PATENT LITIGATION: WHAT ABOUT QUALIFICATION STANDARDS FOR COURT APPOINTED EXPERTS?

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ABSTRACT

“The descriptions in patents are not addressed to the public generally, to lawyers or to judges, but, as [35 U.S.C.] section 112 states, to those skilled in the art to which the invention pertains ***.” [1] This leads to a tenet of patent law, that the meaning of patents and claim terms must be construed by a person of ordinary skill in the relevant art (“POSA”). However, federal district court docket statistics show that for tasks such as claim construction, the “experts” hired by courts to aid the courts themselves may, in fact, not meet the POSA standard. In contrast, to perform the very same tasks, the testifying experts hired by the party litigants are now required to be POSAs. This article argues that logic dictates that there should be consistency in the requirement of skills for both court-appointed experts and party-employed experts when they perform the same tasks.

I. INTRODUCTION

Do you understand an invention regarding DC to AC power converter circuits used to drive cold cathode fluorescent lamps? [2] Would you understand the patent claims, the long run-on sentences defining the invention? [3] Well, sometimes courts may not either. However, when complex patents surface in litigation, there are many types of experts to help a court construe the words and decide whether patent claims are valid and whether they have been infringed. There are both experts hired by the parties (“party experts”) and experts hired by the courts themselves (“court experts”) whose roles are finely delineated. [4] For example, among party experts, there are trial-preparation experts, consulting technical experts, and Fed. R. Ev (“FRE”) 702 experts whose goals are to champion the particular party that hired them. [5] Among court experts, there are (special) masters, (technical) advisors, and FRE 706 court-appointed experts whose goals are to aid the judge who hired them. A problem is that, with regards to court appointed experts, practitioners continue to be concerned about the confidential nature of their influence on the ultimate decision of the court can obscure a possible lack of neutrality or relevant expertise of the purported expert. [6] The problem is exacerbated in patent cases because an invention may be complex and obscure so that there is often little choice but to use experts to elucidate the technology. [7] Accordingly, it is highly unlikely that courts will stop appointing experts; even the U.S. Supreme Court has occasionally utilized this practice that is allowed by statute and common law. [8] Thus, restraining the frequency of using experts is not a viable solution. But, setting threshold standards on the appointment requirements of the court experts is a reasonable compromise solution towards improving the quality of the influence that the experts do have. Presently, however, there is a lack of standards in the qualification of court experts in patent law. Therefore, this article proposes that courts implement a defined set of standards for court experts, specifically requiring them to be POSAs for matters that require a POSA point of view. This proposed solution is consistent with the traditional tenets of patent law, and it is now within practical reach due to recent case law. Setting qualification standards helps ensure that parties do not needlessly pay for court experts whose influence may be based on an inaccurate knowledge of the technology and which may lead to inaccurate analyses and decisions. Beyond patent law, the same concepts may be extended to other areas of law that also rely heavily on experts, such as products liability or criminal law. [9]

Setting qualification standards is compelling because of the frequent use of experts. Experts are so prevalent in patent litigation that even appellate judges in the U.S. Court of Appeals for the Federal Circuit (“CAFC”) lamented: “Evidentiary conflicts with respect to technology and science arise in a variety of cases; and the conflicting testimony of expert witnesses is ubiquitous.” [10] Given the likelihood of conflicting testimony and of complex inventions, court experts are necessary. But, it is important that their use be consistent with the traditional tenets of patent law, which includes a person-of-ordinary-skill-in-the-art standard (“POSA”) for patent claim construction, invalidity, and infringement determination. This POSA standard should also set restrictions on the qualification of all experts, whether they are party or court experts.

The CAFC recently set standards for someone to qualify as a FRE 702 party expert. In Sundance v. DeMonte,
the CAFC held that a patent attorney who did not practice or have formal training in the technology was improperly permitted to testify as a FRE 702 party expert regarding invalidity and infringement. [11] The expert testimony was rejected because the attorney was not deemed a POSA. [12] Thus, Sundance seemingly heightened the standard to be a POSA. The CAFC also decided that party experts must be POSAs if they provide opinions on claim construction and other matters which traditionally have required a POSA point of view. [13] Given Sundance, rationally, it would be incongruous if court experts are not also as least as qualified as party experts. Presently, however, party experts must qualify at least as POSAs, but court experts need not do so, [14] which seems contrary if they are opining about the same issues. The incongruity is all the more a concern considering that court experts may have to distinguish between opposing technical viewpoints and play a decisive role in the outcome of a case. [15]

With this context, this article addresses the qualification standards of court experts. Section II provides an overview of court experts and relevant case law. In Section II-C, court docket statistics illuminate the present practice regarding the experts. Section III discusses the criteria to be a POSA. Section IV describes how Sundance and SEB v. Montgomery Ward [16] require higher standards for FRE 702 experts and also seemingly change the traditional POSA criteria. Section V considers the implications for court experts.

II. THE MULTITUDE OF COURT APPOINTED EXPERTS

A suit involving direct infringement of a patent may arise under 35 U.S.C. § 271(a). This statute states: “Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States, or imports into the United States any patented invention during the term of the patent therefore, infringes the patent.” [17] An infringement analysis entails two steps. [18] The first, known as claim construction, is the determination of the meaning and scope of the patent claims asserted. [19] The second step is the verification of whether there is a match between the elements of the claim and the device accused of infringement. [20]

The hearings and trial take place in federal courts and are subject to the Federal Rules of Civil Procedure (“FRCP”) and FRE. [21] FRE 702 party experts may be utilized in patent litigation to opine on claim construction, invalidity and infringement. [22] Ironically enough, claim construction frequently invokes the use of experts even though Phillips v. AWH and Vitronics Corp. v. Conceptronics cautioned that expert opinions and testimony should be one of the last sources of evidence to consider. [23]

Statutes and the inherent powers of the courts permit the appointment of court experts in any area of law. [24] Court experts may be appointed in patent litigation to handle numerous tasks, such as breaking deadlocks between conflicting views of party experts or counseling a judge on the technical aspects of an invention. [25] They may help perform claim construction contained in the court orders. [26] Sometimes, in claim construction hearings, a court expert may be the only expert involved in the hearing, thus being the only “expert” heard on the disputed terms. [27] Arguably, court experts are highly influential, and as one judge put it, “This expert, in the court’s estimation, would essentially, I can’t say decide the case, but would testify and [the jury] would be told ‘This is the court's expert on these points.’” [28]

While not controlling, the Patent Case Management Judicial Guide compiled by the Federal Judicial Center may be relied upon by a federal judge to decide which type of expert he or she needs. [29] For tasks like claim construction, courts may select evidentiary FRE 706 court-appointed experts, procedural FRCP 53 special masters (or Fed. R. App. P. (“FRAP”) 48 for appellate courts), or common law technical advisors. [30] With respect to nomenclature and description, there are some differences from circuit to circuit or district to district regarding the different types of experts and their roles. [31] Thus, for trial or non-claim construction purposes, the “technical advisor” may instead be a “confidential advisor,” an “expert advisor,” or perhaps some other designation. [32] Regardless of the exact title an appointed person is given, clearly, a technical advisor’s precise task should determine what his qualifications ought to be. While FRE 706 and Rules 53 or 48 provide the criteria as to the procedures and scope of work, there are no standards regarding the qualifications of the appointee. In addition, court orders have been silent as to the necessary qualifications.
A. Statutory Court Appointed Experts and Relevant Cases

There are two types of statutory court experts known as 1) court appointed experts and 2) special masters. The first type is based on FRE 706 for the court appointed experts, which states in pertinent part:

(a) Appointment. The court may on its own motion or on the motion of any party enter an order to show cause why expert witnesses should not be appointed, and may request the parties to submit nominations. The court may appoint any expert witnesses agreed upon by the parties, and may appoint expert witnesses of its own selection. An expert witness shall not be appointed by the court unless the witness consents to act.... A witness so appointed shall advise the parties of the witness' findings, if any; the witness' deposition may be taken by any party; and the witness may be called to testify by the court or any party. The witness shall be subject to cross-examination by each party, including a party calling the witness. [33]

FRE 706 is silent as to the qualification of the court appointed expert who may provide testimony. However, the Advisory Notes suggest the person is perceived to have a high level of expertise: “[T]he contention is made that court appointed experts acquire an aura of infallibility to which they are not entitled.” [34] As such, for patent claim construction, invalidity, and infringement determination, a court appointee should be at least a POSA in order to satisfy some level of expectation of expertise. Moreover, the Advisory Notes state, “the trend is increasingly to provide for their use,” and “[t]he inherent power of a trial judge to appoint an expert of his own choosing is virtually unquestioned.” [35] If such increasing appointments could go unchecked, this paper recommends setting qualification guidelines, if only to ease the mind of litigants. [36]

The CAFC has not provided hints, let alone guidance, on the qualification of FRE 706 experts, even though it had the opportunity to do so months after the Sundance case. In March 2009, in Monolithic Power v. O2 Micro, the CAFC affirmed a district court's decision to appoint a FRE 706 expert for the purposes of elucidating a particularly technical patent. [37] Due to an “unusually complex case and what appeared to be starkly conflicting [party] expert testimony,” the district court instructed the parties to nominate candidates and confer upon a mutually agreeable [FRE 706] witness. [38] Applying regional circuit law, the CAFC held the lower court did not abuse its discretion in hiring the FRE 706 technical expert, [39] Dr. Santi, who testified about three things: the nature of the technology, the obviousness of the claimed invention, and infringement of the patent. [40] The expert's opinion did not agree with that of the jury verdict. [41] In such a situation, it would be useful if the court decision could have described Dr. Santi's qualifications in order to clarify the discrepancy. Clarification is all the more necessary considering that the parties were sharply divided about Dr. Santi's appointment and expertise, to the extent where one party called him “utterly incompetent.” [42] But, the CAFC opinion did not contain even a sliver of dicta as to the qualification of court experts even though the CAFC only just decided that party experts (FRE 702) must pass a POSA standard in Sundance. While related cases that are decided in the same time period often present a similar theme, this did not happen regarding experts. [43] It is difficult to know whether there is any significance in Monolithic Power's silence on the subject of qualifications for court experts. Perhaps it signifies nothing and the difference in CAFC judicial panels for the two cases accounts for the silence in Monolithic Power. [44] On the other hand, it would be a concern if the silence means that the CAFC will not impose qualification standards on court experts. [45] Rather than opine on the qualification of court experts, the CAFC did, however, express apprehension about such appointments altogether, stating: “The predicaments inherent in court appointment of an independent expert and revelations to the jury about the expert's neutral status trouble this court to some extent. Courts and commentators alike have remarked that FRE 706 should be invoked only in rare and compelling circumstances.” [46] If district courts appoint court experts regularly, regardless of the CAFC's concerns, then some alternative solution is needed. In order to mitigate the CAFC's concern, one step in the right direction would be to implement qualification standards, standards such as that of a POSA.

There are CAFC cases, however, in which the district court's experts were not POSAs. For example, in AllVoice Computing PLC v. Nuance Communications, claim construction was performed by a patent law professor who was appointed by a district court to determine the definiteness of certain means-plus-function claims. [47] Paragraph two of 35 U.S.C. § 112 provides the condition for the definiteness requirement. [48] It states: “The test for definiteness asks whether one skilled in the art would understand the bounds of the claim when read in light of the specification.” [49] In contrast, the background of the professor provided no indication that he was a technical POSA, let alone an expert in universal speech-recognition interfaces to computer-related applications, the technology underlying the case, during any part of his career. [50] Although the CAFC opinion did not indicate whether there were any
disputes regarding the qualifications of the court expert, the court hinted that the expert's technical skills were insufficient to qualify him as a POSA and he should not have been selected. [51] The CAFC stated: “Unfortunately, the district court did not specify the proficiency of the hypothetical person of ordinary skill in the art that is essential to administering the definiteness test . . . AllVoice counsel defined a POSA in the context of this case as ‘someone who has a degree in computer science or something equivalent and 2-3 years experience programming in Windows.’” [52] Nothing in the particular law professor's background indicated that he had such degrees or experience, in fact, while he did have an undergraduate engineering education, this concluded forty years ago. [53]

AllVoice Computing is not alone in its use of non-POSAs as court appointed experts in matters that were traditionally reserved to the purview of a POSA. The court's expert in AllVoice Computing was also hired as an expert in North American Container, Inc. v. Plastipak Packaging, Inc., [54] a case that involved an entirely different type of invention. Thus, the very same “expert” professor who provided claim construction on speech-recognition interfaces in AllVoice Computing was called on to opine on the manufacture of bottles in North American Container, [55] although he did not have technical expertise to be a POSA in such widely different technologies. [56] This phenomenon is not limited to law professor experts; courts also frequently look to technically unqualified patent attorneys to serve as experts. For example, in one court the same attorney provided claim construction on detailed software, flash memory (hardware), semiconductors, and packages. [57] Close examination of the credentials of such court appointed patent attorneys, as gleaned from their law firm website biographies, showed that they typically only had a technical undergraduate education besides their legal credentials. [58] In Sundance, this type of education and “experience” was deemed insufficient to qualify an attorney as a POSA even for low-tech, simple technologies. [59]

Like the CAFC, other appellate courts have been silent regarding the requirements of FRE 706 experts in patent litigation. This was true even if a case had both party and court-appointed experts, and the opinion went into great length whether the party experts passed Daubert or Frye standards. [60] By contrast, an opinion like Pioneer Hi-Bred v. Holden at most pointed out any prestigious technical credentials of the court appointed expert, but the appellate opinion did not detail a threshold to be categorized an “expert.” [61] However, at the district court level, at least one court disclosed its selection criteria of FRE 706 experts: “The criteria for appointment of a FRE 706 expert or experts shall be expertise and experience in the relevant technology, complete impartiality, and the absence of any conflict of interests.” [62] This court, in the Eastern District of Virginia, examined the education, experience, and patents garnered by a candidate. [63] This district court essentially required a POSA standard to resolve matters like claim construction because the very phrase “expertise and experience in the relevant technology” is akin to a definition of POSA.

