract from the term of any subsequent nonprovisional application that matures into an issued patent.

An example may illustrate the workings of the provisional application scheme. Suppose that inventor Wyatt Wingfoot files a provisional application on December 1, 2000. Unless Wingfoot files a nonprovisional patent application by December 1, 2001, claiming the benefit of the earlier filing, the PTO will consider the provisional application to have been abandoned. If the PTO issues a patent to Wingfoot, that patent will expire on December 1, 2021—twenty years from the filing date of the nonprovisional application.

Provisional applications may not claim priority from any other application. An inventor could not, for example, file a series of provisional applications and claim the benefit of earlier provisional application filing dates. Amendments to the patent statute in 1999 clarified that if the twelve-month pendency period of a provisional application ends on a holiday, the applicant may file a corresponding nonprovisional application on the next working day.

### 19.2.3 Examination Applications

Once an inventor has completed a patent application, he should forward it to the PTO for further consideration. It is important to note from the outset that the prosecution of a patent at the PTO is an *ex parte* procedure. Members of the public, and in particular the patent applicant's competitors, do not participate in patent acquisition procedures. Moreover, PTO examiners do not possess a competing interest relative to the applicant. Instead, they assist the applicant in fulfilling the statutory requirements for obtaining a patent grant.

Once the PTO receives a patent application, PTO staff will forward it to the examining group bearing responsibility for that sort of invention. A supervisory primary examiner then assigns the application to an individual examiner. The examiner will review the application and conduct a search of the prior art. The examiner then judges whether the application properly discloses and claims a patentable invention.

The examiner must notify the applicant of her response to the application. Termed an Office Action, this response may either allow the application to issue or reject it in whole or in part. The Office Action must identify each claim, indicate whether it has been rejected or allowed, and offer the examiner's reason for her actions. If the claim is to be rejected, the examiner ordinarily must establish a *prima facie* case of unpatentability by a preponderance of the evidence.

If a rejection has resulted, the attorney will usually respond by either amending the claims or by asserting that the rejection was improper. Under the first option, the attorney introduces changes to the claims, typically augmenting the claim language in order to overcome a rejection founded on the prior art or lack of claim definiteness. Alternatively, the attorney may argue on the merits that the rejection was improper. The patent bar refers to this sort of substantive argument as a "traverse."

Applicant attempts to traverse an examiner's rejection often involve the use of affidavits. Two PTO rules describe the kinds of affidavits an applicant is most likely to file. Rule 131 affidavits, which declare dates of inventive activity such as conception or reduction to practice, are employed to circumvent rejections based upon 35 U.S.C.A. §§ 102(a) or (e). This treatise considers Rule 131 affidavits in § 16.3.1. Most of the other affidavits an applicant might wish to file at the PTO fall under Rule

132. This rule provides applicants with the broad ability to offer affidavits for consideration by the examiner. Rule 132 affidavits are typically prepared by technical experts, who express opinions or report laboratory tests that support the patentability of the claimed invention.

If the examiner remains unconvinced by the applicant's response, she will issue a second Office Action titled a "Final Rejection." The applicant ordinarily has three options: abandon the application, file a so-called "continuing application," or seek review of the examiner's actions by filing a petition to the Commissioner or appeal to the Board of Patent Appeals and Interferences. The latter two options are discussed below. Alternatively, if the examiner agrees that the application should mature into a granted patent, she will issue a Notice of allowance. The payment of an issuance fee will then result in a granted patent, along with the publication of its abstract, a selected drawing and its broadest claim in the PTO's Official Gazette. Along with the patent itself, the "prosecution history" or "file wrapper," comprising the application and all subsequently generated documents, is then made available to the public.

#### 19.2.4 continuing Applications

Continuation application practice exists out of the recognition that the path to a Final Rejection can be a short one. The filing of an ordinary application usually purchase the applicant a scant two Official Actions by the Examiner. Agreement often cannot be reached by this point, however, leaving the applicant with only the alternatives of abandonment of patent protection or the filing of an appeal. Under the so-called "file wrapper continuing" procedure, an applicant essentially purchases an additional period of prosecution. This time allows additional further dialogue between the applicant and examiner, with the goal of more accurate and proper claiming of a previously disclosed invention without the necessity of an appeal.

PTO practice also allows for so-called "continuation-in-part," or CIP applications. A CIP application repeats a substantial portion of an earlier application, but adds new matter not disclosed in the original application. Inventors sometimes file CIP applications in order to add improvements they have made to the invention after they originally filed a patent application. Claims that are dependent upon the latter-added new matter are entitled only to the filing date of the CIP.

#### 19.2.5 The Restriction Requirement and Divisional Applications

If one application concerns multiple independent and distinct inventions, the PTO may require the applicant to select one invention for further prosecution in that application. This procedure is known as a restriction. Although the applicant must elect only a single invention for further prosecution in the original application, he may opt to file so-called divisional applications relating to the remaining inventions. If the applicant pays the noted fees and follows the appropriate procedures, all applications

will continue to benefit from the filing date of the original application.

For example, suppose that inventor Kenneth Cline files a patent application on August 1, 2003. Cline's application discloses and claims both a novel type of dental floss and a heat-seeking missile. The PTO will likely impose a restriction requirement, forcing Cline to elect either the floss or the missile for further prosecution with regard to that application. Suppose Cline elects to continue prosecuting the missile. PTO procedures would then allow Cline to file a divisional application directed towards the dental floss. If both applications resulted in issued patents, they would each be accorded a filing date of August 1, 2003, and would ordinarily expire on August 1, 2023.

The restriction requirement serves several purposes. Easily the most important is the maintenance of the PTO fee structure. Otherwise, applicants would be sorely tempted to cut their prosecution costs by claiming several distinct inventions in one application. The restriction requirement also better enables the PTO to classify applications and to assign a qualified examiner to consider the application.

Restriction is not an absolute requirement. Section 121 of the Patent Act merely authorizes the PTO to compel applicants to elect a single disclosed invention. If the PTO opts not to do so, the resulting patent is valid even though it concerns more than one invention.

#### 19.2.6 Publication of Applications

The Domestic Publication of Foreign Filed Patent Applications Act of 1999 requires the PTO to publish pending patent applications eighteen months from the earliest filing date to which they are entitled. Significantly, if an applicant certifies that the invention disclosed in the application will not be the subject of a patent application in another country that requires publication of applications 18 months after filing, then the application shall not be published. This Act also creates provisional rights, equivalent to a reasonable royalty, owed from persons who employ the invention as claimed in the published patent application.

Some background into international and comparative patent law will assist understanding of this provision. First, there is no global patent system. Patent rights must be applied for and secured in each jurisdiction. In a world where technology knows no borders and international trade increasingly dominates, patent protection in a single country is often insufficient to protect inventors.

In recognition of these realities, the United States has long been a signatory of the Paris Convention for the Protection of Industrial Property. This treaty attempts to ease the burdens of maintaining patent rights in many jurisdictions. Among the chief provisions of the Paris Convention is the so-called priority right. The priority right allows patent applicants to benefit from an earlier filing date in a foreign country. So

long as an inventor files abroad within one year of his first filing and complies with certain formalities, his subsequent foreign filings will be treated as if they were made as of the date of his initial filing.

A second important background principle is that foreign patent offices ordinarily publish patent applications eighteen months after their first effective filing date. As an example, suppose that an inventor filed an application at the U.S. PTO on June 1, 2003. Suppose further that the inventor sought patent rights in Germany, which is also a signatory to the Paris Convention. If the inventor files a German patent application by June 1, 2004, his application will be treated as having been filed on the U.S. filing date of June 1, 2003. The German Patent Office will publish the German application on December 1, 2004, eighteen months after the first effective filing date to which the inventor is entitled.

In contrast to overseas regimes, the U.S. patent system traditionally maintained filed applications in secrecy. This regime advantaged patent applications because it allowed them to understand exactly what the scope of any allowed claims might be prior to disclosing an invention. Thus, if the applicant was wise enough to maintain the invention that was subject to a patent application as a trade secret, then he could choose between procuring the allowed patent claims or retaining trade secret status.

However, this secrecy regime has been perceived as imposing costs as well. Others might well engage in repetitive research efforts during the pendency of patent applications, unaware that an earlier inventor had already staked a claim to that technology. This arrangement also allows inventors to commence infringement litigation on the very day a patent issues, without any degree of notice to other members of the technological community.

The Domestic Publication of Foreign Filed Patent Applications Act of 1999 attempts to strike a middle ground between these competing concerns. U.S. patent applications will be published eighteen months from the date of filing, except where the inventor represents that he will not seek patent protection abroad. To discourage applicants from delaying their claims of foreign priority under the Paris Convention, the Act allows the PTO Director to consider the failure of the applicant to file a timely claim for priority as a waiver of such claim.

Sometimes inventors seek more robust patent protection in some countries than in others. This step may be taken for business reasons or due to differences in the patent or competition laws in varying jurisdictions. The Act therefore contains a provision allowing applicants to “submit a redacted copy of the application filed in the Patent and Trademark Office eliminating any part or description of the invention in such application that is not also contained in any of the corresponding application filed in a foreign country.” As a result, if an applicant seeks broader patent protection

in the United States than in other countries, only the more limited version of the application will be published here.

