

WHITSERVE, LLC, Plaintiff/Counterclaim Defendant–Cross Appellant,

and

Wesley W. Whitmyer, Jr., Third Party Defendant–Cross Appellant,

v.

**COMPUTER PACKAGES, INC.,
Defendant/Counterclaim
Plaintiff–Appellant.**

Nos. 2011–1206, 2011–1261.

United States Court of Appeals,
Federal Circuit.

Aug. 7, 2012.

Rehearing En Banc Denied Oct. 10, 2012.

Background: Patentee brought action alleging infringement of patents directed to automating delivery of professional services and to technology for backing up client data. Alleged infringer asserted affirmative defenses and counterclaim seeking declaratory judgment of non-infringement, invalidity and unenforceability, and also asserted counterclaim against patentee’s principal, alleging that he was patentee’s alter ego and true owner of asserted patents, and that he personally engaged in inequitable conduct during prosecution of patents. Jury found that patents had been willfully infringed and that patentee was entitled to \$8,378,145 in damages. The United States District Court for the District of Connecticut, Alfred V. Covello, J., denied patentee’s post-trial request for permanent injunction on the merits, enhanced damages, and attorney’s fees, and denied alleged infringer’s motions for judgment as a matter of law (JMOL) or a new trial. Parties appealed.

Holdings: The Court of Appeals, O’Malley, Circuit Judge, held that:

(1) verdict that accused software infringed patents for automating delivery of pro-

fessional services was supported by substantial evidence;

- (2) patent claim that allowed clients to access a central computer and copy their data records to their own computer from across the Internet was invalid as anticipated;
- (3) verdict that other claims were not invalid was supported by substantial evidence;
- (4) damages award was not supported by substantial evidence;
- (5) district court abused its discretion in failing to provide full explanation as to why prejudgment interest on damages was not necessary to adequately compensate patentee;
- (6) district court abused its discretion in denying patentee’s motion for enhanced damages on ground that jury’s damages award provided “complete compensation” for willful infringement; and
- (7) district court abused its discretion in failing to explain why award of attorney’s fees was unwarranted.

Affirmed in part, vacated in part, and remanded.

Mayer, Circuit Judge, filed dissenting opinion.

1. Patents ⇌ 312(6)

Jury verdict that accused software infringed patents for automating delivery of professional services was supported by substantial evidence that type of manual human intervention required by accused software was consistent with asserted claims that required software to “automatically” query database, including testimony of patentee’s expert that accused software’s querying process could not start before due dates were manually entered

by user and that accused software's query-ing process itself happened automatically.

2. Courts ⇔96(7)

Court of Appeals for the Federal Cir-cuit reviews denial of post-trial motions in a patent infringement action under region-al circuit law.

3. Patents ⇔324.5

Denial of a motion for judgment as a matter of law (JMOL) in a patent infringe-ment action is reviewed by the Court of Appeals de novo.

4. Patents ⇔323.3

District court may set aside the jury's verdict on a motion for judgment as a matter of law (JMOL) in a patent infringe-ment action only where there is such a complete absence of evidence supporting the verdict that the jury's findings could only have been the result of sheer surmise and conjecture, or there is such an over-whelming amount of evidence in favor of the movant that reasonable and fair mind-ed men could not arrive at a verdict against him. Fed.Rules Civ.Proc.Rule 50, 28 U.S.C.A.

5. Patents ⇔323.3

On a motion for judgment as a matter of law (JMOL) in a patent infringement action, the court considers the evidence in the light most favorable to the non-moving party and gives that party the benefit of all reasonable inferences that the jury might have drawn in the non-movant's fa-vor. Fed.Rules Civ.Proc.Rule 50, 28 U.S.C.A.

6. Patents ⇔324.1

Alleged infringer waived challenge on appeal in infringement action to district court's claim construction for patents for automating the delivery of professional services, although alleged infringer alluded in its opening brief to possibility that dis-

trict court's claim construction was con-trary to patent specification and prosecu-tion history, where alleged infringer did not raise the issue in the "Statement of the Issues," cited no legal support for its claim construction arguments, and did not even recite the standard of review for claim construction.

7. Patents ⇔324.1

Alleged infringer waived non-infringe-ment argument, on appeal in action alleg-ing infringement of patents for automating the delivery of professional services, where non-infringement argument was raised only in a footnote.

8. Patents ⇔66(1.14)

Claim, in patent for technology for backing up client data, which allowed clients to access a central computer and copy their data records to their own com-puter from across the Internet, was invalid as anticipated by prior art reference that described a computer downloading files specific to the user from a central comput-er. 35 U.S.C.A. § 102.

9. Patents ⇔72(1)

Patent claim is invalid as anticipated if each and every limitation is found either expressly or inherently in a single prior art reference; the elements in the refer-ence must be arranged or combined in the same way as in the claim, but the refer-ence need not satisfy an ipsissimis verbis test. 35 U.S.C.A. § 102.