There is a second type of statutory court experts, known as “special masters,” which both the district court and appellate courts may employ. Special masters are governed by FRCP 53 [64] and FRAP 48. [65] As for a master's tasks, he can perform functions similar to that of a FRE 706 expert. For example, the same patent attorney performed claim construction even though he was appointed as a “special master” in North American Container and as a “FRE 706 court appointed expert” in AllVoice Computing. During 2005-2006, special masters addressed claim construction matters in about 41% of 90 cases and infringement or invalidity in about 20% of the 90 cases. [66] However, special masters may also have a more comprehensive role, hold hearings, and make decisions that may be difficult to reverse. [67] In short, special masters may perform quasi-judicial tasks. Therefore, due to the possibility of more tasks, there are many more patent cases employing special masters than FRE 706 court experts. Over the last ten years, about 400 patent opinions referenced the use of a special master, and about 200 claim construction opinions cited a special master. [68] During the same period, only about 130 opinions referenced a court-appointed expert, and fewer than 60 claim construction opinions cited a court-appointed expert. [69] Judges who prefer to employ masters are listed in Appointing Special Masters and Other Judicial Adjuncts. [70] The nomenclature for the different “masters” may be further specialized depending on the task at hand: discovery master, settlement master, technology master, etc. [71]

According to specific statutes and the inherent powers doctrine, courts may appoint special masters if they issue a detailed order describing the tasks and conduct. [72] There are advantages in using a special master in patent law. The initial report and recommendation by a master streamlines and speeds up the judicial process, and yet a master’s findings can still be reviewed de novo, [73]
According to the Advisory Committee Notes for FRCP 53, the “court's responsibility to interpret patent claims as a matter of law, for example, may be greatly assisted by appointing a master who has expert knowledge of the field in which the patent operates.” [74] Thus, FRCP 53 shares a similar outlook as FRE 706 regarding the abilities of special masters. The qualification of an appointee should be fairly high. In particular, for claim construction, the language of the Advisory Committee Notes for FRCP 53 suggests at least a POSA threshold. However, unlike Sundance, the FRCP 53 expert might need only knowledge, and not necessarily personal work experience, formal training or something else in addition to knowledge.

Patent case law indicates the purpose of utilizing special masters and also hints at the qualification of a master as a court expert. Masters may be appointed to alleviate court docket congestion. [75] For instance, in Constant v. Advanced Micro-Devices, Inc., masters evaluated patent validity and infringement in the context of motions for summary judgment. [76] As for the qualification of a master, case law appears to relax the requirements stated in the Committee Notes for the statutes for masters. The Constant court stated: “[The appointed court expert,] Mr. Hillman appears to be very well qualified to serve .... Appellant Constant is wrong in presuming that a master need have the same expertise in the technology as the inventor. Where complicated issues of patent law are involved, the appointment of an experienced patent attorney is quite appropriate.” [77] Constant indicated that a master does not need above-average technical skills as most inventors have. [78] The implication is that “ordinary” technical skill should suffice. In Constant, the expert was a veteran patent litigator, but not a POSA in computer science, the technological field underlying the case. [79] Thus, this case could be further interpreted as suggesting a special master does not need to be a POSA when evaluating validity and infringement, even though these issues often require testimony from party experts (i.e. POSAs). [80]

In a 2005-2006 study ordered by the Federal Judicial Center on special masters’ qualifications, the authors concluded that special masters had substantial legal experience and were specialists in patent law, but were not technology experts. [81] A closer look at the statistics showed that only 34 out of about 85 had a technical undergraduate degree and only 8 had a technical graduate degree. Further, only 25 out of 44 listed patent law among their areas of specialization. [82] A mere undergraduate degree in technology or science is usually insufficient to qualify as a POSA, [83] especially for highly specialized technology. This author suspects that most of the masters in the study probably would not qualify as POSAs in the relevant technology field. However, a possible solution is for courts, like the CAFC, to carve out a special niche for masters, which states that masters need not to be POSAs given their special quasi-judicial role in our system. The logic is similar to the reason behind having judges who are not required to be POSAs but having control over a broad general matters. The qualification standard for actual judges is different because they must possess abilities to decide on various federal matters. Nevertheless, Ho when they appoint special masters for a particular task like claim construction, the master ought to have skills tailored to that task for the sake of efficiency.

B. Non-testifying Experts Appointed by Courts' Inherent Powers

Relying solely on their inherent powers, courts may appoint yet another variety of experts, known as “technical advisors,” whose role in patent litigation was upheld and described by the CAFC in TechSearch v. Intel. [84] In TechSearch, the appellant objected to the district court's appointment of a technical advisor due to the alleged lack of proper safeguards, the alleged use of the advisor to resolve issues of fact, and the lack of an opportunity for the parties to depose the advisor. [85] These are precisely the type of concerns that litigators generally have regarding court experts, as alluded to in the Introduction. Applying regional circuit law, the CAFC decided the district court did not abuse its discretion by employing an advisor to “acquaint the judge with the jargon and theory disclosed by the testimony [and] think through ... technical problems [of the patented microprocessor].” [86]

The decision relied on courts' inherent powers to allow hiring advisors to help courts perform their duties and the fact that the federal rules do not forbid such appointments. [87] The advisor in TechSearch was a highly skilled technologist rather than a patent attorney, and neither party objected. [88] The TechSearch court, however, did not address the type of technological skill the expert possessed or whether an advisor should be at least a POSA or why a technical advisor should be allowed to perform his tasks in secret.

However, the TechSearch court did not altogether ignore the problem. It expressed a concern with the influence of technical advisors because it is difficult to determine what technical advisors do in a case. [89]
the “undue influence by the technical advisor and [the need] to ensure that the technical advisor's role is properly limited to a tutorial function and providing technical education and background information ...” [90] According to TechSearch, the purpose of using a technical advisor was to help a court understand technical evidence so that the court, not the advisor, can decide matters of admission of evidence, patent invalidity and infringement for summary judgment, and draft jury instructions. [91]

The concern regarding the influence that a technical advisor has on a judge was exacerbated considering that “a judge can filter out ‘bad’ legal advice or research from a law clerk; he or she is ill-equipped, however, to do the same with ‘bad’ technical advice.” [92] Finally, “any advice [the technical advisor] gives to the court cannot be based on any extra-record information, except that the advisor may rely on his or her own technology-specific knowledge and background in educating the district court.” [93]

The Ninth Circuit's FTC v. Enforma is another important case to consider because of the large number of patent cases in California. This is particularly cogent considering that the CAFC generally applies regional law regarding experts. [94] FTC shared the same concerns expressed in TechSearch: “A technical advisor is a tutor who aids the court in understanding the ‘jargon and theory’ relevant to the technical aspects of the evidence. An advisor may not assume the role of an expert witness by supplying new evidence; nor may an advisor usurp the role of the judge by making findings of fact or conclusions of law.” [95] Similarly, according to the Judicial Guide, the “proper role of the advisor is to be a sounding board or tutor who aids the judge's understanding of the technology” and not to decide legal issues. [96] According to one commentator, technical advisors are controversial appointments because of the informality and the lack of gatekeeping constraints. [97] However, a lack of constraints advantageously allows a judge much flexibility and efficiency. [98] The same attorneys might be employed repeatedly, who make legal decisions and whose cost is billed to the parties. [99] But to litigants, the advisors' biases, conflicts of interest, ex parte communications, introduction of new evidence, and lack of public reports remain areas of concern. [100] Moreover, advisors cannot be deposed or cross-examined, unlike FRE 706 court experts. [101] As a result of these concerns, some judges refuse to use technical advisors. [102] Alternatively, some Eastern District of Texas (“EDTX”) judges use them exclusively and prefer patent lawyers as technical advisors because lawyers understand bias and evidentiary issues better than purely technical persons. [103]

TechSearch adopted the safeguards described by the dissent in Association of Mexican American Educators v. California, including "addressing any lack of qualifications." [104] But, TechSearch, and similarly FTC, did not provide guidelines as to the exact qualifications of or methods of selecting a technical advisor. In addition, given that many patent cases have included advisors, so far the CAFC has not sua sponte remanded or reversed cases merely because it deemed a technical advisor to be inappropriate. In this sense, the CAFC has accepted whatever qualification methods district courts have adopted in selecting technical advisors. However, for certain types of cases, TechSearch hinted that appellate courts should review with particular care any cases where district courts employed an advisor, stating: “reviewing courts may want to consider whether the procedural safeguards should be enhanced, or technical advisors should be allowed at all, when the district judge is acting as the trier of fact.” [105]

Some courts have often relied routinely on technical advisors despite the warning languages to do from TechSearch (“the inherent authority [to appoint advisors] sparingly and then only in exceptionally technically complicated cases,”) [106] [107] or Reilly (“hens teeth rare” and “near-to-last-resort”). [108] Some judges have generally used patent attorneys as technical advisors and noted this fact by listing the name of the advisor in some decisions. [109] At least two judges described their employment of technical advisors very thoroughly through the issuing multi-page orders. [110] These orders stated that, among other things, the advisor shall “examine the patents in suit, the pertinent briefs, and any evidence submitted in the claim construction process with an eye toward tutoring the Court in the technology involved in the patents. He shall also assist the Court in the preparation of the Order construing the claims and act as a sounding board for the Court.” [111]

However, more typically, an order appointing a technical advisor reveals very little and is very concise in describing the duties of an advisor. Common orders are limited to phrases such as “reviewing materials” and “direct consultation.” [112] In fact, in the very same district where one judge publicly disclosed multi-page details of an advisor's duties, another judge's order might simply state “APPOINTS [name] to the position of technical advisor in this case, with his costs to be assessed equally between Plaintiff and Defendants and timely paid as billed.” [113] In such a situation, presumably, the technical advisor was given an unpublished document related to the work scope.
and instructions. [114] Then, on the other extreme end, according to Amgen v. Hoechst, one judge did not mention that he used technical advisors and special masters because case law discourages the practice. [115] It is important to note that, regardless whether judges provide details about appointing advisors, no discussions of the selection criteria of the advisor are included in these orders.

Finally, some courts may appoint the so-called “expert advisors” or “consultants” or “confidential advisors” through the inherent powers of a court. [116] These non-statutory advisors are essentially the same as technical advisors. For example, Judge Cohn borrowed the terminology “expert advisor” from the Appointing Special Masters and Other Judicial Adjuncts and the Patent Case Management Judicial Guide to appoint an “expert or confidential advisor.” [117] Although, the Judicial Guide contains the phrase “confidential advisor” in the caption, the body of the text uses the term “technical advisor.” [118] Thus, expert advisors and such are essentially technical advisors. In Judge Cohn's case, the advisor would “assist the Court in research, analysis and drafting of orders and opinions. The Court may consult with the advisor, ex parte, during pretrial and trial regarding both factual and legal issues.” [119]

In addition to the court-made rules on expert qualifications, parties themselves may help determine the qualifications of a court expert. In Harris Research v. Perrine, the court invited the parties to propose qualified masters. [120] The court was willing to consider nominations from the parties in determining its qualification standards. [121]

Alternatively, a court may select its own expert. [122] At the risk of annoying the judge, burdening a court, or prolonging litigation, parties may object to the appointment or appeal a decision to which technical advisors had input. [123] Thus, the adversarial system itself gives parties some control over the qualifications of court experts.

In summary, notwithstanding the different labels experts carry under FRE 706, Rules 53 and 48, the different categories are often distinctions without differences in patent litigation. Courts may select any category of adjuncts to opine on the same substantive issues. In Monolithic Power, the court appointed expert testified to obviousness and infringement. [124] In TechSearch, the technical advisor undertook similar tasks, but without providing testimony. [125] There are essentially no standards in the qualification of court experts in patent litigation. Hampering uniform standards is the fact that the CAFC has deferentially applied regional circuit law governing court experts in patent cases. [126] Applying different regional law invariably creates some differences. Moreover, the appointment of court experts is reviewed by appellate courts under an abuse of discretion standard. [127] As such, appellate courts are unlikely to overturn any district court's choice of court experts. These practices may be reformed, however, as seen in the recent case of Sundance. Although Sundance related to FRE 702 party experts, a logical extension of that holding could result in standardizing the qualification of court experts.