Proponents of the legislation have asserted that this change will allow foreign competitors to view proprietary technologies earlier than they previously did. Detractors have observed that the Domestic Publication of Foreign Filed Patent Applications Act of 1999 essentially does nothing. Because the legislation only makes available applications that were already published by foreign patent offices, no more or less information is made available at particular times than was before. The only advantage of this legislation would lie in convenience. Inventors may find the U.S. PTO more accessible than foreign counterparts, and the published applications would be available in the English language.

Detractors also note that this legislation might antagonize our trading partners. Inventors ordinarily file patent applications in their home jurisdictions first. Foreign filings are taken up later. As a practical matter, then, the only applications that will not be published under this statute are those filed by U.S. inventors. This domestic favoritism strikes against the principle of national treatment, a pledge the United States made when it signed the Paris Convention to treat domestic and foreign inventors equally. The Act's piecemeal publication regime hopefully marks a transition period in U.S. patent law, providing a first step towards an ecumenical publication system.

#### 19.2.7 Petition and Appeal

If an applicant reaches an impasse with the examiner, he may either appeal to the board of Patent Appeals and Interferences, or file a petition with the PTO Director. The form of review depends upon the nature of the issue in dispute. It is often said that substantive issues may be resolved through appeal, while procedural matters may be petitioned. Although this expression is more of a rule of thumb than a wholly accurate precept, as a general matter decisions of the examiner directly relating to the rejection of claims are appealable. The Board therefore considers such issues as statutory subject matter, utility, novelty, nonobviousness, enablement and claim definiteness.

In contrast, petitions involve such issues as expediting examination, requesting an extension of time, reviving an abandoned application or reviewing a restriction requirement. Petitions are usually resolved by Group Directors within the PTO. As compared with appeals practice, the pursuit of a petition within the PTO is much more informal and summary in character.

Dissatisfied applicants may ordinarily seek judicial review of appeals or petitions. If the applicant receives an adverse decision from the Board, he may opt to bring a civil action against the Director. This action must be filed in either the United States

District Court for the District of Columbia or the Court of Appeals for the Federal Circuit. The primary advantage of the former route is that the applicant may submit new evidence into the record, an option unavailable at the Federal Circuit. Appeals from suits lodged in the D.C. District Court go to the Federal Circuit as well. In contrast, an unsuccessful petitioner may seek judicial review through a number of mechanisms, including the Administrative Procedure Act, the All Writs Act, or a civil action against the Commissioner. Such actions may be brought in any United States district court, with the Federal Circuit as the court of second instance.

### § 19.3 Inventorship

A topic conveniently taken up alongside prosecution is that of inventorship. A patent application ordinarily must be made, or authorized to be made, by the inventor. Even if the inventor has assigned his invention to his employer or other entity, the inventor himself must ordinarily sign a declaration or oath stating that he believes he is the first inventor.

Inventorship determinations have many other consequences in the patent law. Inventors are presumptively the owners of a patent, so a defendant's successful assertion of joint inventorship serves as a fine infringement defense. In addition, inventorship determinations influence the definition of many of the categories of prior art under § 102. For example, paragraph (a) refers to prior knowledge or use "by others," example, paragraph (e) makes prior art out of patent applications filed "by another" in appropriate circumstances. Without knowledge of the inventors appropriately associated with the patent or application under consideration, these prior art categories cannot be properly defined.

Many patented inventions conceived and reduced to practice by a single individual. But in addition to individual inventors, joint inventors are also recognized by the patent statute. Amendments introduced in 1984 to § 116 specified that individuals may be joint inventors "even though (1) they did not physically work together or at the same time, (2) each did not make the same type or amount of contribution, or (3) each did not make a contribution to the subject matter of every claim of the patent." Although this negative definition is of some use in inventorship determinations, the statute does not specify affirmative technical contributions that cause an individual to rise to the level of an inventor. Courts agree that to qualify as an inventor, an individual must have contributed to the conception of the invention, and that the conceiver's status as inventor is not defeated if he employs the services of others to perfect the invention. But beyond these simple defining principles, inventorship cases tend to be highly fact specific and seldom provide firm guidance on resolving future disputes.

An exemplary decision is *Hess v. Advanced Cardiovascular Systems, Inc.* There, two surgeons named Simpson and Robert received a patent infringement suit, the defendant produced declarations by Hess asserting that he should have been named a co-inventor. It seems that while working for a tubing supply company, Hess had discussed the catheter project with Simpson and Robert. Some of the contributions of Hess made their way into the patented product following further development by Simpson and Robert.

Following the rejection of his assertion of co-inventorship, Hess appealed to the Federal Circuit. The appeals court agreed that the contributions of Hess did not rise to the level of an inventor. According to the Federal Circuit, the contributions of Hess were known to the art and available on the marketplace. Hess was seen as no more than a skilled salesman who explained how his employer's products could be used to meet the technical requirements of Simpson and Robert.

The Federal Circuit does not provide an exhaustive explanation of the technical contributions of Hess towards the catheter project. Still, the outcome of the opinion appears subject to doubt given that Simpson and Robert had themselves stated that Hess was responsible for significant portions of the patented catheter. One supposes that although Simpson and Robert were superlative surgeons, their skills in the art of plastics manufacturing were less developed. It seems unlikely that the catheter project could have gotten off the ground without Hess, who should have been valued as more than merely a walking, talking catalogue of the prior art. The reader of the Hess opinion senses that the Federal Circuit distrusted Hess's tardy claims of inventorship and questioned the standing of a rather humble sales engineer against the qualifications of two highly skilled surgeons.

Some hypotheticals further illustrate the implications of Hess. Suppose that Professor Gizmo asks her laboratory technician, Steve Schlep, to combine certain chemicals in such a way as to form Compound X. Gizmo further asks Schlep to determine, using standard testing methodologies well known in the field, whether or not Compound X functions as an adhesive at high temperatures. If Schlep merely follows Gizmo's instructions, making no inventive contribution to the project, then Schlep will not qualify as an inventor even though Schlep was literally the first person to synthesize Compound X. The courts have long held that inventors may employ others to help them achieve a reduction to practice without making co-inventors out of their assistants.

In contrast, suppose that Gizmo had the idea of Compound X but did not possess an operative way of synthesizing it. Upon explaining her idea to Schlep, Schlep discovers a new, nonobvious way to formulate Compound x. Or, alternatively, suppose that Gizmo tells Schlep precisely how to fabricate Compound X, but she has

no idea to what uses the new compound can be put. After trial and error at the laboratory bench, Schlep identifies an unexpected application of Compound X—say, as a depilatory. In either of these alternative hypotheticals, Schlep would likely qualify as a co-inventor. He has made an inventive contribution to the development of Compound X and should be named on any patent instrument that claims that invention.

As inventors named in a patent often receive benefits ranging from financial rewards from their employers to recognition from the technical community, intracorporate disputes over inventorship are not uncommon. Patent attorneys must often demonstrate persistence and tact in order to ensure that the appropriate individuals are named in a given patent. They should also be aware of corporate technical disclosure forms and other documents that label a person as the “inventor,” for such determinations are often made without awareness of the strictures of the Patent Act.

#### § 19.4 Abuses of the Patent Acquisition Process

Experience has taught us that the patent prosecution system is susceptible to abuse by applicants. The judiciary has responded by developing various doctrines to curb the worst of these misuses. The most significant of these doctrines, which concern inequitable conduct and double patenting, are considered in turn below.

##### 19.4.1 Inequitable Conduct

Because the usual advantage of an adversarial system do not attach to the ex parte prosecution process, the patent system relies to a great extent towards the PTO. However, the applicant’s obligation to proceed in good faith may be tempered by the great incentive applicants possess not to disclose prior art or to misrepresent facts that might deleteriously impact their prospective patent rights. The patent law therefore imposes a draconian penalty for those who stray from honest and forthright dealings with the PTO. Under the doctrine of inequitable conduct, if an applicant intentionally misrepresents a material fact or fails to disclose material information, then the resulting patent will be declared unenforceable.

Most inequitable conduct cases involve an applicant’s knowing failure to disclose material prior art to the PTO. But numerous other circumstances have also caused courts to find inequitable conduct and judge the asserted patent unenforceable. These include deceitful statements in affidavits, the submission of misleading test results, and dishonest inventor’s oaths. Although this doctrine applies to a number of factual circumstances, the case law unfailingly requires two elements to exist before a court will decide that the applicant has engaged in inequitable conduct. First, the patentee must have misrepresented or failed to disclose material information to the

PTO in the prosecution of the patent. Second, such misrepresentation must have been intentional.

#### 19.4.1.1 Materiality

A misrepresented or undisclosed fact must be “material” to serve as the basis for inequitable conduct. When deciding whether particular information is material or not, the courts have most often relied upon the definition that occurs in PTO Rule 56. Entitled “Duty to Disclose Information Material to Patentability,” Rule 56 is a basic provision governing ethical representation of inventors at the PTO. From 1977 to 1992, Rule 56 provided that “information is material where there is a substantial likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent.” Under the new Rule 56 promulgated by the PTO in 1992, a reference is judged material if it either (1) establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or (2) is inconsistent with a position taken by the applicant.

The Federal Circuit’s opinion in *Molins PLC v. Textron, Inc.* considers the materiality standard under the earlier version of Rule 56. There, the U.K. enterprise Molins filed patent applications relating to a batch machining process in many countries, including the United States. During prosecution overseas, several foreign patent examiners discovered the Wagenseil prior art reference. A member of the Molins patent department, Whitson, concluded that Wagenseil anticipated the batch process claims. However, Whitson never informed Molin’s U.S. patent representative about the Wagenseil reference. As a result, the PTO examiner did not know of Wagenseil during the original prosecution. Although Molins eventually abandoned all of its foreign applications, it obtained two U.S. patents pertaining to the batch process.

