No.

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\text { v. } & \\
\text { Zetitioner, } \\
\text { Z4 TECHNOLOGIES, INC., } & \text { Respondent. }
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On Petition For A Writ Of Certiorari
To The United States Court Of Appeals
For The Federal Circuit
PETITION FOR A WRIT OF CERTIORARI

ISABELLA FU
Microsoft Corporation
One Microsoft Way
Redmond, WA 98052
(425) 706-6921

JOHN GARTMAN
Matthew Bernstein
Fish \& Richardson P.C.
12390 El Camino Real
San Diego, CA 92130
(858) 678-5070

Theodore B. OLSON
Counsel of Record
Mark A. Perry
Matthew D. McGill
Minodora D. Vancea
Gibson, Dunn \& Crutcher LLP
1050 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 955-8500

## QUESTION PRESENTED

The Patent Act provides that in a civil action for alleged infringement, "[t]he burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity." 35 U.S.C. $\S 282$. The Federal Circuit has held that the "burden" imposed by Section 282 includes a requirement that all factual predicates of an invalidity defense be proved by "clear and convincing evidence," and that this heightened standard of proof applies even if the evidence of invalidity was not considered by the United States Patent and Trademark Office prior to the issuance of the asserted patent. The question presented is:

When a defense of invalidity under Section 282 rests on documentary evidence that was not considered by the United States Patent and Trademark Office, whether the factual predicates of the defense must be proved by "clear and convincing evidence" or some lower burden of proof.

# PARTIES TO THE PROCEEDING AND RULE 29.6 STATEMENT 

In addition to the parties named in the caption, Autodesk, Inc., was a defendant below, but is not a petitioner in this Court.

Pursuant to this Court's Rule 29.6, undersigned counsel state that Microsoft Corporation has no parent company and that no other publicly held company owns $10 \%$ or more of its stock.

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## PETITION FOR A WRIT OF CERTIORARI

Microsoft Corporation respectfully submits this petition for a writ of certiorari to review the judgment of the United States Court of Appeals for the Federal Circuit.

## OPINIONS BELOW

The opinion of the court of appeals (App., infra, $1 \mathrm{a}-30 \mathrm{a}$ ) is reported at 507 F .3 d 1340 . The opinion of the district court (App., infra, 31a-98a) is electronically reported at 2006 U.S. Dist. LEXIS 58374.

## JURISDICTION

The judgment of the court of appeals was entered on November 16, 2007. Microsoft's timely petition for panel rehearing and rehearing en banc was denied on January 30, 2008. App., infra, 99a-100a. The jurisdiction of this Court rests on 28 U.S.C. § 1254(1).

## STATUTORY PROVISION INVOLVED

Section 282 of the Patent Act, 35 U.S.C. § 282, provides, in relevant part:

A patent shall be presumed valid. . . . The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.

## STATEMENT

For nearly a quarter-century, the Federal Circuit has interpreted the presumption of validity codified in 35 U.S.C. § 282, which specifies no particular burden of proof, to require that a person challenging the validity of a patent prove the factual predicates of invalidity by clear and convincing evidence. See, e.g.,

Am. Hoist \& Derrick Co. v. Sowa \& Sons, Inc., 725 F.2d 1350, 1359 (Fed. Cir. 1984). The Federal Circuit adheres to this view even in instances where a defense of invalidity is based on evidence that was never presented to or considered by the Patent and Trademark Office ("PTO") during the patent's prosecution. See Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1050 (Fed. Cir. 1988); App., infra, 25a (citing Uniroyal). Indeed, the Federal Circuit has gone so far as to hold that the statutory presumption of validity "is never . . . destroyed, or even weakened, regardless of what facts are of record." ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1574-75 (Fed. Cir. 1984) (second emphasis added).

In KSR International Co. v. Teleflex Inc., 127 S. Ct. 1727 (2007), however, this Court contemplated a far more pragmatic view of the statutory presumption of validity. There, the Court "th[ought] it appropriate to note that the rationale underlying the presumption-that the PTO, in its expertise, has approved the claim-seems much diminished" where a defense of invalidity rests on evidence that the PTO never had an opportunity to consider. Id. at 1745. That observation was in accord with the conclusion reached by all twelve regional circuits before the Federal Circuit assumed jurisdiction of most patent matters in 1982. See, e.g., Penn Int'l Indus., Inc. v. New World Mfg. Inc., 691 F.2d 1297, 1300-01 (9th Cir. 1982) ("The basis for the presumption-that the Patent Office has compared the claim of the patent with the prior art and used its expertise to determine validity-can no longer exist when substantial evidence of prior art not considered by the Patent Office is placed in evidence at trial."). It also followed naturally from the foundational principle of administrative law that an agency's legal determinations are
entitled to deference only to the extent that they have "considered all relevant factors." Fla. Power \& Light Co. v. Lorion, 470 U.S. 729, 744 (1985).

In this case, the Federal Circuit paid this Court's opinion in $K S R$ no heed whatsoever. At the trial of this action, Microsoft presented a defense of invalidity under 35 U.S.C. § 282(2) that was based on fully documented, commercial software products whose status as prior art and whose invalidating effect under 35 U.S.C. §§ 102 and 103(a) had never been considered by the PTO during the prosecution of the asserted patents. Microsoft accordingly proposed a jury instruction that would have foreshadowed precisely this Court's opinion in $K S R$ : A challenger's "burden is more easily carried when the references on which the assertion [of invalidity] is based were not directly considered by the examiner during prosecution." App., infra, 102a-03a. The district court rejected that instruction because "it might lead the jury to believe that the burden of proof is less than clear and convincing when prior art was not considered by the PTO." Id. at 59a. And six months after this Court's decision in $K S R$, the Federal Circuit affirmed, offering little more than a quotation of the district court's analysis. Id. at 26a.

As the Federal Trade Commission has recognized, litigation over the validity of patents advances our patent system by "weeding out. . . those patents that should not have been granted." U.S. Fed. Trade Comm'n, To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy, ch. 5, at 28 (2003) ("FTC Report"), http://www.ftc.gov/os/ 2003/10/innovationrpt.pdf. If the burden of proof in such litigation is not calibrated carefully, it will "stifle, rather than promote, the progress of useful arts." $K S R, 127$ S. Ct. at 1746 (citing U.S. Const., art. I,
$\S 8$, cl. 8). The question presented is thus important not only to every person and company affected by the erroneous grant of an invalid U.S. patent, but also to the effective functioning of our patent system. The Federal Circuit's well-entrenched rule that a challenger must sustain a clear-and-convincing burden "regardless of what facts are of record" (ACS Hosp. Sys., 732 F.2d at 1574-75) is ripe for review, and this case presents a sound vehicle for considering the question.

1. This case concerns technology for reducing software piracy. Early methods for combating piracy utilized only one password, usually a serial number provided on the software packaging, to install and activate software. Respondent z4 Technologies, Inc. holds two patents for a claimed "invention" that purported to be novel inasmuch it added a second password to that software activation process.
a. Claim 32 of U.S. Patent No. 6,044,471 ("the '471 patent") claims a software product whose operation requires not only a first password to install and initially operate the software, but also a second password to permanently enable the software, obtained by contacting a representative of the software manufacturer and providing certain registration information. App., infra, 4a-5a. Claims 44 and 131 of U.S. Patent No. $6,785,825$ ("the ' 825 patent") point to the same alleged "invention" as does claim 32 of the ' 471 patent, but characterize it as a "method" and add an element of a software representative performing a comparison of the user's registration information against previously stored information to determine whether the user is unauthorized. Id. at 5a-6a. The principal difference between Claim 44 and Claim 131 of the ' 825 patent is that the former allows a grace period for registering the software based on a prede-
termined number of uses of the software, while the latter allows a grace period based on a predetermined time period. Id. at 4a-5a. ${ }^{1}$ z4 has acknowledged, however, that Claim 44 and Claim 131 "are identical for the purpose of this appeal." z4 C.A. Br. 9. Both the ' 471 and ' 825 patents have an effective filing date (i.e., priority date) of June 4, 1998. C.A. App. 173, 188.
b. As opportunities for software piracy multiplied in the 1990s with the growth of the PC market, Microsoft sought to develop improved methods for combating software piracy. In January 1997, Microsoft hired Aidan Hughes and several other programmers to implement its improved anti-piracy technology, known as the central License Verification Program ("LVP"). C.A. App. 2060. Microsoft directed the programmers' efforts first to products sold in markets with relatively high incidences of piracy. Id. at 3748, 5040. By the end of June 1997, Hughes and others had coded the LVP architecture into "Hungarian Word 97 " and, that same month, Microsoft released 1,000 copies of that software into the Hungarian market. Id. at 5006, 5010.

The LVP architecture embedded in Hungarian Word required two passwords to permanently enable the software. First, in order to install the software, the LVP required an initial authorization code (the product identification code), which, in Hungarian

1 As used in the Patent Act, the word "claim" refers to a statutorily required sentence that "particularly point[s] out and distinctly claim[s] the subject matter which the applicant regards as his invention." 35 U.S.C. § 112 II 2 . The allowed "claims" made in a patent application define "the scope of a patent grant." Markman v. Westview Instruments, Inc., 517 U.S. 370, 373 (1996).

Word 1997, was embedded in each serialized copy of the software. That initial authorization allowed the user a grace period of 20 launches of the program. App., infra, 104a. During that grace period, the LVP prompted the user to call a Microsoft representative to obtain a second password that would permanently enable the software. Ibid. To obtain that second password, the LVP required the user to provide the representative both the product identification code and a hardware identification code specific to the hardware configuration of the particular computer. Ibid. Microsoft generally prohibited customers from installing a single copy of the software on more than three computers, C.A. App. 2197, and the LVP required a Microsoft representative to compare the user-provided product and hardware codes against information stored in Microsoft's registration database to determine if the particular copy of software had been installed on more than the authorized number of computers. App., infra, 104a. If it had not, under the LVP, the Microsoft representative provided the user the second password to activate the software permanently. Ibid. Without the second password, the LVP rendered the software inoperable at the expiration of the grace period, i.e., after 20 launches. Id. at 3785-86.

On June 6, 1997, Hughes began coding the antipiracy component of "Brazilian Publisher 98" ("BP98"). C.A. App. 2062. The LVP architecture implemented in BP98 was substantially identical to that in Hungarian Word 1997 except for two improvements. First, the BP98 LVP required the user to supply the initial password for the installation of the software, which was printed on the software packaging, rather than embedded in the software itself. C.A. App. 2044. Second, the BP98 LVP allowed
users to obtain their second password for permanent enablement manually, by telephone, fax, email, or mail, or automatically, over the Internet-as opposed to only by telephone. App., infra, 105a; see also C.A. App. 3842, 2040-56. As in the Hungarian Word 97 LVP, however, the BP98 LVP required a comparison of the user-provided product and hardware codes against information stored in Microsoft's registration database in order to determine if a particular copy of software had been installed on more than the authorized number of computers. App., infra, 105a; C.A. App. 2197, 5035.

A June 1997 presentation by David Pearce, a Microsoft employee based in the United States contained an early specification of the BP98 LVP. C.A. App. 3744-819 (presentation), 2159-71 (testimony describing presentation). "[A] complete specification for how the final software will look" was delivered in an August 27, 1997 document sent by Hughes to Pearce. Id. at 2067, 2171-72. BP98 was released for manufacturing in the United States in March 1998, and was sold soon thereafter in Brazil-all before z4's founder, David Colvin, filed for his patents. Id. at 2040-42, 2195-96.

Neither Hungarian Word 97 nor BP98 was presented to or considered by the PTO before z4's '471 and ' 825 patents issued. Accordingly, the PTO never made any determination as to whether the asserted claims of the ' 471 and ' 825 patents were valid in view of the LVP architecture embodied in the Hungarian Word 97 and BP 98 software products.
2. z4 sued Microsoft in 2004 in the United States District Court for the Eastern District of Texas, alleging that Microsoft's Office and Windows products embodied or caused use of the claimed "invention"
disclosed in the '471 and '825 patents. App., infra, 4a. In addition to denying infringement, Microsoft argued that the asserted claims of the ' 471 and ' 825 patents were invalid. Microsoft contended and presented evidence that the BP98 software was made and tested in the United States at least three months before z4's June 4, 1998 filing date and that BP98 caused use of the same "invention" as that disclosed in claim 32 of the ' 471 patent and claim 44 of the ' 825 patent, and thus anticipated those claims under 35 U.S.C. § 102(g). Microsoft further contended that, if claim 44 was invalid under $\S 102(\mathrm{~g})$, claim 131 of the '825 patent-which differed from the method specified in claim 44 only in that it employed a grace period defined by a predetermined time, rather than a number of launches-also was invalid as obvious to one skilled in the art. See id. § 103.

At trial, z4 disputed invalidity principally by attacking Microsoft's factual assertion that it had reduced z4's claimed inventions to practice before z4's June 1998 priority date. Relying on Federal Circuit authority holding that "[a]ctual reduction to practice requires that the claimed invention work for its intended purpose," Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1376 (Fed. Cir. 1986), z4 argued that the LVP architecture embodied in the BP98 product was not invalidating because it was not adequately shown by Microsoft to have "worked" for the purpose of reducing pirate registrations. ${ }^{2}$

[^0]In support of its contention that the BP98 product purportedly did not "work" to reduce piracy, z4 relied heavily on a November 1998 email from Microsoft employee Luiz Moncau containing his "preliminary analysis" of BP98 LVP registrations from June 1, 1998 to November 17, 1998. App., infra, 106a-08a. That registration data revealed that only 1191 customers had registered the 1190 copies of BP98 that had been sold-meaning that "no customers" were breaking the code and there were "no pirate users registering at first sight." Ibid. Moncau's email, however, also reported a small number of "strange cases," including one instance ("a pirate case?") in which the LVP permitted a single copy of BP98 to be registered on almost 40 different computers. Ibid. ${ }^{3}$

Microsoft responded that the "strange case[s]" of multiple registrations identified by Moncau could be
[Footnote continued from previous page]
invention." Id. at 20a. The BP98 LVP was intended to prevent customers from permanently enabling software on more than three different computers and thereby reduce piracy. Under Federal Circuit law, Microsoft was entitled to a judgment of invalidity if, before z4's priority date, it "constructed," in the BP98 LVP, "an embodiment . . . that met all the limitations" of z4's claimed inventions, and "determined that [BP98] would work for its intended purpose"' of preventing customers from enabling the software on more than three different computers. Id. at 20a (quoting Cooper v. Goldfarb, 154 F.3d 1321, 1327 (Fed. Cir. 1998)).
3 Regrettably, this email from the files of a Microsoft employee working and living in Brazil was produced to z 4 only on the eve of trial. The district court sanctioned Microsoft for its failure to comply with discovery rules, and instructed the jury that it could infer that Microsoft "withheld the document because it was harmful to the positions it has taken in this case." C.A. App. 1751.
readily explained, as Moncau himself had suggested, by "installation problems," App., infra, 107a, and produced substantial evidence that the BP98 LVP did effectively reduce pirate registrations.

Most telling of all this evidence was the BP98 LVP registration data (referenced in the Moncau email) that only 1,191 users had registered 1,190 copies of BP98-an apparent piracy rate of less than one-tenth of one percent. App., infra, 106a. That data was consistent with Microsoft's experience with Hungarian Word 97, which contained an LVP architecture substantially identical to that of BP98; Microsoft produced evidence that the Hungarian Word 97 LVP rejected $2 \%$ of registrants because they attempted to register a copy of software on more than the authorized number of computers. C.A. App. 5012, 5014.

Beyond the registration data, Hughes testified that he successfully tested the BP98 LVP in February 1998 using a database server he maintained in Houston, Texas; after activating the same copy of software (i.e., the same product identification code) on three different computers (i.e., different hardware codes), the server rejected Hughes's attempted registration of a fourth computer. C.A. App. 2201-04. He also testified that he tested the BP98 LVP in March 1998 against the BP98 registration database in Kirkland, Washington, with the same results. C.A. App. 2207-08. And Microsoft corroborated that testimony with contemporaneous documentary evidence, including screen shots that BP98 would display when the server rejected a user's attempted registration because of installation on more than three com-
puters. Id. at 3837-38; see also 2208-15 (testimony describing screen shots). 4

After the close of evidence, z4 moved for a directed verdict on Microsoft's defense of invalidity. 4/18/06 Trial Tr. 350-53. The district court denied that motion without comment, but later remarked that Microsoft had presented a "substantial" invalidity defense "that a reasonable jury could have found convincing." App., infra, 52a.
c. Given that Microsoft's invalidity defense turned almost entirely on the disputed factual issue of whether the LVP architecture, as embodied in copies of the BP98 product, "worked" to reduce pirate registrations of that product, Microsoft's burden of

4 z 4 also raised two other factual challenges (not addressed by the decisions below) to Microsoft's defense of invalidity to which Microsoft responded with substantial evidence. z4 argued that the BP98 LVP did not compare the product identification code and the hardware identification code to the registration database as disclosed in z4's '825 patent. Microsoft rebutted that contention with expert testimony that the BP98 LVP did perform this comparison, see C.A. Reply Br. 20, documentary evidence demonstrating that BP98's server was designed to deny the permanent activation password based on such comparison, C.A. App. 5033, 5035, and evidence of Hughes's 1998 server tests during which the server rejected users once a copy of software had been registered on three different computers. Id. at 2201-04, 2207-08. z4 also argued that even if Microsoft had reduced the invention to practice before z4's priority date of June 1998, z4 was nonetheless the first to invent because it had conceived the invention in September 1997, before Microsoft. Microsoft answered this argument with evidence of Pierce's June 6, 1997 presentation and Hughes's August 27, 1997 functional specification document for the BP98 LVP architecture, demonstrating that Microsoft had conceived that technology before z4's claimed conception date of September 1997. Id. at 2159-71, 3744-819. Like z4's argument that BP98 did not work, both of these arguments turned on disputed issues of fact.
proof of that fact took on added importance. Controlling Federal Circuit precedent required the district court to instruct the jury that Microsoft had to prove invalidity by clear and convincing evidence. Bio-Rad Labs., Inc. v. Nicolet Instrument Corp., 739 F.2d 604, 615 (Fed. Cir. 1984). Microsoft, however, also proposed an additional instruction stating that the burden to prove invalidity "is more easily carried when the references on which the assertion [of invalidity] is based were not directly considered by the examiner during prosecution." App., infra, 102a-03a. The district court rejected Microsoft's requested instruction, and instructed the jury only that invalidity must be proven by clear and convincing evidence. Id. at 101a.

The jury concluded that Microsoft had infringed both asserted patents and that Microsoft had failed to prove by clear and convincing evidence that any of the asserted claims were invalid. App., infra, 34a35a.
d. Microsoft renewed its motion for judgment as a matter of law on invalidity, and also moved for a new trial. Microsoft argued that the district court had erred in rejecting its proposed instruction that its burden to prove invalidity "is more easily carried" when evidence relied on to establish invalidity was not before the examiner, and that this instructional error warranted a new trial. App., infra, 59a.

The district court denied the motion for judgment as a matter of law on invalidity, holding that the jury could have concluded, under the clear-andconvincing standard, that Microsoft did not show that the anti-piracy feature of BP98 worked for its intended purpose. App., infra, 40a. The district court also rejected Microsoft's motion for a new trial,
relying on Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1050 (Fed. Cir. 1988), which held that the clear-and-convincing burden is not reduced when the prior art presented by the alleged infringer was not considered by the PTO. Microsoft's proposed instruction, the district court held, "might [have] le[d] the jury to believe that the burden of proof is less than clear and convincing when prior art was not considered by the PTO." App., infra, 59a.

The district court entered judgment against Microsoft in the amount of $\$ 140,000,000$.
3. On appeal, Microsoft argued that its burden of proof on facts establishing invalidity should have been diminished in view of the fact that the PTO never considered whether the LVP architecture embodied in BP98 was prior art that invalidated the asserted claims. Microsoft C.A. Br. 54-57. After briefing, this Court issued its decision in $K S R$, wherein this Court observed that the "rationale underlying" the statutory presumption of validity-"that the PTO, in its expertise, has approved the claim-seems much diminished" when potentially invalidating prior art has not been presented to the examiner. 127 S. Ct. at 1746. Microsoft informed the Federal Circuit of the new authority in a letter sent pursuant to Fed. R. App. P. 28(j), and invited the court of appeals to order supplemental briefing on its impact. C.A. Docket No. 40.

The Federal Circuit declined the invitation for supplemental briefing, issuing an opinion six months later that affirmed the judgment of the district court. App., infra, 26a. While the Federal Circuit acknowledged that this Court had decided $K S R$ after the close of briefing, id. at 26a n.3, it apparently viewed that decision as having no effect whatsoever on the
burden of proof when the examiner had not considered the evidence tending to demonstrate invalidity. Parroting the analysis of the district court, the Federal Circuit cited its prior decision in Uniroyal for the proposition that "[t]he burden of proof is not reduced when prior art is presented to the court which was not considered by the PTO," and stated that Microsoft had "cited no authority compelling courts" to provide an instruction that the burden of proof is diminished such circumstances. App., infra, 25a-26a.

## REASONS FOR GRANTING THE PETITION

In $K S R$, this Court found it "appropriate to note" that the rationale underlying the Federal Circuit's deferential "clear-and-convincing" standard-"that the PTO, in its expertise, has approved the claimseems much diminished" when a defense of invalidity rests on evidence that the PTO never considered. 127 S. Ct. at 1745 . Given the opportunity, six months later, to revisit its entrenched rule that "[t]he burden of proof is not reduced when prior art was not considered by the PTO," App., infra, 102a03a, the Federal Circuit carried on as if $K S R$ had never been decided. If the Federal Circuit's willful blindness to this Court's teachings were not enough to warrant certiorari, the decision below also conflicts with pre-1982 decisions of all twelve regional courts of appeals, and the fundamental principle of administrative law that agency determinations are entitled to deference only to the extent that the agency has considered all relevant evidence.

The question presented is undeniably important. Studies undertaken by the Federal Trade Commission and leading scholars confirm that, by greatly diminishing the ability of patent litigants to cull the "patent thicket" of invalid patents, the burden of
proof applied by the Federal Circuit to challenges to patent validity stifles, rather than promotes, the progress of the useful arts. $K S R, 127 \mathrm{~S}$. Ct. at 1746. The categorical rule applied by the courts below has been the law of the Federal Circuit since 1984 and thus is ripe-indeed, overdue-for this Court's review. This case, which comes to this Court on final judgment, presents a sound vehicle for that review. The petition should be granted.

## I. The Federal Circuit's Decision Disregards This Court's Decision In KSR And Conflicts With Decisions Of All Twelve Regional Circuits

A. In $K S R$, this Court held (unanimously) that claim 4 of respondent Teleflex's patent (the Engelgau patent) recited subject matter that was "obvious," and thus not patentable, in light of an earlier patent (the Asano patent) that Teleflex had never presented to the PTO during the prosecution of the Engelgau patent. See 127 S. Ct. at 1745.

Because this Court found that claim 4 of the Engelgau patent was obvious as a matter of law, it did not need to reach the question, lurking in the $K S R$ record (but cleanly presented in this case), "whether the failure to disclose Asano during [Teleflex's] prosecution of Engelgau voids the presumption of validity given to issued patents." Id. "[N]everthless," this Court "th[ought] it appropriate to note that the rationale underlying the presump-tion-that the PTO, in its expertise, has approved the claim-seems much diminished" when a defense of invalidity rests on evidence that was never considered by the PTO during the prosecution of an asserted patent. Id.