C. How Often Are Court Appointed Experts POSAs?

How often the purported experts are actually POSAs is particularly important in the claim construction context because this matter is uniquely ascertained from the viewpoint of a POSA. [128] In addition, claim construction is a task performed exclusively by the judge and is arguably the most important step of a patent infringement suit. [129] Sometimes a judge may be able to construe the claims by examining the patent and prosecution history alone, especially if the invention is not particularly technical. [130] But, a judge is seldom one of ordinary skill in the highly technical arts and may very well need to rely on experts for certain types of inventions. [131] Therefore, one reason to hire a court expert is when a POSA point of view is needed to clarify the technology. Another reason for a court to look to experts is to reduce crowded dockets. Even in this scenario, the expert should still be a POSA because claim construction must be performed by a POSA. In short, if a court is going through the expense and trouble of actually hiring an expert, there seems to be little reason not to hire a POSA.

As such, it is illuminating to analyze the number of court appointees who are, in fact, POSAs by examining patent cases that have reached the stage of a Markman hearing or cases in which the parties have submitted claim construction briefs. This article considers patent cases filed in four district courts: Northern California, Eastern Texas, Delaware, and Eastern Michigan, to determine whether the court experts were POSAs. [132]

The analysis consisted of searching through dockets on PACER (Public Access to Court Electronic Records) to
find district court appointees for each patent case (category “830”). [133] In the process, the name and tasks (where available) of such designated persons were noted. Persons with a Ph.D. were assumed to be technical. The backgrounds of other appointees were scrutinized using information available on the Internet. [134] Patent attorneys without advanced technical degrees or at least three years of technical experience in the relevant industry were discounted as POSAs unless the technology was simple. [135] Those with only marketing or product manufacture backgrounds were discounted as having sufficient technical experience because they generally do not know the precise details of the technology. Those who were appointed as “experts” in two or more highly divergent technologies were presumed to be a non-POSA in at least one of the technologies. For example, one person’s biography contained the phrase “court-appointed special master and technical adviser in more than 50 diverse cases ... covering a wide range of cutting-edge technologies from atomic force microscopes to semiconductors to telecommunications and pharmaceuticals.” [136] Nothing in the master’s biography suggested he ever worked or had formal training in these fields. [137] Because technology advances quickly, this person was unlikely to have been a POSA in any of these areas. The author recognizes that this type of analysis is not without imperfection, but feels that it is suited for the issue at hand.

The Northern District of California (“NDCA”) has one of the most active patent litigation dockets in the country as it has jurisdiction over - a major technology center in Silicon Valley. In a fourteen month period, starting on January 1, 2006, there were a total of 167 patent suits filed at the NDCA. [138] Only 40 cases reached the stage where parties at least filed claim construction briefs. [139] The NDCA seldom appointed experts. When it did, each judge had his own preferred type of expert. For example, Judge Ware was the only one appointing technical advisors, but he required them to draft a report that is provided to the parties in addition to the usual informal consultation. [140] The other judges in the NDCA tended not to use technical advisors, perhaps because the Ninth Circuit cautioned against the practice in FTC. [141]

Another possible reason may be that a couple of judges chose to appoint mediators and relied on alternative dispute resolution (“ADR”) evaluators as a substitute for “experts.” On the very day a plaintiff files a patent suit, the NDCA usually automatically issues an ADR-deadline order. [142] In two cases following the filing of claim construction briefs, the docket listed an ADR session. [143] Because the evaluation reports were confidential, it was unclear if the ADR sessions considered claim construction, but the cases settled soon afterwards. [144]

A magistrate judge, who was probably not a POSA, often mediated the ADR sessions. [145] In fact, in only 2 of the NDCA 40 cases examined was it likely that the court appointed an expert for claim construction purposes. [146] One person was a POSA and the other a patent lawyer handling mediation. [147] These numbers are consistent with the statistics from claim construction decisions on LexisNexis, which show that only about 4.5% of the 600 or so opinions made a reference to a court expert, nearly all of whom were FRCP 53 special masters. [148] The NDCA's disinclination to appoint court experts is evident in these statistics.

In contrast to the NDCA, the Eastern District of Michigan (“MIED”) appointed considerably more FRCP 53 special masters in claim construction cases. [149] MIED has a lighter patent docket, but it includes the northern-most region of the U.S. and thus it is valuable to compare against the districts representing other corner regions of the U.S., such as California, Delaware, and Texas. MIED cases are interesting for other reasons as well: for one, a court in this district has had changed an expert midway through a case. This happened in one of the patent cases that was filed by a well-known “patent troll” attorney. The court actually had to change technical advisors due to a confidential objection made by the plaintiff. [150]

Given the limited number of patent cases available in this district, it was necessary to examine at least as far back as January 1, 2004 and go to January 1, 2007 to get a sufficient sample of about 169 patent cases. [151] When the court appointed experts for purposes of claim construction, the docket files sometimes noted the “special master” at the top of a docket file, but only noted expert/technical “advisors” as an entry in some orders. [152] Nearly all the appointees were unique to each case; only one of the appointees was employed twice during the time period examined. [153] Approximately 26 of the 169 cases reached the stage of claim construction statement or brief filings. [154] And 11 of the 26 cases appointed a master or, less frequently, an advisor for claim construction purposes. [155] Thus, about 40% (±12%) of the claim construction was effectively decided by a special master/advisor. All of the appointees, including the technical advisor, were patent attorneys or patent law professors. According to their biographies, there was little indication that any of them worked or had personal experience in a
purely technical or scientific role (i.e. they were non-POSAs). [156] The numbers garnered from PACER dockets are higher than those on LexisNexis court decisions. On LexisNexis, there were about 147 claim construction decisions since 1997 associated with MIED. [157] Only 20 of the 147 opinions mentioned a special master, and none mentioned a technical/expert advisor. Therefore, about 14% (20/147) of the opinions made reference to a master. However, the actual percentage seems closer to 40% based on the PACER statistics. Again, only a few, if any, of the appointees were POSAs, although all of them had extensive patent law experience.

The Eastern District of Texas became a sought after venue for patent suits since cases such as Texas Instruments v. Hyundai yielded large plaintiff awards. [158] In the nine months starting on January 1, 2006, there were a total of 180 patent suits filed at the EDTX according to PACER category 830. [159] All of the court expert appointees were designated “technical advisors”; even the single instance of a “special master” turned out to be primarily a technical advisor. [160] There appeared to be no appointments of FRE 706 testifying experts. [161] Among the EDTX “patent” courts, there was much variety in the use of advisors among the different courts. One judge and his magistrate judges apparently did not use any advisors; [162] by contrast, another judge in the same district used only technical persons tailored to each case. [163] Again in the same district, a third judge's court decisions listed a technical advisor in the document in only about 15 - 16% of the cases. [164] However, according to the PACER records, the percentage is actually closer to 43%. [165] There were about 76 cases that reached the stage in which claim construction briefs were at least filed. [166] The numbers show that about 33 of the 76 cases listed a technical advisor (43% ± 7.6%). Five of the advisors were technical persons, and the rest were patent attorneys. [167] Many of the same patent attorneys were retained for claim construction on widely-varying technologies. [168] Their biographies indicated they were unlikely to have been POSAs at the time of invention or afterwards. [169] Thus, over one-third (28/76) of the cases had a non-POSA court-appointed technical advisor, performing such tasks as claim construction and helping prepare court orders. There were also cases ordered to mediation where the mediators were not POSAs in the relevant art, but the issues might have included some aspect of claim construction. [170]

The District of Delaware is a court where patent owners could readily satisfy the jurisdictional and venue requirements because many of them are incorporated there. However, not many patent suits are actually filed in the district because Delaware is not considered plaintiff friendly. This reputation is largely due to the fact that it takes twice as long to decide a case there than at, say, the EDTX. [171] Also, the success rate for the plaintiff is lower in Delaware. [172] This paucity of cases made it was necessary to examine law suits filed from January 1, 2005 to March 1, 2006 to collect enough statistics on court expert cases. Delaware judges appointed FRCP 53 special masters rather than technical advisors or FRE 706 experts. [173] In the fourteen month time period, there were a total of about 152 patent suits filed based on PACER category 830. [174] Examination of the docket for motions showed that only about 47 cases reached at least the claim construction brief-filing stage, in which there was no subsequent transfer of venue. There appeared to be no appointments of advisors or FRE 706 experts. Only 6 cases enlisted a special master, all of whom were attorneys. [175] Thus, Delaware used court experts rather seldom in patent cases, less than about 13% of the time, and sometimes for discovery rather than claim construction. [176] For all practical purposes, the masters were employed somewhat like magistrate judges following FRCP 53(f)(5) or 53(h). [177] The small percentage found on PACER is consistent with the fact that the Delaware opinions on LexisNexis rarely mentioned “masters.”

In the District of Delaware, the special masters were not POSAs. For example, Vincent Poppiti practiced family law [178] and was chief judge of a family court, [179] and Collin Seitz Jr. (son of Judge Collin Seitz) [180] and former judge Louis Bechtle practiced primarily corporate litigation. [181] As masters, they were never used solely to perform claim construction or determine infringement/invalidity but performed many other legal tasks. These masters sometimes drafted the claim construction opinions of the court as a report and recommendation, for example. [182] With respect to interpreting the technology, they appeared to rely solely on the intrinsic evidence of the patents and on extrinsic testimony, briefs, and tutorials provided by the party experts and litigators. [183] In this type of role, akin to that of a magistrate judge, the regulations and common law rules do not require them to be POSAs, but require them to have judicial experience instead. The court in Constant also agreed that it is inappropriate to require these types of masters to be POSAs. [184] In addition, the experts' communications were provided publicly, following FRCP 53(e), [185] and therefore there should have been no evidentiary issues or undue influence that went unknown to the parties. On the other hand, if such masters are ever used mostly to determine issues that are only within the skill and province of POSAs, then the masters should consist of POSAs with
technological abilities.

In summary, some of the districts appointed court experts fairly often, up to over 40% of the cases for purposes such as claim construction. Unfortunately, the appointees were often not POSAs, even when they performed tasks requiring the viewpoint of a POSA. This fact provides more reason for the courts to consider requiring POSA standards in appointing experts because a significantly large number of cases are impacted in major patent court districts.

III. Role of the Person of Ordinary Skill in the Art (POSA)

Patents are understood and interpreted from the viewpoint of a person of ordinary skill in the relevant art (“POSA”). A POSA is a legal fiction that is used as an important baseline standard to interpret patent claims and determine patent invalidity and infringement. This Section examines case law definitions of “ordinary skill.”

First, the rationale for a POSA point of view is based on the purpose of a patent and the intended reading audience. Patents are not typical reading material. As the CAFC has stated, “The descriptions in patents are not addressed to the public generally, to lawyers or to judges, but ... to those skilled in the art to which the invention pertains or with which it is most nearly connected.” A qualifying POSA acts as a channel between the invention and lay persons (in this context, including the judges and lawyers) and transforms the technical information into everyday language that people without such background can understand. That interpretation of claim term meanings should to be conducted by a POSA as is consistent with patent law.

Second, a POSA wears more than one hat in a patent litigation. By statute, a patent must provide a written description of an invention which will enable a person in the art to understand how to make and use the invention. A POSA may also determine whether a purported invention is already invented by ascertaining whether prior references disclose the same claimed invention. A POSA also determines whether a patent claim would have been obvious in light of prior art. A POSA may also decide infringement, and equivalents of an invention.

Third, a POSA has presumed abilities: “The person of ordinary skill is a hypothetical person who is presumed to be aware of all the pertinent prior art.” Such ability is quite idealistic for someone with “ordinary” skills. It is not clear how such a condition would be logically fulfilled, especially when some patent claims are very complex. This criterion of extraordinary memory is effectively set aside in real life. Instead, a professional researcher conducts a prior art search to verify whether a claimed “invention” has already been invented - rather like a search for legal precedents. This procedure obviates a need to be “aware of all the pertinent prior art.”

Fourth, a real-life POSA is defined by the plain meaning of “ordinary.” A POSA is considered to have the typical skills and knowledge in a particular technical field, without being a genius or having spent many years in the field. Whether someone is a POSA depends on the nature of the legal issues at hand. For example, to determine whether an invention is obvious, the requisite POSA should be “a person of ordinary creativity” and “common sense.” Otherwise, for most patent matters, factors that may be considered in gauging a POSA's level of ordinariness include: 1) the educational level of the inventor; 2) type of problems encountered in the art; 3) prior art solutions to those problems; 4) rapidity with which innovations are made; 5) sophistication of the technology; and 6) educational level of active workers in the field. These factors are not exhaustive but are merely a guide. For instance, in Daiichi v. Apotex, the CAFC looked primarily at the art of the invention (written description of the patent), the occupations of the inventors at the time of the invention, and the skill of others working in the same field. Regardless of these definitions and factors considered in past case law, it is noteworthy that there was no requirement a person must have personally worked in, practiced, or be formally trained in the particular art to be a POSA. However, as described in Section IV, the recent Sundance decision suggests otherwise.