Following Whitson’s retirement, his successor, Hirsch, reviewed the U.S. patent files and realized that the PTO had not been informed of Wagenseil. Hirsch quickly filed a prior art statement that listed the Wagenseil reference. Later, based in part on Wagenseil, a competitor filed a reexamination request directed towards one of Molins’s patents. Although the PTO granted the request, none of the claims were rejected based upon Wagenseil during the reexamination. Seemingly emboldened by this successful outcome, Molins then filed an infringement suit against several competing corporations.

The trial court easily found that Molins had violated its duty of candor with the PTO. The court concluded that Whitson had engaged in inequitable conduct by failing to disclose Wagenseil to the PTO even though he knew it was highly material. As a result, both of Molins’s patents were unenforceable. Following an appeal, the Federal Circuit affirmed. The court agreed that the Wagenseil reference was material under the “reasonable examiner” standard. According to Judge Lourie, extensive evidence

demonstrated that many foreign had amended many considered Wagneseil significant; that Whitson had amended many claims in light of rejections based upon Wagneseil overseas; and that Whitson had indicated during several foreign patent examinations that Wagneseil was the most pertinent reference of which he was aware.

The court did recognize a significant problem with the application of the “reasonable examiner” standard to these facts. One PTO examiner had actually considered the Wagneseil reference during reexamination. The result of that viewing was that the examiner did not call for a single change to any of Molins’s patent claims. However, Judge Lourie noted that the materiality standard is not concerned with whether the particular examiner assigned to the application at issue believed the reference to be important. According to the court, materiality instead rested upon the view of a hypothetical, reasonable examiner. More persuasive was the court’s point that a reference is not immaterial simply because the claims are eventually deemed to be allowable over that reference.

Molins strongly suggests that patent applicants should err on the side of disclosure when considering whether or not to submit a reference to the PTO. An important point mentioned, but not further discussed in Molins, is that applicants have no duty to disclose an otherwise material prior art reference if the reference is cumulative to, or less material than, reference already before the examiner. Applying this concept in *Halliburton Co. v. Schlumberger Technology Corp.*, the Federal Circuit overturned the district court’s holding of inequitable conduct by reasoning that references discovered by the examiner were more pertinent to the claimed invention than those that were not cited. Although this opinion appears to allow examiner competence to excuse an unscrupulous applicant, the courts have reasoned that cumulative prior art adds nothing to what is already of record and therefore need not be disclosed.

#### 19.4.1.2 Intent

An applicant’s misrepresentation or nondisclosure of a material fact is a necessary, but not sufficient, component of a finding of inequitable conduct. The applicant must also have affirmatively sought to mislead the PTO. In *Kingsdown Medical Consultants, Ltd. V. Hollister, Inc.*, the Federal Circuit overturned earlier decisions that had found inequitable conduct based upon grossly negligent behavior by the applicant. According to the en banc court, the involved conduct, viewed in light of all of the evidence, must indicate sufficient culpability to require a finding of an intent to deceive.

In the *Kingsdown* case, *Kingsdown* was in the midst of prosecuting an application directed towards a two-piece ostomy appliance when *Hollister* introduced a similar product to the marketplace. *Kingsdown* opted to file a continuation

application in order to obtain claims that tracked Hollister's device. Unfortunately, when Kingsdown took the ministerial step of copying its lengthy claims from the original to the continuation application, it accidentally transferred an earlier, unamended version of one of the claims into the continuation. Once the patent found inequitable conduct on two grounds. First, the court concluded that Kingsdown's miscopying evidenced gross negligence, sufficient to support a finding of inequitable conduct. Second, the district court held that Kingsdown's tactics in seeking tight claim coverage against the Hollister device evidenced an intent to deceive.

The Federal Circuit reversed on appeal. The court noted that even if level of scienter was insufficient to support a conclusion of inequitable conduct. Nor does an applicant's effort to obtain claims that read upon a competitor's product constitute deceit, whether the applicant first learned of that product during or prior to prosecution. The court instead held that challenged conduct would be judged inequitable only where all the circumstances indicate that the applicant affirmatively maintained a fraudulent intent towards the PTO.

Courts seldom encounter direct evidence of an applicant's intent to deceive. They must instead infer the applicant's mental state based on circumstantial evidence. A pattern of deliberately withholding or mischaracterizing information would be most probative of fraudulent intent, particularly if the patentee cannot provide a believable, good faith explanation for its repeated conduct. Some judicial opinions also speak towards a balancing of materiality and intent. In cases where an applicant knowingly withheld prior art references, for example, courts have reasoned that the more material the references to the patentability of the claimed invention, the more likely the applicant intended to deceive the PTO.

Suppose, for example, that Dr. Nefarious files an application at the PTO directed towards a new machine for making dental floss. Nefarious does not disclose an article published two years earlier in the well-known journal *Fiendish Fluoridators Fortnightly*. Because that article includes many of the elements claimed in the patent application of Nefarious, it is highly material. Although no direct evidence of the intent of Nefarious may exist, a court would put great weight on the fact that Nefarious had cited the article in earlier writings, had mentioned the article in a speech, and had even written a letter to the editor of *Fiendish Fluoridators Fortnightly* discussing the article in question. In such an extreme case, a court could readily assume that Nefarious was very much aware of the importance of the journal article and harbored an intent to deceive the PTO.

#### 19.4.1.3 Reconsidering Inequitable Conduct

The doctrine of inequitable conduct has suffered its fair share of criticism over the years. One perceptive commentator has questioned whether the patent system

benefits from striking down otherwise valid patents that happen to have been inequitably procured. If, for example, the applicant knowingly withheld a pertinent prior art reference, then the resulting patent is likely invalid due to the requisites of novelty and nonobviousness. But if that patent would stand over the reference, we do well to question whether the applicant has engaged in conduct worthy of condemnation. In such circumstances even the inequitable inventor has obtained a patent that objectively functions as well as any other.

The Federal Circuit has also described inequitable conduct as “an absolute plague” upon patent litigation. In recent years accused infringers seem to bring charges of inequitable conduct in every case. The strategic advantages of doing so are almost too good to resist: Not only does inequitable conduct effectively place the inventor and her patent attorney on trial, it also provides a mechanism for discovery of documents otherwise protected by the attorney-client privilege and work product doctrine. Despite these telling criticisms, the Federal Circuit has remained a vigorous enforcer of the patent applicant’s duty of candor during prosecution.

#### 19.4.2 Double Patenting

The patent system envisions the issuance of only a single patent per invention. Allowing inventors to obtain multiple patents on a single invention could disturb the integrity of the twenty-year patent term and present accused infringers with the possibility of paying multiple damages for a single infringing act. The following example illustrates these difficulties.

Suppose that inventor Carla Complement files a patent application claiming a photocopier on March 21, 2000. That patent issues as U.S. Patent No. 6,789,123 on August 1, 2002. On July 31, 2003, Complement files a second patent application. Complement’s 2003 application contains a disclosure and claims identical to that of the '123 patent. The harms that might result from the issuance of Complement’s 2003 application as a separate patent are apparent. The '123 patent will expire on March 21, 2020, but the patent resulting from the 2003 application would provide complement with over three years of additional patent protection. Further, if Complement brought suit against another, that individual would face the possibility of twofold infringement liability.

Despite the conspicuous drawbacks of double patenting, the prior art definition provided by § 102 contains no express statutory mechanism for addressing this abuse of the patent acquisition process. Many activities must be performed by another to be patent-defeating under § 102, including the secret prior art established by § 102(e). Only the statutory bars of § 102(b) and (d) generate prior art from the applicant’s own work. Thus, in the absence of other activities that disclose the invention to the public, an inventor could extend the statutory protection period through a simple

policy: file an application no later than one year after an earlier, related application has matured into a patent.

As a result, the courts have been left to develop the law of double patenting on their own. They have identified two sorts of double patenting. The first kind, which occurs when both patents have claims of identical scope, is known as “same-invention double patenting.” If the claims of the later patent could not be literally infringed without literally infringing the claims of the earlier patent, then a court will strike down the later patent for double patenting. Courts have sometimes based same invention doubling patenting on § 101, which allows an applicant to “obtain a patent” on an invention. As a result, this doctrine is sometimes referred to as statutory double patenting.

When two patents do not claim the identical invention, but instead obvious variations of each other, the later patent will also be invalidated due to so-called “obviousness-type double patenting.” In contrast to same invention double patenting, judges may employ prior art references in combination with the claims of the earlier patent to determine whether the later patent claims an invention that would have been obvious to those of skill in the art. Because no provision of the Patent Act concerns obviousness-style double patenting, courts sometimes refer to this doctrine as nonstatutory double patenting.

Double patenting may occur when the same inventor obtains two issued patents directed towards the same inventive concept. However, the PTO also considers the double patenting doctrine during prosecution. As a result, an applicant may face a double patenting rejection based upon either an granted patent or another pending application. In *re* Vogel, one of the meatier decisions in the patent law, was such a case. There the PTO imposed a double patenting rejection based upon a granted patent that claimed a method of preparing pork products for long term storage. Claims 7 and 10 of Vogel’s pending application performed an analogous process applied to meat, while claim 11 was directed towards a similar process on beef products.