In this case, Microsoft proposed a jury instruction that, had it been delivered, would have "diminished" the presumption of validity in precisely the manner that this Court found "appropriate." $K S R$, 127 S. Ct. at 1745. A challenger's "burden," Microsoft urged, "is more easily carried when the references on which the assertion [of invalidity] is based were not directly considered by the examiner during prosecution." App., infra, 102a-03a. The clear-andconvincing instruction delivered by the district court, on the other hand, relied on exactly the rationale"the presumption that the United States Patent and Trademark Office acted correctly in issuing a patent," id. at 101a-that this Court later found "much diminished" where, as here, a defense of invalidity rests on documentary evidence that never had been considered by the PTO.

Even after Microsoft brought this particular aspect of $K S R$ to the Federal Circuit's attention in a Rule 28(j) letter-six months before this appeal was decided-the Federal Circuit disregarded it. Consistent with its long-held view that the presumption of validity is "never ... weakened, regardless of what facts are of record," ACS Hosp. Sys., 732 F.2d at 1574-75, the Federal Circuit affirmed the district court's rejection of Microsoft's proposed instruction. Microsoft's instruction, the court reasoned, might have " $[\mathrm{ed}]$ the jury to believe that the burden of proof is less than clear and convincing when prior art was not considered by the PTO." App., infra, 26a (quoting id. at 59a). The law of the circuit, the court observed, is that "[t]he burden of proof is not reduced when prior art is presented to the court which was not presented to the PTO." Id. at 25a (quoting Uniroyal, 837 F.2d at 1050).

The Federal Circuit's longstanding rule that a challenger must prove all the factual predicates of a defense by clear and convincing evidence "regardless of what facts are of record," ACS Hosp. Sys., 732 F.2d at 1574-75-which is to say, whether or not the PTO has previously considered the evidence put forward by an alleged infringer-cannot sensibly be reconciled with this Court's statement that the "rationale underlying the presumption... seems much diminished" when a defense of invalidity is based on evidence that the PTO never considered. KSR, 127 S. Ct. at 1746 . Nor can the Federal Circuit's rule be reconciled with this Court's suggestion that such "facts of record" might "void[ ] the presumption" altogether. Id. at 1745. But see ACS Hosp. Sys., 732 F.2d at 1574 (the presumption is "never annihilated, destroyed or even weakened").

In an effort to distinguish KSR, z4 argued in the court of appeals that when a challenger asserts "prior invention/use" under Section 102(g) (as opposed to, for instance, obviousness or anticipation by prior art) this Court's decisions in The Barbed Wire Patent, 143 U.S. 275 (1892), Cantrell v. Wallick, 117 U.S. 689 (1886), and Coffin v. Ogden, 85 U.S. 120 (1874), "compel [ ] the clear and convincing standard." C.A. Resp. to Pet. for Reh'g 4-5. It is a strange interpretation of Section 282 that permits courts to vary the burden of proof depending upon the asserted legal basis of invalidity, and, indeed, the nineteenthcentury decisions invoked by z4 do not remotely establish that prior inventorship is a disfavored ground that must be proved with greater certainty than other bases for invalidating a patent. Those decisions addressed assertions of invalidity based on "oral testimony . . . in the absence of models, drawings or kindred evidence," T.H. Symington Co. v.

Nat'l Malleable Casting Co., 250 U.S. 383, 386 (1919), and applied a familiar common-law doctrine concerning the reliability of certain types of evidence, not a doctrine establishing a heightened burden of proof for "prior invention" defenses in general. See James W. Dabney, KSR: It Was Not Ghost, 24 Santa Clara Computer \& High Tech. L.J. 131, 165 n. 60 (2007).

Assertions of invalidity that, like Microsoft's, are based on documentary evidence, do not pose the "risk of creative recollection of inventions allegedly made" by the defendant (C.A. Resp. to Pet. for Reh'g 4-5) that concerned this Court in The Barbed Wire Patent and its predecessors. Indeed, Microsoft's assertion of invalidity is the converse of that confronted by the Court in those cases: Whereas in Cantrell, for instance, this Court closely scrutinized oral testimony evincing prior inventorship because the alleged invention was "not produced" into evidence, "nor any model of it," 117 U.S. at 696, here an actual copy of BP98-a fully documented, commerciallymanufactured product-was introduced into evidence, C.A. App. 2040-42, along with documentary evidence demonstrating that Microsoft had conceived the invention before z4's alleged conception date, id. at 2171-72, and reduced it to practice before $z 4$ 's June 1998 filing date, App., infra, 106-08a. Neither The Barbed Wire Patent, nor Cantrell, nor Coffin lends any support to the notion that assertions of prior inventorship based on documentary evidence must surmount a clear-and-convincing burden of proof. Indeed, this Court often enough has resolved questions of patent validity, including those based upon an allegation of "prior invention/use," without applying-or even mentioning-a clear-andconvincing burden of proof. See, e.g., Leggett v.

Standard Oil Co., 149 U.S. 287, 297 (1893) (invalidating patent based on evidence that the claimed process of lining oil barrels with glue had been used previously by other manufacturers). 5

The Court should grant certiorari so that it may now hold expressly what it has held impliedly in so many of its past patent law precedents, and what the Court strongly indicated in $K S R$ just last Term: When a defense of invalidity under Section 282 rests on documentary evidence that was not considered by the PTO before the patent issued, the statutory presumption of validity cannot rightly be interpreted as stripping courts of authority to sustain the defense except on a record that establishes by "clear and convincing evidence" each and every factual predicate of the defense.
B. The Federal Circuit's holding that a challenger must prove invalidity by clear and convincing

[^1]evidence even when relevant documentary evidence has not been presented to or considered by the PTO conflicts directly with the pre-1982 decisions of all twelve regional circuits. While the Federal Circuit now (post-1982) has exclusive jurisdiction over most patent appeals, regional circuits continue to have jurisdiction over cases in which patent claims and issues are raised only in a defendant's counterclaim. See Holmes Group, Inc. v. Vornado Air Circulation Sys., Inc., 535 U.S. 826 (2002). Regional circuit decisions on matters of patent law "provide an antidote to the risk that the specialized court may develop an institutional bias," and are useful, to the extent the Federal Circuit departs from them, in identifying patent cases that "merit this Court's attention." Id. at 839 (Stevens, J., concurring). Against the backdrop of the Federal Circuit's indifference to this Court's decision in $K S R$, the Federal Circuit's break from the uniform view of the regional circuits presents a compelling case for this Court's review.

As in $K S R$, each of the regional courts of appeals to have addressed the question presented has rejected application of an undiminished burden of proof, recognizing that when the PTO has not considered the evidence on which a defense of invalidity rests, there is no factual determination with respect to the patentability of the claimed subject matter that warrants deference in the form of a heightened burden of proof.

The Fifth Circuit, for example, emphasized that, " $[w]$ here the validity of a patent is challenged for failure to consider prior art, the bases for the presumption of validity, the acknowledged experience and expertise of the Patent Office personnel and the recognition that patent approval is a species of administrative determination supported by evidence,
no longer exist." Baumstimler v. Rankin, 677 F.2d 1061, 1066 (5th Cir. 1982) (citation omitted). "[T]hus," the court held, "the challenger of the validity of the patent need no longer bear the heavy burden of establishing invalidity either 'beyond a reasonable doubt' or 'by clear and convincing evidence."' Ibid. Accordingly, the Fifth Circuit concluded that the jury charge, which instructed that the defendant needed to prove invalidity "by clear and convincing evidence," was "erroneous," and remanded the case for a new trial. Id. at 1068, 1069.

In Manufacturing Research Corp. v. Graybar Electric Company, 679 F.2d 1355 (11th Cir. 1982), the Eleventh Circuit reached a similar conclusion, holding that the district court, presented with evidence of invalidity not considered by the examiner, "erred in instructing the jury to apply a clear and convincing evidence standard to the defense of invalidity," and remanded for a new trial. Id. at 1364. "[W]hen pertinent prior art was not considered by the Patent Office," the court explained, "the burden upon the challenging party is lessened, so that he need only introduce a preponderance of the evidence to invalidate a patent." Id. at 1360-61; see also id. at 1364 ("Graybar is only obligated to show invalidity by a preponderance of the evidence").

Presented with the converse situation-a patent holder arguing that the district court erred in instructing the jury that it could find invalidity by a preponderance of the evidence-the First Circuit affirmed the preponderance instruction. See Futorian Mfg. Corp. v. Dual Mfg. \& Eng'g, Inc., 528 F.2d 941, 943 (1st Cir. 1976). The First Circuit explained that, "to the extent patent office attention has not been directed to relevant instances of prior art the presumption of validity arising from the issuance of a patent
is eroded." Ibid. "The presumption of validity having been [thus] weakened, it follows that while [the] burden still remain[s] on the challenger, it would, as a practical matter, be less than the burden embodied in the 'clear and convincing' standard." Ibid.

The other nine regional circuits are substantially in accord, holding that when the evidence of invalidity adduced by the challenger has not been considered by the PTO, the statutory presumption of validity is "weakened," U.S. Expansion Bolt Co. v. Jordan Indus., Inc., 488 F.2d 566, 569 (3d Cir. 1973); Preformed Line Prods. Co. v. Fanner Mfg. Co., 328 F.2d 265, 271 (6th Cir. 1964), "substantially weakened," Cont'l Can Co. v. Old Dominion Box Co., 393 F.2d 321, 326 n. 8 (2nd Cir. 1968), "weakened or destroyed," Marston v. J.C. Penney Co., 353 F.2d 976, 982 (4th Cir. 1965), "weakened, if not completely destroyed," Ralston Purina Co. v. Gen. Foods Corp., 442 F.2d 389, 390 (8th Cir. 1971), "largely dissipated," Jaybee Mfg. Corp. v. Ajax Hardware Mfg. Corp., 287 F.2d 228, 229 (9th Cir. 1961), diminished to the point that it "does not apply," Turzillo v. P. \& Z. Mergentime, 532 F.2d 1393, 1399 (D.C. Cir. 1976), or "does not exist," Henry Mfg. Co. v. Commercial Filters Corp., 489 F.2d 1008, 1013 (7th Cir. 1972), or simply "vanishes," Plastic Container Corp. v. Cont'l Plastics of Okla., Inc., 708 F.2d 1554, 1558 (10th Cir. 1983).

Though all twelve regional circuits had held that, when the PTO has issued a patent without considering evidence pertinent to patentability, the presumption of patent validity is (at minimum) "weakened," and accordingly incapable of supporting a heightened burden of proof, the Federal Circuit established and blindly adheres to a rule that a challenger must carry a clear-and-convincing burden regardless of the facts of record. That radical departure from the uni-
form pre-1982 practice of the regional circuits warrants this Court's review.

## II. The Federal Circuit's Interpretation Of Section 282 Is At Odds With Basic Principles Of Administrative Law

In addition to disregarding this Court's decision in $K S R$ and setting itself against an overwhelming tide of authority from the regional circuits, the Federal Circuit's interpretation of Section 282 also contravenes foundational principles of administrative law.

The PTO is an "agency" and its findings indisputably constitute "agency action," subject to the Administrative Procedure Act ("APA"). Dickinson v. Zurko, 527 U.S. 150, 154 (1999). While judicial review of agency action under the APA is generally deferential, see 5 U.S.C. § 706(2), that deference is predicated always on the agency's "consideration of the relevant factors." Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 42 (1983). While "a court is not to substitute its judgment for that of the agency," an agency determination that "fail[s] to consider an important aspect of the problem" is not a "judgment" that is entitled to deference. Id. at 43. "[I]f the agency has not considered all relevant factors," its determination is arbitrary and capricious under the APA, and courts almost invariably remand such determinations to the agency so that it may produce a determination that is entitled to judicial deference. Fla. Power \& Light Co. v. Lorion, 470 U.S. 729, 744 (1985).

By interpreting Section 282-which itself is completely silent as to the weight of the challenger's burden of proof-to require that challengers prove invalidity by clear and convincing evidence even
when the challenge is based on evidence of invalidity not presented to the examiner, the Federal Circuit has mandated judicial deference to agency determinations even when the agency concededly "has not considered all relevant factors." Fla. Power \& Light, 470 U.S. at 744 (emphasis added). The Federal Circuit thus mandates deference to agency determinations of patentability that are, by definition, "arbitrary and capricious." Nat. Ass'n of Homebuilders v. Def. of Wildlife, 127 S. Ct. 2518, 2529 (2007); see also Stuart M. Benjamin \& Arti K. Rai, Who's Afraid of the APA? What the Patent System Can Learn from Administrative Law, 95 Geo. L.J. 269, 319 (2007) (arguing that the clear-and-convicing burden is unwarranted because "[u]nder boilerplate administrative law, a court cannot defer to agency factfinding if the agency has not even passed on the factual ques-tion-the agency has not considered the factual question, so there is nothing for the court to defer to").

The oddity of the Federal Circuit's interpretation of Section 282 is magnified by the fact that no remotely analogous area of the patent law requires courts to defer to PTO determinations in the face of new information affecting patentability. For instance, as this Court explained in Zurko, when a disappointed patent applicant sues in district court under 35 U.S.C. § 145 to review a decision of the Board of Patent Appeals and Interferences and presents "new or different evidence" concerning validity, it is the district court, not the PTO, that sits as the actual "factfinder." 527 U.S. at 164. The administrative decision is not simply subjected to substantial evidence or arbitrary-and-capricious review; the district court is obligated to resolve in the first instance the disputes of fact arising out of the "new or different
evidence," ibid., presumably under a preponderance standard. See Fregeau v. Mossinghoff, 776 F.2d 1034, 1038 (Fed. Cir. 1985) ("where new evidence is presented to the district court . . . a de novo finding will be necessary to take such evidence into account").

Similarly, when the PTO opens a reexamination of an issued patent "on the basis of new information about pre-existing technology which may have escaped review at the time of the initial examination," the agency does not start by presuming its earlier grant of a patent was correct. In re Etter, 756 F.2d 852 , 856 (Fed. Cir. 1985) (en banc) (emphasis in original); see also 35 U.S.C. § 305. Indeed, because reexamination proceedings involve "'a substantial new question of patentability," the Federal Circuit has held that the presumption of validity does not apply at all (much less a presumption of validity and a burden of proof of invalidity by clear and convincing evidence). Etter, 756 F.2d at 856. There is no basis for deferring to a PTO determination of patentability when the PTO has failed to consider pertinent evidence affecting that determination.

This Court's suggestion in $K S R$ that the statutory presumption of validity might be void when pertinent evidence of invalidity was not considered by the agency, see 127 S . Ct. at 1746 , is rooted in the fundamental principle of administrative law that agency determinations are entitled to deference only to the extent that they have considered "all relevant factors." Fla. Power \& Light, 470 U.S. at 744. Although Zurko made clear that the Federal Circuit could not isolate the PTO from the mainstream of administrative law, that court's "inattention to administrative law principles has long been a striking feature of the patent system." Benjamin \& Rai, su-
pra, at 270. Certiorari is warranted to ensure that our patent laws are interpreted, and our patent system administrated, in accordance with basic precepts of administrative law.

## III. A National Study Of The Federal Trade Comimission Marks The Question Presented As Exceptionally Important

It is beyond serious dispute that invalid patents "stifle, rather than promote, the progress of useful arts." $K S R, 127$ S. Ct. 1727, 1746. Invalid patents confer market power "without consumer benefit," encourage litigation, raise "transaction costs," and create uncertainty that "may deter investment in innovation and/or distort its direction." National Research Council, A Patent System for the 21st Century 95 (2004), http://www.nap.edu/html/patent system/030908910.pdf.

Still, invalid patents have proliferated. The recent surge of patent applications-last year, the PTO received twice as many patent applications $(467,243)$ as it did just ten years ago $(237,045)$, see USPTO Performance and Accountability Report, tbl. 2 (2007)has overwhelmed the resources of the PTO's examiners. See Doug Lichtman \& Mark A. Lemley, Rethinking Patent Law's Presumption of Validity, 60 Stan. L. Rev. 45, 46, 54 (2007). Compounding the strain on agency resources imposed by the volume of patent applications is the difficulty of obtaining reliable information about the claimed technology. As Professors Lichtman and Lemley observed, "[p]atent applications are evaluated early in the life of a claimed technology, and thus at the time of patent review there is typically no publicly available information" from which an examiner could readily determine novelty or nonobviousness. Id. at 46. "Worse, patent
examiners cannot solicit credible outsider opinions" because patent evaluation is at least in part a confidential conversation between an applicant and the examiner. Ibid.; see also FTC Report, ch. 5, at 28 (detailing "the failings of ex parte examination," including "limited examiner time, the limited nature of [the] applicants' disclosure obligations, limited access to potentially vital prior art and third-party expertise").

When coupled with significant information asymmetries, the examiners' limited time predictably and inevitably results in an increasingly large number of mistakes, some of them glaring. See, e.g., Sara Schaefer Munoz, Patent No. 6,004,596: Peanut Butter and Jelly Sandwich, Wall St. J., Apr. 5, 2005, at B1; see also FTC Report ch. 5, at 25-28. Particularly in an era when the PTO's gatekeepers are stretched too thin, patent litigation is an important tool for "weeding out... those patents that should not have been granted." FTC Report ch. 5, at 28; see also Lear, Inc. v. Adkins, 395 U.S. 653, 670 (1969) (because the PTO's non-adversarial process is error-prone, without litigation over patent validity "the public m[ight] continually be required to pay tribute to would-be monopolists without need or justification").

In patent litigation, no less than in other arenas, the burden of proof is often outcome-determinative. See In re Winship, 397 U.S. 358, 367-68 (1970). Indeed, when the Federal Circuit strengthened the presumption of validity by adopting the clear-andconvincing standard in the early 1980s, the rate at which patents were held valid increased significantly. Lichtman \& Lemley, supra, at 69. The burden of proof courts apply to invalidity defenses thus impacts directly whether patent litigants can cull invalid patents from the modern patent thicket and,
less directly, whether our patent system is calibrated to promote progress in the useful arts, or to stifle it.

After undertaking a comprehensive review of the Nation's patent system, the FTC concluded that the clear-and-convincing burden of proof imposed by the Federal Circuit on patent challengers tended to hinder, rather than promote, progress. By "distort[ing] the litigation process," the clear-and-convincing standard creates "serious potential for judicially confirming unnecessary, potentially competitionthreatening rights to exclude." FTC Report ch. 5, at 28; see also Lichtman \& Lemley, supra, at 58 (observing that the clear-and-convincing standard favors disproportionately patents of dubious validity). Accordingly, the FTC has recommended that "legislation be enacted specifying that challenges to the validity of a patent be determined based on a preponderance of the evidence," FTC Report ch. 5, at 28-a conclusion that has been echoed by leading commentators. Lichtman \& Lemley, supra, at 49; Matthew Sag \& Kurt Rohde, Patent Reform and Differential Impact, 8 Minn. J.L. Sci. \& Tech. 1, 63 (2007).

If it is true as a general matter, as the FTC has concluded, that, by distorting litigation outcomes, the Federal Circuit's clear-and-convincing standard jeopardizes the ability of patent litigants to clear the field of competition-threatening invalid patents, then the risk is particularly acute in cases in which the pertinent evidence of invalidity was not considered by the patent examiner. It is in those cases-cases where the PTO was not afforded the opportunity "to do its job," Am. Hoist \& Derrick, 725 F.2d at 1359that the risk of examiner error is at its zenith, and, as recognized in $K S R$, the justification for the presumption of validity as its nadir.

## IV. The Question Presented Is Ripe For Review And This Case Presents A Sound Vehicle For Resolving It

Eight years ago the Federal Circuit considered it already "well established that persons defending against a charge of infringement on the ground of patent invalidity by virtue of prior invention or prior knowledge must establish this defense by clear and convincing evidence." Environ Prods., Inc. v. Furon Co., 215 F.3d 1261, 1265 (Fed. Cir. 2000). And, the uniform view of all twelve regional circuits notwithstanding, it was equally well-established that, as the decision below illustrates, a challenger's burden "is not reduced when prior art is presented to the court which was not considered by the PTO." App., infra, 25a (quoting Uniroyal, 837 F.2d at 1050). This issue will not benefit from further percolation in the circuits. The twelve regional circuits remain bound by their pre-1982 decisions holding that the statutory presumption of validity and the burden of proof that flows from it are, at least, "weakened," when validity is challenged based on evidence of invalidity not considered by the PTO. E.g., Futorian Mfg. Corp., 528 F.2d at 943. And the Federal Circuit thus far has exhibited an unwillingness to revisit its interpretation of Section 282 en banc, even when confronted directly by this Court's unanimous statement that the rationale for according patents a presumption of validity "seems much diminished" when the pertinent evidence of invalidity had not been presented to the examiner. $K S R, 127 \mathrm{~S} . \mathrm{Ct}$. at 1745 . The question presented is ripe for this Court's review.

And this case, which comes to the Court on final judgment, presents a sound vehicle for its review. Microsoft proposed an instruction that the burden of proof by clear and convincing evidence "is more eas-
ily carried when the references on which the assertion [of invalidity] is based were not directly considered by the examiner during prosecution," App., infra, 102a-03a, and objected to the district court's rejection of that instruction both in its motion for a new trial, see D. Ct. Docket Entry 327, at 1-4, and on direct appeal, see Microsoft C.A. Br. 54-57. To be sure, consistent with the well-established law of the Circuit, Microsoft did not argue that its burden of proof had been reduced to a mere preponderance. But through its proposed "more easily carried" in-struction-itself rooted in out-of-fashion Federal Circuit precedent, see EWP Corp. v. Reliance Universal Inc., 755 F.2d 898, 905 (Fed. Cir. 1985)—Microsoft urged an instruction that its "burden" of proof was weakened in these circumstances. And the court of appeals rejected that instruction because "it might [have] le[d] the jury to believe that the burden of proof is less than clear and convincing when prior art was not considered by the PTO." App., infra, 26a.

This case thus clearly and cleanly presents the question whether, when a defendant challenges the validity of a claim based on documentary evidence of invalidity not considered by the examiner, the challenger's burden of proof may be sustained by less than clear and convincing evidence. And if the question presented is resolved in Microsoft's favor, Microsoft, like the defendants in Baumstimler, 677 F.2d at 1069, Manufacturing Research, 679 F.2d at 1364, and several other cases decided in the regional circuits before 1982, will be entitled to a new trial.

## CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted.

IsABELLA FU<br>Microsoft Corporation<br>One Microsoft Way<br>Redmond, WA 98052<br>(425) 706-6921<br>John Gartman<br>Matthew Bernstein<br>Fish \& Richardson P.C.<br>12390 El Camino Real<br>San Diego, CA 92130<br>(858) 678-5070<br>THEODORE B. OLSON<br>Counsel of Record<br>Mark A. Perry<br>MATTHEW D. MCGILL<br>Minodora D. Vancea<br>Gibson, Dunn \& CRUTCHER LLP<br>1050 Connecticut Avenue, N.W.<br>Washington, D.C. 20036<br>(202) 955-8500

March 31, 2008

## APPENDIX A

## Z4 TECHNOLOGIES, INC., Plaintiff-Appellee,

V.<br>MICROSOFT CORPORATION, Defendant-Appellant,<br>and<br>Autodesk, Inc., Defendant.<br>No. 2006-1638.<br>United States Court of Appeals, Federal Circuit

Nov. 16, 2007.