During patent litigation, the appropriate level of “ordinary skill in the art” is a complex factual inquiry within an abstract legal standard. Although fact finders ultimately decide the level of skill in the art, a court determines the relevant art as a matter of law. Courts have long acknowledged the difficulty of this task. However,
in actual practice, it is often simpler. Usually, litigants often agree in advance about the definition of “POSA” for a particular invention. [206] Managers or senior designers may provide guidance as to what constitutes “ordinary skill.” [207] Additionally, industry organizations or occupation handbooks describe the education level for a particular job. [208] Finally, although a factor that has not been considered in past case law, the skill level of the U.S. Patent & Trademark Office (“USPTO”) patent examiners conceivably may provide a baseline for determining the threshold to be a POSA. Examiners undertake the role of a POSA by construing claims and determining invalidity before granting or denying a patent. And yet, over two-thirds of the examiners have less than three or four years of examination experience and even less actual personal technical experience. [209] As such, a survey of their educational backgrounds and actual work experience could prove useful to courts in deciding an appropriate POSA level. In fact, in light of new USPTO Director David Kappo’s emphasis on improving the examination process, such a study may very well already exist within the organization. The studies that do exist publicly categorize the examiners by art unit, [210] which is very useful to a court because different fields require different levels of skill and number of years of experience.

Finally, time plays a role in the determination of POSAs. Claim construction refers to “the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application.” [211] Similarly, the determination of patent invalidity also refers to the time of the invention. For example, the Sundance court decided the “invention” was obvious based on the combination of two prior patents already existing at the time of alleged “invention.” [212] However, there is a second issue related to time. Unlike claim construction and invalidity issues, which are inventor-focused in the past, infringement is presently determined when an accused product of the defendant was made, used, offered for sale, or sold. [213] It is intuitively clear that it is relatively easy to select a POSA based on the present time, but it is not always as clear as to how to invoke a POSA at the time of the invention.

Determination of the time when a person might be considered an expert or have adequate experience could pose a problem in litigation regarding qualifying a person as a POSA. For example, some patents, like the one in Sundance, are quite old. In Sundance, the patent was filed in 1989, but the testimony of the purported expert took place in 2006. [214] [215] At the time of the filing, court expert Mr. Bliss had only just graduated from law school a year before and had a mere three years of patent-agent experience. [216] Arguably, he was only a technical novice in the 1989. This historical element prevents him from easily projecting his present-day understanding back to a 1989 time frame and testifying about what constituted a POSA’s perspective at the “time of the invention.” Had the court hired a contemporary, highly skilled person, who had been a POSA back at the time of the invention, a more sound result would have ensued. Experts should be highly skilled in the art to be capable of evaluating the level of ordinary skill and applying that perspective. [217]

However, such a rationale is contrary to case law and the method of selecting testifying experts. Present day experts need not be the hypothetical POSAs at the time of invention. [218] But, it does seem perplexing that an “expert” witness, who did not have personal knowledge or experience of a POSA at the time of invention, could surmise the knowledge of a POSA back then. [219] The Sundance case, described in the next section, perhaps provides a solution to this perplexing situation. Although, the Sundance court stated that mere POSAs, rather than the highly skilled, may be “expert” witnesses in the present day, the court appears to have heightened the definition of “POSA.” [220] By requiring a more skillful modern-day “POSA” the Sundance court perhaps ensures that the person could better evaluate the level of ordinary skill and project that perspective back in time.

IV. THE CHRISTMAS CASE OF SUNDANCE V. DEMONTE FOLLOWED BY SEB V. MONTGOMERY WARD [221]

Sundance seemingly heightened the threshold to qualify as a POSA. In this case, the owners of a cover assembly for trucks and trailers (U.S. Patent No. 5,026,109), Sundance, and its licensees sued their rivals DeMonte, et al., for patent infringement. [222] DeMonte relied on its expert's testimony to assert that Sundance's claims were obvious and thus invalid. [223] Sundance appealed on two issues, including the lack of qualification of DeMonte's testifying expert. [224] The CAFC effectively held that for certain roles in patent litigation, FRE 702 experts must meet at least a POSA standard [225] and that the admission of evidence from a non-POSA was an abuse of discretion. [226] The holding actually used the term “expert” rather than “ordinary” - “unless that witness is qualified as an expert in the pertinent art.” [227] But, the opinion then went on to clarify that a “witness possessing merely ordinary skill will often be qualified.” [228] In sum, the FRE 702 person must be at least a POSA and
preferably an expert.

DeMonte's expert, Daniel Bliss, was primarily a patent prosecution lawyer who had an undergraduate mechanical engineering degree. [229] But, he did not personally design or practice the art of the invention; thus, his knowledge was only second-hand, perhaps learned as part of the litigation strategy of "advocacy from the witness stand." [230] Therefore, the Court held he did not qualify as a POSA and was not eligible to testify as a FRE 702 expert for the purposes of claim construction, invalidity, and infringement determination. [231] Sundance stated that there was no “possible relevancy or reliability of Mr. Bliss's testimony as to technical matters in light of his lack of relevant technical expertise.” [232] It is not clear whether the records indicated or whether it would have made a difference to the Court that Mr. Bliss seemed to have actually drafted patents similar to the ones for which he provided an opinion. [233] Thus, Mr. Bliss should have learned the technology through patent preparation and prosecution.

The invention was relatively simple. It was a segmented, retractable cover system where one can roll open a tarp-like cover using a pulley with a handle. [234] The invention is perhaps most easily visualized as a slatted balcony shade that can be rolled up and down. Such a system might be used to shade a porch (e.g. retractable awning), cover a pool, cover the back of a trailer or a truck (e.g. army truck), and so on. [235] The patent itself stated the pulley system was similar to those found in previous patents. [236] In addition, the patent explained others have previously patented retractable cover systems for trucks and the like. However, in the prior art, when the one-piece tarp in the other systems got damaged with holes, the entire tarp or system must be replaced. [237] By contrast, the novelty of Sundance's invention was that its tarp was segmented so only a section needed to be replaced when damaged. [238] Arguably, the invention's subject matter should have been familiar to or readily understood by most people. In fact, the Court decided, “As to the level of skill in the art, testimony at trial established that it would encompass ‘somebody with a high school education, maybe at least a year in working with covers and would also have to understand how mechanical objects work.’ In short, the level of skill is low.” [239]

After claim construction, a jury found the patent infringed, but also invalid because of obviousness. [240] Even the jury decided the invention was simple. However, the district court granted a new trial to reconsider patent invalidity. [241] In the new trial, Mr. Bliss provided testimony. [242] Without relying on references to support his conclusions, he opined that a POSA would be motivated to combine two prior inventions to come up with Sundance's purported invention. [243] Thus, he concluded the invention was obvious and the patent invalid, which is the same result as the jury decision. [244]

Although the invention was low-tech and simple even by laymen standards, the Court still found Mr. Bliss's technical skills inadequate: “Despite the absence of any suggestion of relevant technical expertise, Mr. Bliss offered expert testimony.” [245] According to the Court, patent attorneys are not qualified to testify on issues of validity or patent infringement absent technical expertise in the pertinent art. [246] “These issues are analyzed in great part from the perspective of a person of ordinary skill in the art, and testimony explaining the technical evidence from that perspective may be of great utility to the fact finder.” [247]

Then, interestingly enough, the Court relied on its own legal authority rather than technical experts to determine that the invention was obvious after all - the same conclusion reached by the jury and Mr. Bliss. [248] The Court relied on the legal authority given in KSR, which held that a court may determine whether an invention is obvious. [249] Additionally, the Court relied on the conclusion “that no such [expert] testimony was required because there are no underlying factual issues in dispute as to obviousness. The technology is simple and neither party claims that expert testimony is required to support such a holding.” [250]

The Court apparently made a distinction between Mr. Bliss's learned knowledge and relevant technical expertise. Given the fact that the Court decided the invention was low-tech, it is significant that Sundance held that the patent attorney still did not qualify as a POSA and thus could not testify as a FRE 702 “expert.” It appears that Sundance has heightened the threshold of what constitutes “ordinary skill” and “expert” for patent litigation purposes. Also, learned knowledge appears to be insufficient. The CAFC seemed to reinforce these ideas in light of its subsequent decision in SEB v. Montgomery Ward. [251]
About a year after Sundance, in SEB, the CAFC permitted the testimony of the plaintiff's expert as to the infringement of a deep-fat fryer patent because it deemed the expert to have sufficient expertise. [252] The expert, Charles Van Horn, was a patent attorney, but he also had an undergraduate degree in chemical engineering and was a USPTO examiner for thirty-one years in various capacities, including examining structural and non-structural laminate inventions and supervising chemical technology and organic chemistry groups. [253] However, like in Sundance, the expert did not have personal, let alone designing, experience in the industry. [254]

The fryer at issue had a novel plastic outer shell ("skirt") comprising of heat resistive material which was separated from an inner pan by an air gap, and the skirt encasing the pan was attached to the pan only at the top rim of the pan. [255] The CAFC concluded the inventive part of the apparatus involved the selection of polymer materials and so the expert "did not testify about deep fat frying per se, but instead described the importance of selecting a material ... the importance of the spacing between the hot pan and the skirt ... and reference to thermal bridges." [256]

The SEB decision implied that actual work experience in the industry or formal (scholastic) training was not necessary, but any non-traditional learning experience should be "formidable." [257] Examining chemical patents for so many years indeed seems to be considerably more learned knowledge than what the Sundance expert garnered by drafting some mechanical patents. In fact, the CAFC pointed out, "[SEB] comes nowhere close to the unusual situation in Sundance ..." [258] However, the CAFC also adopted a gentler stance towards a district court's choice of experts than it did in Sundance, "District courts enjoy 'wide latitude' to determine admissibility and 'the mode and order' of evidentiary presentations ... the district court was in the best place to judge that Mr. Van Horn had the 'knowledge, skill, experience, training, [and] education' of a 'specialized' nature."

SEB did not clarify the threshold needed to qualify as an "expert," but rather created some confusion as to what qualifies an expert. Some significant differences in the two cases should also be noted. For instance, the difficulty of the invention was not taken into account in the Court's comparison between Sundance and SEB. The Sundance invention was considered low-tech where a less learned person could testify; whereas, the SEB invention was specialized or high-tech and therefore needed a more learned individual. In addition, some portion of Mr. Van Horn's in SEB testimony involved more mechanics and physics, which was less related to his area of expertise. [259] The Court too noticed and clearly stated, "[Mr. Van Horn] is not an expert on deep-fat-fryers." [260] Another practitioner added that, "Hard to find such experts. They tend to die young." Facetiousness aside, it was not clear from SEB what constituted adequate expertise. The expert in Sundance suffered from the same problem because it the relevant technology involved was not in his area of expertise either.

Regardless of the unanswered questions and lack of clear direction, both Sundance and SEB expressed a desire that the qualification threshold should be higher than what it was in the past. Sundance implied that actual work experience in the industry was important to qualify as an expert even when the invention was simple; whereas, SEB implied that if non-formal training or learning is substituted in lieu of actual work in the industry, that training or learning should be significant, such as being a USPTO patent examiner in a relevant art for over thirty years. Perhaps the two decisions taken together represent a balancing between the two levels: between work experience in the industry and amount of learned knowledge, a greater showing of one factor allowing a lesser showing of the other.

V. DISCUSSION

A. Recap of the Existing Problems

Patents and other areas of law rely on experts to elucidate technology, science, and industry practices. Experts are so commonly allowed that, historically and statutorily, litigants are unlikely to stop employing them. Despite cautionary statements made in CAFC decisions or by the Federal Judiciary Center, some judges continue to employ their own experts to obtain advice, break dead-locks, draft orders, and help reduce docket congestion. However, other CAFC judges endorse the use of experts, [261] though not necessarily non-Rule 706 court experts. Regardless, parties have little say when judges decide to use them, perhaps not even a real say in the choice of the court experts out of concern for offending the judge. [262] A bigger concern is that some types of experts provide their advice and
conduct their activities in secrecy and off the record. Although law clerks may do the same, they tend not to have the
same kind of influence over a judge because judges are often experts in law themselves. [263] Technical experts, on
the other hand, have formidable experience and prestige that may cause judges to defer to their advice. Given this
concern, one obvious way of improving transparency is for district courts to avoid using technical advisors and
embrace the use of only statutory court experts and special masters (Rule 706 and FRCP 53) who are required to
disclose and document their contribution.