Vogel appealed to the CCPA, contending that the double patenting rejection was improper. The court first considered whether this was a case of same invention double patenting. The court thought not: the patent claims concerned pork, while the claims of Vogel’s application recited beef and meat. Beef is not the same as pork, and many processes that would infringe claims 7 and 10 of the application would not infringe the patented claims, which were limited to pork.

The CCPA then turned to obviousness-style double patenting. Turning first to claim 11 of Vogel’s application, the court found no evidence of record that beef and pork exhibited similar characteristics for purposes of long term storage. With nothing to suggest that beef and pork were patenting rejection. The CCPA next considered

whether claims 7 and 10 were appropriately rejected for double patenting. The court observed that the term “pork” was literally covered by the term “meat.” As a result, allowance of Vogel’s pending application would effectively extend the term of the already patented pork preparation process. The court therefore affirmed the PTO’s double patenting rejection with respect to those claims.

The reader of Vogel obtains the fortunately rare privilege of simultaneously learning about the making of both law and sausages. But beyond being tempted into vegetarianism by the rather graphic claim language in that case, most readers of Vogel find it easy to scoff at the court’s reasoning regarding the relationship of beef and pork. Most cooks would freely substitute beef for pork in the majority of recipes if no pork was on hand. As well, the meat packing industry likely knew the spoilage characteristics of both beef and pork quite well. Still, the PTO always possesses the burden of presenting evidence that opposes patentability, and its failure to present proof may well have allowed Vogel to avoid a double patenting rejection at the CCPA.

Vogel also reminds us that double patenting focuses upon the claims. The double patenting doctrine rejects attempts of an inventor to claim the same inventive concept twice. If a later patent discloses but does not claim the same or similar invention as an earlier patent, then double patenting issues do not arise. Section 121 of the Patent Act also provides that “[t]he validity of a patent shall not be questioned for failure of the Director to require the application to be restricted to one invention.” The practical effect of this language is that the double patenting doctrine does not apply when the two patents as issue resulted from a PTO restriction requirement.

Courts have authorized the use of a “terminal disclaimer” to overcome obviousness-style double patenting rejections. A terminal disclaimer causes patent granted to a given inventor to expire on the same date as an earlier patent. By arranging for all related patents to elapse at the same time, the patentee overcomes the concerns of extended patent protection for the same inventive concept. The terminal disclaimer technique allows inventors to file applications claiming obvious variants on a single inventive idea, in order to create prior art against other applicants and to obtain a tight fit for potential infringements.

Patents that issue due to terminal disclaimers may be subject to abuse. Suppose that the owner of terminal disclaimers – all but one valid due to the filing of terminal disclaimers – sells one patent each to different, unrelated entities. This scenario would potentially subject an accused infringer to multiple infringement suits based on patents to the same invention. Such concerns led the PTO to mandate that terminal disclaimers include a provision that any subsequent patent shall be enforceable only while it is commonly owned with the application or patent which formed the basis for the double patenting rejection.

Terminal disclaimers may not be used to overcome same invention double patenting rejections. The courts have reasoned that the use of terminal disclaimers in overcoming an obviousness-style double patenting is in the public interest because it encourages the disclosure of additional developments, the earlier filing of applications and the earlier expiration of patents. Because none of these benefits appears to flow when two patents claim the identical subject matter, neither the courts nor the PTO will allow the use of terminal disclaimers in such cases.

## 19.5

### Duration of Rights

Once the PTO issues a patent, that patent enjoys an effective term established by the statute. As this book goes to press U.S. patent law is in a transition period regarding patent term. For patents resulting from applications filed after June 8, 1995, the patent term is ordinarily twenty years from the date the patent application was filed. For patents issued prior to June 8, 1995, as well as for patents results from applications pending at the PTO as of that date, the patent endures for the greater of twenty years from filing or seventeen years from grant.

Although the life of the patent is measured from the filing date, the patentee gains no enforceable rights merely by filing a patent application. These rights accrue only at such time that the patent issues, and include the power to enjoin infringers and obtain an award of damages. If the application was published in accordance with the Domestic Publication of Patent Applications Abroad Act of 1999, then the patentee also obtains provisional rights equivalent to a reasonable royalty. Although provisional rights extend from the time the application was published, the patentee may not assert them until the patent issues.

The term of U.S. patents was traditionally measured from the date the PTO issues the application. The Act of 1790 allowed the issuance of patents ‘for any term not exceeding fourteen years.’ The Act of 1861 increased this term to ‘seventeen years from the date of issue.’ On June 8, 1995, the U.S. patent system shifted to a term based upon the filing date. Transitional provisions ensured that patents in force on June 8, 1995, as well as patents that issued from applications filed prior to that date, enjoyed the longer of the two terms; seventeen years from issuance or twenty years from filing.

Although the distinction between the two regimes may no appear to loom particularly large, significant consequences flow from United States adoption of a twenty-year patent term measured from the filing date. Prior to June 8, 1995, the filing of continuing applications did not affect the length of the effective patent term. Once the patent issued, it obtained a seventeen-year term. Currently, the term of a

patent is measured as twenty years from the earliest filing date. The new term scheme puts an end to so-called 'submarine' patents which plagued particular industries in the United States. Submarine patents emerged from a series of concealed continuation applications, sometimes filed thirty or more years earlier, to 'torpedo' industries that had developed in ignorance of the pending applications.

Three significant qualifications may alter the basic twenty-year term. First, the term of a patent may be extended under 156, a provision of the Hatch-Waxman Act. This complex statute authorized increased patent terms on inventions that have been subject to a lengthy premarket approval process under the Federal Food, Drug and Cosmetic Act.

Second, enjoyment of the full patent term is subject to the payment of maintenance fees. Currently, a patent expires after four, eight, or twelve years if maintenance fees are not timely paid on each occasion. As of January 1, 2003, the amount due are \$890 by the fourth year, \$2,050 by the eighth year, and \$3,150 by the twelfth year. As only about thirty-three percent of the patents issued in the United States are maintained beyond their eleventh year, maintenance fees effectively dedicate a great deal of patented technology into the public domain.

Finally, the Patent Term Guarantee Act of 1999 provides certain deadlines that, if not met by the PTO, results in an automatic extension of the term of individual patents. The most significant of these deadlines appear to be fourteen months for a First Office Action and four months for a subsequent Office Action. In addition, the prosecution of an original patent application must be complete within three years of the actual U.S. filing date, with exceptions granted for continuing applications and appeals. As might be expected, each day of PTO delay beyond these limits results in an additional day of patent term. The Director is charged with calculating any patent term extensions that might result from missed PTO deadlines.

## 19.6. Post-Grant Proceedings

The Patent and Trademark Office's involvement in the United States patent system does not necessarily end when it formally grants a patent. The law has long recognized the numerous possibilities for mistakes, ranging from minor typesetting errors to significant substantive flaws, to make their way into the patent instrument. The patent statute thus provides the PTO with several different mechanisms for correcting the inevitable. The magnitude of the mistake largely determines which procedure will be employed.

### 19.6.1 Certificates of Correction

The least onerous and most frequently used of these procedures is a certificate of correction. Patentees employ a certificate of correction to address minor typographical

errors. Such errors typically include misspelled words, omission of the name of an assignee or the printing of a claim in original rather than amended form. Mistakes incurred through the fault of the PTO may be corrected free of charge. Most of these mistakes occur during the formatting and typesetting of the formal copy of the patent instrument. Otherwise, the petitioner must submit a fee along with proof that the error occurred in good faith.

The PTO may also issue a certificate correcting the inventors named on a particular patent instrument. When the correct inventors are not named in an issued patent, through error and without deceptive intent, the parties and assignees may petition the PTO to amend the patent. Provided that a sufficient factual showing is made, the PTO will issue a certificate correcting the error in inventorship.

#### 19.6.2 Disclaimers

The Patent Act provides for two sorts of disclaimers. Applicants employ the first kind, terminal disclaimers, in order to avoid double patenting rejections. Terminal disclaimers are discussed in section 19.4.2 of this Chapter. Patentees file the second kind, statutory disclaimers, in order to eliminate invalid claims from otherwise sound patents. A statutory disclaimer effectively cancels the claims from the patent. Failure to file a statutory disclaimer does not render the remaining claims of a patent invalid or unenforceable. The Patent Act merely provides that a patentee may not recover costs for a litigation unless he filed a disclaimer of any invalid claims with the PTO prior to commencing litigation.

Suppose, for example, that Carol Kinkead is the proprietor of U.S. Patent No. 6,797,617. As issued, the '617 patent contained ten claims. Suppose that Kinkead brought suit against a competitor. During this litigation, the court held that claim 1 of the '617 patent was invalid due to obviousness. If Kinkead wished to commence a second litigation, she should file a statutory disclaimer of claim 1 at the PTO. Taking this step prior to filing the second suit would allow her to recover costs from the defendant should she prevail.

#### 19.6.3 Abuses of the Patent Acquisition Process

A patentee may employ the reissue proceeding to correct a patent that he believes to be inoperative or invalid. In contrast to certificates of correction or disclaimers, which are quite limited in scope, reissues allow for a comprehensive dialogue between the patentee and examiner. The reissue proceeding thus provides a powerful mechanism for preparing a patent for litigation or licensing negotiations.

##### 19.6.3.1 The Error Requirement

In order to be reissued, a patent must be defective due to an “error without any deceptive intention.” Towards this end, the PTO requires that the reissue applicant file a reissue oath or declaration stating at least one error that forms the basis for reissue.