Frank A. Angileri, Brooks Kushman P.C., of Southfield, MI, argued for plaintiff-appellee. With him on the brief were Ernie L. Brooks, Thomas A. Lewry, and John S. Le Roy.

John E. Gartman, Fish \& Richardson P.C., of San Diego, CA, argued for defendant-appellant. With him on the brief were Matthew C. Bernstein, Seth M. Sproul, and John M. Bustamante. Also on the brief were Robert E. Hillman and John A. Dragseth, of Boston, MA. Of counsel on the brief was Isabella Fu, Microsoft Corporation, of Redmond, WA.

Before LOURIE and LINN, Circuit Judges, and BUCKLO, District Judge.*

LINN, Circuit Judge.
Microsoft Corporation ("Microsoft") appeals from a final judgment of the United States District Court for the Eastern District of Texas, $z 4$ Techs., Inc. v. Microsoft Corp., No. 06-cv-142, 2006 WL 2401099 (E.D. Tex. Aug. 18, 2006). The district court denied Microsoft's renewed motion for judgment as a matter of law ("JMOL") following a jury trial in which the jury found that Microsoft had infringed $z 4$ Technologies, Inc.'s ("z4's") U.S. Patents No. 6,044,471 ("the '471 patent") and No. 6,785,825 ("the ' 825 patent") and had failed to prove these patents invalid. z4 Techs., Inc. v. Microsoft Corp., No. 06-cv142, 2006 WL 2401099 (E.D. Tex. Aug. 18, 2006) ("JMOL Opinion"). Because substantial evidence supports the jury's verdict, and because the district court did not abuse its discretion in denying Microsoft's motion for a new trial, we affirm.

## I. BACKGROUND

z 4 is the assignee of two patents related to the prevention of software piracy. The inventor of these patents, David Colvin ("Colvin"), founded and owns z4. The ' 825 patent claims priority to the ' 471 patent through continuation applications, and thus shares an effective filing date of June 4, 1998. Because these patents also share a common specification, we will refer generically to "the specification" in

[^2]reference to both the ' 471 and ' 825 patents. These patents are directed specifically to the problem of "illicit copying and unauthorized use" of computer software. ' 825 patent col. 1 ll.21-25. The patent specification explains that "[t]he advent of the Internet has contributed to the proliferation of pirated software, known as 'warez', which is easily located and readily downloaded." Id. col.1 ll.33-35. Prior art solutions to this problem were either easily circumvented or imposed substantial burdens on the consumer. For example, requiring the entry of a serial number was "easily defeated by transferring the serial number . . . to one or more unauthorized users." Id. col.1 ll.45-51. Similarly, the use of "hardware keys," which must be physically present to enable the software, proved "relatively expensive for the developer and cumbersome for the authorized user." Id. col. 1 ll.36-44.
z4's invention "controls the number of copies of authorized software by monitoring registration information," and by "[r]equiring authorized users to periodically update a password or authorization code provided by a password administrator." ' 471 patent col. 3 ll.15-24. More particularly, the patents disclose a multi-step user authorization scheme whereby an initial password or authorization code grants the user a "grace period" for a fixed number of uses or period of time. Users must then submit registration information to a representative of the software developer to receive a second password or authorization code, which is required to enable the product for use beyond this grace period. In the patented system, users are able to choose between a manual registration mode and an automatic or electronic registration mode. Upon receipt of the registration information, the software representative
compares the submitted information to previouslystored registration information, and determines whether the user is authorized. If the user is not authorized, the software representative may disable the software.

On September 22, 2004, z4 sued Microsoft and Autodesk, Inc. ("Autodesk") ${ }^{1}$ alleging infringement of claim 32 of the ' 471 patent and claims 44 and 131 of the ' 825 patent. Claim 32 of the ' 471 patent reads as follows, with disputed portions highlighted:
32. A computer readable storage medium having data stored therein representing software executable by a computer, the software including instructions to reduce use of the software by unauthorized users, the storage medium comprising:
instructions for requiring a password associated with the software;
instructions for enabling the software after the password has been communicated to the software;
instructions for subsequently requiring a new password to be communicated to the software for continued operation of the software; and instructions for automatically contacting an authorized representative of the software to communicate registration

1 Autodesk was found to have willfully infringed two of the asserted claims by the jury, but entered into a settlement with z4 prior to the close of briefing in this appeal.
information and obtaining authorization for continued operation of the software.
Claims 44 and 131 of the ' 825 patent are identical for purposes of this appeal. They differ only in their definition of the "initial authorization period," or grace period. Claim 44 reads as follows, with disputed portions highlighted:
44. A method for reducing unauthorized software use, the method comprising:
providing a representative to monitor software license compliance;
associating a first authorization code with the software, the first authorization code enabling the software on a computer for use by a user for an initial authorization period, the initial authorization period being based on usage of the software;
supplying the first authorization code with the software;
requiring the user to enter the first authorization code to at least partially enable the software on the computer for use by the user during the initial authorization period;
requiring the user to contact the representative for retrieval of at least one additional authorization code to repeat the enablement of the software on the computer for use by the user during a subsequent authorization period beyond the initial authorization period and allowing the repeat of the enablement of the software to be performed prior to the expiration of the
initial authorization period so the enablement of the software can be continuous from the initial authorization period to the subsequent authorization period, the software being enabled on the computer for use by the user during the subsequent authorization period beyond the initial authorization period requiring without further communication with the representative following entry of the at least one additional authorization code;
requiring the user to selectively choose either manual or electronic registration and provide registration information to the representative prior to retrieval of the at least one additional authorization code, the registration information including computer specific information; comparing previously stored registration information related to at least one of the software, the user, and the computer with the registration information provided by the user to the representative to determine if the user is an authorized or an unauthorized user; and
at least partially disabling, the software if the user [sic] an unauthorized user.
In the litigation, z4 alleged that Microsoft's "Product Activation" feature, as implemented in its "Office" group of software applications and its "Windows" operating system, infringed each of the asserted claims, beginning in 2000 and 2001, respectively. Microsoft countered that it did not infringe z4's patents, that the ' 471 and ' 825 patents were invalid for anticipation and obviousness, and that both patents were unenforceable due to
inequitable conduct by Colvin. In particular, Microsoft contended that it had developed its own technology to reduce software piracy, called the Licensing Verification Program ("LVP"), which it implemented in its 1998 Brazilian Publisher ("BP 98") software product. Because this product was released prior to the filing date of $z 4$ 's patents, Microsoft alleged that it constituted a prior invention sufficient to invalidate the asserted claims.

A magistrate judge held a Markman hearing, and subsequently construed several disputed claim terms. $z 4$ Techs., Inc. v. Microsoft Corp., No. 06-cv142, 2005 WL 2304993 (E.D. Tex. Sep. 20, 2005) ("Claim Construction Opinion"). Later, during the course of the jury trial, the court construed an additional term, "user," which had become central to Microsoft's litigation arguments. z4 Techs., Inc. v. Microsoft Corp., No. 06-cv-142 (E.D. Tex. Apr. 12, 2006) ("Supplemental Claim Construction Opinion"). The jury returned a verdict of willful infringement of all three asserted claims against Microsoft and awarded damages of $\$ 115$ million.

Following the jury verdict, Microsoft filed various renewed motions for JMOL under Rule 50(b) and a motion for a new trial under Rule 59(a) of the Federal Rules of Civil Procedure. The district court denied all of Microsoft's motions for JMOL and a new trial, thereby upholding the jury's verdict in its entirety. The district court also held both patents to be enforceable. JMOL Opinion at 2. It declined, however, to issue a permanent injunction against Microsoft. See $z 4$ Techs., Inc. v. Microsoft Corp., 434 F. Supp. 2d 437 (E.D. Tex. 2006).

Based on the jury's finding of willful infringement, z4 requested enhanced damages.

Although the district court chose not to enhance damages to the maximum of three times the jury verdict, it did award an additional $\$ 25$ million against Microsoft. JMOL Opinion at 47. It also awarded attorney's fees to z4 based on the jury's willfulness verdict and its own determination of litigation misconduct by Microsoft. Id. at 43. Microsoft timely appealed. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

## II. DISCUSSION

A. Standard of Review

We review the denial of a motion for JMOL de novo, Harris Corp. v. Ericsson Inc., 417 F.3d 1241, 1248 (Fed. Cir. 2005), and thus affirm the jury's verdict unless "a reasonable jury would not have a legally sufficient evidentiary basis to find for the [winning] party," Fed. R. Civ. P. 50(a) (1). "The denial of a motion for judgment as a matter of law ... is a procedural issue not unique to patent law, which we review under the law of the regional circuit where the appeal from the district court normally would lie." Riverwood Int'l Corp. v. R.A. Jones \& Co., 324 F.3d 1346, 1352 (Fed. Cir. 2003). "The United States Court of Appeals for the Fifth Circuit describes appellate review of a JMOL denial as a determination whether 'the facts and inferences point so strongly and overwhelmingly in favor of one party that the court concludes that reasonable jurors could not arrive at a contrary verdict." Harris, 417 F.3d at 1248 (quoting Bellows v. Amoco Oil Co., 118 F.3d 268, 273 (5th Cir. 1997)). "In reviewing the sufficiency of the evidence . . . we must affirm unless there is no legally sufficient evidentiary basis for the jury's verdict. In this regard, the evidence, as well as all reasonable inferences from it, are viewed in the
light most favorable to the verdict." Lane v. R.A. Sims, Jr., Inc., 241 F.3d 439, 445 (5th Cir. 2001) (internal citations omitted). In performing this review, we are mindful of the fact that "[a]nticipation is a factual determination that is reviewed for substantial evidence when decided by a jury," Koito Mfg. Co. v. Turn-Key-Tech, LLC, 381 F.3d 1142, 1149 (Fed. Cir. 2004), as is the jury's determination of non-infringement, Acumed LLC v. Stryker Corp., 483 F.3d 800, 804 (Fed. Cir. 2007).

We also review the denial of a motion for a new trial under regional circuit law, see Riverwood, 324 F.3d at 1352 , which, in the Fifth Circuit, provides for reversal only upon an "abuse of discretion or a misapprehension of the law" by the district court. Prytania Park Hotel, Ltd. v. Gen. Star Indem. Co., 179 F.3d 169, 173 (5th Cir. 1999).

Claim construction is an issue of law, see Markman v. Westview Instruments, Inc., 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996), over which we exercise plenary review, Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc).

## B. Analysis

Microsoft argues that the district court erred as a matter of law by denying JMOL of non-infringement based on three claim limitations allegedly lacking in the accused products and by denying JMOL of invalidity under 35 U.S.C. § 102(g) based on Microsoft's BP 98 product. Microsoft also requests a new trial based on allegedly incorrect and prejudicial jury instructions. Microsoft further argues that the Supreme Court's recent decision in Microsoft Corp. v. $A T \& T$ Corp., - U.S. -, 127 S.Ct. 1746, 167
L.Ed.2d 737 (2007) (addressing infringement under 35 U.S.C. § 271(f) with respect to software components), compels a remand for a new trial on damages. We address each of these arguments in turn.

## 1. Microsoft's Motion for JMOL of NonInfringement

Microsoft disputes the district court's constructions of the "user" limitation of both patents, the "automatically" limitation of the ' 471 patent, and the "electronic" limitation of the '825 patent. It further challenges the jury's finding that the accused products meet these limitations as well as the "password" limitation of the ' 471 patent and the "authorization code" limitation of the '825 patent. z4 responds that Microsoft's accused products require the entry of a Product Key, which is a "password" or "activation code," that they also allow users to choose Internet activation, which performs all the steps of the "automatic" or "electronic" claim limitations, and that because Microsoft's Product Activation compares stored information regarding the software and the computer to registration information submitted by the user to activate the software, Microsoft infringes all of the asserted claims.

## a. The "User" Limitation

The district court construed the term "user" to mean "a person, a person using a computer, a computer, or computers." Supplemental Claim Construction Opinion at 3. Microsoft had attempted to limit "users" to "persons," thereby excluding a computer or computers, while z4 advocated for the broad interpretation adopted by the district court. Id. at 1. Under its definition, Microsoft argues that the asserted claims require the authorization of a
"particular user, regardless of what particular computer they are using," while the accused products authorize "a particular computer, regardless of who is using it." Microsoft thus asserts that there can be no infringement because its products do not recognize "unauthorized users," but rather unauthorized computers. In its reply brief, however, Microsoft concedes a construction of "user" as including both "a person" and "a person using a computer." Reply Br. at 4 ("Properly construed, a 'user' is a person or a person using a computer . . . . It is only the district court's elimination of the person altogether, in allowing a computer by itself to be a 'user,' that we ask this Court to overrule as an error of law.").

In construing a disputed claim term, we begin with the language of the claims. Phillips $v . A W H$ Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc). Claims of the ' 825 patent include the limitations "enabling the software on a computer for use by a user," and "comparing previously stored registration information . . to at least one of the software, the user, and the computer." In these recitations, the "user" and the "computer" are distinct entities. To construe the term "user" to mean a "computer" would result in the claim being interpreted to recite, for example, "enabling the software on a computer for use by a [computer]." The language of the claims does not reasonably or logically permit such a construction. Likewise, the written description makes clear that the terms "users" and "computers" are distinct and used to describe different things. E.g., '471 patent col.1 ll.48-51 (discussing "users who may have a legitimate need to . . . transfer a copy to a new computer"); id. col.7 ll.7-9 ("[T]he user installs ... the software in his computer or computer
network."). Because a construction that would equate a "user" with a "computer or computers" conflicts with "both the plain language of the claims and the teachings of the specification," NeoMagic Corp. v. Trident Microsystems, Inc., 287 F.3d 1062, 1070 (Fed. Cir. 2002), the district court's inclusion of "computer or computers" in its claim construction cannot be sustained. Because we agree with Microsoft that the district court erred in construing "user" to include a computer or computers apart from a person, we modify the district court's claim construction and hold that a "user" is properly construed as "a person or a person using a computer." ${ }^{2}$ This construction applies to all of the asserted claims. See Omega Eng'g, Inc., v. Raytek Corp., 334 F.3d 1314, 1334 (Fed. Cir. 2003) ("[W]e presume, unless otherwise compelled, that the same claim term in the same patent or related patents carries the same construed meaning.").

Notwithstanding our modification of the district court's claim construction, however, we find Microsoft's contention that the asserted claims require the authorization of a "particular user, regardless of what particular computer they are using" to be artificial and inconsequential. Although the claims recite "software including instructions to reduce use of the software by unauthorized users," '471 patent claim 32, and "determin[ing] if the user

2 In so holding, we rely in part on Microsoft's concession that "user" includes both "a person" and "a person using a computer." See Reply Br. at 4. Accordingly, we express no opinion as to whether "a person" and "a person using a computer" differ meaningfully.
is an authorized or an unauthorized user," '825 patent claims 44, 131, both the claims and specification describe methods of making this determination based on computer-specific information, among other things. This conclusion is based on relevant language that appears in the claims and not on any particular construction of the term "user." Specifically, the claims recite that the software representative may identify authorized users based on a comparison of "registration information provided by the user," with "previously stored registration information related to at least one of the software, the user, and the computer." Id. Because the " $[u]$ se of the phrase 'at least one' means that there could be only one or more than one" of the listed types of previously stored registration information, Rhine v. Casio, Inc., 183 F.3d 1342, 1345 (Fed. Cir. 1999), the identification called for by the claims may be accomplished by comparing the registration information with previously-stored information related: (a) to the software installed by a person on the computer; (b) to the person using the computer; or (c) to the computer hardware. Microsoft's argument that the asserted claims require the authorization of a "particular user, regardless of what particular computer they are using" ignores the language of the claims which, as noted above, permits the identification of authorized users based on, inter alia, "previously stored registration information related [only] to ... the computer." Our construction of the term "user" to mean "a person or a person using a computer" does not foreclose or in any way affect such a conclusion nor does it preclude a determination that the accused Microsoft products infringe. Thus, Microsoft's argument, while correct as to the construction of the
claim term "user," is not determinative of the question of infringement.

With respect to infringement, substantial evidence supports the jury verdict, even under our modified construction. Because the claims explicitly contemplate tracking authorized users through, inter alia, the identity of the computers on which they install the software as discussed, supra, and because Microsoft admits that it makes Product Activation determinations based on registration information related to user's computers, see Reply Br . at 2, a reasonable juror could find that Microsoft infringed the asserted claims notwithstanding our modification of the district court's construction of the term user. See Teleflex, Inc. v. Ficosa N. Am. Corp., 299 F.3d 1313, 1328 (Fed. Cir. 2002) (noting that when we determine that the district court "has misinterpreted a patent claim, we independently construe the claim to determine its correct meaning," and that "[w]e may affirm the jury's findings on infringement . . . if substantial evidence appears in the record supporting the jury's verdict and if correction of the errors in a jury instruction on claim construction would not have changed the result, given the evidence presented").

## b. The "Password" and "Authorization

Code" Limitations
As discussed above, the patents disclose a system wherein an initial password or authorization code enables a software "grace period" for a fixed number of uses or period of time. Microsoft and z4 agree that the terms "authorization code" and "password" are used interchangeably. Claims 44 and 131 of the ' 825 patent recite "associating a first authorization code with the software, the first authorization code
enabling the software . . . for an initial authorization period, ... supplying the first authorization code with the software; [and] requiring the user to enter the first authorization code to [activate the grace period]" (emphases added). Similarly, claim 32 of the '471 patent recites "requiring a password associated with the software; ... [and] enabling the software after the password has been communicated to the software" (emphases added). The parties raise no claim construction issues related to these limitations, and we review them only for substantial evidence supporting the jury's finding of infringement.

Although Microsoft admits that the accused products have a grace period, and that users are instructed to enter a "Product Key" provided with the software before this period may begin, it argues that this Product Key cannot be an "authorization code" or "password" because it is not "associated with the software" as required by the claims. Specifically, Microsoft asserts that any Product Key can enable the grace period on any copy of the software, and thus there is no association between a particular copy of software and the specific Product Key provided with that copy. We disagree. Not only was the jury presented with evidence that Microsoft directly instructed its users to input a specific Product Key provided with each copy of the software and that the Product Key was required as part of product installation, but one of Microsoft's own witnesses admitted that unless users enabled the grace period using this specific Product Key, they would have been unable to complete the Product Activation process (i.e., to enable the software beyond the grace period).

Thus, substantial evidence supports a finding that in the ordinary course of activating a copy of the accused software, a user is required to enter an authorization code-the Product Key-associated with that copy of the software. Even if the potential use of unassociated Product Keys to enable software grace periods may be framed as a "non-infringing mode[ ] of operation," our conclusion remains the same. See Hilgraeve Corp. v. Symantec Corp., 265 F.3d 1336, 1343 (Fed. Cir. 2001) ("[I]n determining whether a product claim is infringed, we have held that an accused device may be found to infringe if it is reasonably capable of satisfying the claim limitations, even though it may also be capable of non-infringing modes of operation."). We are likewise unpersuaded by Microsoft's related assertion that it does not infringe because a single copy of the accused software can be installed on an unlimited number of machines using a single Product Key. As with the previous argument, infringement is not avoided merely because a noninfringing mode of operation is possible. The fact remains that Microsoft's Product Activation process prevents the use of software installations beyond the grace period unless the associated Product Key is used to enable the grace period.

Microsoft further argues that $z 4$-through criticism of prior art in the patent specificationdisclaimed the use of authorization codes that, like serial numbers in the prior art, can be used to install multiple copies of the software. It again contends that its own Product Key cannot be considered an "authorization code" because a single Product Key can enable the grace period for any copy of the software. See Astrazeneca AB v. Mut. Pharm. Co., 384 F.3d 1333, 1340 (Fed. Cir. 2004) (discussing
disavowal of claim scope through criticism of other products in the general summary or description of the invention). We find this argument disingenuous at best because the patent language cited by Microsoft distinguishes prior art systems relying on a single authorization code, such as a serial number, from the disclosed invention, which utilizes a dual authorization code scheme. It is undisputed that Microsoft's Product Activation, like the claimed invention, requires dual authorization codes and that the Product Key enables only a limited grace period.

For all of these reasons, we affirm the jury's verdict of infringement as to these limitations.

## c. The "Automatic" and "Electronic" Limitations

The parties also dispute the level of user interaction required by the claims to complete the registration step and to enable the software beyond the grace period previously enabled by the initial authorization code. This dispute implicates two related limitations recited in the asserted claims. Claims 44 and 131 of the ' 471 patent recite "requiring the user to selectively choose either manual or electronic registration" (emphasis added), while claim 32 of the ' 825 patent recites "instructions for automatically contacting an authorized representative ... to communicate registration information and obtaining authorization for continued operation" (emphasis added). Despite the difference in the language of the claims, the parties agree that for purposes of this appeal, the terms "automatic" and "electronic" may be analyzed together.

At the district court, Microsoft suggested a construction of the term "automatically" to be "without user discretion or intervention." The
district court disagreed and instead construed the term to mean "instructions (i.e. a computer code) that enable a user's computer to contact an authorized representative of the software." Claim Construction Opinion at 6-8. The court did not construe the term "electronic," but noted that "[i]n open court, the parties agreed to use the claim language for this term." Id. at 8. Microsoft further agreed that it would not argue at trial "that 'electronic' means 'without user intervention' without leave of Court." Id.

On appeal, Microsoft contends that once users choose the electronic or automatic registration mode (as contrasted with the manual mode), the initiation of the registration communication must commence without any user interaction.

We find Microsoft's claim construction arguments to be without merit. As the district court carefully observed, the claims are silent as to the initiation of the registration process, although the claims and specification "clearly contemplate[ ] a user choice as to whether registration will be automatic or manual." Id. at 6 (citing ' 471 patent col. 7 ll.7-18 ("The user is allowed to choose between automatic or manual registration.")); see also '825 patent claims $44 \& 131$ ("requiring the user to selectively choose either manual or electronic registration"). Although the specification discloses that automatic registration is performed "without user intervention," '471 patent col.4 ll.50-54 (emphasis added), the claims require at least a minimal level of user interaction to select this registration mode. Indeed, nothing in the claims or specification precludes user interaction in the selection or initialization of the automatic
registration. Thus, the district court correctly rejected Microsoft's attempt to exclude any user interaction from the claims, and we affirm its construction of this term. Microsoft makes no effort to argue non-infringement under this construction, and its own product documentation, which was presented to the jury, characterizes the Internet option as "automatically activating the [accused product]."

Moreover, even under Microsoft's proposed construction, its sole non-infringement argument is artificial at best. Specifically, Microsoft argues that although the accused products allow users to choose between Internet (i.e., automatic or electronic) or phone (i.e., manual) activation, if the user chooses the Internet option, "nothing happens after that manual choice until the user additionally manually presses the 'next' button. . .." Microsoft Br. at 23. Thus, even under Microsoft's construction, a reasonable juror could find that "manually press[ing] the 'next' button" is merely part of the selection process. Therefore, we affirm the judgment of infringement with respect to these limitations as well.

## 2. Microsoft's Motion for JMOL of Invalidity by Anticipation

Before the district court, Microsoft argued a number of points in support of its motion for JMOL of invalidity based on anticipation by its BP 98 product. The district court denied the motion based solely on its conclusion that in light of "the evidence presented at trial, a reasonable jury could have concluded that BP 98 did not work for its intended purpose, to stop piracy." JMOL Opinion at 7. On appeal, Microsoft repeats many of the arguments it
raised before the district court. Because we agree with the district court's determination on the point it considered and find it dispositive, we discuss only that point and need not and do not address Microsoft's other contentions.