Regardless of which type of court expert a judge selects, an additional concern is the qualification of the expert. The
statistics gathered in this paper show that some experts’ experience may not be technically suitable for a particular
case and task, particularly during claim construction. In fact, courts themselves recognize this is a problem. As
pointed out by Sundance, although courts do appoint skilled persons such as patent prosecutors, the skill might not be the correct skill. [264] Therefore, standardizing the qualifications and requiring a POSA threshold
are additional important steps towards improving the efficient use and legitimacy of experts to ensure more equitable outcomes in patent litigation. [265]

This paper analyzed the three categories of court appointed experts: FRE 706 experts, FRCP 53 masters, and
discretionary advisors. According to the Advisory Committee Notes, “The inherent power of a trial judge to appoint
an expert of his own choosing is virtually unquestioned. Hence the problem becomes largely one of detail.” [266] As
discussed above, the most troubling detail is that there are no court expert qualification standards from circuit to
circuit, or even judge to judge. But, the situation could improve with Sundance and SEB. Although these cases
carried party experts, they are also good vehicles to set heightened qualification standards for the selection of
court experts. Moreover, Sundance boldly restricted a district court's discretion in qualifying an expert who opined
on patent invalidity and infringement. [267] Perhaps, the CAFC was signaling that it will provide oversight on the
selection criteria in the future. If nothing else, Sundance and SEB should give party litigants increased effectiveness
to object to a judge's choice of court experts. Litigants could rely on these cases and argue that they impute
conditions on court experts as described.

B. Proposed Solution

Courts should apply a POSA qualification standard to court appointed experts if the tasks require a POSA point
of view. When a court expert is both a POSA and a patent attorney, he may be optimal because he will have an
understanding of both legal and technical issues in a patent. [268] On the other hand, if the expert is a patent lawyer,
he may be part of law firms and could have conflicts of interests with the court or with the parties on other cases.
[269] Also, in the instances in which the same patent lawyer is employed repeatedly, his influence affects many
cases. However, if the patent lawyer is a POSA for each case he works on, at least his influence is reasonably legitimate.

There should be qualification standards especially when selecting technical advisors as opposed to FRE 706 or
FRCP 53 experts. Non-statutory technical advisors permit a judge maximum flexibility and efficiency, but their advice is conducted ex parte even though they are paid by the parties. [270] There are few indications as to how they reached a decision. So, heightened gate-keeping and selection standards seem all the more necessary for technical advisors.

Furthermore, requiring a court expert to meet at least a POSA standard creates self-consistency among patent law, the FRE, and CAFC decisions. The language of the Advisory Committee Notes of FRE 706 or FRCP 53 encourages a high level of expertise. For patent law, this translates into someone comparable to a POSA or even to a highly skilled person in the relevant art, especially when it comes to claim construction. [271] [272] The POSA requirement is also a logical extension of Sundance, which held that party's FRE 702 experts must qualify at least as POSAs. Requiring the same qualification standards for both court and party experts is not only logical, but necessary, when dissecting contradictory party arguments.

To further the POSA requirement, there are clerical, but important details to consider. Parallel to the importance of court opinions, court records should serve the similar function as to explaining why a certain expert was selected for a particular case. Court records should include the resume or description of a selected court expert. Court orders
should include the findings on an expert. While it is unnecessary to revise the abuse of discretion standard of review, these on-record details should better help appellate courts decide whether there is any abuse.

Finally, the court-appointed expert issue is one of fundamental fairness in litigation. The parties pay for the cost of the expert and deserve to get full disclosure and high quality in return (i.e., to get effective results from their expenditure). Also, requiring a POSA standard should better achieve the overarching goals of the FRCP and FRE: “just, speedy and inexpensive determination” as well as “fairness in administration.” [273] Accordingly, it is desirable to establish a unified, compatible set of rules in the selection of experts in patent litigation which may result in more reliable, predictable and just decisions.

The lack of predictable results has been a problem according to two studies conducted on the reversal rates of district court decisions on claim construction. [274] Averaged over about ten years, the reversal rate is over 30% for claim construction, whereas the rate is only about 13% for other matters. [275] Moreover, the Schwartz study contended that judges do not learn from their past errors in claim construction and that the main reason for this high reversal rate is that judges are generalists and not POSAs. [276] As such, one conclusion is that if judges maintain their same habits of not hiring POSAs when necessary or hiring primarily non-POSAs, then their claim construction results will not improve. Thus, hiring POSAs may not be a cure-all, but a POSA is at least predictably more able to understand a patent and provide better accuracy in uncovering the truth.

Finally, because court experts do have much influence on a court's decision, a correct decision speeds litigation and reduces the need for appeals which further saves costs for everyone. Even where influence is minimized, qualification standards legitimize any influence that court experts do appear to have. Standards increase parties' comfort level with court experts.

In Section II-C's survey of court cases, the court experts who were purely technical were highly skilled practitioners. They nearly all held advanced technical degrees and practiced many years in their specialized fields. It was a reasonably safe assumption that they knew the technology of the patent-in-suit better than an attorney with general knowledge or with second-hand learned knowledge through invention disclosures. As such, the advice or determination about an invention made by the purely-technical experts should be more reliable and accurate than that of non-POSA lawyers. Moreover, each technologist appointed was tailored to the technology of the patent-in-suit. Courts that appointed technologists did not use the same person repeatedly, as some courts did with attorney appointees. This practice decreased the likelihood of conflicts of interest and repeated undue influence by any one technologist. Technologists also generally cost less than lawyer experts which thus saved parties on litigation costs. These reasons, among others, indicate why qualified POSAs are good choices as court experts.

C. Remaining Issues and Problems

The potential downside in requiring POSA standard is that it may cause procedures in patent litigation to diverge from the FRE or FRCP or a court's inherent discretionary powers to appoint advisors. In Sundance, the CAFC stated, “There is, of course, no basis for carving out a special rule as to experts in patent cases.” [277] Also, the CAFC stated, “Admission of expert testimony remains subject to the Rules of Evidence and is committed to the discretion of the district court.” [278] However, these concerns have already been “waived” and the CAFC has already gone down a divergent path. In fact, the very creation of a special Federal Circuit court to oversee patent law was unique. [279] Patent law has also gone down a divergent path in procedural and substantive matters. [280] For instance, the CAFC sometimes treat attorney-client privilege matters somewhat differently from the rules provided in Upjohn v. U.S. [281] [282]

As another example of how the CAFC rules have diverged from general evidentiary law, party experts under FRE 702 are intended to “assist the trier of fact.” [283] And yet, claim construction is determined as a matter of law and there is no trier of facts [284] so that the FRE 702 experts who are often used in claim construction are not assisting a trier of fact. The dissent in Markman agonized over this divergence, [285] but the general concern is that overly-technical expert testimony may confuse a jury fact-finder. [286] Finally, as an example closer to the issues of this article, Sundance itself, could be interpreted as diverging from FRE 702 which otherwise permits expert qualification based on “knowledge” rather than formal training, personal work experience or practice in the industry.

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Given some of these existing, rather major, divergences between patent law and the general federal rules and common law, creating a qualification standard and requiring court experts to be POSAs is a fairly small adjustment within the existing circumstances. In patent litigation, Sundance already required FRE 702 experts to at least be POSAs. Extending the concept to court appointed experts is a logical, modest step towards compatibility with Sundance and the entire POSA framework of patent law. [288]

In fact, this small step is consistent with practices of U.S. patent law as well laws in other countries. For example, Japan uses only technical specialists in IP matters as court's technical advisors; there is no intermingling of patent lawyers with technical advisors. [289] Similarly, Taiwan established a fixed division of advisors used by all the courts. [290] In fact, these solutions may even be superior to the solution proposed in this paper as the court expert would already be pre-qualified, there is a convenient, centralized expert database, and so on. However, these solutions could present bigger hurdles to implement and at the very least require Congressional approval.

Of course, there are yet other solutions. For example, in the spirit of disclosure, all experts, including the technical advisors could disclose and write a report in the same manner of the special masters and FRE 706 experts. But, this is only a half-measure solution because if the “expert” is not sufficiently qualified, he still does not satisfy the POSA requirements of patent law. For litigation in other areas of law, perhaps full disclosure alone is adequate, but probably not. The decisions of Daubert v. Merrell Dow and Kumho Tire v. Carmichael favor qualification standards for FRE 702 party experts. [291] Thus, for consistency sake, court experts should also pass qualification standards. As another solution, judges might outsource the task of finding experts by using a middleman or consulting a referral service of some sort. [292] But, this adds another layer of costs for the parties to bear; parties already pay for the court expert. Moreover, the middleman would have to have at least some legal training; he would require broad and strong technical training in order to be able to discern who is qualified for a particular type of technology; he may very well have biases and conflicts of interests and so on. So, this does not seem to be a good solution unless the referral service is officially part of some centralized federal judiciary system, such as part of the Federal Judicial Center. That is, rather than leave it to individual courts to find middlemen, it would be more efficient to invoke a type of “outsourcing” like the one used in Taiwan or Japan. As yet another solution, perhaps all judges should be required to let the parties themselves propose candidates. [293] Per the cases noted in Sections II-B and II-C, some judges already do this on their own. But, there is no statute or case law for such a requirement, and the manner of “hiring” an expert is presently left to the discretion of the judges. As such, this paper presently proposes that all court appointed experts be qualified at least as POSAs in patent litigation.

As to the second issue, what exactly constitutes or should constitute a POSA standard once a POSA standard is implemented? This is partly addressed in Section III, and even though there was already some case law on the “POSA” standard, [294] Sundance seemingly imposed new conditions. Sundance deemed Mr. Bliss's engineering education and patent prosecution experience on automobile and mechanical inventions inadequate to pass the POSA threshold despite the fact that he testified on an obvious, low-tech invention. [295] Moreover, the opinion stated, “In elaborate technical detail, Mr. Bliss opined on how the disclosed invention, accused system, and prior art operate.” [296] So, it would seem that Mr. Bliss really understood the subject matter on which he testified. But still, Sundance concluded, “Unless a patent lawyer is also a qualified technical expert, his testimony on these kinds of technical issues is improper and thus inadmissible.” [297]

By rejecting Mr. Bliss as a POSA, Sundance implied that a POSA should have actually practiced (worked in) or have formal training in the particular relevant art. According to the factors traditionally considered by courts to gauge the level of ordinariness of skill, such conditions are not necessary. [298] Admittedly though, by requiring, say, actual practice, courts might resolve the time issue problem raised in Section III, i.e. whether an “expert” witness, who did not have personal knowledge or experience of a POSA at the time of invention, could surmise the knowledge of a POSA back then. A person who actually practiced the art, especially a designer would almost necessarily have acquired an understanding of past designs. On the other hand, a condition of actual practice or formal training would deviate from the plain meaning of FRE 702 which permits testimony from someone qualified merely by his knowledge or education. [299]

In the subsequent SEB decision, the CAFC continued the trend of upholding a high threshold of expertise. [300]
The circumstances were different, but the threshold was still high. SEB implied actual work experience was unnecessary and formal training was not necessary, but any non-traditional learning experience needed to be formidable. In SEB, the expert examined chemical patents and managed a relevant art unit for thirty-one years. Thus, the CAFC appears to have settled on heightened qualification standards. However, there appeared to be no compensation for the relative difficulty of the inventions in SEB and Sundance and a commensurate level of expertise required of the experts. Nevertheless, the threshold to be a testifying “expert” was heightened in the two cases. Such a condition, regardless of the simplicity or complexity of an invention, has profound ramifications.

Sundance and SEB also implied that the POSA standard is heightened because the expert must now be a POSA and also have more “expertise.” This implied the POSA standard is also heightened. But, the POSA framework is so fundamental to all of patent law that it is difficult to imagine that the CAFC intended a major shift in the definition of a POSA. But, if there are such implications, the CAFC would almost necessarily have to extend Sundance and SEB to the qualification of court appointed experts as well. In any case, the qualification for party experts appears to have been heightened, and so, it is only logical and consistent if the qualification standard for court experts is also heightened. Future cases clarifying these issues should prove interesting.

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[3]. Id. (Claim 1 states: “A DC to AC inverter circuit, comprising: an input voltage source; a plurality of switches arranged in a full bridge configuration wherein opposite corners of said full bridge configuration being selectively coupled to said voltage source; a transformer having a primary side and a secondary side, said primary side being selectively coupled to said voltage source in an alternating fashion through said full bridge switch configuration; a load coupled to said secondary side of said transformer; a pulse generator circuit generating a first pulse signal for driving one of the corner switches of said full bridge configuration; a feedback control loop circuit receiving a feedback signal indicative of power being supplied to the load and adapted to generate a second pulse signal for controlling the conduction state of a switch on the opposite corner of said switch being controlled by said first pulse signal, said second pulse signal having a first state which overlaps said first pulse signal to deliver an amount of power to said load determined by said feedback signal, and a second state which overlaps the first signal with a predetermined minimum overlap to deliver a predetermined minimum power to the load.”).

[4]. If it is not already clear to the reader, court experts refer to an appointee retained by a judge and his staff to aid them directly. The parties usually divide the expense of the court expert. By contrast, party experts are generally “hired guns” for a particular party.


[6]. The boldest criticism of court appointed adjuncts appears to be from a practitioner who called technical advisors “rent-a-judge.” Joseph Hosteny, Niro, Scavone, Haller & Scavone, Litigator’s Corner: Technical Advisors, Intellectual Property Today 38 (2004). The litigator stated his party did not even know the background of the appointee in a recent litigation with which he was involved. Id.; See also Sophia Cope, Ripe for Revision: A Critique of Federal Rule of Evidence 706 and the Use of Court-Appointed Experts, 39 Gonz. L. Rev. 163, 165-66.