Although the term “error” appears straightforward, it has developed into a term of art in the patent law. Not every sort of mistake constitutes an error within the meaning of the reissue statute.

The Patent Act explains that reissues may be obtained where the patent contains “a defective specification or drawing,” or if the patentee claimed “more or less than he had a right to claim.” In practice, most reissue proceedings amend the patent claims. For example, the patentee might recognize that the claims contain an ambiguity that might render them invalid under the definiteness requirement of § 112, ¶ 1. alternatively, subsequent to the issuance of a patent, the patentee may learn of prior art that would invalidate the claimed invention due to anticipation or obviousness. By incorporating additional limitations into the claim through reissue, the patentee may yet be able to define a patentable advance over the prior art.

Suppose, for example, that Dr. Tinker obtains a patent claiming a new radiator cap on December 1, 2003, based upon an application filed on August 12, 2000. While Dr. Tinker is reviewing some back issues of the Radiator Review monthly magazine, she discovers an article in the May 1996 issue that describes a radiator cap almost identical to her claimed invention. Tinker realizes that the magazine article counts as prior art under § 102(b)—it was published more than one year before her filing date—and that it might render her invention obvious within the meaning of § 103. Because her patent already issued and administrative proceedings with the PTO have closed, Tinker cannot simply telephone the PTO and ask an examiner to narrow the scope of her claims. Tinker may wish to file a reissue application, however, in order to add further language of restriction to her patent’s claims. Tinker may be able to distinguish successfully her patented radiator cap from the prior art and turn an invalid patent into a valid, albeit more circumscribed one.

A third possibility is that the patentee claimed less than he had a right to claim. In such cases, although the written description of the patent may cover particular commercial embodiments of the disclosed invention, the patent claims were not drafted to read upon these embodiments. Consider the example of Herr Knies, who hypothetically obtains a patent concerning a method of brewing beer. Assume that the specification of the Knies patent includes two “working examples” discussing the brewing of larger-and pilsner-style beers. However, the claims of the Knies patent are specifically restricted to the use of larger-style beer, then the Knies patent would not literally cover his competitor’s activities. Nor would Knies be able to employ the doctrine of equivalents against Goldman, because under the “public dedication doctrine” subject matter that is disclosed, but not claimed in a patent is disclaimed. Knies may be able to pursue a so-called broadening reissue, however, in order to broaden the scope of his claims. Broadening reissues are subject to special restrictions

described in § 19.6.3.3 below.

Although the grounds listed in the statute appear broad, the Federal Circuit has stated on numerous occasions that reissue is not a universal curative for all patent prosecution problems. Some flaws are simply too grave to be corrected through the use of a reissue proceeding. These include a specification that does not fulfill the requirements of § 112; when the applicant has engaged in inequitable conduct during the original prosecution; and when the invention has been entirely anticipated under § 102. None of these sorts of mistakes constitutes an error cognizable by the reissue statute.

The courts have also specified that other sorts of mistakes are uncorrectable simply because they are not the sort the reissue statute was designed to remedy. Jurists have uniformly reasoned that if the error requirement did not serve as a gatekeeper, unlimited access to reissue would diminish incentives for applicants to get things right in the initial prosecution. But beyond this fundamental principle of administrative efficiency, the courts have lacked mechanisms for determining what sort of conduct amounts to an error within the reissue statute. The result has been some varying case law and fine reasoning about the precise scope of the error requirement.

Exemplary of this uncertainty is the 1989 opinion of the Federal Circuit in *Hewlett-Packard Co. v. Bausch & Lomb Inc.* Bausch & Lomb (B&L) had purchased the '950 patent, which was directed towards a plotter. The '950 patent contained nine claims. Prior to commencing enforcement litigation against Hewlett-Packard (H-P), B&L realized that only the broadest '950 patent claim, claim 1, read on a H-P plotter. But this same broad claim was likely invalid over the prior art. While claims 2-9 of the '950 patent were likely not invalid, they also were too narrow to cover H-P's product.

B&L opted to file a reissue application at the PTO. Its affidavits provided that the drafter of the '950 patent application had limited contact with the inventor and did not realize which limitations were significant in light of the prior art. After some wrangling with PTO officials, B&L ultimately obtained a reissue of the '950 patent that included three additional claims. These three claims were of intermediate scope and specifically covered the H-P plotter. When B&L commenced infringement litigation, H-P argued that a failure to include multiple dependent claims of varying scope was insufficient in itself to establish error warranting reissue. Following an appeal, the Federal Circuit agreed. Because B&L neither disclaimed claim 1 nor added claims narrower than those originally in the '950 patent, B&L could not assert that the '950 patent was ineffective to protect the patented invention.

The reasoning of the Hewlett-Packard opinion may be justly criticized. The patent law employs dependent claims to ameliorate the principle that limitations may not be

read from the specification into the claims in order to preserve their validity. The failure to include appropriate dependent claims in the '950 patent appears to have been a simple lack of foresight, rather than some sort of strategic calculation. Perhaps the Federal Circuit was influenced by the affidavits filed by B&L at the PTO, some of which appeared inaccurate and even bordered on the fraudulent. In any event, B&L would have been better advised simply to confess to the PTO its actual suspicions and disclaim claim 1 when filing the reissue application.

#### 19.6.3.2 Reissue Procedures at the PTO

A patentee commences reissue proceedings by filing a reissue application. The PTO requests that reissue applicants include the originally issued patent instrument, usually known as the “ribboned copy,” along with the other paperwork. This requirement is in keeping with the statute’s mandate that the patentee surrender the original patent in order to obtain a reissued patent. Although a patentee may ultimately abandon a reissue proceeding and arrange for the return of her patent, she should be reluctant to do so: the cloud this abandoned application would cast upon the patent will be duly noted by courts and competitors.

Once the PTO accepts a reissue application, it oversees the customary procedures of patent prosecution. The standard sequence of Office Actions and responses occurs, and applicants may also file continuation and divisional applications as necessary. Note that continuation-in-part applications are not allowed during reissue proceedings: this step would involve the introduction of new matter, which is prohibited by the first paragraph of § 251. The second paragraph of § 251 also allows several patents to issue from a single reissue application.

In high relief to the usual prosecution process, reissue proceedings are open to the public. To this end, the PTO Official Gazette announces the filing of reissue applications each week. PTO regulations then mandate that the reissue proceeding not commence for at least two months, in order to allow third parties to submit evidence and arguments relating to the patentability of the reissue application.

Reissue proceedings therefore expose the patentee to some risk. Although he may have carefully calculated the steps he needs to take to move through the reissue proceeding, these plans may be thrown off by interested parties. Competitors and licensors in particular may vigorously contest the reissue of the patent by submitting additional prior art or arguments against patentability. If the patent reissues, however, the patentee has likely strengthened his patent for use in licensing negotiations or during litigation.

Reissued patents receive a new number, but their term is set to the remaining term of the original patent. Suppose, for example, that a patent application was filed on January 19, 1997, resulting in a issued patent on March 15, 1999. the patentee then

filed a reissue application on December 1, 1999, which led to a reissued patent on August 1, 2000. the expiration date of the reissued patent would ordinarily be January 19, 2017, twenty years from the filing date of the original patent.

#### 19.6.3.3 Broadening Reissues

A patentee may employ a reissue to expand the scope of its claims. The fourth paragraph of § 251 sets forth a two-year statute of limitations for seeking a broadening reissue. Suppose, for example, that Ed Alva obtains a patent directed towards a method of grating cheese. The PTO issues the Alva patent on July 4, 2004. Although the specification of the Alva patent discloses the use of the method with regard to American, Swiss and Gouda cheese, the patent's claims recite only the grating of American cheese. If Alva wishes to obtain additional claims that specifically recite the grating of Swiss or Gouda cheese, then he must file a reissue application no later than July 4, 2006. otherwise the claims can never be broadened through the use of the reissue proceeding.

Meeting this deadline has proved a somewhat subtle affair, as suggested by two cases, *in re Doll* and *In re Graff*. In *Doll*, the patentee filed a reissue application containing broadened claims within the two-year statutory period. The claims were further broadened during the course of prosecution after the two-year period has expired, prompting a rejection by the examiner under the fourth paragraph of § 251. The Court of Customs and Patent Appeals reversed in a terse opinion, holding that the reissue oath was proper.

*Graff* involved an applicant who filed a reissue application approximately twenty-two months after the issuance date. The initial reissue application was solely directed towards an erroneous drawing and contained no changes to the claims whatsoever. During the course of prosecution and following the expiration of the two-year period, however, *Graff* introduced broadened claims. The examiner rejected these claims as untimely under the fourth paragraph of § 251. On appeal, the Federal Circuit affirmed. The court characterized the holding in *Doll* as recognizing that “the public was placed on notice of the patentee’s intention to enlarge the claims by the filing of a broadening reissue application within the two year statutory period.” According to the Federal Circuit, because the public lacked notice that *Graff* sought a broadening reissue within the statutory period, any enlarged claims were properly rejected.

#### 19.6.3.4 The Recapture Rule

Along with the two-year statute of limitations, the courts have developed another significant restriction on broadening reissues. The recapture rule prevents a patentee from acquiring, through reissue, claims of the same or broader scope than those canceled from the original application. This doctrine typically arises when an

examiner rejected the original application based upon the prior art. If the patentee opted to narrow its claims to avoid a prior art reference, then he cannot use the reissue proceeding to recapture the abandoned subject matter.