Microsoft argues that the LVP feature of its BP 98 software product anticipates the asserted claims under section $102(\mathrm{~g})(2)$. That section provides that a patent is invalid if "before such person's invention thereof, the invention was made in this country by another inventor. . ." 35 U.S.C. § 102(g)(2). "This court has interpreted $\S 102(\mathrm{~g})$ to provide that 'priority of invention goes to the first party to reduce an invention to practice unless the other party can show that it was the first to conceive the invention and that it exercised reasonable diligence in later reducing that invention to practice." Monsanto Co. v. Mycogen Plant Sci., Inc., 261 F.3d 1356, 1362 (Fed. Cir. 2001) (quoting Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572, 1577 (Fed. Cir. 1996)).

Microsoft bore the burden of demonstrating by clear and convincing evidence that BP 98 constituted an actual reduction to practice of the invention claimed in z4's patents. See, e.g., SRAM Corp. v. AD-II Eng'g, Inc., 465 F.3d 1351, 1357 (Fed. Cir. 2006) ("Under the patent statutes, a patent enjoys a presumption of validity, see 35 U.S.C. § 282 , which can be overcome only through facts supported by clear and convincing evidence."). "In order to establish an actual reduction to practice, the inventor must prove that: (1) he constructed an embodiment or performed a process that met all the limitations ... and (2) he determined that the invention would work for its intended purpose." Cooper v. Goldfarb, 154 F.3d 1321,1327 (Fed. Cir.
1998). "Testing is required to demonstrate reduction to practice in some instances because without such testing there cannot be sufficient certainty that the invention will work for its intended purpose." Slip Track Sys., Inc. v. Metal-Lite, Inc., 304 F.3d 1256, 1267 (Fed. Cir. 2002). Because the necessity and sufficiency of such testing are factual issues, see id. at 1268, substantial evidence in the record supporting a finding that Microsoft's LVP software did not work for its intended purpose will suffice to support the jury's verdict that z4's patents are not invalid for anticipation, see Eli Lilly \& Co. v. Aradigm Corp., 376 F.3d 1352, 1362 (Fed. Cir. 2004) (noting that when we review the denial of a postverdict JMOL "on a mixed question of law and fact ... we must sustain the jury's conclusion unless the jury was not presented with substantial evidence to support any set of implicit findings sufficient under the law to arrive at its conclusion"); Taskett $v$. Dentlinger, 344 F.3d 1337, 1339 (Fed. Cir. 2003) (noting that reduction to practice is a question of law predicated on subsidiary factual findings).

As an initial matter, Microsoft contends that the district court incorrectly defined the "intended purpose" of the invention as "to stop piracy," and thus erred in holding that a prior invention must "stop piracy" to qualify as invalidating art under § 102(g). See JMOL Opinion at 7. We agree. z4's patents do not disclose a method or apparatus to completely eliminate software piracy, and the claim language indicates that the purpose of the invention is merely the reduction, rather than the elimination, of such piracy. See ' 471 patent claim 32 (claiming "instructions to reduce use of the software by unauthorized users" (emphasis added)); '825 patent
claims 44 \& 131 (claiming "[a] method for reducing unauthorized software use" (emphasis added)).

We agree with $z 4$, however, that the record contains substantial evidence for a reasonable jury to conclude that the anti-piracy feature of BP 98 did not work even to reduce piracy. For example, a reasonable juror could have relied upon the internal Microsoft presentation of April 28, 1998, which indicated that "effectiveness" was not known, and that Microsoft "[could] only measure [effectiveness] once enabled fully in a country w/ [sic] a real product." The testimony of Microsoft's own witness, Mr. Hughes, indicates that the anti-piracy software found in the accused products was "virtually a complete rewrite" of the software in BP 98. Additionally, an internal Microsoft e-mail dated November 18, 1998-more than five months subsequent to $z 4$ 's filing date-indicated a problem with the LVP software and documented an instance of the "same CD being installed in almost 40 different machines with different user names." It also noted that one user had registered 34 times, and others had registered more than 15 times. z4's expert testified at trial that this e-mail "affirm[ed][his] opinion that Brazilian Publisher 98 is not prior art because there was no recognition or appreciation that it worked for its intended purpose." We also note that Microsoft failed to produce the document containing the e-mail until the day before the trial started, and then only because z 4 uncovered it during a last-minute deposition, see JMOL Opinion at 40, resulting in the district court sanctioning Microsoft by instructing the jury that
z4 has offered [the document containing the e-mail] into evidence to show that Brazilian

Publisher 98 did not work for its intended purpose.... You are instructed that Microsoft, although it had knowledge of this document, did not produce it to z 4 as it was required to do under controlling discovery rules. You're instructed that . . . under the law and rules of this Court, that Microsoft improperly withheld this document and you may infer, although you are not required to do so, that Microsoft improperly withheld the document because it was harmful to the positions it has taken in this case.

Microsoft has not appealed this sanction.
Collectively, this evidence comprises "more than a mere scintilla" and is "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." Consol. Edison Co. v. NLRB, 305 U.S. 197, 229, 59 S.Ct. 206, 83 L.Ed. 126 (1938) (discussing substantial evidence review); see also Teleflex, 299 F.3d at 1323-24. Because substantial evidence supports the jury verdict, we affirm the district court's denial of Microsoft's motion for JMOL of invalidity by anticipation.

## 3. Microsoft's Request for a New Trial

Microsoft requests a remand for a new trial based on three allegedly erroneous jury instructions and an intervening change in law concerning infringement under 35 U.S.C. § 271(f). We do not find these arguments persuasive.

## a. Jury Instructions

Under the law of the Fifth Circuit, two requirements must be met before a new trial will be granted based on an erroneous jury instruction: "First, the challenger must demonstrate that the
charge as a whole creates substantial and ineradicable doubt whether the jury has been properly guided in its deliberations. Second, even if the jury instructions were erroneous, we will not reverse if we determine, based upon the entire record, that the challenged instruction could not have affected the outcome of the case." Hartsell v. Doctor Pepper Bottling Co., 207 F.3d 269, 272 (5th Cir. 2000).

## i. Jury Instruction Regarding "Single Document" Corroboration

The district court instructed the jury that "[a]n inventor's testimony of conception must be corroborated in a single document." It later conceded that this instruction was "improper," but nonetheless held that it did not "constitute harmful error under the circumstances" because Microsoft never presented, much less relied, on the testimony of an individual inventor. Instead, Microsoft represented to the court that ""[f]or its § 102(g) defense, Microsoft did not need to name a particular person. ... Microsoft corporately both conceived and reduced to practice before Mr. Colvin." JMOL Opinion at 26 (quoting Microsoft's JMOL motion) (emphasis added). The district court expressed reservations concerning the propriety of asserting corporate conception, but it expressly declined to decide this issue, and simply held that because Microsoft admitted that it "never presented oral testimony of an individual inventor who allegedly conceived the anti-piracy portion of BP 98," this instruction was simply not relevant to the verdict. Id. at $27 \&$ n.10. Because we agree that this instruction was not relevant, we need not and do not address the merits of Microsoft's claims regarding corporate conception.

On appeal, Microsoft now contends that the jury could have assumed that one of its witnesses, Mr. Hughes, was an inventor. This argument is not persuasive. Microsoft cannot argue below that it did not and need not name an individual inventor, see id. at 26-27, yet now assert that the jury would have concluded precisely the opposite. Therefore, as the district court correctly concluded, "whether such testimony must be corroborated by a 'single document' was not an issue in the case." Thus, "the improper instruction could not create sufficient error to warrant a new trial on the issue of anticipation." Id. at 27-28. Furthermore, this instruction "could not have affected the outcome of the case," Hartsell, 207 F.3d at 272 , in light of the substantial evidence supporting the conclusion that Microsoft's BP 98 was not a reduction to practice of the asserted claims as discussed supra.

## ii. Jury Instruction Regarding Burden of Proof on Invalidity

Although the district court properly instructed the jury that Microsoft had the burden of proving invalidity by clear and convincing evidence, see SRAM, 465 F.3d at 1357, Microsoft contends that the district court abused its discretion by refusing to further instruct the jury that Microsoft's "burden is more easily carried when the references on which the assertion is based were not directly considered by the examiner during prosecution." We disagree. See Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1050 (Fed. Cir. 1988) ("The burden of proof is not reduced when prior art is presented to the court which was not considered by the PTO."); Bio-Rad Labs., Inc. v. Nicolet Instrument Corp., 739 F.2d 604, 615 (Fed. Cir. 1984) ("The introduction of prior art
not considered by the PTO does not change the burden of proof or the requirement that evidence establish the presumption-defeating facts clearly and convincingly."), abrogated on other grounds by Markman, 52 F.3d 967. Despite Microsoft's reliance on cases indicating that a party may more easily meet this clear and convincing evidence burden when the references at issue were not before the examiner, see, e.g., Am. Hoist \& Derrick Co. v. Sowa \& Sons, Inc., 725 F.2d 1350, 1359-60 (Fed. Cir. 1984), it cites no authority compelling courts to provide such an instruction, and we agree with the district court that "it might lead the jury to believe that the burden of proof is less than clear and convincing when prior art was not considered by the PTO." JMOL Opinion at 22. Accordingly, we hold that the district court did not abuse its discretion in refusing to provide the jury with Microsoft's requested instruction.
iii. Jury Instruction Regarding Obviousness

Microsoft also requests a remand in light of the Supreme Court's decision in KSR Int'l Co. v. Teleflex Inc., -_ U.S. -_, 127 S.Ct. 1727, 167 L.Ed.2d 705 (2007), based on the district court's instruction to the jury that "to find an asserted claim obvious, you must find that there was some teaching, suggestion or incentive to combine the items in the prior art into the particular claimed combination." $z 4$ responds that Microsoft would not be entitled to a new trial regardless of the outcome in $\mathrm{KSR}^{3}$ because the only direct evidence of obviousness introduced by

[^3]Microsoft was the conclusory testimony of its expert. See Upjohn Co. v. Mova Pharm. Corp., 225 F.3d 1306, 1311 (Fed. Cir. 2000) (noting that "there must be factual support for an expert's conclusory opinion"); see also JMOL Opinion at 10 (noting that it was "questionable whether Defendants even established a prima facie case of obviousness"). Although Microsoft asserts that "the jury certainly could have reached a conclusion of obviousness on this record," Reply Br. at 30, it fails to identify specific evidence or arguments establishing even a prima facie case of obviousness under the factors outlined in Graham v. John Deere Co., 383 U.S. 1, 17, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966). Therefore, we find no abuse of discretion here by the district court.
b. Damages Based On Foreign Sales Under § 271(f)

Finally, Microsoft requests a remand for a new trial on damages in light of Microsoft $v . A T \& T$, because the jury made its damages determination based on worldwide sales of the accused products. Although the Supreme Court issued the Microsoft $v$. $A T \& T$ opinion after the parties had filed their briefs in this case, Microsoft argues that it preserved its right to argue damages under 35 U.S.C. § 271(f) by moving in limine to exclude evidence of foreign sales of the accused products. See Micro Chem., Inc. v. Lextron, Inc., 317 F.3d 1387, 1391 (Fed. Cir. 2003) (holding that under Rule 103(a) of the Federal Rules of Evidence, once a court makes a definitive evidentiary ruling on the record, a party need not renew an objection to preserve appeal rights). z4 counters that Microsoft has no basis to argue damages based on global sales because it failed to renew its motion in limine on this issue, see Fed. R.
Civ. P. 50(b); Unitherm Food Sys., Inc. v. SwiftEckrich, Inc., 546 U.S. 394, 404, 126 S.Ct. 980, 163 L.Ed.2d 974 (2006) (holding that "a party is not entitled to pursue a new trial on appeal unless that party makes an appropriate postverdict motion in the district court"), and because Microsoft failed to properly present the issue on appeal by mentioning it only in a footnote in its opening brief. See SmithKline Beecham Corp. v. Apotex Corp., 439 F.3d 1312 (Fed. Cir. 2006) (holding that arguments raised only in footnotes are not preserved).

We reject Microsoft's request for a retrial on damages because we find no properly-defined § 271(f) issue in the record. While we question the merits of Microsoft's reliance on its denied motion in limine to preserve this argument for appeal in light of the district court's admonition that its "rulings on the pre-trial motions in limine were not definitive rulings," JMOL Opinion at 17; Fed R. Evid. 103(a) (requiring a "definitive ruling" to preserve a claim of error for appeal without renewing an objection), we need not decide whether Microsoft properly preserved any § 271(f) arguments. This is because the jury did not and could not have relied on § 271(f) in determining its damages award. The complaint alleged infringement using only language from § 271(a) ("[W]hoever 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 therefor, infringes the patent."). The jury instructions similarly only paralleled the language of § 271(a):

Any person or business entity that, without the patent owner's permission, makes, uses,
offers for sale, or sells within the United States any product or method that is covered by at least one claim of a patent, before the patent expires, infringes the patent.
At oral argument, Microsoft asserted that Microsoft $v . A T \& T$ is relevant because this case involves accused products that were identical to those of the Microsoft v. AT \& $T$ case and distributed using the same "golden master" distribution system discussed in that opinion. See Oral Arg. at 36:05-36:46, available at http://www.cafc.uscourts.gov/ oralarguments/mp3/2006-1638.mp3. While that may be true, the asserted claims in this case differ significantly from those at issue in Microsoft $v$. $A T \& T$, and thus raise different infringement issues. Moreover, Microsoft points to nothing in the record to establish that z4 ever argued that Microsoft
supplie[d] or cause[d] to be supplied in or from the United States all or a substantial portion of the components of a patented invention, where such components are uncombined in whole or in part, in such manner as to actively induce the combination of such components outside of the United States in a manner that would infringe the patent if such combination occurred within the United States.

35 U.S.C. § 271(f)(1). Because no § 271(f) issues were presented to the jury, and because the jury instructions communicated the requirements for finding infringement only under § 271(a), we must assume that the jury properly confined its analysis and ultimate finding of liability to the instructions given under § 271(a). See, e.g., Shannon v. United

States, 512 U.S. 573, 585, 114 S.Ct. 2419, 129 L.Ed.2d 459 (1994) (declining "to depart from the almost invariable assumption of the law that jurors follow their instructions"). Without more, a damages award based in part on global sales does not necessarily implicate § 271(f).

Microsoft may or may not have legitimate arguments regarding the propriety of considering specific foreign sales in a damages calculation for infringement under § 271(a), but it raised no such arguments here. Additionally, we find no evidence in the record that Microsoft presented any evidence to the district court segregating domestic and foreign sales. Therefore, we find no merit in Microsoft's request for a remand on these grounds. Because Microsoft failed to explain what § 271(f) issues it defined below, let alone preserved, we deny Microsoft's request for a new trial on damages.

## CONCLUSION

For the above reasons, we conclude that the district court properly denied Microsoft's motions for JMOL and a new trial, and thus its judgment is

AFFIRMED.

## APPENDIX B

# z4 TECHNOLOGIES, INC., Plaintiff vs. MICROSOFT CORPORATION, AND AUTODESK, INC., Defendants 

CASE NO. 6:06-CV-142
UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS, TYLER DIVISION

2006 U.S. Dist. LEXIS 58374

August 18, 2006, Decided
August 18, 2006, Filed

COUNSEL: For z4 Technologies, Inc, Plaintiff: Elton Joe Kendall, Provost Umphrey - Dallas, Dallas, TX; Thomas John Ward, Jr, Law Office of T John Ward Jr PC, Longview, TX; Ernie L Brooks, Brooks \& Kushman, Southfield, MI; Frank A Angileri, Brooks \& Kushman PC, Southfield, MI; John S Le Roy, John E Nemazi, Robert C J Tuttle, Brooks \& Kushman PC - Southfield, Southfield, MI; Thomas A Lewry, Brotherton Law Firm, Highland Village, TX.

For Microsoft Corporation, Defendant: Isabella Fu, Katherine Ford Horvath, Microsoft Corporation, Redmond, WA; John Marcus Bustamante, Fish \& Richardson - Austin, Austin, TX; John A Dragseth, Fish \& Richardson, Minneapolis, Mn; John E Gartman, Matthew C Bernstein, Seth M Sproul, Fish \& Richardson - San Diego, San Diego, CA; Jennifer

Parker Ainsworth, Wilson Sheehy Knowles Robertson \& Cornelius PC, Tyler, TX.

For Autodesk, Inc, Defendant: Allen Franklin Gardner, Michael Edwin Jones, Potter Minton PC, Tyler, TX; Cindy Marie Allen, Potter Minton, Tyler, TX; John Marcus Bustamante, Fish \& Richardson Austin, Austin, TX; John A Dragseth, Fish \& Richardson, Minneapolis, Mn; John E Gartman, Matthew C Bernstein, Seth M Sproul, Fish \& Richardson - San Diego, San Diego, CA.

For Microsoft Corporation and Autodesk, Inc., Defendant: John Marcus Bustamante, Fish \& Richardson - Austin, Austin, TX; John E Gartman, Matthew C Bernstein, Seth M Sproul, Fish \& Richardson - San Diego, San Diego, CA.

For Microsoft Corporation, Counter Claimant: Jennifer Parker Ainsworth, Wilson Sheehy Knowles Robertson \& Cornelius PC, Tyler, TX.
For z4 Technologies, Inc, Counter Defendant: Thomas John Ward, Jr, Law Office of T John Ward Jr PC, Longview, TX.

For Autodesk, Inc, Counter Claimant: Michael Edwin Jones, Potter Minton PC, Tyler, TX.
JUDGES: LEONARD DAVIS, UNITED STATES DISTRICT JUDGE.

OPINION BY: LEONARD DAVIS OPINION

## MEMORANDUM OPINION AND ORDER

Before the Court are Defendant Autodesk Inc.'s ("Autodesk") Motion for Judgment as a Matter of Law of Noninfringement (Docket No. 330); Defendant Microsoft Corporation's ("Micrososft")

Motion for Judgment as a Matter of Law of Noninfringement (Docket No. 332); Defendants Microsoft and Autodesk's (collectively "Defendants") Motion for Judgment as a Matter of Law of Invalidity (Docket No. 319); Microsoft's Motion for Judgment as a Matter of Law Regarding Damages, Non-Retail Products, and Willfulness (Docket No. 323); Autodesk's Motion for Judgment as a Matter of Law Regarding Damages (Docket No. 321); Microsoft and Autodesk's Motion for a New Trial (Docket No. 327); Autodesk and Microsoft's Statements of Fact and Conclusions of Law Regarding Inequitable Conduct (Docket No. 322); Plaintiff z4 Technologies Inc.'s ("z4") Proposed Findings of Fact and Conclusions of Law Regarding Inequitable Conduct (Docket No. 334); z4's Motion and Brief in Support for an Order Finding Litigation Misconduct, Enhancing Damages, and Awarding Attorney Fees and Expenses (Docket No. 329); z4'sMotion and Brief in Support for Prejudgment Interest (Docket No. 318); z4's Emergency Motion to Strike Docket Entry 344 (Docket No. 354); Autodesk and Microsoft's Emergency Opposed Motion for the Court to Consider the Expert Report of Walter Bratic Relating to Docket Nos. 321 and 323 (Docket No. 369); and z4's Motion and Memorandum in Support to Unseal Findings Related to z4's Motion for Permanent Injunction for Docket Entries 346, 347, 353, 370, and 371 (Docket No. 376).

The Court DENIES all motions for judgment as a matter of law, Defendants' motion for a new trial, and HOLDS that both patents-in-suit are enforceable, therefore, upholding all portions of the jury's verdict. The Court GRANTS z4's motions awarding z4 enhanced damages, attorneys' fees and expenses, and prejudgment interest.

## BACKGROUND

On September 22, 2004, z4 brought this suit against Microsoft and Autodesk alleging infringement of U.S. Patent Nos. 6,044,471 ("the '471 patent") and 6,785,825 ("the '825 patent"). The '471 patent issued March 28, 2000. The ' 825 patent issued August 31, 2004. David Colvin ("Colvin") is the inventor of both patents and the founder and president of $z 4$. The patents disclose methods, referred to as product activation, for limiting the unauthorized use of computer software.

The case was tried to a jury on April 10 through April 19, 2006. At trial, z4 asserted claim 32 of the ' 471 patent and claims 44 and 131 of the ' 825 patent. z4 alleged that Microsoft's "Office" group of application products and "Windows" operating system and Autodesk's complete line of software infringed all three asserted claims of the two patents. z4 contended that Microsoft's Office software contained infringing product activation starting in 2000 and that the Windows product started including the same technology in 2001. z4 alleged that all of Autodesk's software released after March of 2004 included product activation, which infringed claim 32 of the'471 patent and claim 131 of the ' 825 patent. Microsoft and Autodesk both claimed that their software did not infringe, that the '471 and '825 patents were invalid for anticipation and obviousness, and that both patents were unenforceable due to Colvin's inequitable conduct.

The jury found that Microsoft infringed claim 32 of the ' 471 patent and claims 44 and 131 of the ' 825 patent and that Microsoft's infringement was willful. The jury found that Autodesk infringed the two claims asserted against it. The jury also found that
neither Microsoft nor Autodesk proved by clear and convincing evidence that any of the listed claims of the patents in the lawsuit were invalid. The jury awarded $\$ 115$ million in damages against Microsoft and $\$ 18$ million against Autodesk.

## AUTODESK'S AND MICROSOFT'S MOTIONS FOR JMOL

JMOL Standard
A court may grant a motion for Judgment as a Matter of Law ("JMOL") with regard to a particular issue when "there is no legally sufficient evidentiary basis for a reasonable jury to find for [the nonmoving] party on that issue." Harris Corp. v. Ericsson, Inc., 417 F.3d 1241, 1248 (Fed. Cir. 2005) (citing Fed. R. Civ. P. 50(a)); see Guile v. United States, 422 F.3d 221, 225 (5th Cir. 2005).

Rule 50(a)(1) provides, in relevant part, that if a party has been fully heard on an issue and there is no legally sufficient evidentiary basis for a reasonable jury to find for that party on that issue, the court may determine the issue against that party and may grant a motion for judgment as a matter of law [JMOL] against that party with respect to a claim or defense that cannot under the controlling law be maintained or defeated without a favorable finding on that issue.
Nobelpharma $A B$ v. Implant Innovations, Inc., 141 F.3d 1059, 1064 (Fed. Cir. 1998). A court reviews all the evidence in the record and must draw all reasonable inferences in favor of the nonmoving party, however, a court may not make credibility determinations or weigh the evidence, as those are
solely functions of the jury. See Reeves $v$. Sanderson Plumbing Prods., Inc., 530 U.S. 133, 150-51 (2000).

## Autodesk's Motion for Judgment as a Matter of Law of Noninfringement

Autodesk moves for JMOL arguing that z4 did not present sufficient evidence for a reasonable jury to find that Autodesk's accused products infringe claim 32 of the ' 471 patent and claim 131 of the ' 825 patent. Autodesk presents multiple arguments to support its motion, however, Autodesk's arguments are unpersuasive.