10. Patents ⇔65

In order for patent to be invalid as anticipated, the anticipating prior art refer-ence must enable one of ordinary skill in the art to make the invention without un-due experimentation. 35 U.S.C.A. § 102.

11. Patents ⇔112.1, 112.5

Patents are presumed to be valid, and invalidity must be proven by clear and convincing evidence. 35 U.S.C.A. § 102.

12. Patents ⇨324.55(4)

Anticipation of a patent claim is a question of fact reviewed for substantial evidence when tried to a jury. 35 U.S.C.A. § 102.

13. Patents ⇨323.3

On a appeal of the district court's denial of a motion for a judgment as a matter of law (JMOL) that the asserted patents in an infringement action are invalid as anticipated, when the jury finds that the patents are not invalid, the Court of Appeals reviews the evidence to see if there is such an overwhelming amount of evidence in favor of the alleged infringer that reasonable and fair minded men could not arrive at a verdict against it. 35 U.S.C.A. § 102.

14. Federal Courts ⇨699

Arguments of counsel cannot take the place of evidence lacking in the record.

15. Patents ⇨62(1)

Jury verdict, that claims in patent for technology for backing up client data were not invalid as anticipated by prior art, was supported by substantial evidence that prior art, unlike asserted claims, did not allow central computer to retrieve data previously sent to the user and did not require Internet-based data. 35 U.S.C.A. § 102.

16. Patents ⇨62(2)

Typically, testimony concerning anticipation of patent claim must be testimony from one skilled in the art and must identify each claim element, state the witnesses' interpretation of the claim element, and explain in detail how each claim element is disclosed in the prior art reference. 35 U.S.C.A. §§ 102, 282.

17. Patents ⇨323.3

Because general and conclusory testimony is not enough to be even substantial evidence in support of a verdict, it is cer-

tainly not enough to overturn a jury's finding that a patent is not invalid.

18. Patents ⇨323.3

Generalized and conclusory testimony of patentee's expert, that asserted claims were "invalid because of prior art" and that all claim elements were disclosed in prior art reference, and expert's cursory statement that data conversion and encryption were "well known" at the time of patenting, did not constitute the overwhelming evidence required to overturn jury verdict that claims were not invalid as anticipated or obvious, in action alleging infringement of patent for technology for backing up client data. 35 U.S.C.A. § 102.

19. Patents ⇨16(2, 3), 36.1(1)

Determination that patent is invalid as obvious is based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness. 35 U.S.C.A. § 102.

20. Patents ⇨323.3

Jury verdict awarding \$8,378,145 in damages, for infringement of patents for automating delivery of professional services and backing up client data, was not supported by substantial evidence, and thus district court abused its discretion in denying motion for new trial on damages; although royalty base of \$41 per infringing transaction was reasonable, expert's calculation of royalty rate of 19% of revenue was speculative, as expert did not explain how much the factors he considered affected the rate and he inexplicably shifted his analysis from percentage of profit to percentage of revenue, and there was no evidence of other compensable damages that jury could have added to a lower reasonable royalty rate to arrive at award. 35 U.S.C.A. § 284.

21. Courts ⇔96(7)

When reviewing damages in patent cases, Court of Appeals for the Federal Circuit apply regional circuit law to procedural issues and Federal Circuit law to substantive and procedural issues pertaining to patent law.

22. Federal Civil Procedure ⇔2339

District court may grant a motion for a new trial even when there is evidence to support the jury's verdict, so long as the court determines that, in its independent judgment, the jury has reached a seriously erroneous result or its verdict is a miscarriage of justice. Fed.Rules Civ.Proc.Rule 59, 28 U.S.C.A.

23. Federal Courts ⇔825.1

Denial of a motion for a new trial is reviewed for abuse of discretion. Fed. Rules Civ.Proc.Rule 59, 28 U.S.C.A.

24. Federal Civil Procedure ⇔2311

Federal Courts ⇔825.1

Standard for ordering a new trial is somewhat less stern than that for entering judgment as a matter of law (JMOL), but Court of Appeals' review of a district court's disposition of motion for a new trial is more deferential. Fed.Rules Civ.Proc. Rule 59, 28 U.S.C.A.

25. Federal Courts ⇔812

District court abuses its discretion when its decision is based on clearly erroneous findings of fact, is based on erroneous interpretations of the law, or is clearly unreasonable, arbitrary, or fanciful. Fed. Rules Civ.Proc.Rule 59, 28 U.S.C.A.

26. Federal Civil Procedure ⇔2343

On a motion for a new trial on the issue of damages, the trial court must scrutinize the evidence to ensure that the jury's damages award is supported by substantial evidence. Fed.Rules Civ.Proc. Rule 59, 28 U.S.C.A.

27. Patents ⇔312(1.7)

Patentee in an infringement action bears the burden of proving damages. 35 U.S.C.A. § 284.

28. Patents ⇔318(1), 319(1)

Two alternative categories of infringement compensation are the patentee's lost profits and the reasonable royalty he would have received through arms-length bargaining. 35 U.S.C.A. § 284.