The Federal Circuit opinion in *Mentor Corp. v. Coloplast, Inc.* demonstrates the recapture rule. Mentor had obtained a patent claiming a condom catheter that transferred an adhesive from its outer to its inner surfaces upon unrolling. A review of the prosecution history indicated that Mentor had inserted this limitation into the claims following the examiner's prior art rejection. Mentor later learned of Coloplast's competing product, a catheter with adhesive applied directly to its inner surface. Aware that its patent claims did not read directly on the Coloplast product, Mentor initiated a reissue proceeding at the PTO. After Mentor submitted detailed evidence of commercial success, the examiner reissued the patent. Notably absent from the reissued claims were limitations calling for adhesive transfer.

Mentor then sued Coloplast for infringement of both the original and reissue patents. Coloplast denied infringement of the original patent the inner surface. Coloplast admitted infringement of the reissue patent but asserted that Mentor had improperly invoked the reissue statute by recapturing what it had deliberately surrendered during the original prosecution in response to a prior art rejection. The jury disagreed, and the trial judge denied Coloplast's motion for judgment as a matter of law after the adverse verdict.

On appeal, the Federal Circuit reversed. The court concluded that Mentor could not use the reissue proceeding to modify its deliberate actions during the original prosecution. Because Mentor had deliberately added claim language requiring adhesive transfer following the examiner's prior art rejection, the court reasoned, Mentor should not be allowed to recapture that subject matter by deleting these claim limitations during reissue. In so doing, the court justified the recapture rule both upon the requirement of error as well as concerns for the reliance interests of third parties. The Federal Circuit did not consider Mentor's deliberate decision to narrow its claims, instead of filing a continuation application or appealing to the Board, to be the sort of error comprehended by the reissue statute. Additionally, the court sympathized with a hypothetical third party that might have reviewed the prosecution history and made commercial decisions based upon Mentor's express surrender of subject matter that had originally been claimed.

Neither of these grounds provides an entirely satisfactory explanation for the recapture rule. Reissue is a broad-reaching curative mechanism that corrects many sorts of mistakes that patentees made deliberately, albeit ill advisedly. For example, patentees commonly use reissue to rectify claims of inappropriate scope, even though each word of those claims was purposefully written. The court's notice rationale is

entirely circular: if there was no recapture rule, third parties would not so rely upon the prosecution history. In addition, the reissue statute's provisions for intervening rights, which are discussed immediately below, provide an adequate mechanism for addressing the reliance interests of others. In any event, the venerable recapture rule remains a fixed part of the law of reissue at the Federal Circuit.

#### 19.6.3.5 Intervening Rights

Congress recognized that third parties may have made commercial decisions based upon the precise wording of the claims of an issued patent. If that patent is later reissued with different claims, this reliance interest could be frustrated. In order to protect individuals who may have relied upon the scope of the claims of the original patent, the second paragraph of § 251 provides for so-called intervening rights. There are two sorts of intervening rights: absolute and equitable.

Absolute intervening rights are set forth in the first sentence of the second paragraph of § 251. According to that provision, no reissued patent shall prevent one from employing a "specific thing" covered by the reissue patent, so long as that individual made use of that thing prior to the grant of the reissue. Absolute intervening rights are limited to the sale or continued use of individual machines, manufactures or products covered by the reissue patent. There is one significant exception: if the infringed claim of the reissue patent was also within the original patent, then no absolute intervening right arises.

The second sentence of the second paragraph of § 251 provides for equitable intervening rights. This statute allows a court to authorize the continued practice of an invention claimed in a reissue patent "to the extent and under such terms as the court deems equitable for the protection of investments made or business commenced before the grant of the reissue." To qualify for equitable intervening rights, an infringer must have made at least substantial preparations to practice the patented invention. As with the absolute intervening right, equitable intervening rights apply only when a valid, infringed claim appears solely in the reissue patent.

That intervening rights may apply to broadening reissues should be apparent. Less intuitive is that intervening rights may also arise when the claims are narrowed during reissue. However, even prior to a narrowing reissue, a defendant may have believed the original, broader claims to be invalid. Such grounds as anticipation, nonobviousness, indefiniteness or lack of an enabling disclosure may apply to the claims of the original patents but not to those that were reissued. The better view is that intervening rights may apply during any reissue, not just a broadening one.

A paucity of case law considers either sort of intervening right. This absence is likely due to artful reissue practice on behalf of patentees. Wise to the wording of the original patent to the reissued patent as possible without amendment. Of course, if the

defendant infringes a claim that appears in both the original and reissued patents, then no intervening rights are possible.

#### 19.6.4 Reexamination

Reexamination proceedings were introduced into the U.S. patent law in 1980. The Reexamination Act of 1999 renamed the traditional sort of reexamination as an “ex parte reexamination” and also introduced the possibility of an “inter partes reexamination.” The principal purpose of either sort of reexamination is to provide third parties with an avenue for resolving validity disputes more quickly and less expensively than litigation. Indeed, prior to the adoption of the reexamination statute, third parties were ordinarily unable to challenge the validity of an issued patent at all unless they had been accused of infringement.

The chief limitation upon reexamination is that the cited grounds for invalidity must constitute a patent or printed publication. Other grounds for patent invalidity, such as the public use or on sale bars of § 102(b), may not be considered during reexamination. The reason for this restriction is that the PTO is much more able to assess patents or printed publications than other sorts of prior art. Full consideration of such issues as public use, offers to sell, inventorship and fraud ordinarily entails examination of witnesses and other techniques of litigation, procedures which the PTO is not well equipped to oversee.

##### 19.6.4.1 Ex parte Reexamination

Under the ex parte reexamination regime, any individual, including the patentee, a licensee, and even the PTO Director himself, may cite a patent or printed publication to the PTO and request that a reexamination occur. The reexamination request must be in writing and explain the relevance of the cited reference to every claim for which reexamination requested. The request must also be accompanied by the appropriate fee, which as of January 1, 2003, was \$2,520. Although the PTO does not maintain the identity of the requester in confidence, individuals desiring anonymity may authorize a patent agent or attorney to file the request in the agent’s own name.

A PTO examiner then must determine whether the patents or printed publications cited in the request raise “a substantial new question of patentability.” This standard is met when there is a significant likelihood that a reasonable examiner would consider the reference important in deciding whether the claim is patentable. If the PTO determines that the cited reference does not raise “a substantial new question of patentability,” then it will refund a large portion of the requestor’s fee. The PTO’s denial of a reexamination request may not be appealed. But if the PTO does present a

substantial new patentability question, then it will issue an order for reexamination. Under § 304, the patentee is given the opportunity to file a preliminary statement for consideration in the reexamination. If the patentee does so, then the requestor may then file a reply to the patentee's statements. As a practical matter, because most patentees do not wish to encourage further participation by the requestor, few preliminary statements are filed.

Following this preliminary period, the PTO will essentially reinitiate examination of the patent. Because the PTO has determined that a substantial new question of patentability exists, ordinarily the First Office Action includes a rejection of at least one of the claims. Prosecution then continues following the usual rules for examination of applications. However, several special rules apply to reexaminations. First, the PTO does not accord patents under reexamination the usual presumption of validity under § 282. Second, the PTO conducts reexaminations with special dispatch. Examiners must give priority to patents under reexamination, and will set aside their work on other patent applications with special dispatch. Examiners must give priority to patents under reexamination, and will set aside their work on other patent applications in favor of the reexamination proceeding. To further ensure their timely resolution, patentees may not file a continuation application in connection with a reexamination. Finally, no new matter may be introduced into the patent during reexamination.

If the reexamined claims are upheld in original or amended form, the PTO will issue a certificate of conformation. Once this certificate has issued, the reexamined patent once more enjoys the statutory presumption of validity. The doctrine of intervening rights, discussed at section 19.6.3.5 in connection with reissue, also applies to claims that survive reexamination. If the PTO judges the claims to be unpatentable over the cited reference, then it will issue certificate of cancellation. Patentees adversely affected by a reexamination may appeal to the Board or to the courts as necessary.

Frequently a defendant accused of infringement before a court files a reexamination request at the PTO. If the PTO accepts the request, the PTO and a court will find themselves in the awkward situation of simultaneously considering the validity of the same patent. In *Ethicon, Inc. v. Quigg*, the Federal Circuit concluded that because the Patent Act required reexaminations to be conducted with "special dispatch," the PTO may not stay reexamination proceedings due to ongoing litigation. Whether a court will stay litigation in favor of the reexamination lies within the discretion of the judge. Such factors as the technical complexity of the invention, the overall workload of the court, and whether the reexamination request was filed early or late in the litigation typically influence this determination.

#### 19.6.4.2 Inter partes Reexamination

As traditionally structured, the *ex parte* reexamination statute encountered criticism. As the title “*ex parte* reexamination” suggests, the role of the reexamination requestor is very limited in these proceedings. Only the patentee may participate in the dialogue with the examiner, and only the patentee may appeal the matter to the Board or to the courts if the PTO reaches an unsatisfactory conclusion. Many third parties did not believe the limited role provided for them offered a viable alternative to validity challenges in court. As a result, the ability of *ex parte* reexamination to provide an expert forum as a faster, less expensive alternative to litigation of patent validity was compromised. Data supported these observations, for far fewer *ex parte* reexaminations were requested than had been originally anticipated.