Autodesk first argues that z4 did not present a prima facie case for infringement because it did not establish that every single limitation in each asserted claim was identically met by Autodesk's products. To the contrary, z4 presented sufficient evidence through its expert William Rosenblatt ("Rosenblatt") such that a reasonable jury could have concluded that every limitation of the patents-in-suit were infringed by Autodesk's accused products. See 4/12/06 Trial Tr. 78:5-98:1, 103:2-120:24; Pl.'s Ex. 51.

Autodesk contends that the Court's mid-trial construction of the term "user" was incorrect and that under Defendant's proposed construction, which the Court rejected, z4 did not present sufficient evidence for a jury to find infringement. ${ }^{1}$ Autodesk's

1 In the context of trial, the parties brought to issue the meaning of the term "user" as it appears in both the ' 825 and ' 471 patents. Although the parties had not submitted this term for construction during the pretrial Markman proceedings, it became obvious as the trial progressed that there was substantial disagreement over the meaning of the term, which would be confusing to the jury. Accordingly, in fulfilling its
argument is based on the conclusion that the Court's construction of the term "user" is incorrect. The Court's April 12, 2006 order construing the term "user" stands. Accordingly, Autodesk's argument based on its construction of the term "user" fails.

Autodesk also argues that the Court improperly construed the term "automatically contacting" in claim 32 of the ' 471 patent and that Autodesk does not infringe under its proposed construction, which was also rejected by the Court. Again, the Court's claim construction of "automatically contacting" stands and Autodesk's argument fails.

Finally, Autodesk contends that z4 did not present sufficient evidence that Autodesk's accused products satisfied the "password" limitations of the '825 patent. However, z4 presented sufficient evidence that a reasonable jury could conclude that Autodesk's accused products met the "password" limitation of the ' 825 patent. See 4/12/06 Trial Tr. 92:3-13; Pl.'s Ex. 14.

Drawing all reasonable inferences in favor of $z 4$, there is sufficient evidence that a reasonable jury could find that Autodesk's accused products infringe the patents-in-suit. Accordingly, Autodesk's motion for JMOL of noninfringement is DENIED.

[^4]38a

## Microsoft's Motion for Judgment as a Matter of Law of Noninfringement

Microsoft moves for JMOL arguing that z4 did not present sufficient evidence for a reasonable jury to find that Microsoft's accused products infringe claim 32 of the ' 471 patent and claims 44 and 131 of the ' 825 patent. In support of its motion for JMOL, Microsoft presents almost the identical arguments as Autodesk. For the same reasons stated above with regard to Autodesk's motion, Microsoft's arguments are unpersuasive. Drawing all reasonable inferences in favor of $z 4$ there is legally sufficient evidence in the record that a reasonable jury could find that Microsoft's accused products infringe all three asserted claims of the patents-in-suit. See 4/12/06 Trial Tr. 78:5-98:1, 103:2-120:24; Pl.'s Ex. 102. Accordingly, Microsoft's motion for JMOL of noninfringement is DENIED.

## Microsoft and Autodesk's Motion for JMOL of Invalidity

Defendants argue that claims 32 of the ' 471 patent and claims 44 and 131 of the ' 825 patent are invalid because the claims are anticipated by prior art under 35 U.S.C. § 102(b) and (g) and because each would have been obvious under 35 U.S.C. § 103. ${ }^{2}$ Defendants carry the burden of proof on issues

2 Citing Duro-Last, Inc. v. Custom Seal, Inc., 321 F.3d 1098, 1105 (Fed. Cir. 2003), z4 argues that Defendants did not articulate the specific grounds of their JMOL as to obviousness at the close of evidence and, therefore, are not allowed to raise the issue in there post-trial motion for JMOL. In Dura-Last, the Federal Circuit did indicate that Federal Circuit law, as opposed to Fifth Circuit law, controls the issue raised by z4.
[Footnote continued on next page]
of invalidity and must prove the patent is invalid by clear and convincing evidence. See Nobelpharma, 141 F.3d at 1065. A motion for JMOL in favor of the party that bears the burden of proof at trial should only be granted where "(1) the movant 'has established [its] case by evidence that the jury would not be at liberty to disbelieve.' and (2) 'the only reasonable conclusion is in [the movant's] favor." Id.

## Anticipation

Defendants argue that claim 32 of the ' 471 patent and claims 44 and 131 of the ' 825 patent are anticipated by Microsoft's Brazilian Publisher 1998 ("BP 98") under 35 U.S.C. § 102(g)(2). Under $\S 102(\mathrm{~g})(2)$, a patent is invalid for anticipation if
before such person's invention thereof, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. In determining priority of invention under this subsection,

[^5]there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

Defendants contend that BP 98 was conceived and architected by June of 1997, before Colvin's conception date of September 1997 and before Colvin reduced his invention to practice by filing his patent application in June of 1998.

In order for BP 98 to anticipate the ' 471 patent, Defendants must prove by clear and convincing evidence that BP 98 worked for its intended purpose. See Medichem, S.A. v. Rolabo, S.L., 437 F.3d 1157, 1169 (Fed. Cir. 2006). Considering the JMOL standard discussed above and the evidence presented at trial, a reasonable jury could have concluded that BP 98 did not work for its intended purpose, to stop piracy. See Pl.'s Ex. 92, Pl.'s Ex. 558, 4/18/06 Tr. Trans. 75:17-76:8. Therefore, Defendants did not establish that the only reasonable conclusion on the issues of anticipation must be in their favor. Although Defendants have other arguments for why their motion for JMOL should be granted based on BP 98, the fact that a reasonable jury could have concluded that BP 98 did not work for its intended purpose prevents the Court from granting Defendants' motion.

At trial, Defendants also argued that Autodesk's AutoCAD R13 ("R13") software anticipates claim 32 of the ' 471 patent under 35 U.S.C. § 102(b) because it was offered for sale, sold, and used before June 4, 1997. Under 35 U.S.C. § 102(b), a patent is invalid for anticipation if the "invention was ... on sale in
this country, more than one year prior to the date of the application for patent in the United States. . .." The critical date for the '471 patent is June 4, 1997.

Defendants had to prove that R13 included every limitation of claim 32 of the ' 471 patent in order to succeed on invalidity based on R13. See Cooper $v$. Goldfarb, 240 F.3d 1378, 1382 (Fed. Cir. 2001). Claim 32 of the ' 471 patent requires "instructions for automatically contacting the authorized representative." See '471 Patent, col 12:1-2. The Court construed this phrase to mean "instruction (i.e. computer code) that enable a user's computer to contact the authorized representative." Defendants argue that registration using email or a web browser constitutes a computer code for contacting the authorized representative. Although there were other arguments made at trial for why R13 did not anticipate claim 32 of the ' 471 patent, based on the evidence presented at trial, a jury could reasonably conclude that R13 did not meet the "automatically contacting" limitation of the claim. Accordingly, Defendants' motion for JMOL cannot succeed on this basis.

Defendants further argue that Autodesk's AutoCAD R14 ("R14") software anticipates claim 32 of the ' 471 patent under $\S 102$ (b) because it was offered for sale and sold prior to June 4, 1997. As with Defendants' argument related to R13, Defendants had to prove that R14 met the "automatically contacting" limitation of claim 32. For the same reasons discussed above, a reasonable jury could conclude that R14 did not meet this limitation and Defendants' motion for JMOL cannot succeed based on this argument.

Defendants argue that Autodesk's AutoCAD R13c4a New Zealand ("R13c4a NZ") software anticipated claim 32 of the ' 471 patent and claims 44 and 131 of the ' 825 patent under $\S 102(\mathrm{~g})(2)$ because it was conceived and reduced to practice in February 1997. As with Defendants' argument related to R13 and R14, Defendants had to prove that R13c4a NZ met the "automatically contacting" limitation of claim 32 to succeed on this issue at trial. Defendants contend that R13c4a NZ met the "automatically contacting" element of claim 32 of the ' 471 patent because a user could provide registration information to Autodesk via email. Again, as with the R13 and R14, a reasonable jury could conclude that R13c4a NZ did not meet this limitation.

Defendants' expert used the term "electronic registration" recited in claims 44 and 131 of the ' 825 patent interchangeably with the "automatically contacting" term in claim 32 of the '471 patent. For the same reasons discussed above with regard to claim 32, a reasonable jury could have concluded that the "electronic registration" limitation of claims 44 and 131 of the ' 825 patent were not met by R13c4a NZ. Accordingly, Defendants' motion for JMOL cannot succeed on these grounds.

Defendants continually argue that z4 did not directly dispute certain evidence that Defendants claim proved a particular element of their anticipation defense at trial. But Defendants, not z4, carried the burden of proof on anticipation at trial. Defendants were required to prove the elements of anticipation by clear and convincing evidence such that a jury could not be at liberty to disbelieve that the patents-in-suit were anticipated by prior art. See Nobelpharma, 141 F.3d at 1065. Based on the
evidence presented by Defendants and drawing all reasonable inferences in favor of $\mathrm{z4}$, a reasonable jury could conclude that Defendants did not meet their burden and prove that either claim 32 of the ' 471 patent or claims 44 and 131 of the ' 825 patent were anticipated by the products discussed above.

## Obviousness

Under 35 U.S.C. § 103, a patent cannot be obtained on an invention "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 to a person having ordinary skill in the art to which said subject matter pertains." The determination of obviousness is ultimately a question of law that involves factual findings such as "(1) the scope and content of prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed subject matter and the prior art; and (4) where relevant, objective evidence of nonobviousness, e.g., long-felt need, commercial success, failure of others, copying, unexpected results, i.e., the secondary considerations." Ashland Oil, Inc. v. Delta Resins \& Refractories, Inc., 776 F.2d 281, 291 (Fed. Cir. 1985). A patent is presumed valid, under 35 U.S.C. § 282, therefore, Defendants were required to prove by clear and convincing evidence that the '471 and '825 patents were invalid for obviousness. See Kao Corp. v. Unilever U.S., Inc., 441 F.3d 963, 968 (Fed. Cir. 2006). "The presumption of validity is a procedural device that mandates that the party asserting invalidity bears the initial burden of establishing a prima facie case of obviousness under 35 U.S.C. § 103." Ashland Oil, 776 F.2d at 291. Once the party alleging invalidity has established a prima facie case
of obviousness, the patentee has the burden of presenting rebuttal evidence showing that the claimed invention was not obvious. Id. at 292.

Defendants argue that they offered "unrebutted testimony" that the inventions of claim 32 of the '471 patent and claims 44 and 131 of the ' 825 patent were obvious based on BP 98, R13, R14, and R13c4a NZ. The only direct evidence that Defendants offered as to obviousness was the testimony of their expert Dr. Avi Rubin ("Rubin"):

Q: Could you please provide your expert opinion on obviousness, whether Mr . Colvin's patents are obvious in light of the prior art?
A: Yes, I believe that-everything that's disclosed-that's claimed in these two patents is obvious to one of ordinary skill in the art at the time of the invention, given the products that where the prior art at that time and before it.

4/18/06 Trial Tr. 100:6-13. It is questionable whether Defendants even established a prima facie case of obviousness. Even assuming that Defendants did establish a prima facie case of obviousness, z4 presented some evidence to rebut Defendants' minimal evidence of obviousness. See 4/12/06 Trial Tr. 122:12-123:24.

Defendants must prove the patents-in-suit were invalid for obviousness by clear and convincing evidence that a jury could not be at liberty to disbelieve. See Nobelpharma, 141 F.3d at 1065. Based on the evidence presented by Defendants and drawing all reasonable inferences in favor of $z 4$, a reasonable jury could conclude that Defendants did
not meet their burden and prove that either claim 32 of the ' 471 patent or claims 44 and 131 of the ' 825 patent were obvious.

## Conclusion

It was Defendants burden of proof at trial to prove that the patents-in-suit were invalid by clear and convincing evidence. Defendants did not establish invalidity based on anticipation or obviousness with evidence that a jury would not be at liberty to disbelieve nor did they establish that the only reasonable conclusion on the issues of invalidity must be in their favor. See Nobelpharma, 141 F.3d at 1065. Accordingly, Defendant's motion for JMOL is DENIED.

## Microsoft's Motion for Judgment as a Matter of Law Regarding Damages, Non-Retail Products, and Willfulness

Microsoft argues that the Court should grant its motion for JMOL based on three grounds.

## Damages for products outside of the retail chain

Microsoft argues that the Court should grant its motion for JMOL because no reasonable jury could conclude that Microsoft's non-retail products infringe the patents-in-suit. Microsoft contends that there is no evidence that any Microsoft products sold outside of the retail channel infringe the patents-in-suit. Microsoft argues that $z 4$ 's technical expert Rosenblatt only testified with regard to whether retail products infringe z4's patents-in-suit and did
not address whether OEM or volume licensing channel products infringe. ${ }^{3}$

Contrary to Microsoft's contentions, z4 did present some evidence at trial that both Microsoft's OEM and retail channel products use product activation and, therefore, potentially infringe the patents-in-suit. z4 introduced into evidence Plaintiff's Exhibit 63, which is entitled "Frequently asked questions about Microsoft Product Activation" and was posted on Microsoft's website as of June 9, 2004. The document stated that "Product activation is required in retail packaged products and in new computers that have been purchased from a computer manufacturer. . . ." and "All customers who purchase retail packaged products or a new computer from an original equipment manufacturer (OEM) have to activate the product. The products on a new computer that was purchased from an OEM may be activated in the factory." z4 also introduced into evidence the "Frequently asked questions about Microsoft Product Activation" document found on Microsoft's website as of January 10, 2006, which also included the same statements related to product activation as Plaintiff's Exhibit 63. See Pl.'s Ex. 56. Furthermore, in an interrogatory response that was read into the record, Microsoft stated:

For any accused product that actually uses the accused product activation technology, for purposes of the patents-in-

3 OEM stands for original equipment manufacturer and refers to computer manufacturers that sell Microsoft programs installed on their machines.
suit, the steps of the product activation are the same whether the accused product is licensed or activated in the United States or in another country. As in the United States, all of the accused products licensed outside the United States through the volume licensing channel do in [sic] not use product activation and most of the accused product licence [sic] through the OEM channel likewise do not use product activation. Outside of the United States is primarily accused products sold through the retail channel that use product activation.
4/18/06 Trial Tr. 104:15-105:2. Even if Rosenblatt only established that Microsoft's retail products infringed the patents-in-suit, based on the evidence submitted to the jury, a reasonable jury could conclude that the OEM and retail products worked in the same way with regard to product activation. Furthermore, based on the evidence, a reasonable jury could have concluded that at least some of the OEM channel products used product activation and infringed the patents-in-suit. ${ }^{4}$

## Willfulness

Microsoft contends that z 4 did not present sufficient evidence at trial to support the jury's finding of willful infringement against Microsoft.

[^6]Willful infringement must be determined based on the totality of the circumstances. Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp., 383 F.3d 1337, 1342-43 (Fed. Cir. 2004). Willfulness must be proven by clear and convincing evidence. Gustafson, Inc. v. Intersystems Indus. Prods., Inc., 897 F.2d 508, 510 (Fed. Cir. 1990). Willfulness is a question of the infringer's intent as determined by the circumstances. Id. Once a party has actual notice of another's patent rights, that party has an affirmative duty of care to determine whether or not he infringes. See Imonex Servs., Inc. v. W.H. Munzprufer Dietmar Trenner GmbH, 408 F.3d 1374, 1377 (Fed. Cir. 2005). There is no hard and fast per se rule when it comes to determining willfulness. Rolls-Royce, Ltd. v. GTE Valeron Corp., 800 F.2d 1101, 1110 (Fed. Cir. 1986). However, facts that are often considered in determining willfulness are whether the infringer deliberately copied the patentee's invention, whether the infringer investigated the scope of the patent and determined a good faith basis as to whether he was infringing or that the patents were invalid, and the infringer's behavior as a party to the litigation. Read Corp. v. Portec, Inc., 970 F.2d 816, 826-27 (Fed. Cir. 1986). A patentee must present threshold evidence that an infringer's actions were willful. See Norian Corp. v. Stryker Corp., 363 F.3d 1321, 1332 (Fed. Cir. 2004).

Microsoft argues that z4 did not present clear and convincing evidence of willfulness and argues that it presented evidence that it exercised sufficient due care to overcome a finding of willful infringement. Microsoft argues, among other things, that the only evidence of willfulness was the deposition testimony of Susan Cole ("Cole"), Microsoft's corporate representative. The portion of

Cole's deposition that was read into the record at trial states:
"Can you tell us the factual basis for noninfringement of the '471 patent.
"Answer: I'm not in a position to say if we're infringing or not infringing. I believe that you have documents that lay out our stance on that.
"Question: That may or may not be true. The first part, if that's your answer, that you don't have an opinion, whether you're infringing or not infringing, I accept that.
"Answer: That's my answer.
"Question: For the ' 825 patent, is the same answer, do you not have an opinion whether-
"Answer: Correct.
"Question: The next paragraph two, the factual basis for the second affirmative defense in validity were both the ' 471 patent and ' 825 patent, according to proof elements for each ground of invalidity pleaded. And can you tell us the factual basis on Microsoft's behalf for the '471 patent?
"Answer: No.
4/13/06 Trial Tr. 13:4-13:23.
Microsoft contends that the only effect Cole's testimony could have was to create the type of
improper negative inference against Microsoft that the Federal Circuit banned in Knorr-Bremse. ${ }^{5}$ In Knorr-Bremse, the Federal Circuit held that a party's failure to receive advice of counsel cannot provide an adverse inference or evidentiary presumption that if the party had obtained such advice it would have been unfavorable. Id. at 1346. There is a difference between the adverse inference discussed in KnorrBremse and any inference that might have arisen from the deposition testimony of Cole. Cole testified that she did not have an opinion related to either infringement or invalidity with regard to the patents-in-suit. The inference that the jury could have drawn from Cole's testimony was that Microsoft did not seek the advice of counsel based on the fact that Cole did not have an opinion on the subjects of infringement or invalidity. This type of inference is still appropriate under Federal Circuit authority. In Knorr-Bremse, the Federal Circuit specifically stated that it was not addressing the question of whether, "the trier of fact, particularly a jury, can or should be told whether or not counsel was consulted (albeit without any inference as to the nature of the advice received) as part of the totality of the circumstances relevant to the question of willful infringement." 383 F.3d at 1346-47. Neither the Court nor z4 instructed the jury to draw an adverse inference or evidentiary presumption that had Microsoft obtained the advice

5 The jury sent a note to the Court during deliberations that stated "Susan Cole's deposition." The Court responded that sections of her deposition were read into the record and that they should recall this evidence as any other testimony, but that no transcript or copy of the deposition was available. 4/18/06 Trial Tr. 288:25-290:3.
of counsel, the opinion would have been unfavorable. Accordingly, the portion of Cole's testimony read into evidence by z4 was not improper.

Contrary to Microsoft's argument, z4 introduced evidence, other than Cole's deposition, to support willful infringement of the patents-in-suit. It is undisputed that Microsoft had knowledge of the '471 patent before this suit was filed. $z 4$ introduced some evidence that Microsoft had knowledge of the '471 patent as early as 2000 and introduced substantial evidence that Microsoft was aware of the patent by February 2003. z4 presented evidence that in 2003 it approached Microsoft in an attempt to license the '471 patent, provided Microsoft with a copy of its patent portfolio, which included the ' 471 patent, and provided Microsoft, at Microsoft's request, with a claim chart for the '471 patent outlining literal infringement of the '471 patent based on Microsoft's products. Microsoft presented no evidence that it investigated the scope of the '471 patent to form a good faith belief that it did not infringe or that the patent was invalid in 2003 or even after this suit was filed. Accordingly, Microsoft did not prove that it made a reasonable determination that it was not infringing the ' 471 patent after learning of it.

Microsoft argues that it was acting in good faith because it invented and commercialized product activation in BP 98 before Colvin patented his invention. However, the jury did not accept the argument that Microsoft anticipated Colvin's '471 patent and, therefore, this argument does not insulate Microsoft from a finding of willful infringement.

Microsoft claims that it did not have knowledge of the ' 825 patent until z4 filed suit on September 22,

2004 and, therefore, argues that it did not have a duty of care regarding the ' 825 until that date. It is undisputed that Microsoft did not have a duty of care with regard to the ' 825 patent until it actually issued. However, z4 did introduce evidence that Microsoft was aware of the pending ' 825 patent as early as 2003, and therefore, received advance warning that it might infringe the patent, when and if it issued. Although Microsoft may not have had a duty of care to insure it did not infringe the ' 825 patent until after the patent actually issued, there is evidence that Microsoft knew of the ' 825 patent before the suit was filed.

Microsoft claims it showed due care after the suit was filed because it promptly hired litigation counsel to defend against $z 4$ 's claims and had substantial defenses of noninfringement, invalidity, and inequitable conduct. However, the Federal Circuit has held that "defenses prepared for trial are not equivalent to the competent legal opinions of noninfringement or invalidity which qualify as "due care" before undertaking any potentially infringing activity." Crystal Semiconductor Corp. v. TriTech Microelectronics Int'l, Inc., 246 F.3d 1336, 1352 (Fed. Cir. 2001).

Furthermore, as discussed below in more detail, Microsoft's behavior during the litigation of this case was far from exemplary and supports a finding of willfulness.

While Microsoft did present substantial defenses at trial that a reasonable jury could have found convincing, in this case, the jury did not. Based on the totality of the circumstances, a reasonable jury also could have concluded that Microsoft willfully
infringed the ' 471 and ' 825 patents, as the jury did here.

## Insufficient Damages to Support \$ 115 Million Dollar

 AwardMicrosoft argues that no reasonable jury could have concluded that a $\$ 115$ million damage award against Microsoft was warranted. Microsoft contends that the testimony of z4's damages expert Walter Bratic ("Bratic") was legally insufficient and should have been excluded from evidence as contrary to the Court's ruling on a pre-trial motion in limine. Microsoft claims that the Court made a definitive ruling regarding the admissibility of issues outside of all expert reports by granting Defendants' pre-trial motion in limine. Microsoft contends that it did not need to object to evidence that violated the motion in limine but points to two instances where it did object to such evidence at trial. 6

The Court's rulings on the pre-trial motions in limine were not definitive rulings. As the Court stated during the hearing regarding various motions in limine, "It is just a motion in limine and that doesn't mean that either side can't approach the bench. And I'm not ruling on admissibility" and "I'm not ruling that it won't be admissible, I'm just grating the motion in limine." 3/23/06 Pretrial Tr.

6 Microsoft objected twice to evidence it thought was outside the scope of Bratic's report. One of these objections related to Bratic's mention of other licenses that Colvin had entered into and the other objection was not specific but seemed to be related to Bratic's testimony of a $38 \%$ increase in product sales at Microsoft. See 4/13/06 Trial Tr. 46:9-48:2, 64:16-23. Both objections were overruled.

39:18-20, 61:10-11. The Court repeatedly clarified during the pre-trial hearing that by granting a motion in limine the Court was not making a definitive ruling on admissibility. At trial, Microsoft was still required to object to what it perceived as a violation of the granted motion in limine. On this particular issue, the Court could not know what was within each expert's report to determine if certain testimony was outside of the report. Accordingly, the duty fell on Defendants to bring such testimony to the Court's attention if they believed it was outside of the expert's report. A party is not allowed to sit on its hands during trial and then object after trial that an expert's testimony was outside of his expert report and inadmissible. The Court overruled the objections Defendants made at trial, and Defendants waived all other objections under Rule 103 of the Federal Rules of Evidence. Accordingly, Bratic's testimony was properly considered by the jury.