[7]. Kimberley A. Moore, Paul R. Michel, Timothy Holbrook, Patent Litigation and Strategy 205-07 (3d ed. 2008). The authors are judges on the Federal Circuit and state that “the Federal Circuit has repeatedly endorsed the use of experts for providing the judge with background on the technology sufficient to determine what the claim terms mean to one of ordinary skill in the art.” Id. at 208.


[11]. Sundance, Inc. v. DeMonte Fabricating Ltd., 550 F.3d 1356, 1361 (Fed. Cir. 2008) (stating “We conclude that the district court abused its discretion in denying Sundance's motion in limine; Mr. Bliss is not qualified to testify as an expert witness on the issues of infringement or validity.”).

[12]. Id.

[13]. Id. at 1360.

[14]. E-mail from Daniel Shuman, Professor at Southern Methodist University, to Dolly Wu (Nov. 7, 2009, (7:22 AM CST)) (on file with author) (Professor Daniel Shuman said, “I should think that generally telling the judge she really has bad judgment in experts is not a winning strategy so such cases are few and far between.”)

[15]. See, e.g., Monolithic Power Sys., Inc. v. 02 Micro Int'l Ltd., 558 F.3d 1341 (Fed. Cir. 2009).


[18]. Markman, 52 F.3d at 976.
[19]. *Id.*

[20]. *Id.*

[21]. U.S. Const. art. III, § 2 (Federal question jurisdiction: cases arising under the Constitution, laws, and treaties). Exceptions may occur for patent licensing cases where the primary issues are contracts, such as breach of contract.

[22]. See *Id.*

[23]. Phillips, 415 F.3d at 1312; Vitronics Corp. v. Conceptronics, 90 F.3d 1576, 1585 (Fed. Cir. 1996).

[24]. Fed. R. EvId. 706 (“Court Appointed Experts”) Notes of Advisory Committee on Rules.

[25]. See, e.g., Monolithic Power, 558 F.3d at 1348 (perceiving “no abuse of discretion in this case where the district court was confronted by what it viewed as an unusually complex case and what appeared to be starkly conflicting expert testimony”).


[27]. Some cases litigated by Steven Geiszler, patent litigator at Gibson Dunn & Crutcher LLP. Private conversation (Nov. 3, 2009).

[28]. Monolithic Power, 558 F.3d at 1345 (emphasis added).


[30]. Menell, *supra* note 29, at § 5.1.2.2 (Educating the Court About Underlying Science and Technology).

[31]. See, e.g., Cook Biotech, Inc. v. Acell, Inc., 460 F.3d 1365, 1373 (Fed. Cir. 2006) (applying Seventh Circuit law when reviewing lower court's evidentiary rulings). Different regional courts sometimes use different terminology for the same function. For example, Eastern District of Michigan recently used an “expert advisor” for technical issues in Novo Nordisk A/S, but the Eastern District of Texas used a “technical advisor.” See Menell, *supra* note 29 at § 5.1.2.2 and Section II-b.

[32]. See, e.g., Menell, *supra* note 29; *See also* Appointing Special Masters and Other Judicial Adjuncts (Academy of Court-Appointed Masters 2006), http://www.courtappointedmasters.org/ACAM%20Benchbook%CC20Master%CC20FINAL%20combined.pdf

[33]. Fed. R. EvId. 706 (“Court Appointed Experts”) (emphasis added).

[34]. *Id.* (Notes of Advisory Committee on Rules) (emphasis added).

[35]. *Id.*

[37]. Monolithic Power, 558 F.3d at 1348 (“the Supreme Court has long recognized the constitutionality of court-appointed experts,” citing Ex parte Peterson, 253 U.S. 300, 312-13 (1920).).

[38]. Id.

[39]. Id. at 1346-48.

[40]. Id. at 1347-48 (The expert was Dr. Santi. “Of note, the jury's verdict did not entirely track Dr. Santi's opinions. Whereas Dr. Santi opined that only claim 12 of the ’722 patent was obvious, the jury found all claims obvious. Moreover, whereas Dr. Santi opined that only claim 12 was infringed under the doctrine of equivalents, the jury found both claims 12 and 14 infringed under the doctrine.”).

[41]. Monolithic Power, 558 F.3d at 1347-48.


[43]. For example, the CAFC used a common theme to decide the patent-eligibility of subject matter that the CAFC deemed to be intangible: man-made encoded electromagnetic signals, business methods, and software. See In re Bilski, 545 F.3d 943, 965 (Fed. Cir. 2008); In re Nuijten, 500 F.3d 1346, 1357 (Fed. Cir. 2007).

[44]. The Monolithic Power panel consisted of Judges Rader, Plager and Gajarsa. Whereas, the Sundance panel consisted of Judges Dyk, Prost and Moore.

[45]. Another possibility is that the expertise was simply not an issue in Monolithic Power. Although, it is surprising there is no dicta altogether. Dr. Enrico Santi was the court expert. See Dr. Santi - biography, South Carolina's Flagship University, http://www.ee.sc.edu/people/faculty/default.asp?id=santi (October 10, 2009) (He is an associate professor at the Department of Electrical Engineering of the University of South Carolina. His long-term research interests are in the area of power electronics. He received his Ph.D. in 1994 from California Institute of Technology, holds two patents, and has many publications related to the relevant topic.)

[46]. Id. (citing In re Joint E. & S. Dists. Asbestos Liti., 830 F. Supp. 686, 693 (E.D.N.Y. 1993) (noting that “use of Rule 706 should be reserved for exceptional cases in which the ordinary adversary process does not suffice”).

[47]. AllVoice Computing PLC, 504 F.3d at 1240. (relying on Professor Paul M. Janicke as an expert, the judge used the terminology “court appointed expert” and did not specify Rule 706.); See also, AllVoice Computing PLC v. Scansoft Inc., Civil Action No. H-02-04471 (S.D. Tex. June 28, 2005) (appointing Gayle R. Peterson, a patent lawyer, as a “court-appointed expert.”).


[49]. AllVoice Computing PLC, 504 F.3d at 1240 (citing Miles Labs., Inc. v. Shandon, Inc., 997 F.2d 870, 875 (Fed. Cir. 1993)) (emphasis added).

[50]. See Professor Janicke - biography, University of Houston Law Center, http://www.law.uh.edu/faculty/print.asp?PID=19 (October 9, 2009) (University of Houston Law Center's Professor Janicke graduated with a B.E.E. (Bachelor of Electrical Engineering) from Manhattan College, but there were no indications of post-graduation electric engineering positions).

[51]. AllVoice Computing PLC, 504 F.3d at 1240.

[52]. Id. (emphasis added).
[53]. Preston Gralla, How the Internet Works 10-11 (8th ed. 2007) (presenting a timeline, showing in 1991, the World Wide Web was developed at CERN, the European Organization for Nuclear Physics). Microsoft Windows is a graphical operating system environment which was not really necessary until the Web grew.


[55]. Id. (“The Magistrate Judge appointed a special master, Paul M. Janicke, to provide recommendations to the district court on claim construction issues. The master, in turn, made recommendations regarding the construction of numerous claim limitations, including ‘re-entrant portion’ and ‘generally convex.’”).


[58]. Id.

[59]. Sundance, 550 F.3d at 1364-65.


[61]. Id.


[63]. Id.

[64]. Fed. R. Civ. P. 53 (2009) (53(a) states in relevant part: (a) Appointment. (1) Scope. Unless a statute provides otherwise, a court may appoint a master only to: (A) perform duties consented to by the parties; (B) hold trial proceedings and make or recommend findings of fact on issues to be decided without a jury if appointment is warranted by: (i) some exceptional condition; or (ii) the need to perform an accounting or resolve a difficult computation of damages; or (C) address pretrial and posttrial matters that cannot be effectively and timely addressed by an available district judge or magistrate judge of the district.”).

[65]. Fed. R. App. P. 48 (2009) (48(a) states “authorizes the appointment of a special master by a court of appeals to handle ancillary matters. Subject to any limitations in the order referring a matter to a special master, the special master is given the power to hold hearings (including the regulation of all aspects of such hearings), administer
oaths, examine witnesses and parties, require the production of evidence, and recommend factual findings and disposition in the matter.” (emphasis added)).


[69]. Id.


[71]. Id.


[74]. Id.


[76]. Constant, 848 F.2d at 1563, 1566 (citing Milliken Research Corp. v. Dan River, Inc., 739 F.2d 587 (Fed. Cir. 1984)).

[77]. Id. at 1567 (emphasis added).

[78]. In the four technology companies where the author has worked, the key patentees are usually the more skilled and experienced engineers. Also, the CAFC instructed that the ordinary person is not a judge, a layman, a person skilled in remote arts, or the inventor. Envtl. Designs, Ltd. v. Union Oil Co., 713 F.2d 693, 697 (Fed. Cir. 1983). Rather, “[a] person of ordinary skill in the art is ... presumed to be one who thinks along the line of conventional wisdom in the art and is not one who undertakes to innovate, whether by patient, and often expensive, systematic research, or by extraordinary insights ....” Standard Oil Co. v. Am. Cyanamid Co., 774 F.2d 448, 454 (Fed. Cir. 1995) (emphasis added).


[80]. “Mr. Bliss is not qualified to testify as an expert witness on the issues of infringement or validity. These issues are analyzed in great part from the perspective of a person of ordinary skill in the art.” Sundance, 550 F.3d at 1361. Even for determining particular types of infringement or validity, a POSA standard is required. Id. (infringement under Doctrine of Equivalents, citing AquaTex Indus., Inc. v. Techniche Solutions, 479 F.3d 1320, 1329 (Fed. Cir. 2007) (citing Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 609, (1950)); Scripps Clinic & Research Found. v. Genentech, Inc., 927 F.2d 1565, 1576 (1991); KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007)).

[82]. *Id.* at 4-5. The study said undergraduate majors were identifiable for 37 persons and 80% out of the 37 had a technical undergraduate degree. *Id.* But, a technical or scientific undergraduate degree is often designated as B.S., B.S.E.E., B.S.C., etc. So probably the ones where the undergraduate degree was not identifiable probably held a B.A. and were not technical or scientific.

[83]. For example, in the Sundance case, the veteran patent lawyer with an undergraduate degree in mechanical engineering did not even qualify as a POSA regarding a mechanical, low-tech, obvious invention.


[85]. *Id.* at 1380.

[86]. *Id.* at 1368.

[87]. *Id.* at 1378 (citing Ex parte Peterson, 253 U.S. 300, 312 (1920); Ass'n of Mexican Am. Educators, 231 F.3d at 590; Reilly v. United States, 863 F.2d 149, 158 (1st Cir. 1988)).

[88]. TechSearch, 286 F.3d at 1369 ("Dr. Anthony Hearn is appointed Technical Advisor to the court in this action for the purpose of assisting the court in understanding all matters requiring technical expertise and skill above and beyond the normal matters routinely dealt with by the court. The Technical Advisor will be paid for his services at the rates of $250 per hour for study and travel time and $300 per hour for court time, plus such reasonable costs as he may incur in the performance of his duties". Dkt. 180, 3:98-cv-03484, November 9, 1999.). Dr. Hearn's resume indicates he was part of the Rand Corporation and a professor, amongst other things. http://www.rand.org/about/contacts/personal/hearn/resume.html (October 11, 2009).

[89]. *Id.* at 1379.

[90]. *Id.*

[91]. *Id.* at 1377 ("the court must rely in understanding the technology so that it can interpret the patent claims ..."; "the district court must have the authority to appoint a technical advisor in such instances so that the court can better understand scientific and technical evidence in order to properly discharge its gatekeeper role of determining the admissibility of such evidence."); citing Ass'n of Mexican Am. Educators, 231 F.3d at 590 (9th Cir. 2000) (en banc); also Gen. Elec. Co. v. Joiner, 522 U.S. 136, 149, 139, L. Ed. 2d 508, 118 S. Ct. 512 (1997) (Breyer, J., concurring) (endorsing the appointment of specialists to assist district courts in understanding scientific or technical evidence); Reilly, 863 F.2d at 156.

[92]. TechSearch, 286 F.3d at 1379 (quoting Ass'n of Mexican Am. Educators, 231 F.3d at 614).

[93]. *Id.*

[94]. FTC v. Enforma Natural Prods., 362 F.3d 1204, 1219 (9th Cir. Cal. 2004) (distinguishing between a court-appointed expert and technical advisors). The CAFC applies regional law. See, e.g., Cook Biotech, 460 F.3d at 1373 (applying Seventh Circuit law when reviewing lower court's evidentiary rulings).

[95]. *Id.* at 1213.

[96]. Menell, *supra* note 29, at § 5.1.2.2.2.1 (emphasis added); See also, Xilinx, Inc. v. Altera Corp., 1997 U.S. Dist. Lexis 13056 (N.D. Cal. July 17, 1997) (stating "the technical advisor will be an electrical engineer, who is not a lawyer, and who will not contribute evidence or render conclusions of law." The advisor attended the hearing and aided claim construction.).
[97]. See, e.g., Note, Improving Judicial Gate Keeping, supra note 6, at 941. (“The informal relationship between judges and advisors necessitates stronger party influence over the initial selection of the advisors.”); See also Hosteny, supra note 6, at 38. (One patent litigator stated “our judge took it upon himself to appoint a technical advisor, without consulting any party to the lawsuit.”)