The Optional Inter Partes Reexamination Procedure Act of 1999 responded to these concerns by providing third party requesters with an additional option. They may employ the traditional reexamination system, which has been renamed an *ex parte* reexamination. Or, they may opt for a considerable degree of participation in the newly minted *inter partes* reexamination. Under this legislation, third party requesters may opt to submit written comments to accompany patentee responses to the PTO. The requester may also appeal PTO determinations that a reexamined patent is not invalid to the Board and the courts. To discourage abuse of *inter partes* reexamination proceedings, the statute provides that third party participants are estopped from raising issues that they raised or could have raised during reexamination during subsequent litigation. The filing fee for *inter partes* reexaminations is also quite steep; it was \$8,800 as of January 1, 2003.

We have little experience with these procedures at the time this book goes to press. It will be interesting to observe the willingness of the patent bar to engage in these proceedings and the ability of the PTO to step out of its ordinarily *ex parte* mindset. This expansion of the scope of reexamination also suggests that the restrictions upon patents and printed publications may also be deserving of reconsideration in the near future.

#### 19.6.4.3 Reexamination vs. Reissue Review

The difference between a reexamination and a reissue may appear elusive to newcomers to the patent system. The following points may help illuminate the distinctions between the two post-grant proceedings:

- A request for reexamination may be filed by “any person,” while a reissue must be filed with the approval of the patentee.
- A request for reexamination need not assert an “error” without deceptive intent, while a reissue application must do so.
- A reexamination is directed towards prior art patents and printed publications, while

a reissue is directed towards any issue that is pertinent to the original application. Where the patentee amends matter in the patent, however, ancillary issues concerning compliance with § 112 and other statutes may arise in a reexamination as well.

- A reexamination cannot be employed to broaden the patent's claims, nor may it be abandoned by the patentee. An applicant may employ a reissue to provide broadened claims if the reissue application is filed within two years from the date of the patent grant, and may also choose to abandon the reissue and have the PTO return its original patent.
- Claims may be copied from a reissue application in order to place the application into an interference. Reexaminations do not give rise to interferences.

## § 19.7 Other PTO Proceedings

### 19.7.1 Interferences

Sometimes two or more inventors seeks to obtain patent rights for the same invention. In such circumstances, the PTO may conduct an interference proceeding in order to determine which claimant was the first inventor within the meaning of the patent law. These contests over priority of inventorship are termed interferences. They are discussed in this text at § 16.3.2.1.

### 19.7.2 Protests

Members of the public are allowed to enter a protest against a patent application. The protest must specifically identify the application and be served upon the applicant. The protest must also include a copy and, if necessary, an English translation, of any patent, publication or other information relied upon. The protester also must explain the relevance of each item.

The rights of the protester are extremely limited. The only PTO acknowledgment of the protest will occur if the protestor opts to include a self-addressed stamped postcard along with the protest papers. In that case the PTO will simply mail the postcard upon receipt of the protest papers. The PTO possesses complete discretion in deciding whether the patent applicant must respond to the protester's contentions. The protester will learn of the disposition of the protest only upon the issuance of the patent and the opening of the prosecution history to the public.

Protest proceedings have traditionally played a small role in PTO practice. Until Congress enacted the Domestic Publication of Foreign Filed Patent Applications Act of 1999, the PTO maintained applications in secrecy. Therefore, the circumstances in which members of the public would learn of a patent application were relatively limited. With the PTO commencing publication of some pending patent applications as of November 30, 2000, protests would seem far more likely. Seemingly aware of this possibility, the Domestic Publication of Foreign Filed Patent Applications Act of

1999 provides that the PTO shall “ensure that no protest or other form of pre-issuance opposition ... may be initiated after publication of the application without the express written consent of the applicant. It remains to be seen both whether this restriction can be meaningfully enforced and whether the patent bar will make more active use of protests in the future.

### 19.7.3 Citation of Prior Art

In lieu of filing a protest or provoking a reexamination, individuals may simply cite patents or printed publications to the Patent and Trademark Office. If accompanied by a written explanation of the relevance of the cited prior art to the patent, this submission will be included in the patent’s official record. Section 301 allows competitors to place prior art on the record, ensuring that it will be considered if a reexamination is declared. Of course, particularly pertinent prior art will undoubtedly hamper the patentee’s enforcement or licensing efforts, and may even encourage another party to file a reexamination or protest itself.

### 19.7.4 Public Use Proceedings

Individuals may also file a petition with the PTO showing that an invention described in a pending patent application had been in public use or on sale more than one year prior to the filing of the patent application or before the date of invention. If the examiner determines that this petition makes a prima facie case, she may order a preliminary hearing to determine whether a public use proceeding is appropriate. Any resulting public use proceeding may be conducted as an inter partes hearing, including the taking of testing and cross-examination as appropriate. If the examiner concludes that a public use bar exists, then she will reject the claims. Although the examiner’s decision in a public use proceeding may not be appealed, the application will be returned to ex parte prosecution at the close of the proceeding. The applicant may then appeal an adverse examiner decision to the Board.

As with protests, public use proceedings have traditionally not been of great moment in patent practice. The PTO’s former practice of maintain applications in secrecy suggested that few persons, other than the patent applicant, would know of the pending application. With a partial publication regime now in place following the Domestic Publication of Foreign Filed Patent Applications Act of 1999, public use proceedings may play a greater role in the future.

## § 19.8 International Prosecution

The world’s patent-granting states have yet to agree to a true global patent system. Yet in a world where international trade consistently increases and technology knows few borders, patent protection in a single jurisdiction seldom suffices to remunerate an inventor. Inventors must instead seek patent protection in each

jurisdiction where they hope to obtain proprietary rights. The result is that U.S. patent attorneys are frequently called upon to coordinate patent acquisition efforts before many different administrative agencies overseas.

Multinational patent acquisition is among the most difficult professional tasks faced by patent attorneys. The responsible attorney must operate in an environment marked by multiple substantive patent laws, granting procedures and languages. He must also ensure that prosecution efforts in one country must also not negatively impact patentability elsewhere, by triggering the § 102(d) statutory bar or otherwise limiting patent rights. Fortunately, the foundational patent law treaty, the Paris Convention, eases some of the burdens of obtaining patents in many countries. Its most significant provision, Article 4, creates a right of international priority that is discussed at length below.

#### 19.8.1 Obtaining Paris Convention Priority

Article 4 of the Paris Convention allows an applicant to obtain a priority date by filing an initial application for a patent in any signatory state. The applicant may then file a patent application in any other signatory state within twelve months and obtain the benefit of the earlier filing date. As implemented in § 119 of the Patent Act, the applicant must fulfill certain additional requirements in order to gain the benefit of the Paris Convention priority date.

First, both the foreign and domestic applications must be filed by the same “applicant, legal representatives or assigns.” Second, the applicant must formally declare his entitlement to priority at the PTO. Failure to claim priority promptly may result in a waiver of the priority right. Third, the foreign application must have been for a “patent.” Inventor’s certificates, utility model registrations and other foreign intellectual property rights may qualify as a patent within the meaning of § 119.

Finally, in order to serve as an effective priority document, the foreign application must fulfill the disclosure requirements of § 112 of the Patent Act, including enablement, written description and best mode. One decision in which a foreign applicant ran afoul of this requirement is *In re Gosteli*. On May 4, 1978, Gosteli filed a U.S. patent application that included claims directed towards a generic class of antibiotic compounds. Gosteli’s priority application had been filed in Luxembourg on May 9, 1977. Notably, Gosteli’s Luxembourg application did not disclose the generic class that was later claimed in the United States. The examiner rejected the claims due to the disclosure of the Menard patent, which was filed in the United States on December 14, 1977. Menard disclosed two antibiotics that were members of the class of compounds recited in Gosteli’s generic claims.

On appeal to the Federal Circuit, Gosteli attempted to rely upon the filing date of his Luxembourg application in order to antedate Menard. The Federal Circuit

determined that a number of differences existed between what was disclosed in the Luxembourg application and what was claimed in the United States. Alternatively, Gosteli argued that was claimed in the United States. Alternatively, Gosteli argued that because the Luxembourg application did disclose the two compounds enough to remove Menard as a reference. The Federal Circuit disagreed: § 119(a) compelled a comparison between the priority application and the U.S. application, not between the priority application and the reference.

Note that § 119(a) does not limit the right of priority to Paris Convention signatories. Patent applications that were filed in a country that affords “similar privileges” to applications first filed in the United States may also be awarded priority. Because Article 2 of the TRIPS Agreement requires signatories to respect Article 4 of the Paris Convention, as a practical matter any application originating in a WTO member country will be accorded priority.

#### 19.8.2 Benefits of Paris convention Priority

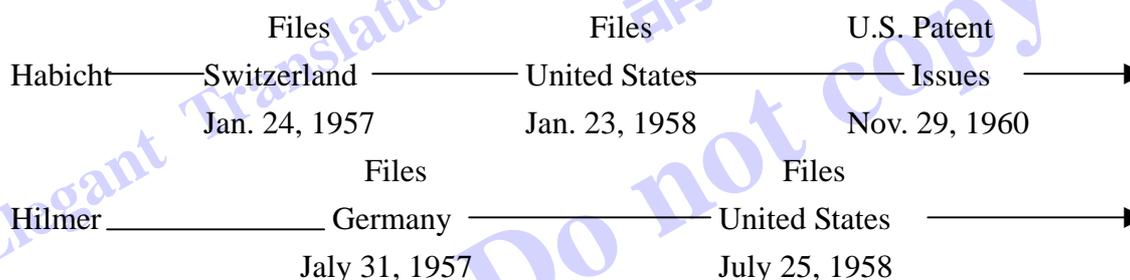
Under § 119(a), a priority application has the same effect as if it had been filed in the United States. As a result, a foreign priority date allows applicants to avoid prior art rejections under § 102(a) or (g). For example, suppose that an inventor files an application in Japan on January 19, 2003, and then in the United States on January 4, 2004. The PTO examiner then cites an anticipatory article published on August 1, 2003. The applicant may point to her Japanese priority date in order to antedate the reference. A foreign priority date may also be used to demonstrate a date of constructive reduction to practice in an interference under § 102(g).