Microsoft further argues that z4 did not present sufficient evidence to support the jury's damage award. After a jury concludes that a patent is infringed, "a patentee is entitled to 'damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer." Unisplay, S.A. v. Am. Elec. Sign Co., Inc., 69 F.3d 512, 517 (Fed. Cir. 1995) (citing 35 U.S.C. § 284 (1988)). A patentee is entitle to "reasonable royalty" damages when lost profits or an established royalty rate cannot be proven. Id. "Reasonable royalty" damages are calculated by considering a hypothetical negotiation between the patentee and the infringer at the time that the infringement began. See id. The analysis involved in determining "reasonable royalty" damages inherently involves approximation
and uncertainty, however, some factual basis for the damage calculation must exist and the damage rate must be supported by relevant evidence in the record. See id. The determination of "reasonable royalty" damages is a question of fact. Id. When the infringing party files a motion for JMOL on damages awarded by a jury, "the trial court determines whether the jury's verdict is against the clear or great weight of the evidence." Id. (citing Standard Havens Prods. v. Gencor Indus., 953 F.2d 1360, 1367 (Fed. Cir. 1991)).

Microsoft claims that z 4 did not produce quantifiable evidence of damages such as the revenue or license numbers for the accused products and that there was not sufficient evidence of a reasonable royalty aside from highlights by Bratic that Microsoft's revenue grew during the period of the alleged infringement. Bratic based the growth rate in his damage calculation on Microsoft's reports from Cole that were admitted into evidence. He explained how he got to his "conservative" estimate of a growth rate based on the documented profits of Microsoft for the accused products during the two possible periods of infringement. See 4/13/06 Trial Tr. 37:14-45:18; Pl.'s Ex. 102. Evidence of an infringer's actual profits are generally admissible when calculating a "reasonable royalty." $T W M M f g$. v. Dura Corp., 789 F.2d 895, 899 (Fed. Cir. 1986).

Microsoft also contends that Bratic's royalty calculation was improperly based on a lost profit model. Microsoft urges that Bratic's royalty calculation was based on z4's business plan that was speculative and assumed the production of an actual product. Contrary to Microsoft's contentions, Bratic testified with regard to a hypothetical negotiation
and based his royalty calculation on hypothetical royalty rates, infringing units sold, revenue from the infringed products, and an explanation of how he reached his damage amount. See 4/13/06 Trial Tr. 30:23-37:13, 45:19-46:2, 48:4-54:6, 54:10-62:21; Pl.'s Ex. 564. Bratic's calculations were based on documents and evidence that were properly before the jury and that were not objected to by Defendants. See 4/13/06 Trial Tr. 37:14-45:18. Accordingly, there was a factual basis for the damage calculation presented by z 4 at trial and relevant evidence to support the jury's determination of damages.

## Conclusion

For the reasons discussed above, Microsoft's motion for JMOL is DENIED.

## Autodesk's Motion for Judgment as a Matter of Law Regarding Damages

Autodesk argues that no reasonable jury could have concluded that an award of $\$ 18$ million dollars in damages against Autodesk was warranted. Autodesk also contends that the testimony of z4's damages expert Bratic was legally insufficient because it should have been excluded as contrary to the Court's pre-trial ruling on Defendants' motion in limine. Autodesk, like Microsoft, argues that the Court definitively ruled on the issue by granting Defendants' pre-trial motion in limine. For the same reasons discussed above with regard to Microsoft's motion for JMOL on damages, the Court rejects Autodesk's argument that Bratic's testimony should not have been considered by the jury.

Autodesk further argues that Bratic's testimony regarding Autodesk's damages is insufficient. Autodesk contends that Bratic made no attempt to
quantify damages and, therefore, the jury could not have relied on any quantified damage evidence because it did not exist. However, z4 introduced Plaintiff's Exhibit 565, which showed the numbers used to calculate damages against Autodesk. Bratic testified about the documents he used to gather information about Autodesk's revenues based on accused products, he discussed the factors he considered in calculating the royalty rate, and he indicated how he calculated the damages. $4 / 13 / 06$ Trial Tr. 29:8-30:22, 30:23-37:13, 45:19-46:2, 48:453:10, 54:7-55:21, 57:19-58:11, 71:10-73:7. Bratic did not go into as much detail when discussing the documents behind the numbers used to create Plaintiff's Exhibit 565 related to Autodesk as he did when discussing the damage calculations for Microsoft. However, Bratic identified the documents that he referred to and made it clear that he used the same method described with regard to his Microsoft damage calculation. Autodesk had the opportunity at trial to cross-examine Bratic on the basis of his calculation and the documents used to create Plaintiff's Exhibit 565.

Autodesk also argues that Bratic's reasonable royalty calculation was improperly based on a lost profits model. Like Microsoft, Autodesk's argument that Bratic based his damage calculation on a lost profits model is unpersuasive. As discussed above, Bratic testified that he based his calculations on a hypothetical negotiation.

Autodesk contends that there is no basis for the $1.5 \%$ royalty rate used by Bratic to calculate the damages against Autodesk. "A jury's choice [of a reasonable royalty] simply must be within the range encompassed by the record as a whole." Unisplay, 69
F.3d at 519. Although the explanation was brief, Bratic did explain how he got to the $1.5 \%$ royalty rate. Furthermore, Colvin explained the royalty rates he had accepted when licensing previous patents. 4/11/06 Trial Tr. 95:3-12; 4/13/06 Trial Tr. 54:7-55:5, 73:4-6.

Finally, Autodesk argues that Bratic's testimony and report did not consider the availability of a noninfringing alternative. However, Defendants directly confronted Bratic about this issue on crossexamination and he explained that he considered the noninfringing alternatives and concluded that they were not as effective at stopping piracy as the patents-in-suit. See 4/13/06 Trial Tr. 87:1-88:9.

Although z4 provided less evidence related to the damage calculation against Autodesk, than it did against Microsoft, it did present a sufficient factual basis for the damage calculation and that calculation was supported by relevant evidence. See 4/13/06 Trial Tr. 30:23-73:7; Pl.'s Ex. 565. Accordingly, Autodesk's motion for JMOL on damages is DENIED.

## MICROSOFT AND AUTODESK'S MOTION FOR NEW TRIAL

Under Rule 59(a) of the Federal Rules of Civil Procedure, a new trial can be granted to any party to a jury trial on any or all issues "for any reason for which new trials have heretofore been granted in actions at law in courts of the United States." "A new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course." Smith v. Transworld Drilling Co., 773 F.2d 610, 612-13 (5th Cir. 1985).

Defendants move for a new trial on multiple grounds. Defendants argue that they are entitled to a new trial because prejudicial error was committed when the court refused to allow testimony on what prior art was and was not before the patent examiner and then refused to instruct the jury on this point. Defendants claim that a fundamental tenet of patent law is that "while the presentation at trial of a reference that was not before the examiner does not change the presumption of validity, the alleged infringer's burden may be more easily carried because of this additional reference." SIBIA Neurosciences, Inc. v. Cadus Pharm. Corp., 225 F.3d 1349, 1355-56 (Fed. Cir. 2000). Defendants also argue that the Court erred by not allowing an instruction stating, "[t]hat the burden is more easily carried when the references on which the assertion is based were not directly considered by the examiner during prosecution." 4/18/06 Trial Tr. 134:1-135:2.

Defendants produce no authority that the failure to give the requested instruction is error. In fact, Defendants' instruction would be improper because it might lead the jury to believe that the burden of proof is less than clear and convincing when prior art was not considered by the PTO. This is in direct contradiction to Federal Circuit law. See Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1050 (Fed. Cir. 1988) (holding that the burden of proof is not reduced when prior art presented to the court was not considered by the PTO).

In support of their argument, Defendants also cite a paragraph from the section entitled "Parts of a Patent" from the Federal Circuit Bar Association's Model Jury Instructions, which indicates that the cover page of a patent lists the prior art publications
considered by the PTO. This is not the instruction Defendants requested at trial and it is not even related to a model instruction on the validity of a patent. Section 9.2 of the Fifth Judicial Circuit Pattern Jury Instructions (2004) sets out a pattern jury instruction related to patent validity. This instruction is based on Federal Circuit law and makes no mention of Defendants' requested instruction. The Court did not commit error by not allowing Defendants' requested instruction.

Defendants also contend that the jury was prohibited from learning that the prior art presented in this case was not before the examiner. Defendants complain that an objection sustained by the Court prevented them from explaining to the jury what prior art was and was not considered by the patent examiner in prosecuting the patents-insuit. The Court did not prevent Defendants from presenting evidence of what prior art references were on the face of the patent and, therefore, considered by the PTO in prosecuting the patents-in-suit. The Court sustained z4's objection that Defendants' expert could not testify to "art that was before the patent examiner" because the expert "doesn't know what the examiner may have found." See 4/18/06 Trial Tr.at 42:17-25). This objection was property sustained. Defendants' expert could not testify to what was before the patent examiner because he did not have personal knowledge of such facts. Defendants could have rephrased the question to elicit the testimony they claim they were prevented from presenting at trial. Furthermore, Defendants’ expert or some other witness could have testified to what was listed on the patent as prior art and what a certain reference being listed on a patent in that capacity means. The record indicates that

Defendants did not make such an attempt. Defendants should not be granted a new trial based on the Court's instructions or the Court's sustained objection to the question asked of Defendants' expert.

Defendants further move for a new trial arguing that several jury instructions regarding corroboration of testimony related to prior art references were improper and prejudicial. The first instruction that Defendants contend was improper states: "Oral testimony from interested witnesses is not sufficient to corroborate reduction to practice. Corroboration must be done using documents." Defendants contend that this instruction prevented the jury from considering the testimony of Aidan Hughes ("Hughes") and other witnesses' testimony on the issue of anticipation.

The Federal Circuit has indicated that there is "a clear requirement" that oral testimony by interested parties related to invalidity must be corroborated by documentary testimony. Lacks Indus., Inc. v. McKechnie Vehicle Components USA, Inc., 322 F.3d 1335, 1350 (Fed. Cir. 2003). "[T]he need for corroboration exists regardless of whether the party testifying concerning the invalidating activity is interested in the outcome of the litigation or is uninterested but testifying on behalf of an interested party. That corroboration is required in the former circumstance cannot be debated." Finnigan Corp. v. Int'l Trade Comm'n, 180 F.3d 1354, 1367 (Fed. Cir. 1999).

Hughes is undeniably an interested party to this litigation. He is a current employee of Microsoft, a party to the litigation. Based on Federal Circuit authority and the factual circumstances in this case, the instruction that "Oral testimony from interested
witnesses is not sufficient to corroborate reduction to practice," was not improper under the circumstances.

Furthermore, Defendants did not produce any oral testimony other than that of Hughes related to invalidity based on BP 98. Accordingly, the only evidence that could corroborate the testimony of Hughes, an interested witness, was the documentary evidence that Defendants presented on the issue. Therefore, the instruction by the Court that "corroboration must be done using documents" was proper under the circumstances, was not prejudicial to Defendants, and does not warrant a new trial.

Defendants also argue that the instruction "An inventor's testimony of conception must be corroborated in a single document" was improper and presents sufficient error to warrant a new trial. The Court agrees that the instruction was improper, however, the instruction does not present harmful error under the circumstances.

The Court's entire instruction in section 6.4.1 titled "Anticipation by Prior Invention - Conception" states:

Conception is the formation in the mind of the inventor of a definite and permanent idea of the complete and operative invention, as it is thereafter to be applied and practiced. A conception must encompass all limitations of the claimed invention and is complete only when the idea is so clearly defined in the inventor's mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation.

An inventor's testimony of conception must be corroborated in a single document. A document used to corroborate conception need not, itself, be corroborated.

This instruction addresses conception in the context of an anticipation defense. Anticipation by a prior invention under § $102(\mathrm{~g})(2)$ requires that the prior invention was conceived and reduced to practice before the filing date of the patent in question. Sandt Tech., Ltd. v. Resco Metal \& Plastics Corp., 264 F.3d 1344, 1350 (Fed. Cir. 2001). Conception is:
"the formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." Conception is complete only when the idea is so clearly defined in the inventor's mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation. Because it is a mental act, courts require corroborating evidence of a contemporaneous disclosure that would enable one skilled in the art to make the invention.

Thus the test for conception is whether the inventor had an idea that was definite and permanent enough that one skilled in the art could understand the invention; the inventor must prove his conception by corroborating evidence, preferably by showing a contemporaneous disclosure. An idea is definite and permanent when the inventor has a specific settled idea, a particular solution to the problem at hand,
not just a general goal or research plan he hopes to pursue.
Burroughs Wellcome Co. v. Barr Lab., 40 F.3d 1223, 1228 (Fed. Cir. 1994) (citations omitted); see also Singh v. Brake, 222 F.3d 1362, 1367 (Fed. Cir. 2000). Corroboration of conception can be done by documentary, physical, or circumstantial evidence. See Sandt Tech., 264 F.3d at 1351. "Additionally oral testimony of someone other than the alleged inventor may corroborate an inventor's testimony." Id. Accordingly, under Federal Circuit authority, the instruction that "An inventor's testimony of conception must be corroborated in a single document" is improper. When an inventor testifies about the conception of his invention, that oral testimony can be corroborated with documents, physical evidence, circumstantial evidence, or oral testimony. ${ }^{7}$

Although the instruction was improper, it does not constitute harmful error under the circumstances. Defendants admittedly did not name an inventor of BP 98. In their Motion for JMOL of Invalidity, Defendants stated, "For its § 102(g) defense, Microsoft did not need to name a particular person, whether David Pearce, Philippe Goetschel, or Aidan Hughes. It was sufficient, under Dow that Microsoft corporately both conceived and reduced to practice before Mr. Colvin." Again in their Motion for New Trial Defendants stated, "Moreover, focusing

7 The oral testimony of an interested witness such as Hughes can be used to corroborate the testimony of an inventor on the topic of conception, however, that oral testimony itself may require corroboration as discussed above.
on an argument that is incorrect as a matter of law, z4 argued that the Defendants had failed to identify who the inventor of Brazilian Publisher was and therefore it was not prior art." Defendants again cite Dow in support of their argument. 8 During closing arguments, Defendants argued: "And they say they're not an inventor at Microsoft of what ended up in here. And with all due respect, how did it get created then? You can't have a physical thing like this that Mr. Hughes followed the architecture right here in these documents which he explained to you preceded Mr. Colvin if they didn't do it." Id. 268:814. Based on the testimony presented at trial, Defendants' closing arguments, and post-trial briefing, it is only reasonable to conclude that Defendants' position at trial was that Microsoft, as a company, conceived the anti-piracy portion of BP 98 that Hughes then reduced to practice, as outlined in the specifications entered as exhibits by Defendants.

[^7]In accordance with Microsoft's position regarding the inventor of BP 98, Defendants never presented oral testimony of an individual inventor who allegedly conceived the anti-piracy portion of BP 98.9 Although the instruction that "An inventor's testimony of conception must be corroborated in a single document" is incorrect, it was not at issue in the case because there was no oral testimony by an inventor regarding the conception of BP 98. Therefore, whether such testimony must be corroborated by a "single document" was not an issue in the case. The jury had to ignore the instruction because it could not be applied under the facts presented at trial by Defendants. Based on these facts and without deciding whether or not Defendants can legally argue that Microsoft, as a company, conceived an invention, ${ }^{10}$ the improper

9 Even if Defendants are now attempting to claim that Hughes was the one they argued conceived the anti-piracy portion of BP 98 at trial, Hughes also never testified to a conception date of his invention that would come near to satisfying the test for conception laid out above.
10 Defendants argue that they are not required to name an individual inventor who conceived the prior art invention that allegedly anticipated Colvin's patents. Defendants do not identify an individual author or inventor or group of authors or inventors for the documents that they claim prove conception of the invention by Microsoft that Hughes then reduced to practice in BP 98. z4 argues that to succeed on a defense of anticipation under $\S 102(\mathrm{~g})$ Defendants must identify an individual inventor from Microsoft that actually conceived the invention.

As discussed above in the text, the Federal Circuit's test for conception with regard to anticipation requires the formation of an idea in the mind of the inventor. See Burroughs Wellcome Co., 40 F.3d at 1228. "Conception is 'the formation in the mind
[Footnote continued on next page]

## [Footnote continued from previous page]

of the inventor[] of a definite and permanent idea of the complete and operative invention, as it is thereafter to be applied in practice." Singh, 222 F.3d at 1367. Microsoft the corporation cannot form ideas in its mind. In New Idea Farm Equipment Corp. v. Sperry Corp., 916 F.2d 1561, 1566 n. 4 (Fed. Cir. 1990), the Federal Circuit stated, "the judge properly recognized that people conceive, not companies, stating that "[w]hen I refer to Hesston, I mean to include Mr. Burkhart and all his colleagues who worked on the machines in question." See also Fromson v. W. Litho Plate \& Supply Co., 853 F.2d 1568, 1575 (Fed. Cir. 1988) ("Corporations don't' invent; people do.") (overturned on other grounds).

Microsoft cites Dow Chemical Co. v. Astro-Valcour, Inc., 267 F.3d 1334, 1339-41 (Fed. Cir. 2001), arguing that it supports its contention that an inventor does not need to be identified as conceiving the invention for anticipation purposes. In Dow, the Federal Circuit held that the corporate defendant AstroValcour, Inc. ("AVI") "clearly appreciated the existence of its new process and product." 267 F.3d at 1341. The court stated, "We find undisputed, clear and convincing evidence in the record that AVI's employees immediately appreciated what they had made, and indeed its significance, when they made isobutane-blown foam in March and August of 1984." AVI employees testified to the fact that they were aware of the significance of the creation of the invention that was found to invalidate plaintiff's patent. The Federal Circuit's holding in Dow, relied on so heavily by Defendants, does not expressly hold that a company can conceive an invention.

Federal Circuit law regarding conception repeatedly discusses the "mind" of the inventor and implies that establishing conception of an invention requires the identification of the individual or group of individuals who did the actual conceiving. Furthermore the case law cited above indicates that the Federal Circuit only recognizes people, and not companies, as inventors. Accordingly, Defendant's contention that they did not need to name an individual
instruction could not create sufficient error to warrant a new trial on the issue of anticipation.

Defendants move for a new trial based on a vague argument that the Court's instructions were insufficient to allow the jury to determine particular pieces of prior art. Defendants do not identify what instructions they are complaining about. Defendants' vague and unclear argument on these grounds do not warrant the granting of a new trial.

Defendants further argue that the Court committed prejudicial error by removing Defendants' requested instruction related to the defense of derivation based on R13. Defendants argue that they did not need to object at the charge conference because they submitted a request for the derivation instruction in their joint proposed jury instructions and z 4 objected to the instruction in the joint proposed instructions. However, the joint proposed jury instruction referred to by Defendants was not the Courts' proposed charge that Defendants are required to object to at the charge conference. The document Defendants claim z4 objected to was the parties' charge not the Court's. The Court presented its proposed jury charge to the parties, and Defendants did not object to the absence of the derivation instruction. Accordingly, Defendants waived any objection to the absence of the instruction. See Fed. R. Civ. P. 51.
[Footnote continued from previous page] inventor responsible for conceiving the invention embodied in BP 98 is unpersuasive.

Defendants argue that the Court's jury instruction related to willfulness gave undue weight to instructions regarding the opinion of counsel and invited the jury to draw an improper adverse inference. The Court's instruction undisputedly set out the correct standard for willful infringement and then stated that "the absence of a lawyer's opinion does not require you to find willfulness." The Court is not persuaded that Defendants suffered any prejudice as a result of the Court's instruction regarding willfulness.

Defendants contend that it was prejudicial error for the Court to instruct the jury that "[i]n deciding whether to combine what is described in various items of prior art, you should keep in mind that there must be some motivation or suggestion for a skilled person to make the combination covered by the patent claims." This instruction was proper under Federal Circuit precedent. See Al-Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1323-1324 (Fed. Cir. 1999) ("The party seeking patent invalidity based on obviousness must also show some motivation or suggestion to combine prior art teachings.").

Defendants move for a new trial arguing that the Court's construction of the terms "automatically contacting" in the ' 471 patent and "user" in the ' 471 and ' 825 patents were improper. With regard to "automatically contacting," Defendants re-urge the arguments they presented to the Court at the Markman hearing and in their Markman briefing. The Court's ruling on the term "automatically contacting" stands and Defendants are not entitled to a new trial on these grounds.

As to the term "user," Defendants argue that they relied on the Court's ruling at the March 26,

2006 pre-trial conference to mean that their expert could testify to his interpretation of the term "user." The Court stated during the pre-trial conference that "I'm just going to have to deal with this when I get into it" and "I'll take objections at the time it comes in" and did not make any statements that Defendants could have reasonably relied on to believe that their expert's interpretation of the term "user" would be allowed if objected to. The term "user" became disputed during the course of the trial. "The court has the power and obligation to construe as a matter of law the meaning of language used in the patent claim." Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995). As discussed above, the Court construed the term "user" after hearing argument from the parties and stands by its ruling. Accordingly, Defendants are not entitled to a new trial based on these grounds.

Defendants move for a new trial based on comments made by z4 before the jury with regard to Defendants' witness Cole who was not present at trial. During the pre-trial conference, the Court granted Defendants' Motion in Limine with regard to z4's ability to comment on the absence of Cole. In granting the motion the Court stated, "I will grant your Motion in Limine. But if you wish to go into it, feel free to approach the bench and I'll be glad to let you walk down that path if you want." In granting Defendants' Motion in Limine pre-trial, the Court did not make a definitive ruling on the issue of whether testimony related to Cole's absence was admissible but rather employed a prophylactic measure that required $\mathrm{z4}$ to approach the bench before going into testimony on the subject.

At trial, Defendants' expert Brian Napper mentioned Cole's deposition testimony to support his argument, to which z4 responded that she was not present at trial to support her testimony. Whether z 4 should have approached the bench prior to going into her absence at trial is questionable. However, under Rule 103 of the Federal Rules of Evidence, Defendants were required to timely object to the mention of Cole's absence if they felt it was in violation of their pre-trial motion in limine. Defendants did not object to z4's mention of Cole's absence and, therefore, Defendants did not properly preserve any error that may have occurred.

Defendants move for a new trial on the grounds that the Court improperly excluded Philippe Goetschel's ("Goetschel") June 1995 Memo from evidence. During trial, z4 read one of Microsoft's responses to an interrogatory into evidence. 4/13/06 Trial Tr. 119:9-120:20. That response referenced Goetschel's June 1995 Memo, however, z4's reading of the interrogatory response into evidence did not also automatically enter the Goetschel Memo into evidence. Any argument that it did is absurd.

Defendants further argue that z4 agreed to allow the Goetschel Memo into evidence when four days later Defendants attempted to enter multiple documents into evidence by referring to the documents' bates numbers and stating that they were mentioned in an interrogatory response read into the record by z4. z4's counsel stated in objection to Defendants' attempt to enter these documents, "on the representation that they are the documents from the interrogatories, we have no objection. We'll check that. And if there's a problem, we'll raise it later." Later that same day when Microsoft
attempted to question Hughes on the Goetschel Memo, z4 objected on the grounds that Hughes was not the custodian and had no personal knowledge as to certain aspects of the memo. The Court clarified at the time of $\mathrm{z4}$ 's specific objection to the Goetschel Memo that $z 4$ had reserved the right to object to these documents, "I think he reserved the right to object to those after he had a chance to review them." 4/17/06 Trial Tr. 36:11-37:10.