[98]. See, e.g., Campbell, supra note 9. (providing a table comparing the advantages and disadvantages of using technical advisors compared to Rule 706 experts: appointments of advisors are less time consuming and purportedly cheaper because no depositions are taken).

[99]. See Section II-C.

[100]. TechSearch., 286 F.3d at 1368. See also Dauchot, supra note 6; Wood, supra note 6.

[101]. “A district court's appointment of a technical advisor, outside of the purview of Rule 706 of the Federal Rules of Evidence.” TechSearch., 286 F.3d at 1378

[102]. The Seventh Circuit harshly criticized a judge for meeting alone with experts appointed by the court. Edgar v. K.L., 93 F.3d 256 (7th Cir. 1996). The biggest advantage of technical advisors is that judges may work with them ex parte. If a judge cannot do this in a particular circuit, the judge is arguably better off appointing a FRE 706 expert; See also Fitzpatrick, supra note 102. Meredith Fitzpatrick, Ten Patent Litigation Questions for Texas District Court Judges, Advocacy Department of The University of Texas School of Law, (2009) http://www.texasbariplaw.org/docs/Ten_Patent_Questions_DiNovo_Ellwanger.pdf.

[103]. Fitzpatrick, supra note 102.

[104]. TechSearch, 286 F.3d at 1379 (citing Ass'n of Mexican Am. Educators, 231 F.3d at 614).

[105]. Id. at 1379.


[107]. TechSearch, 286 F.3d at 1378.

[108]. Reilly, 863 F.2d at 157.

[109]. The name of a “technical advisor” was listed in about 110 E.D. Tex. (“EDTX”) decisions in patent infringement cases (search, http:// www.lexisnexis.com, Oct. 12, 2009); See also Fitzpatrick, supra note 102.


[111]. Id. (emphasis added).


[113]. IP Innovation, Civil Case 2:07-cv503.
[114]. See, e.g., Papyrus Tech. Corp. v. N.Y. Stock Exch., LLC, 2009 U.S. Dist. LEXIS 30382, at *3 (S.D.N.Y. Apr. 6, 2009) (“Dr. Clifford Stein has read and signed the attached Scope and Limits of Appointment as a Technical Advisor.”).

[115]. Amgen, 2006 U.S. Briefs 5341, at 1046; See also Dauchot, supra note 6, at Conclusion section (fifty one percent of the trial courts that allowed extrinsic evidence (including expert opinions) professed not to rely on it).


[118]. Menell, supra note 29.


[121]. Id. (emphasis added).

[122]. 800 Adept, Inc. v. AT&T Mobility, LLC, 2008 U.S. Dist. LEXIS 39842, *8 (E.D. Tex. May 16, 2008) (“the Court proposed [name] to serve as a technical advisor in the above-referenced cause of action. The parties were given five days to lodge any objections to [name] serving as technical advisor. No objections have been filed.”).

[123]. Id., Boston Sci. Corp., 2007 U.S. Dist. LEXIS 40602. Professor Shuman does not think it is a “winning argument” with the judge to object to an expert appointed by the court. Supra note 14.

[124]. Monolithic Power, 558 F.3d at 1348

[125]. TechSearch, 286 F.3d at 1377-78.

[126]. See, e.g., Sundance, 550 F.3d at 1360-61; Cook Biotech, 460 F.3d at 1373 (applying Seventh Circuit law when reviewing lower court’s evidentiary rulings); Dauchot, supra note 6, at 7-8.

[127]. Monolithic Power, 558 F.3d at 1348 (“under Ninth Circuit law, district courts enjoy wide latitude to make these appointments. This court perceives no abuse of discretion in this case....”); TechSearch, 286 F.3d at 1378.


[129]. Moore, supra note 7, at 205-07.

[130]. Id.
[131]. Id.

[132]. With possibly the exception of the Eastern District of Texas, these districts were in the “top ten” in patent caseloads in the 2000-2006 period. See Moore, supra note 7, at 94-95. Nowadays, the Eastern District of Texas is among the top ten in patent docket load.

[133]. https://pacer.login.uscourts.gov/cgi-bin/login.pl (October 10, 2009) (follow a particular district and patent case category 830; then follow a particular case name; then search for “appoint,” “expert,” “master,” or “advisor”).

[134]. The names of the experts have all appeared on the Internet. LexisNexis and Martindale Hubbell are additional resources.

[135]. The number of years of training depends on the technology. The choice of three years is selected based on the author's own experience in high-tech software and circuit design. But, three years is consistent with the information provided in cases. E.g. a case where the patent is directed to “Video on Demand”: a system and method for transmitting video programs to remote locations over selected commercial telephone networks. “[T]he court finds that ‘one of ordinary skill in the art’ covered by the patent-in-suit is someone with the equivalent of a “four year” degree from an accredited institution (usually denoted in this country as a B.S. degree) in a field such as electrical engineering, with a concentration of courses covering subjects such as computer science, communication networks, and data transmission, and at least three years of experience in digital networking and network architecture, fiber optic transmission systems, data storage systems, digital video compression, telephone systems, and telecommunication systems. Advanced education could substitute for some experience, while additional training and experience might substitute for formal college education.” USA Video Tech. Corp. v. Time Warner Cable, Inc., 2007 U.S. Dist. LEXIS 92578 (E.D. Tex. Dec. 12, 2007) (emphasis added).

[136]. See, e.g., Gale R. (Pete) Peterson - biography, IP attorney, Cox & Smith, http://www.coxsmith.com/People/GaleRPeterson (October 9, 2009) (“Recognized nationwide in the area of intellectual property law, Pete Peterson has served federal district courts from Georgia, Texas and New York to the state of Washington as a court-appointed special master and technical adviser in more than 50 diverse cases involving today's leading technology companies, covering a wide range of cutting-edge technologies from atomic force microscopes to semiconductors to telecommunications and pharmaceuticals.”).

[137]. Id.


[139]. Id.

[140]. Judge Ware provided very detailed orders to appoint the advisor, stating the informal consultations may be off-record, but reports were also to be provided. See, e.g., Agilent Technologies Inc. v. Affymetrix Inc., Case 5:06-CV-05958, Dkt. No. 51 (October 30, 2007).

[141]. See, e.g., FTC, 362 F.3d at 1213 (questioning whether the district court did its job properly, “Despite our general endorsement of technical advisors; there is concern that the use of technical advisors may impermissibly influence a district court's ultimate findings or impinge upon the court's role as finder of fact.”).


[146]. There were three cases where the court appointed masters for discovery purposes: Power Monolithic, and two that went into mediation.

[147]. Id.

[148]. Research conducted on www.LexisNexis.com (November 18, 2009) (searching on key words such as “special master,” “court appointed expert,” and “advisor” along with the district court's name). There are also some expert advisors. See also note 149 supra.

[149]. Research conducted on www.LexisNexis.com (November 18, 2009). See note 148. NDCA is somewhat unique in not using court appointed experts. The judges or their courts seemed particularly adept at dealing with patent cases and deciding claim construction themselves. Patent litigation typically included a “tutorial” session just before claim construction hearings. Perhaps the California judges/courts figured out the technology based purely on these tutorials and the party briefs.


[152]. See, e.g., N. Am. Container, 415 F.3d at 1342.

[153]. Professor John R. Thomas. There were exceptions for two related cases. For example, Professor Mark A. Lemley and patent attorney Marjory G. Basile were reappointed to subsequent cases filed by the same plaintiff.


[155]. Id.

[156]. The attorneys/professors were John R. Thomas, Thomas N. Young, Richard D. Grauer, James F. Davis, Robert Neuner, Eric M. Dobrusin, Marjory G. Basile, and Mark A. Lemley.

[157]. See supra note 148.


[160]. The order used the terminology of “technical advisor” even though the title was “special master/technical advisor.” Mass, Inst. Tech. v. Abacus, Case5:2001-cv-00344 (E.D. Tex. September 18, 2006).


[164]. See Professor John R. Thomas. There were exceptions for two related cases. For example, Professor Mark A. Lemley and patent attorney Marjory G. Basile were reappointed to subsequent cases filed by the same plaintiff.


[166]. Id.

[167]. The five were Scanner Tech. Corp v. NVIDIA Corp., Case No. 9:06-cv00205; Deep Nines, Inc. v. McAfee, Case No. 9:06-cv00174; Cisco, Anascape Ltd. v. Microsoft Corp., Case No. 9:06-cv00158; Pressure Prods. Med. Supplies, Inc. v. Greatbatch Ltd., Case No. 9:06-cv00121.


[169]. Id.


[171]. Compare the number of cases within a time period: EDTX had 180 cases in nine months; whereas, Delaware had 152 cases in fourteen months.

[172]. Moore, supra note 7.


[174]. The number of cases appears to change often on Delaware's docket, perhaps due to venue transfers. https://pacer.login.uscourts.gov/cgi-bin/login.pl (October 20, 2009).


[176]. The 13% number does not account for transfers in and out of the District of Delaware. Delaware transfers some of its patent cases to judges who are keen to deal with them. The Eastern District of Pennsylvania and the District of Massachusetts have judges signed on to handle Delaware patent issues. See, e.g., Nokia Corp., v. Interdigital Comm., Case No. 1:05-cv00016, Dkt No. 40 (Mar. 22, 2006) (The Order appointing a master to take case of discovery issues).

[177]. Id. (The Special Master requested turning over privileged documents.); Fed. R. Civ. P. 53(f)(5) Reviewing Procedural Matters. Unless the appointing order establishes a different standard of review, the court may set aside a
master's ruling on a procedural matter only for an abuse of discretion.). See also Fed. R. Civ. P. 53(h) (“Appointing a Magistrate Judge. A magistrate judge is subject to this rule only when the order referring a matter to the magistrate judge states that the reference is made under this rule.”).


[180]. Collin Seitz Jr. is also a veteran lawyer and has his own large law firm, http://www.cblh.com/attorneys/cseitz (October 17, 2009).


[183]. E.g., Id.

[184]. See discussion in Section II-A, supra.

[185]. Fed. R. Civ. P. 53(e) (2009) Master's Reports. A master must report to the court as required by the appointing order. The master must file the report and promptly serve a copy on each party, unless the court orders otherwise.

[186]. E.g. Phillips, 415 F.3d at 1313 (“We have made clear, moreover, that the ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application. See Innova, 381 F.3d at 1116 (“A court construing a patent claim seeks to accord a claim the meaning it would have to a person of ordinary skill in the art at the time of the invention.”)."


[188]. Phillips, 415 F.3d at 1311-12 (citing In re Nelson, 280 F.2d 172, 181 (CCPA 1960)).

[189]. Id. at 1313.

[190]. Id.; Ferguson Beauregard/Logic Controls v. Mega Sys., LLC, 350 F.3d 1327, 1338 (Fed. Cir. 2003) (claim terms “are examined through the viewing glass of a person skilled in the art”).


[192]. Johns Hopkins Univ. v. Cellpro, Inc., 152 F.3d 1342, 1360 (Fed. Cir. 1998) (“to prove lack of enablement to show that one of ordinary skill in the art would be unable to make the claimed invention without undue experimentation”); Sanofi-Synthelabo v. Apotex, Inc., 550 F.3d 1075, 1082 (Fed. Cir. 2008) (When an invention is “anticipated” and not new: “Invalidation on this ground requires that every element and limitation of the claim was previously described in a single prior art reference, either expressly or inherently, so as to place a person of ordinary skill in possession of the invention”); Custom Accessories, Inc. v. Jeffrey-Allan Indust., Inc., 807 F.2d 955, 963 (Fed. Cir. 1986) (“The person of ordinary skill is a hypothetical person who is presumed to be aware of all the pertinent prior art”).

[194]. 35 U.S.C. § 103(a) (2006) (“A patent may not be obtained ... if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.”) (emphasis added); KSR Int'l Co., 550 U.S. at 421.

[195]. Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co., 520 U.S. 17, 40 (1997) (“An element in the accused product is equivalent to a claim limitation if the differences between the two are ‘insubstantial’ to one of ordinary skill in the art.”) (emphasis added); AquaTex Indus., Inc. v. Techniche Solutions, 479 F.3d 1320, 1329 (Fed. Cir. 2007) (citing Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 609 (1950)).


[197]. See www.google.com (“prior art search services”) (September 5, 2009).

[198]. Random House Dictionary, Random House (2009) http://dictionary.reference.com/browse/ordinary (October 19, 2009) “1. of no special quality or interest; commonplace; unexceptional: One novel is brilliant, the other is decidedly ordinary; an ordinary person. 2. plain or undistinguished: ordinary clothes.”

[199]. KSR Int'l Co., 550 U.S. at 421.


[202]. Id. at 1257.


[204]. Id.


[206]. Northrop Grumman Corp. v. Intel Corp., 325 F.3d 1346, 1356 (Fed. Cir. 2003) (“Both parties agree that a person of ordinary skill in the art at the time the invention was made would have had knowledge of protocols or data transfer algorithms that did not operate in a bus controller/remote terminal environment or require an operating mode signal such as signal 160.”).