Section 119(a) further specifies that if the invention had been in public use or on sale in the United States, or patented or described in a printed publication anywhere more than one year before the actual U.S. filing date, then no patent shall issue. The practical effect of this provision is that the one-year grace period provided by § 102(b) is measured from the U.S. filing date, not the foreign priority date. For example, suppose that an invention is described in a published magazine article on March 21, 2002. A German patent application directed towards that invention is filed on April 1, 2002, followed by a corresponding U.S. patent application on March 31, 2001. In this case the March 21, 2002, publication bars the issuance of a U.S. patent even though the applicant is otherwise entitled to a priority date of April 1, 2002.

Recall that under § 102(e), a granted patent has prior art effect as of its U.S. filing date, rather than its issue date, for subject matter it discloses but does not claim. When a U.S. application enjoys a foreign priority date under § 119, the question has arisen whether the appropriate § 102(e) date is the foreign priority date or the actual U.S. filing date. In its infamous *Hilmer* opinions, the CCPA decided that § 102(e) concerned the date the application was filed in the United States, even where the

application enjoys a foreign priority date. The following timeline displays the pertinent facts at issue in the Hilmer cases:

Protest proceedings have traditionally played a small role in PTO practice. Until Congress enacted the Domestic Publication of Foreign Filed Patent Applications Act of 1999, the PTO maintained applications in secrecy. Therefore, the circumstances in which members of the public would learn of a patent application were relatively limited. With the PTO commencing publication of some pending patent applications as of November 30, 2000, protests would seem far more likely. Seemingly aware of this possibility, the Domestic Publication of Foreign Filed Patent Applications Act of 1999 provides that the PTO shall “ensure that no protest or other form of pre-issuance opposition ... may be initiated after publication of the application without the express written consent of the applicant. It remains to be seen both whether this restriction can be meaningfully enforced and whether the patent bar will make more active use of protests in the future.



The PTO initially conducted an interference between Habicht and Hilmer. Because the U.S. patent law does not consider inventive activity performed overseas prior to January 1, 1996, Habicht readily prevailed. The PTO then dissolved the interference and returned the Hilmer application to the examiner. The rather clever Hilmer then drafted a new set of claims that were distinct from the count of the interference he had just lost. However, Hilmer’s new claims would have been obvious in view of the disclosure of the Habicht patent. The examiner quickly imposed an obviousness rejection, relying upon Habicht as prior art under § 102(e). Hilmer disagreed, asserting that priority applications under 119 cannot be accorded prior art status under § 102(e). Hilmer lost before the Board, but then appealed the matter to the CCPA.

The CCPA was then left to decide the point at which the disclosure of the Habicht patent served as prior art against Hilmer. Although Habicht was entitled to his Swiss filing date under § 119, the court held that the Habicht patent was effective as a prior art reference only as of its U.S. filing date. Section 102(e) expressly refers to patent applications “filed in the United States,” the court reasoned, and priority applications under § 119 should not be read into this language. According to the court, Paris Convention priority under § 119 served only as a shield to fend off prior

art references, not as a sword to defeat the applications of others. The result was that Hilmer was entitled to employ his German filing date to antedate Habicht's U.S. filing date, even though Habicht's first filing predated Hilmer.

The so-called Hilmer rule has two uncontestable effects on U.S. patent practice. First, more patents proceed to grant as a result of Hilmer. The opinion in Hilmer demonstrates some of the resulting mischief, for the immediate result of that opinion was two patents claiming the same inventive concept. Second, the Hilmer rule favors patent applicants based in the United States. Those who file their priority application elsewhere learn that their application is not accorded prior art effect until such time as they file in the United States. As a result, up to one year's worth of patent-defeating effect is lost, an eternity in many fast-moving and competitive industries.

The foreign patent community continues to voice its outrage at the holdings in Hilmer. Most patent systems provide both priority and patent-defeating effect to the Paris Convention priority application. As a result, the winner of the race to the first patent office potentially wins exclusive rights in the disclosed invention almost everywhere in the world. In the United States, however, a subsequent applicant can obtain a patent claiming subject matter disclosed in the earlier application. Most observers believe that the Hilmer rule violates at least the spirit of the priority mechanism of Paris Convention Article 4.

### 19.8.3 Foreign Filing Licenses

The Invention Secrecy Act prohibits an inventor from filing a patent application in another country on an invention made in the United States unless he obtains a license from the PTO. Inventors may obtain the license through one of two routes. One option is to file a petition with the PTO expressly requesting a foreign filing license. Alternatively, and far more typically, the inventor simply files a U.S. patent application, which is deemed an application for a license to pursue patent protection in other countries. In either case, officials from the PTO and other government agencies will review the application to determine whether disclosure of the invention would be detrimental to the national security. Following this review, the PTO sends a filing receipt to the applicant that indicates whether the license has been granted or not.

If the PTO grants the foreign filing license, the inventor is free to seek patent protection abroad. However, if the government concludes that disclosure of the invention would implicate national security interests, then it will deny the license and issue a secrecy order. The order compels the inventor to neither disclose the subject matter of the application nor file a patent application in another country. The PTO will also withhold the issuance of a U.S. patent on that invention. The inventor may seek compensation for damages caused by the secrecy order. Government officials

periodically review the secrecy order and may rescind it when disclosure of the invention is no longer deemed detrimental to national security.

Sometimes inventors fail to obtain a license before filing patent applications overseas. As a penalty, the Patent Act declares any U.S. patent on that subject matter invalid. The statute does provide a liberal mechanism for curing a violation of the foreign filing license requirement. Following the 1988 Patent Law Foreign Filing Amendments Act, a license may be granted retroactively where the application was filed abroad “through error and without deceptive intent” and the application does not disclose an invention that implicated national security concerns.”

#### 19.8.4 The Patent Cooperation Treaty

The Patent Cooperation Treaty, or PCT, is an international agreement open to any signatory of the Paris Convention. Its purpose is to simplify multinational patent acquisition by providing an optional application procedure. Over one hundred signatory nations, including the United States, have adopted the PCT filing mechanisms and standardized application format. Although a detailed review of the PCT exceeds the scope of this treatise, some fundamentals of this increasingly popular patent acquisition technique are worthy of note here.

The PCT allows an inventor to file an “international application” at a so-called Receiving Office, typically the patent office of the PCT member country. The applicant may designate those nations where patent protection is desired on the international application. The application is automatically published eighteen months from the priority date. It is also sent to an International Searching Authority, which conducts a prior art search and forwards the results to the applicant. The purpose of this search is to allow the applicant to learn of relevant prior art and decide whether to take further steps towards perfecting the patent right. After receiving the international search report, the applicant may amend the claims of the international application by filing the appropriate papers at the so-called International Bureau, which is housed in the World Intellectual Property Office in Geneva, Switzerland.

The PCT provides applicants with two options at this point. One possibility is the immediate commencement of prosecution at the patent offices designated in the international application. This option is termed the National Stage. If the applicant opts to move to the National Stage immediately, he must undertake local prosecution upon the expiration of 20 months from the filing date of the international application.

Alternatively, the applicant may delay entering the National Stage in favor of an intermediate step. This step consists of an “international preliminary examination” in accordance with Chapter II of the PCT. A demand for an international preliminary examination must be filed by the expiration of the nineteenth month from the priority date of the international application. The objective of this examination is to formulate

a tentative ,non-binding opinion on the patentability of the claimed invention. Applicants who opt for the international preliminary examination also gain a significant practical benefit: the applicant may postpone entering the National Stage, with its expensive translations, individual patent office fees and costs of local patent counsel, until the expiration of 30 months from the filing date of the international application.

Two relatively technical points concerning the PCT process are worthy of note here. First, the PCT provides that priority may be claimed based on earlier applications filed in any Paris Convention signatory state. In terms of U.S. practice, priority may be claimed under signatory state. In terms of U.S. practice, priority may be claimed under § 119 or § 120 in connection with the PCT. Either a national application or an international application designating the United States may obtain priority under § 119 based upon an earlier foreign application or international application designating a foreign country. In accordance with § 120, either a national application or international application date of a prior international application that designated, but did not originate in, the United States.

Second, the prior art effect of a PCT application is specifically noted in § 102(e). According to that statute, U.S. patents issuing from international applications are effective as prior art only at such time as the applicant paid the appropriate fee and filed at the PTO; a copy of the international application; a verified English translation of the international application, if necessary; and a proper oath or declaration. These requirements correspond to items (1), (2) and (4) of § 371(c). The filing of these items normally coincides with the start of the National Stage at the PTO. Because § 102(e) provides that an international application filed outside the United States does not by itself have prior art effect until the application is actually perfected at the PTO, the effect of this statute is to preserve the Hilmer rule in the contest of the PCT.