Under the circumstances, z4 maintained the right to object to the Goetschel Memo and timely raised that objection when Microsoft attempted to use the memo at trial.

Defendants further complain that the Court improperly excluded the Goetschel Memo on the basis of hearsay. Defendants contend that Hughes could provide the proper predicate to establish the memo as a business record. The Court did not allow Hughes to testify to the requirements of Rule 803(6) of the Federal Rules of Evidence to prove that the document was a business record because the actual author of the memo, Goetschel, was sworn as a witness in the case and could have testified himself as to the authenticity of the document. Furthermore, the Court did not find that Hughes was a qualified witness to testify to all of Rule 803(6)'s requirements as to the Goetschel Memo and properly excluded the document under the circumstances.

Defendants move for a new trial arguing that the Court's exclusion of testimony from Hughes regarding a database of detailed customer registration information for BP 98 from 1998-99 and a summary chart created by Hughes from the data in the database was improper. The circumstances surrounding the exclusion of this evidence is
discussed in more detail below. However, the Court properly excluded Hughes's testimony on the database and summary chart. Accordingly, a new trial is not warranted on these grounds.

Defendants move for a new trial on the grounds that they were prejudiced when the Court allowed z4 to read excerpts from the deposition of Microsoft's Rule 30(b)(6) representative, Cole, into evidence. The excerpts read into evidence from Cole's deposition related to her knowledge of Microsoft's defenses on noninfringement and invalidity. Neither Cole nor any other corporate representative from Microsoft was present at trial on behalf of Microsoft. ${ }^{11}$ Defendants objected based on Rules 402 and 403 of the Federal Rules of Evidence arguing that, because Cole was not an attorney, z4 could not ask questions about legal conclusions. The Court allowed the testimony because Cole explained in her deposition why she could not answer the questions and because there was nothing legally inadmissible about the questions and answers considering that she was Microsoft's corporate representative. See 4/13/06 Trial Tr. 5:4-8:7. The Court's ruling was proper under the circumstances and does not establish grounds for a new trial.

Defendants move for a new trial on the grounds that z4 improperly commented on the number of exhibits Defendants brought to trial. Defendants included over 3,000 exhibits, totaling 30 linear feet of documents, on their pre-trial exhibit list. As

[^8]discussed below in more detail, Defendants' attempt to flood z 4 in exhibits constituted litigation misconduct. Any mention by z4 about Defendants' excessive exhibits does not establish grounds for a new trial.

Defendants move for a new trial arguing that z4 made improper arguments regarding Microsoft's revenues, size, and alleged actions toward z4 during z4's closing argument. Defendants also contend that z4 improperly commented on the absence of Microsoft witnesses in violation of this Court's order. Regardless of whether these comments present sufficient prejudice, if any, to justify a new trial, Defendants did not object at trial to any of the comments they now complain of. Accordingly, under Rule 103 of the Federal Rules of Evidence, Defendants waived their right to complain on these grounds and a new trial is not warranted.

Defendants move for a new trial on the grounds that the jury was improperly instructed that it could make an adverse inference against Microsoft with regard to Plaintiff's Exhibit 558, which was an email sent from Luiz Moncau ("Moncau"), a Microsoft employee, to David Pearce ("Pearce"), Cole and several other Microsoft employees ("the Moncau email"). ${ }^{12}$ As discussed in more detail below, the Moncau email was not produced to z 4 until the day before trial when z 4 took the deposition of Moncau and he produced the email. Although z4 had requested all relevant documents of Moncau, Cole,

[^9]and Pearce, during discovery, which should have included this email, the email was not produced until Moncau's deposition the day before trial. The Court properly instructed the jury with regard to the Moncau email as a sanction against Microsoft for not producing the email, which should have been produced much earlier. Accordingly, the instruction does not establish grounds for a new trial.

Finally, Defendants move for a new trial on the grounds that the great weight of the evidence is against the verdict on the issues of infringement and invalidity of the patents-in-suit. Defendants base their argument on the same grounds they presented in support of their motions for JMOL on infringement and invalidity. For the same reasons discussed in regard to Defendants' motions for JMOL, Defendants have not established that a motion for new trial is warranted on these grounds.

For the reasons discussed above, Defendants' Motion for New Trial is DENIED.

## FINDINGS OF FACT AND CONCLUSIONS OF LAW ON INEQUITABLE CONDUCT

The Court reserved the issue of Colvin's inequitable conduct in obtaining the patents-in-suit for itself and heard evidence related to this issue outside the presence of the jury. After considering the testimony, exhibits, arguments of counsel, and supporting memoranda, the Court makes the following Findings of Fact and Conclusions of Law
pursuant to Rule 52(a) of the Federal Rules of Civil Procedure with regard to inequitable conduct. ${ }^{13}$

## Background

Colvin purchased a copy of Autodesk's R13 software in August of 1995 and registered his copy of the software with Autodesk on September 1, 1995. R13 came on two separate disks, a CD-ROM disk and a floppy disk referred to as the "Personalization Disk." To install R13, a user would insert the CRROM into the user's CD drive. The CD would then begin the software installation process. During the installation process the user would be prompted to insert the floppy disk into the floppy disk drive. Once the floppy disk was inserted, the user was asked to enter various personal information. The user was not prompted to enter the serial number of the product or any other authorization code at this point. After the user's personal information was entered, the installation process continued. Once the installation process was completed, the user configured the software by answering different questions related to the user's computer and other hardware.

After the configuration of the software was completed, the program asked the user if he wanted "to enter authorization at this time?" The user could answer either "Y" for yes or "N" for no to this question. If the user chose "Y," he was prompted to enter an authorization code given to him by the

[^10]dealer who sold him the software. If the user chose "N," he did not have to enter the authorization code at that time and was informed of a thirty day grace period before he would have to enter an authorization code to allow the use of the software. Users could also get an authorization code from Autodesk by contacting Autodesk via telephone, fax, or postal mail.

When Colvin installed his version of R13 he was asked to enter personal information but was never prompted to enter a serial number. When asked if he wanted to authorize his software he chose "Y" and entered the authorization code given to him by the dealer who sold him the program. Colvin was never informed of a 30 day grace period because he chose "Y" instead of "N." Colvin never owned a copy of Autodesk's R14 software.

The prosecuting attorney for the ' 471 patent was David Bir ("Bir"). Colvin did not provide Bir with any information about R13 or R14 during the prosecution of the ' 471 patent. The prosecuting attorney for the '825 patent was James Kallis ("Kallis"). As with the '471 patent, Colvin did not provide Kallis with any information regarding R13 or R14 during the prosecution of the ' 825 patent.
U.S. Patent No. 5,341,429 ("the '429 patent") is listed under "References Cited" on the ' 471 patent, indicating that it was considered by the PTO during the prosecution of the ' 471 patent. The ' 429 patent discloses an anti-piracy process that is very similar to the process utilized by R13. One embodiment of the ' 429 patent allows the software to be used during a grace period for a certain number of times before it is enabled. An ID number is embedded in the software to allow the software to run during the
grace period. Once the grace period is over, a password is manually provided to the user. The user then communicates the password to the program to activate the software.

## Applicable Law

"Inequitable conduct includes affirmative misrepresentation of a material fact, failure to disclose material information, or submission of false material information, coupled with an intent to deceive." Molins PLC v. Textron Inc., 48 F.3d 1172, 1178 (Fed. Cir. 1995).

One who alleges inequitable conduct arising from a failure to disclose prior art must offer clear and convincing proof of the materiality of the prior art, knowledge chargeable to the applicant of that prior art and of its materiality, and the applicant's failure to disclose the prior art, coupled with an intent to mislead the PTO.

Id. The party asserting inequitable conduct through a withholding of information must separately establish materiality and intent, as they are separate components of inequitable conduct. See id. "Once threshold findings of materiality and intent are established, the court must weigh them to determine whether the equities warrant a conclusion that inequitable conduct occurred." Id. The party asserting inequitable conduct must prove by clear and convincing evidence that the applicant "made a deliberate decision to withhold a known material reference," and not merely the omission of an act that should have been performed. Id. at 1181.

Information is considered material if:
[I]t is not cumulative to information already of record or being made of record in the application, and
(1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
(2) It refutes, or is inconsistent with, a position the applicant takes in:
(I) Opposing an argument of unpatentability relied on by the Office, or
(ii) Asserting an argument of patentability.
Purdue Pharma L.P. v. Endo Pharms., Inc., 438 F.3d 1123, 1129 (Fed. Cir. 2006) (citing 37 C.F.R. § 1.56(b) (2004)).

## Analysis

Defendants contend that the '471 and '825 patents are unenforceable based on the inequitable conduct of Colvin. Defendants argue that Colvin intentionally withheld a material reference, R13, from the Patent and Trademark Office ("the PTO") during the prosecution of both patents. Defendants argue that R13 is material because it is inconsistent with a position taken by Bir when he remarked in the '471 file history that:

Applicant has amended a number of claims to further distinguish over the prior art relied upon by the examiner. The prior art relied upon taken alone or in any permissible combination does not disclose a number of features found in various claims as filed, and other claims as amended,

80a
including requiring a first password or authorization code to activate software and requiring additional passwords or authorization codes after expiration of an interval associated with the password.
4/12/06 Trial Tr. 70:8-17. Defendants contend that R13, like the '471 patent, required two passwords, making Bir's statement inconsistent and, therefore, making R13 material.

R13 does not require two passwords. R13 only requires one password in the form of an authorization code that is communicated to the software to permanently enable the software. Defendants contend that the serial number embedded in the floppy disk of R13 is a password. However, Defendants did not prove by clear and convincing evidence that the serial number embedded in the floppy disk had anything to do with activating the software. Furthermore, the fact that the serial number is embedded in the software does not make it a password in the sense that the concept password is used in the ' 471 patent.

Defendants argue that the '471 patent specifically allows for a password to be a serial number. This is true; the ' 471 patent indicates that a serial number can act as a password. However, there is nothing in the '471 patent that indicates that a serial number embedded in the software as it is in R13 and the ' 429 patent is a password. If a serial number is used as a password in the invention disclosed in the ' 471 patent, the serial number must be communicated to the software and cannot be a part of the software. Bir's statement that the ' 471 is distinguishable from the prior art based on its
multiple passwords is not inconsistent with R13. Accordingly, R13 is not material on this basis.

Furthermore, R13 is cumulative of the ' 429 patent, which was considered by the examiner during the prosecution of the ' 471 patent. The '429 patent and R13 disclose very similar processes for anti-piracy protection. One embodiment of the '429 patent has a serial number or code embedded in the software and has a grace period that begins without the user having to communicate a password to the software. Like R13, after the grace period ends, the user must manually obtain a password to activate the software. R13 is not material to the ' 471 patent because it is cumulative of the ' 429 patent, which was considered by the PTO in prosecuting the ' 471 patent.

## Conclusion

Defendants did not prove by clear and convincing evidence that R13 was material to the patentability of the ' 471 patent. Accordingly, the Court HOLDS that neither the ' 471 or ' 825 patents are unenforceable due to inequitable conduct.
z4's MOTION FOR A FINDING OF LITIGATION MISCONDUCT, ENHANCED DAMAGES, AND ATTORNEYS FEES AND EXPENSES
z4 asks the Court to award attorneys' fees and expenses to z4 against both Microsoft and Autodesk and to enhance the damage award against Microsoft for infringement of the ' 471 and ' 825 patents.

## Attorneys' Fees

Under 35 U.S.C. § 285 of the Patent Act, "The court in exceptional cases may award reasonable
attorney fees to the prevailing party." A case may be exceptional based solely on litigation misconduct and unprofessional behavior. Rambus, Inc. v. Infineon Techs. AG, 318 F.3d 1081, 1106 (Fed. Cir. 2003); Epcon Gas Sys., Inc. v. Bauer Compressors, Inc., 279 F.3d 1022, 1034 (Fed. Cir. 2002). A case may be deemed exceptional on a party's or its counsel's display of bad-faith during either the pre-trial or trial stages. Kloster Speedsteel AB v. Crucible, Inc., 793 F.2d 1565, 1580 (Fed. Cir. 1986) (overruled on other grounds). The prevailing party seeking an attorneys' fee award has the burden of establishing that the case is exceptional by clear and convincing evidence. Reactive Metals \& Alloys Corp. v. ESM, Inc., 769 F.2d 1578, 1582 (Fed. Cir. 1985) (overruled on other grounds). A finding of willful infringement is a factor to be considered in determining if a case is exceptional. See Del Mar Avionics, Inc. v. Quinton Instrument Co., 836 F.2d 1320, 1329 (Fed. Cir. 1987).

In its motion, z4 presents many instances where Defendants acted in bad faith and committed litigation misconduct sufficient to make this an exceptional case. The Court discusses the more flagrant here. First, the Moncau email.

At the last pre-trial conference, the Court deviated from its usual rules to allow Defendants to bring a belatedly identified trial witness, Moncau, with the condition that z 4 could depose Moncau before trial started. As discussed above, z4 was finally able to depose Moncau on Sunday, April 9, 2006, the very day before trial began. During the course of Moncau's deposition he revealed an email that was later introduced into evidence as Plaintiff's Exhibit 558 ("the Moncau email"). The Moncau email was an email sent from Moncau to various

Microsoft employees including Cole and Pearce and addressed in part whether Microsoft's BP 98 software worked for its intended purpose of stopping piracy. This was an important piece of evidence for z4 and was unfavorable to Microsoft, yet it had never been produced by Microsoft. Moncau testified in his deposition that he provided all of his documents to Microsoft's counsel over a year before the deposition. Nevertheless, the email had never been produced by Microsoft during discovery despite the fact that it was between three Microsoft employees referenced in the email, all of whom allegedly gave all of their relevant documents to Microsoft's counsel for production. Making matters even worse, Defendants admit they were aware of the Moncau email several hours before Moncau's deposition, but still withheld it from z 4 until z 4 found out about it during questioning during the deposition. This raises a serious question as to whether the email would have ever seen the light of day, had z4 not uncovered it during Moncau's deposition the day before trial. As a sanction for not disclosing the email, the Court instructed the jury that Microsoft failed to produce this document during discovery as it was supposed to have done.

Second, is the Hughes database. As discussed above, Microsoft attempted to use a summary chart at trial created by Hughes to demonstrate that BP 98 worked for its intended purpose. The summary chart had never been produced to z 4 and was allegedly only created by Hughes during the first day of trial, April 10, 2006. The summary chart was allegedly compiled from data found in a Hughes database that tracked the customer registrations of BP 98. However, the identity and location of this database was never identified to z 4 until it appeared as an
attachment to a motion for summary judgment long after discovery had closed. z4 had inquired about this database some eight months earlier during Hughes's deposition in August, 2005. Hughes testified that the alleged database did not exist. However, a week later, Microsoft produced a CD labeled "source code" with 11,274 files on it that belonged to Hughes. At trial Microsoft argued that the database was on the CD in a subfolder and z 4 could have found it. Yet Microsoft admits that it knew all along the database was on the CD and never informed z4 or corrected Hughes's testimony on the topic.

The database became a larger issue when Microsoft attempted to have Hughes testify at trial about data he extracted from the database using his own extraction method. In an attempt to bolster Defendants' claim that BP 98 worked for its intended purpose, Hughes intended to testify, based on this data and his own extraction method, that no copy of BP 98 was installed on more than three computers over the internet. After reviewing the database, z4 discovered at least one instance where the same copy of BP 98 appeared to have been installed on 828 different computers over the internet. Microsoft's attempt at explaining away this data entry was unpersuasive.

Closer inspection of the database by z4 revealed not only that Hughes's data summary was an inaccurate reflection of the data, but that Microsoft had not accurately disclosed the method of extraction used by Hughes to create his summary chart. The Court determined that Microsoft had attempted to mislead z4, the Court, and the jury and excluded

Hughes from testifying with regard to the database and his summary chart.

Third, is the "Read This First" card. Before trial, Defendants filed a motion for summary judgment on inequitable conduct. Attached to that motion was the declaration of Michelle Winkenbach ("Winkenbach"), which, among other things, was intended to prove that Colvin had received a copy of a blue "Read This First" card when he purchased his personal copy of Autodesk's R-13 software in 1995. Winkenbach's declaration asserted that the SKU number on Colvin's copy of R-13 matched a SKU in Autodesk's bill of materials database, unproduced to z 4 at that time, implying that Colvin had received a "Read This First" card with his copy of R-13.

After production of the bill of materials database, z4 discovered that the SKU relied on by Winkenbach was not the same as the one on Colvin's disk and that the information in the database related to the SKU on Colvin's software did not show that a "Read This First" card was included with his software. Defendants claim that the discrepancy in Winkenbach's declaration was merely a mistake. The facts surrounding the Winkenbach declaration are highly questionable. If the information in the Winkenbach declaration was merely a mistake, it could have turned into a very beneficial mistake for Defendants if z4 had not caught the discrepancy in the SKU numbers. In light of the other instances of litigation misconduct by Defendants brought to the Court's attention, Defendants are no longer given the benefit of the doubt before this Court. Accordingly, the Court considers this "mistake" an intentional attempt by Defendants to mislead z4 and this Court.

Fourth, is Defendants' voluminous exhibit tactic. Defendants marked an unprecedented 3,449 exhibits for trial, which resulted in a 283 page exhibit list and took up, as z4 points out, "30 lineal feet." Yet, at trial Defendants only admitted 107 of these exhibits. Defendants argue that the unreasonable number of remaining exhibits were intended to combat $z 4$ 's previous position that Colvin conceived the invention disclosed in the ' 471 patent in March of 1996 instead of September 1997. This excuse is neither reasonable nor believable. The Court concludes that Defendants attempted to bury the relevant 107 exhibits admitted at trial in its voluminous 3,449 marked exhibits in the hope that they could conceal their trial evidence in a massive pile of decoys. This type of trial tactic is not only unfair to $z 4$, but creates unnecessary work on the Court staff and is confusing and potentially misleading to the jury.

Finally, the Court is greatly disturbed by the repeated instances where Defendants actions go beyond what can be dismissed as a mere appearance of impropriety and collectively appear to represent a pattern which is of disappointment to the Court and a disservice to legitimate advocacy. The repeated examples, some of which are not even mentioned here, of what can be described as nothing less than misleading on the part of Defendants, justify a conclusion that Defendants committed litigation misconduct. This conduct, coupled with the fact that Microsoft was found to have willfully infringed the patents-in-suit results in this case being deemed exceptional. Accordingly, the Court awards z4 reasonable attorneys' fees and expenses, excluding expenses related to expert witnesses.

When determining a reasonable attorneys' fee award, a court should consider all relevant circumstances in a case. Junker v. Eddings, 396 F.3d 1359, 1365 (Fed. Cir. 2005). In determining such an award, a court usually analyzes "hourly time records, full expense statements, documentation of attorney hourly billing rates in the community for the particular type of work involved, the attorney's particular skills and experience, and detailed billing records or client's actual bills showing tasks performed in connection with the litigation." Id. at 1366.
z4 presented the Court with detailed billing records, a detailed explanation of the skill level and experience of each attorney and paralegal billed, and detailed records of its expenses incurred. See Supplement to z4 Technologies Inc.'s Motion for an Order Finding Litigation Misconduct, Enhancing Damages, and Awarding Attorney Fees and Expenses (Docket No. 392). Based on the information provided by $z 4$, the total combined fees and expenses incurred by z 4 for this case amount to $\$ 2,702,929$. Defendants point to a collection of billing entries that appear to be improper based on the description accompanying the entry. These entries amount to a total of $\$ 20,738$, bringing the total fees and expenses for z 4 to $\$ 2,682,191$.
z4 provided the Court with an excerpt from the 2005 American Intellectual Property Law Association's Economic Survey, which indicates that the average cost of litigating a patent case in Texas is $\$ 4,993,750$. Id. z4's fees and expenses associated with this case are reasonable considering the complexity of the case and the results z4's attorneys achieved at trial. Based on all of the relevant
circumstances in the case, the Court awards $\$$ $2,300,000$ in attorneys' fees and expenses to be paid to $\mathrm{z} 4, \$ 1,978,000$ by Microsoft and $\$ 322,000$ by Autodesk. ${ }^{14}$

## Enhanced Damages

A court may in its discretion enhance damages up to three times when there is a finding of willful infringement or bad-faith on the part of an infringing party. 35 U.S.C. § 284; see SRI Int'l v. Advanced Tech. Lab., 127 F.3d 1462, 1468-69 (Fed. Cir. 1997). "Bad faith" in this context refers to an infringer's lack of due care with regard to avoiding infringement and is more properly called "bad faith infringement." Jurgens v. CBK, Ltd., 80 F.3d 1566, 1571 (Fed. Cir. 1996). Although "bad faith" acts such as litigation misconduct are not sufficient alone to support an enhancement of damages, assuming the requisite culpability is present, such acts can be considered in determining whether to award enhanced damages and how much to award. See id. at 1570-71. A finding of willful infringement provides sufficient culpability to justify the enhancement of damages under § 284. See id. at 1571, 1573.

Enhanced damages are a punitive measure taken by the Court to penalize a willful infringer for his or her increased culpability. See id. at 1570. However,

14 Of the total $\$ 133,000,000$ in actual damages awarded by the jury, Microsoft is responsible for $86 \%(\$ 115,000,000)$ and Autodesk is responsible for $14 \%(\$ 18,000,000)$. The amount of attorneys' fees and expenses owed by each Defendant is based on the percentage of the total actual damages each Defendant is responsible for.
a court can refrain from awarding enhanced damages in light of a finding of willfulness based on the weight of the evidence supporting willfulness and the closeness of the issues at trial. See Brooktree Corp. v. Advanced Micro-Devices, Inc., 977 F.2d 1555, 1582 (Fed. Cir. 1992); Laitram Corp. v. NEC Corp., 115 F.3d 947, 955 (Fed. Cir. 1997). "The paramount determination in deciding enhancement and the amount thereof is the egregiousness of the defendant's conduct based on all the facts and circumstances." Read Corp., 970 F.2d at 826. Factors courts consider in deciding whether to enhance damages and the amount of enhancement include:
(1) whether the infringer deliberately copied the ideas or design of another;
(2) whether the infringer, when he knew of the other's patent protection, investigated the scope of the patent and formed a good-faith belief that it was invalid or that it was not infringed;
(3) the infringer's behavior as a party to the litigation;
(4) defendant's size and financial condition;
(5) closeness of the case;
(6) duration of defendant's misconduct;
(7) remedial action by the defendant;
(8) defendant's motivation for harm;
(9) whether defendant attempted to conceal its misconduct.

Id. at 827.
The jury found that Microsoft wilfully infringed both the ' 471 and the ' 825 patents. While it is undisputed that Microsoft did not copy z4's inventions under factor one and that the questions of willfulness, invalidity, and infringement were such that a reasonable jury arguably could have found either way on these issues under factor five, these are the only two factors that weigh against enhancement of damages. All of the other factors support the enhancement of damages.

As discussed above, Microsoft did not present any evidence that displayed an attempt to form a good faith belief that it did not infringe the patents-in-suit or that the patents were invalid, prior to the suit being filed. Even after the suit was filed, Microsoft only points to the fact that it promptly contacted litigation counsel and the defenses put forth by its litigation counsel as evidence of its due care. However, as stated above, defenses of litigation counsel are not strong evidence of due care.