[207]. Interview with Steven Geiszler, patent litigation attorney, Gibson, Dunn and Crutcher (Nov 3, 2009); See also Neutrino Dev. Corp. v. Sonosite, Inc., 410 F.Supp. 2d 529, 550 (S.D. Tex. 2006) (“Expert witnesses quite often have extraordinary skill in the art and are perfectly capable of evaluating the level of ordinary skill and applying that perspective.”).

[208]. See, e.g., United States Department of Labor, Occupational Outlook Handbook, (2008-09 ed. 2008) (describing that the education and training needed to get employment as, say, a typical physicist is at least at the master's or doctorate degree level; “Physicists and Astronomers” section), http://www.bls.gov/oco/ocos052.htm#training (December 18, 2007). Industry organizations include I.E.E.E. and many other professional organizations.
[209]. Dennis Crouch, Patently-O (February 8 and 10 2010), http://www.patentlyo.com/patent/2010/02/patent-examiner-experience-levels-part-ii.html; Mark Lemley and Bhaven Sampat, Examiners Characteristics and the Patent Grant Rate (January 3, 2009) http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1329091 (See Figure 1, In some art units like communications and computers, most have less than two years experience).

[210]. Interview with Steven Geiszler, supra note 207.

[211]. Phillips, 415 F.3d at 1313 (emphasis added).

[212]. 35 U.S.C. § 103(a) (2006) (“A patent may not be obtained ... [where] the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art ....”); see Sundance, 550 F.3d at 1366.


[217]. See Neutrino, 410 F.2d at 550.

[218]. Id.

[219]. One solution courts appear to adopt is to require corroborating evidence regarding the workings of an invention to avoid pinpointing an expert person's level of expertise, whether he is a POSA or, instead, highly skilled in the relevant art. “Documentary or physical evidence that is made contemporaneously with the inventive process provides the most reliable proof that the inventor's [or expert's] testimony [about the invention] has been corroborated.” Tex. Digital Sys. v. Telegenix, Inc., 308 F.3d 1193, 1218 (2002) (overruled on other grounds) (quoting Sandt Tech. v. Resco, 264 F.3d 1344, 1350-51(2001)).

[220]. Sundance, 550 F.3d 1356 at 1363 (“our opinion should not be read as suggesting that Rule 702 requires a witness to possess something more than ordinary skill in the art to testify as an expert. A witness possessing merely ordinary skill will often be qualified to present expert testimony both in patent trials and more generally”).

[221]. Sundance was decided on Christmas Eve. Based on a LexisNexis search, there are nearly no other Christmas Eve decisions except in 1987 when there were three. Perhaps this indicates the importance of issuing the Sundance opinion.


[224]. Id.

[225]. Previously, the CAFC had provided dicta that experts must be POSAs. See, e.g., Endress + Hauser, Inc. v. Hawk Measurement Sys. Pty. Ltd., 122 F.3d 1040, 1042 (Fed. Cir. 1997); Markman, 52 F.3d at 979.
[226]. Sundance, 550 F.3d 1356 at 1361 (“the district court abused its discretion ... Mr. Bliss is not qualified to testify as an expert witness on the issues of infringement or validity.”).

[227]. Id. (“We hold that it is an abuse of discretion to permit a witness to testify as an expert on the issues of noninfringement or invalidity unless that witness is qualified as an expert in the pertinent art.”) (emphasis added).

[228]. Id. (emphasis added).


[230]. Sundance, 550 F.3d at 1362 (“The report does not present Mr. Bliss as having any personal technical experience, or skills in the field of mechanics, much less covers.”); Sundance, 530 F.3d at 1364-65 (“Allowing a patent law expert without any technical expertise to testify on the issues of infringement and validity amounts to nothing more than advocacy from the witness stand.”).

[231]. Id. at 1363.

[232]. Id. at 1364 (emphasis added).


[234]. U.S. Patent No. 5,026,109, Col. 4, lines 10-60.

[235]. Id.

[236]. Id.

[237]. Id. at Col. 2, lines 12 - L:30.

[238]. Id.


[240]. Id.

[241]. Id. at *18.

[242]. Sundance, 550 F.3d at 1359.

[243]. Id. at 1359-60.

[244]. Id.

[245]. Id. at 1361 (emphasis added).
[246]. Id. at 1361-62. The Court provided a long list of other things to which technically-unskilled lawyers may not testify: “anticipation, or any of the underlying questions, such as the nature of the claimed invention, what a prior art references [sic] discloses, or whether the asserted claims read on the prior art reference.” at 1364 (citing Acoustical Design, 932 F.2d at 942). As if this were not enough, the Court further added to the forbidden topics: “obviousness, or any of the underlying technical questions, such as the nature of the claimed invention, the scope and content of prior art, the differences between the claimed invention and the prior art, or the motivation of one of ordinary skill in the art to combine these references to achieve the claimed invention.” Id. (citing Medtronic, 799 F.2d at 741, and In re Deters, 515 F.2d 1152, 1155 (CCPA 1975)).

[247]. Id. at 1361.

[248]. Id. at 1365.

[249]. Id. (citing KSR Int'l Co., 550 U.S. at 398.)

[250]. Id. at 1365 (emphasis added).

[251]. SEB S.A, 594 F.3d at 1365, 1372.

[252]. Id. at 1373.

[253]. Id.

[254]. Id.

[255]. Id.

[256]. Id.

[257]. SEB S.A, 594 F.3d at 1373.

[258]. Id. (“This case comes nowhere close to the unusual situation in Sundance Inc. v. Demonte ... In Sundance, this court held that a district court abused its discretion when it admitted the testimony of a patent law expert “[d]espite the absence of any suggestion of relevant technical expertise.”).

[259]. Id. (The SEB expert also testified that “the ring segments in the modified fryer did not completely close off the air space between the pan and the skirt ... that the hot air escaped the modified fryer ... that hot air leaking out of it will result in a cooler outside plastic wall.”).


[261]. Moore, supra note 7. (authors are now Judges Moore and Michel of the Federal Circuit).

[262]. See, e.g., Hochstein, Case No. 2:04-cv-73071, (the plaintiff made a confidential objection to the court's choice of technical advisor) (the plaintiff made a confidential objection to the court's choice of technical advisor); Hosteny, supra note 6.

[263]. Moore, supra note 7, at 208

[264]. See Sundance, 550 F.3d at 1359-69. (the party expert was a skilled patent lawyer, but not deemed a skilled
engineer. There are other reasons why appointees are sometimes inappropriate.) See, e.g., Hosteny, supra note 6.

[265]. Hosteny, supra note 6. One litigant is publicly vociferous about their influence and calls the court appointees “rent-a-judge.”

[266]. Fed. R. EvId. 706, Notes of Advisory Committee (2009) (internal citations omitted).

[267]. Sundance, 550 F.3d at 1360. It is interesting that the CAFC overturned an abuse of discretion, and whether it really applied regional law. The CAFC stated if the evidentiary matters do not pertain uniquely to patent law, it applies local laws. For example, applying 11th Circuit precedent that evidentiary rulings are only reversed for clear abuse of discretion, the CAFC affirmed. Air Turbine Tech., Inc. v. Atlas Copco AB, 410 F.3d 701, 713 (Fed. Cir. 2005) (citing Tampa Bay Shipbuilding, 320 F.3d at 1216; United States v. Myers, 972 F.2d 1566 (11th Cir. 1992)). See also Research Corp. Techs. v. Microsoft Corp., 536 F.3d 1247, 1255 (Fed. Cir. 2008) (“The United States Court of Appeals for the Ninth Circuit reviews evidentiary rulings under an abuse of discretion standard. United States v. Feingold, 454 F.3d 1001, 1006 (9th Cir. 2006). A district court's decision to preclude expert testimony is such an evidentiary issue. Gen. Elec. Co. v. Joiner, 522 U.S. 136, 141-43 (1997).”).


[269]. Id.

[270]. See Section II-B, supra.

[271]. See discussion, Section II-A, supra.


[276]. Id. at 256-61.

[277]. Sundance, 550 F.3d at 1360 (emphasis added).

[278]. Id. at 1363.

[279]. Markman, 52 F.3d at 1025 (Newman, J., dissenting) (“The Federal Circuit is responsible for establishing consistent national law in its areas of assigned subject matter .... Thus the litigation process that served other civil disputes also served in patent litigation. Today's ruling, with its departures from the rules of evidence, its changed standards of deference and review, its conflict with established jury and bench procedures, challenges the principle on which this comity was based.”).

[280]. Midwest Indus., Inc. v. Karavan, 175 F.3d 1356, 1359 (1999) (en banc in relevant part) (“A procedural issue that is not itself a substantive patent law issue is nonetheless governed by Federal Circuit [CAFC] law if the issue pertains to patent law, if it bears an essential relationship to matters committed to our exclusive [jurisdiction] by
statute, or if it clearly implicates the jurisprudential responsibilities of this court in a field within its exclusive
jurisdiction.”) (internal citations and quotation marks omitted).

and its contents are protected by attorney-client privilege, when it is prepared and submitted to counsel).


[283]. Party experts are typically used for purposes of claim construction, but there is no jury. Fed. R. Evid. 702
states, “If scientific, technical, or other specialized knowledge will assist the trier of fact to determine a fact in issue
..., a witness qualified as an expert by knowledge, skill, experience, training, or education, .... if (1) the testimony is
based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the
witness has applied the principles and methods reliably to the facts of the case.”

[284]. The Supreme Court has stated this many times for over 150 years. E.g. Hogg v. Emerson, 47 U.S. 437, 484
(1848); Silsby v. Foote, 55 U.S. 218, 225 (1853); Winans v. N.Y. & Erie R.R. Co., 62 U.S. 88, 100 (1859); Bischoff
v. Wethered, 76 U.S. 812, 816 (1870); Heald v. Rice, 104 U.S. 737, 749 (1882); Couve v. Royer, 155 U.S. 565, 579-
80 (1895); Market St. Cable Ry. Co. v. Rowley, 155 U.S. 621, 625 (1895); Singer Mfg. Co. v. Cramer, 192 U.S.
265, 275 (1904).

[285]. Markman, 52 F.3d at 1005-1006 (The dissent in Markman was much concerned about the divergence from
federal civil and evidentiary rules. They pointed out, “The majority has created a procedural quandary, for extrinsic
evidence can apparently be received, but no jury can weigh it. When the extrinsic evidence is in conflict--as it
invariably is--what then? Will the Federal Circuit itself weigh the evidence of expert witnesses? Will we receive a
collection of self-serving affidavits, without examination and cross-examination? Such a procedure surely is not
optimal for cases that may require decision of complex engineering or electronics, or chemical or biological
processes.”).

hand, studies have suggested that lawyers and experts believe that “the juries' ability to understand expert testimony
and ranked jurors only slightly less capable of understanding expert testimony than judges.” This, however, was a
study in more general areas of civil litigation rather than in patents. Daniel W. Shuman and Anthony Champagne,
Removing the People from the Legal Process, 3 Psychology, Public Policy, and Law 242, 254 (1997) (citing surveys
of four cities in two studies). See also Valerie P. Hans, Judges Juries, and Scientific Evidence, 16 J.L. & Pol'y 19, 43
(2007) (describing results of a judge study affirming the basic similarity of judge-jury decision making in cases with
scientific evidence).

[287]. The CAFC overruled the Daiichi district court's definition of a POSA. But, the district court stated, “The plain
language of Rule 702 clearly provides that work experience at a certain period in time is not a determining factor in
qualifying a witness as an expert. Rule 702 requires that an expert witness have specialized knowledge, the basis of
which 'can be practical experience as well as academic training and credentials.'” Daiichi Pharm. Co. v. Apotex,

[288]. By contrast, some commentators even advocate revising the language of Rule 706 to compel changes in the
selection and screening of court experts, especially technical advisors. See, e.g., Cope, supra note 6, at 176-85.


[290]. See Thomas Tsai, Introduction to the New Intellectual Property Court in Taiwan, International Association
court_taiwan.html (November 19, 2009).

[292]. See, e.g., Campbell, supra note 9, at 207.

[293]. See, e.g., Cope, supra note 6, at 176-85.

[294]. See Section IV, especially the factors courts use to determine the level of expertise to be a POSA.

[295]. Sundance, 550 F.3d at 1363. Mr. Bliss's law firm drafted many mechanical patents, including ones related to covers for automobiles. This fact may be ascertained on the U.S. Patent Office Web site invention search.

[296]. Id. at 1361-62 (emphasis added).

[297]. Id. at 1362 (emphasis added).

[298]. See Section III. For example, to determine obviousness, the factors include “a person of ordinary creativity” and “common sense.”

[299]. Fed. R. Evid. 702 (2009) (“If scientific, technical, or other specialized knowledge will assist the trier of fact to determine a fact in issue ..., a witness qualified as an expert by knowledge, skill, experience, training, or education, .... if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.”) (emphasis added).

[300]. SEB, 594 F.3d at 1360.

[301]. Id.