As discussed above, Microsoft's behavior as a party to this case constitutes litigation misconduct making this an exceptional case. Microsoft is unquestionably large enough and profitable enough to pay enhanced damages.

Microsoft infringed the '471 patent with knowledge of that patent since at least February 2003. This time period is significant considering the amount of infringing products that Microsoft sold in that amount of time. Although there is some evidence that Microsoft could have designed around the patents-in-suit, the Court is not aware of any remedial actions taken by Microsoft in an attempt to
design around the patents or to remedy the potential infringement of Colvin's patents.

While the Court is not aware of any direct motivation on the part of Microsoft to harm Colvin, there is ample circumstantial evidence that to Microsoft Colvin and his patent rights were insignificant because Microsoft never thought Colvin would be able to pursue his rights against it. The evidence presented at trial suggests that Microsoft considered z4 a small and irrelevant company that was not worthy of Microsoft's time and attention, even if Microsoft was potentially infringing its patents. Microsoft might well have taken $z 4$ seriously had z4 been a large and more established company.

Finally, Microsoft attempted to conceal its misconduct as evidenced by the incidents discussed above with regard to litigation misconduct. Considering the totality of the circumstances, particularly the lack of evidence that Microsoft presented with regard to due care in avoiding infringement of the ' 471 patent prior to this suit being filed and Microsoft's misconduct during the course of the trial, enhancement of the damages awarded against Microsoft is appropriate. While the Court could enhance damages against Microsoft up to three times the jury verdict of $\$ 115,000,000$, or $\$ 345,000,000$, under the totality of the circumstances, enhancing damages to the maximum extent allowed under § 284 is not warranted. Accordingly, the Court awards an additional $\$ 25,000,000$ making a total of $\$ 140,000,000$ plus attorneys fees to be paid by Microsoft to z4.

## z4's MOTION FOR PREJUDGMENT INTEREST

Section 284 of the Patent Act indicates that a court should award interest in patent cases after a finding of infringement. 35 U.S.C. § 284. The purpose of prejudgment interest is to place the patentee in as good a position as he would have been had the infringer paid a reasonable royalty instead of infringing. Beatrice Foods v. New England Printing, 923 F.2d 1576, 1580 (Fed. Cir. 1991). Prejudgment interest should be awarded unless there is a significant justification for withholding such an award, such as a delay in brining suit against the infringer. See Gen. Motors Corp. v. Devex Corp., 461 U.S. 648, 657, 103 S. Ct. 2058, 76 L. Ed. 2d 211 (1983); Bio-Rad Labs. v. Nicolet Instrument Corp., 807 F.2d 964, 967 (Fed. Cir. 1986). The interest rate used to calculate prejudgment interest and the method and frequency of compounding is left to the discretion of the district court. See Uniroyal, Inc., 939 F.2d at 1545; Studiengesellschaft Kohle, m.b.H. v. Dart Indus., Inc., 862 F.2d 1564. 1579-80 (Fed. Cir. 1988) (citing Bio-Rad Labs., 807 F.2d at 969). Prejudgment interest can only be applied to actual damages and not punitive or enhanced damages. Beatrice Foods, 923 F.2d at 1580. Interest should be awarded from the date of infringement to the date of final judgment. Nickson Indus., Inc. v. Rol Mfg, 847 F.2d 795, 800 (Fed. Cir. 1988).

There is evidence in the record that z 4 took measures to avoid litigation with Microsoft prior to filing suit. However, the record does not indicate that z4 unreasonably delayed in prosecuting this action against either Microsoft or Autodesk such that prejudgment interest should be withheld.

Accordingly, prejudgment interest shall be awarded to z 4 on the actual damages found against both Defendants at the prime rate as of August 18, 2006 compounded monthly through July 31, 2006 and compounded daily for the month of August, 2006. Interest should be calculated from the date of infringement through the date of final judgment.

## OTHER MOTIONS

z4's Emergency Motion to Strike Docket Entry 344

The parties resolved the issues related to this motion. Accordingly, z4's Emergency Motion to Strike Docket entry 344 is DENIED as moot.

## Autodesk and Microsoft's Emergency Opposed

 Motion for the Court to Consider the ExpertReport of Walter Bratic Relating to Docket Nos. 321 and 323

Defendants ask the Court to consider Bratic's expert report in determining their various motions for JMOL. The Court considered Bratic's expert report to the extent it deemed necessary in ruling on Defendants' motions for JMOL. Accordingly, Defendants' motion is DENIED as moot.
z4's Motion and Memorandum in Support to Unseal Findings Related to z4's Motion for Permanent Injunction for Docket Entries 346, $347,353,370$, and 371

On June 14, 2006, the Court issued a Memorandum Opinion and Order regarding z4's Motion for Permanent Injunction. The Court resolved the underlying issue related to $\mathrm{z4}$ 's motion to unseal findings. Accordingly, the Court DENIES z4's motion as moot.

## CONCLUSION

For the reasons discussed above:
The Court DENIES Autodesk's Motion for Judgment as a Matter of Law of Noninfringement; Microsoft's Motion for Judgment as a Matter of Law of Noninfringement; Defendants' Motion for Judgment as a Matter of Law of Invalidity; Microsoft's Motion for Judgment as a Matter of Law Regarding Damages, Non-Retail Products, and Willfulness; Autodesk's Motion for Judgment as a Matter of Law Regarding Damages; and Microsoft's and Autodesk's Motion for a New Trial;

The Court HOLDS that the '471 and '825 patents are not unenforceable due to inequitable conduct.

The Court GRANTS z4's Motion and Brief in Support for an Order Finding Litigation Misconduct, Enhancing Damages, and Awarding Attorney Fees and Expenses; and z4'sMotion and Brief in Support for Prejudgment Interest. Accordingly, the Court ORDERS Microsoft to pay $\$ 1,978,000$ in attorneys' fees and expenses to $z 4$, as well as $\$ 25,000,000$ in enhanced damages and $\$ 115,000,000$ in actual damages, and ORDERS Autodesk to pay $\$ 322,000$ in attorneys' fees and expenses to z4, as well as $\$ 18,000,000$ in actual damages. Additionally, the Court ORDERS Autodesk and Microsoft to pay prejudgment interest on the actual damages found against each Defendant at the prime rate as of August 18, 2006 compounded monthly and calculated from the date of infringement for the accused products through the date final judgment is entered in this case.

The Court DENIES AS MOOT z4's Emergency Motion to Strike Docket Entry 344; Autodesk and Microsoft's Emergency Opposed Motion for the Court to Consider the Expert Report of Walter Bratic Relating to Docket Nos. 321 and 323; and z4's Motion and Memorandum in Support to Unseal Findings Related to z4's Motion for Permanent Injunction for Docket Entries 346, 347, 353, 370, and 371.

So ORDERED and SIGNED this 18th day of August, 2006.

## LEONARD DAVIS

UNITED STATES DISTRICT JUDGE
FINAL JUDGMENT
This matter came for trial before a jury on April 10, 2006. Plaintiff $z 4$ Technologies, Inc. ("z4") appeared in person and through its attorney and announced ready for trial. Defendants Microsoft Corporation ("Microsoft") and Autodesk, Inc. ("Autodesk") (collectively "Defendants") appeared in person and through their attorneys and announced ready for trial. The Court then empaneled and swore in the jury. Trial commenced on April 10, 2006, and continued through April 18, 2006. On April 18, 2006 the Court submitted questions, definitions, and instructions to the jury. Early in the morning on April 19, 2006, the jury returned a unanimous verdict that the Court received, filed, and entered of record.

The jury, in its verdict, determined that Microsoft infringed claim 32 of United States Patent No. 6,044,471 ("the '471 patent") and claims 44 and 131 of United States Patent No. 6,785,825 ("the ' 825 patent"), that Microsoft wilfully infringed all three of these claims, that Autodesk infringed claim 32 of the
' 471 patent and claim 131 of the ' 825 patent, that none of the asserted claims of the patents-in-suit are invalid as anticipated or obvious, that z4's actual damages with regard to Microsoft total $\$ 115,000,000$, and that $z 4$ 's actual damages with regard to Autodesk total $\$ 18,000,000$. Microsoft and Autodesk's defense of unenforceability of the patents-in-suit due to inequitable conduct was tried to the Court, and, on August 18, 2006, the Court announced its decision that, based upon the evidence introduced during trial, Defendants did not prove that z4 or inventor David Colvin engaged in inequitable conduct with respect to the patents-in-suit.
z4 has requested an award of enhanced damages under 35 U.S.C. § 284 against Microsoft, attorneys’ fees and expenses under 35 U.S.C. § 285 against both Defendants, pre-judgment interest against both Defendants, and a permanent injunction prohibiting infringement of the asserted claims of the patents-insuit under 35 U.S.C. § 283 against both Defendants. On June 14, 2006, the Court issued a Memorandum Opinion and Order denying $z 4$ 's request for a permanent injunction. On August 18, 2006, the court entered an Order enjoining Autodesk from infringing the patents-in-suit. On that same day, the Court determined that z 4 should be awarded enhanced damages in the amount of $\$ 25,000,000$ and attorneys' fees in the amount of $\$ 1,978,000$ against Microsoft, attorneys' fees in the amount of $\$ 322,000$ against Autodesk, and prejudgment interest against both Defendants at the prime rate compounded monthly. In accordance with the jury's verdict and the Court's post-trial rulings, the Court renders the following judgment.

It is hereby ORDERED, ADJUDGED, AND DECREED that Plaintiff z4 Technologies, Inc. have and recover from Defendant Microsoft Corporation, the following:

One Hundred and Fifteen Million Dollars ( $\$ 115,000,000$ ) in actual damages;

Twenty-Five Million Dollars $(\$ 25,000,000)$ in enhanced damages pursuant to 35 U.S.C. § 284;

One Million, Nine Hundred and Seventy-Eight Thousand Dollars ( $\$ 1,978,000$ ) in attorneys' fees and expenses pursuant to 35 U.S.C. § 285;

Prejudgment interest on the actual damages found by the jury calculated at the prime rate as of August 18, 2006 and compounded monthly from the date of infringement through July 31, 2006, plus per diem interest from August 1, 2006 until the date of this judgment.

Postjudgment interest is payable on all the above amounts at the lawful rate under 28 U.S.C. § 1961 from the date this judgment is entered until the date the judgment is paid; and

One half of z4's Costs of Court.
It is further ORDERED, ADJUDGED, AND DECREED that Plaintiff z4 Technologies, Inc. have and recover from Defendant Autodesk, Inc., the following:

Eighteen Million Dollars $(\$ 18,000,000)$ in actual damages;

Three Hundred and Twenty-Two Thousand Dollars ( $\$ 322,000$ ) in attorneys' fees and expenses pursuant to 35 U.S.C. § 285;

Prejudgment interest on the actual damages found by the jury calculated at the prime rate as of August 18, 2006 and compounded monthly from the date of infringement through July 31, 2006, plus per diem interest from August 1, 2006 until the date of this judgment.

Postjudgment interest is payable on all the above amounts at the lawful rate under 28 U.S.C. § 1961 from the date this judgment is entered until the date the judgment is paid; and

One half of z4's Costs of Court.
All relief not granted in this judgment is DENIED.

So ORDERED and SIGNED this 18th day of August, 2006.

## APPENDIX C

## Z4 TECHNOLOGIES, INC., Plaintiff-Appellee, v. MICROSOFT CORPORATION, DefendantAppellant, and AUTODESK, INC., Defendant. <br> 2006-1638 <br> UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

2008 U.S. App. LEXIS 3932
January 30, 2008, Decided January 30, 2008, Filed

COUNSEL: For Autodesk, Inc., Defendant: DUNNER, DONALD R., STOLL, KARA F., OF COUNSEL ATTORNEYS, Finnegan, Henderson, Farabow, Washington, DC; MCCABE, II, MICHAEL J., OF COUNSEL ATTORNEY, Finnegan, Henderson, Farabow, Atlanta, GA.

For Microsoft Corporation, Defendant-Appellant: OLSON, THEODORE B., PRINCIPAL ATTORNEY, Gibson, Dunn \& Crutcher LLP, Washington, DC; MCGILL, MATTHEW D., VANCEA, MINODORA D., PERRY, MARK A., OF COUNSEL ATTORNEYS, Gibson, Dunn \& Crutcher LLP, Washington, DC; GARTMAN, JOHN E., BERNSTEIN, MATTHEW C., SPROUL, SETH M., OF COUNSEL ATTORNEYS, Fish \& Richardson, P.C., San Diego, CA; HILLMAN, ROBERT E., OF COUNSEL ATTORNEY, Fish \& Richardson, P.C., Boston, MA; DRAGSETH, JOHN

## 100a

A., OF COUNSEL ATTORNEY, Fish \& Richardson, P.C., Minneapolis, MN; BUSTAMANTE, JOHN MARCUS, OF COUNSEL ATTORNEY, Fish \& Richardson, P.C., Austin, TX; FU, ISABELLA E., OF COUNSEL ATTORNEY, Microsoft Corporation, Redmond, WA.
For z4 Technologies, Inc., Plaintiff-Appellee: ANGILERI, FRANK A., PRINCIPAL ATTORNEY, Brooks \& Kushman P.C., Southfield, MI; BROOKS, ERNIE L., LEWRY, THOMAS A., LE ROY, JOHN S., OF COUNSEL ATTORNEYS, Brooks \& Kushman P.C., Southfield, MI.

## OPINION

## ORDER

A combined petition for panel rehearing and for rehearing en banc having been filed by the Appellant, and a response thereto having been invited by the court and filed by the Appellee, and the petition for rehearing and response, having been referred to the panel that heard the appeal, and thereafter the petition for rehearing en banc and response having been referred to the circuit judges who are in regular active service,

UPON CONSIDERATION THEREOF, it is
ORDERED that the petition for panel rehearing be, and the same hereby is, DENIED and it is further

ORDERED that the petition for rehearing en banc be, and the same hereby is, DENIED. The mandate of the court will issue on February 6, 2008.

Circuit Judge Gajarsa did not participate in the vote.

Dated: 01/30/2008

## APPENDIX D

> z4 Technologies vs. Microsoft \& Autodesk
> Jury Instructions

## 6. INVALIDITY

Only a valid patent may be infringed. For a patent to be valid, the invention claimed in the patent must be new, useful, and non-obvious. A patent cannot take away from people their right to use what was known or what would have been obvious when the invention was made. The terms "new," "useful," and "non-obvious" have special meanings under the patent laws. I will explain these terms to you as we discuss Microsoft's and Autodesk's grounds for asserting invalidity.

Microsoft and Autodesk have challenged the validity of the ' 471 and ' 835 patent claims on a number of grounds. Microsoft and Autodesk must prove that a patent claim is invalid by clear and convincing evidence. An issued patent is accorded a presumption of validity based on the presumption that the United States Patent and Trademark Office acted correctly in issuing a patent.

I will now explain to you each of Microsoft's and Autodesk's grounds for invalidity in detail. In making your determination as to invalidity, you should consider each claim separately.

## APPENDIX E

z4 Technologies vs. Microsoft \& Autodesk
Transcript of Colloquy on Jury Instructions (April

$$
18,2006)
$$

Page 134-35
MR. DRAGSETH: Missing an important consideration for the jury in considering the burden, Federal Circuit case lie - uniformly says that that burden is more easily carried when the references on which the assertion is made were not directly considered by the examiner during the prosecution.

And the flip side is that the burden is more difficult to carry when the references were considered by the examiner.

I have case law to show the Court, if you would like to see it.

THE COURT: What wording would you like to add?

MR. DRAGSETH: At the end of the paragraph it mentions United States Patent and Trademark Office, we would add the wording -

THE COURT: Where it says "United States Patent and Trademark Office patent" - period?

MR. DRAGSETH: Period. After that period we would add: "That burden is more easily carried when the references" -

THE COURT: More easily carried.
MR. DRAGSETH: "When the references" -
THE COURT: When the references.
MR. DRAGSETH: - "on which the assertion is based were not directly considered by the examiner during prosecution."

*     *         * 


## APPENDIX F

## License Verification Technical Overview

*     *         * 

LVP Central - Pilot Implementation [A005010]

- Created separate build of Word97 for Hungary
- Contracted for vendor telephone unlocking

LVP Central - Flow [A005011]


Confidential

*     *         * 

[PID = product identification code; HWID = hardware identification code]

## APPENDIX G

## DAD Anti-Piracy Overview Brazil LVP Meetings

## 4/28/98

*     *         * 


## Anti-Piracy Technologies: LVP Central



- SW may be launched up to 20 times prior to registering
- Infrastructure-based, customers must contact MS to acquire registration key via: internet, email, fax, postal mail or phone
-Database determines permission to unlock, returns RegID
-Leverages or requires new infrastructure build-out
- Establishes customer contact mechanism
- WW total cost per customer $\$ 4.41$


## APPENDIX H

## Luiz Marcelo Marrey Moncau

From: Luiz Marcelo Marrey Moncau
Sent: $\quad$ Wednesday, November 18, 1998 05:49
PM
To:
David Pearce
Cc:
Susan Cole (Exchange); Andy
Berschauer (Andersen Consulting);
Lene Santana Manfredi
Subject: RE: LVP Data
Great receiving that from you. I have done preliminar analysis and would like to receive your thoughts on this:
a) GREAT STATISTIC: for publisher we sold (sellout) 1190 products and 1191 customers registering

- This means that there are no customers breaking the code AND
- There are no pirate users registering at first sight
b) GREAT: after so long we keep the great ratio of internet registration "constant" also in month analysis):
- $59 \%$ in publisher
- $49 \%$ in SBE
- I would guess that we will have $\sim 35 \%$ in Office 2000 due to increasing corporate usage
c) NOT SO GREAT: $25 \%$ of customers attempted to register more than once
- $10 \%$ registered 5 times in average
- $15 \%$ registered twice
- $75 \%$ of customers registered once
- this means (for publisher) 1191 users doing 1849 registrations
Possible conclusions here (same as previous analysis but with better data):
a) same user insatlling in different machines (MOLP or pirate) or
b) installation problems


## Suggestion here: do active calls to those customers (get sample from 302 customers) asking why they did so.

d) POTENTIAL PROBLEM: We have some strange cases I'd like to have your thoughts on before we try to do the phone tune-up:

- same CD being installed in almost 40 different machines. with different user names. May this be a pirate case ? Why LVP engine considered this in several of the istallations as first instaltion (see second DB bellow)?
- One user registering 34 times. Some registering more than 15 . What sort of problem did they have?
thanks for any inputs.


## Luiz Marcelo

Date available ( 2.5 Mb ):
Multiple registration Data:
-----Original Message-----
From: David Pearce
Sent:
Wednesday, November 18, 1998 4:38
PM

108a

| To: | Luiz Marcelo Marrey Moncau |
| :--- | :--- |
| Cc: | Susan Cole (Exchange); Andy |
|  | Berschauer (Andersen Consulting) |
| Subject: | RE: LVP Data |

Luiz,
Here is an update report, splitting out SBE and Publisher from 1 June to 18 Nov. Very curious to see if you think there is a relationship with your MSSALES reports.

David
<<File: Nov98 Update.xls>>
-----Original Message-----
From: Susan Cole (Exchange)
Sent: Wednesday, November 18, 1998 10:22
AM
To: David Pearce, Andy Berschauer
(Andersen Consulting)
Subject: FW: LVP Data
can we get some current data RE: Publisher to luiz? thanks.
-----Original Message-----
From: Luiz Marcelo Marrey Moncau

Sent:

To:
Subject: LVP Data

Do you have an updated database of publisher LVP customers so qe can do further analysis?

Luiz Marcelo


[^0]:    2 The district court concluded that the intended purpose of the BP98 LVP was to "stop piracy," and that Microsoft needed to demonstrate that the BP98 LVP did in fact "stop piracy" for it to qualify as invalidating prior art. App., infra, 40a. Of course, no invention to date has even nearly "stop[ped] piracy" of software, and the court of appeals acknowledged that the district court had "incorrectly defined the 'intended purpose' of the

[^1]:    5 Nor can those decisions be read to support general application of a clear-and-convincing burden of proof to all assertions of invalidity. This Court has explained that The Barbed Wire Patent, Cantrell, and Coffin "were not defining a standard in terms of scientific accuracy or literal precision, but were offering counsel and suggestion to guide the course of judgment." Radio Corp. of Am. v. Radio Eng'g Labs., 293 U.S. 1, 8 (1934). And though the Federal Circuit has cited Radio Corporation as supporting application of the clear-and-convincing burden of proof to invalidity defenses, see, e.g., Am. Hoist \& Derrick Co., 725 F.2d at 1360, that case (which, in fact, referred only to "convincing evidence of error," 293 U.S. at 7) involved an attempt to relitigate an issue of inventorship that had previously been determined in a contested adversarial proceeding. See id. at 3-6. It thus can provide no support for application of a heightened burden of proof in a challenge to the validity of a patent obtained in an ex parte proceeding, particularly where the challenge is based upon documentary evidence the agency never had an opportunity to consider.

[^2]:    * Honorable Elaine E. Bucklo, District Judge, United States District Court for the Northern District of Illinois, sitting by designation.

[^3]:    3 The parties completed briefing in this case prior to the Supreme Court's decision in KSR.

[^4]:    [Footnote continued from previous page]
    Markman claim construction responsibilities, on April 12, 2006, during the course of trial and after hearing arguments from both sides, the Court issued an order construing the term "user" as "a person, a person using a computer, a computer, or computers."

[^5]:    [Footnote continued from previous page]
    See 321 F.3d at 1106. However, the Federal Circuit's opinion did not indicate that the general liberal standard taken by most circuits regarding the predicate for a Rule 50(b) JMOL should be abandoned in patent cases. The Federal Circuit stated that the liberal standard is appropriate when it is largely technical and no prejudice results from the application of that standard. See id. Here, z4 was not prejudiced by Defendants' lack of specificity when it moved for JMOL at the close of evidence. z4 does not carry the burden of proof on invalidity and was aware from testimony at trial that both obviousness and anticipation were at issue in the case. Accordingly, Defendants are not precluded from urging a motion for JMOL post-trial with regard to invalidity based on either obviousness or anticipation.

[^6]:    4 The jury may have taken this into consideration in awarding $\$ 115$ million in damages against Microsoft instead of the $\$ 369$ million that $z 4$ asked the jury to award based on its damage calculations, which included both retail and OEM products sales.

[^7]:    8 It is unclear whether Defendants now claim here that they argued at trial that Hughes was in fact the inventor of Brazilian Publisher in contradiction to their statements in their Motion for JMOL on Invalidity that they did not name an inventor. Defendants point to their closing argument in which Defendant's counsel stated, "And you heard Mr. Hughes, I'll just remind you, he's the man who did this at Microsoft. And I think it's interesting that we get criticized for not bringing other witnesses in this case. Because if you listen to Mr. Hughes testify, who at Microsoft, who could possible know more about product activation than the man who did it then and the man who does it now? Who was it that we should have brought to tell you about this patent case, about this patent case and about product activation than the man who did it?" 4/18/06 Trial Tr. 258:13-22

[^8]:    11 Microsoft decided not to bring Allen Nieman as a corporate representative at trial in place of Susan Cole.

[^9]:    12 The Moncau email is relevant to whether BP 98 worked for its intended purpose.

[^10]:    13 To the extent that any conclusion of law is deemed to be a finding of fact, it is adopted as such; and likewise, any finding of fact that is deemed to be a conclusion of law is so adopted.