29. Patents ⇔319(1)

If lost profits are not at issue in a patent infringement action, the reasonable royalty the patentee would have received from the alleged infringer through arms-length bargaining is the floor for damages. 35 U.S.C.A. § 284.

30. Patents ⇔312(10)

Jury finding that royalty base of \$41 per infringing transaction was reasonable, in determining damages award for infringement of patents for automating delivery of professional services and backing up client data, was supported by substantial evidence, including expert testimony that infringer's \$41 average transaction fee was the same for infringing and non-infringing transactions because overall average fee remained the same as proportion of infringing transactions increased. 35 U.S.C.A. § 284.

31. Courts ⇔96(7)

Court of Appeals reviews the district court's admission of evidence in a patent infringement action under the standard of the law of the pertinent circuit.

32. Patents ⇔319(1)

Proposed licenses may have some value for determining a reasonable royalty as damages for patent infringement in certain situations; their evidentiary value is limited, however, by the fact that patentees

could artificially inflate the royalty rate by making outrageous offers. 35 U.S.C.A. § 284.

33. Patents ⇌312(10)

Lump sum payments negotiated between a patentee and an infringer's competitors should not support running royalty rates as a basis for infringement damages without testimony explaining how they apply to the facts of the case. 35 U.S.C.A. § 284.

34. Patents ⇌312(10)

While witnesses are not required to use any or all of the *Georgia-Pacific* factors when testifying about royalty damages in patent cases, if they choose to use them, reciting each factor and making a conclusory remark about its impact on the damages calculation before moving on does no more than tell the jury what factors a damages analysis could take into consideration; expert witnesses should concentrate on fully analyzing the applicable factors, not cursorily reciting all fifteen, and, while mathematical precision is not required, some explanation of both why and generally to what extent the particular factor impacts the royalty calculation is needed. 35 U.S.C.A. § 284.

35. Federal Courts ⇌696

When parties rely on demonstratives to present evidence or mathematical calculations to the jury, it is their burden to assure that the record captures the substance of the data so presented.

36. Patents ⇌312(1.7), 319(1)

Jury in a patent infringement action is entitled to award compensatory damages in addition to a reasonable royalty because a reasonable royalty is merely the floor below which damages shall not fall, but patentees bear the burden of proving such damages. 35 U.S.C.A. § 284.

37. Patents ⇌319(3)

Juries, when determining damages in a patent infringement action, may not award litigation costs or punish infringers. 35 U.S.C.A. § 284.

38. Patents ⇌316, 317

District court, in determining whether to grant patentee relief for ongoing infringement of patents for automating delivery of professional services and backing up client data, was required to address the propriety of patentee's request for either a permanent injunction or an ongoing royalty, and to explain any decision it made with respect thereto.

39. Patents ⇌316

There are several types of relief for ongoing patent infringement that a court can consider: (1) it can grant an injunction; (2) it can order the parties to attempt to negotiate terms for future use of the invention; (3) it can grant an ongoing royalty; or (4) it can exercise its discretion to conclude that no forward-looking relief is appropriate in the circumstances.

40. Patents ⇌324.54

District court's decision regarding relief for ongoing patent infringement is reviewed for abuse of discretion.

41. Patents ⇌316

While a trial court in a patent infringement action is not required to grant a compulsory license as relief for ongoing infringement even when an injunction is denied, the court must adequately explain why it chooses to deny this alternative relief when it does so.

42. Interest ⇌39(2.20)

District court abused its discretion in failing to provide full explanation as to why prejudgment interest on damages was not necessary to adequately compensate patentee for infringement of patents for auto-

mating delivery of professional services and backing up client data, where district court had specifically instructed jury it could not award any interest. 35 U.S.C.A. § 284.

43. Patents ⇔324.54

Court of Appeals reviews a district court's denial of prejudgment interest on patent infringement damages for an abuse of discretion. 35 U.S.C.A. § 284.

44. Interest ⇔39(2.20)

Prejudgment interest on patent infringement damages should be awarded absent some justification for withholding such an award. 35 U.S.C.A. § 284.

45. Interest ⇔39(2.20)

An award of prejudgment interest on patent infringement damages carries out Congress's overriding purpose of affording patent owners complete compensation since a patentee's damages also include the forgone use of the money between the time of infringement and the date of judgment. 35 U.S.C.A. § 284.

46. Federal Civil Procedure ⇔2242

District courts are given broad discretion to interpret verdict forms.

47. Patents ⇔319(3)

District court abused its discretion in denying patentee's motion for enhanced damages on ground that jury's damages award provided "complete compensation" for willful infringement, in action for infringement of patents for automating delivery of professional services and backing up client data; verdict did not, and could not, include enhanced damages, and district court provided no independent justification for denying enhanced damages. 35 U.S.C.A. § 284.

48. Patents ⇔324.54

District court's decision on whether to enhance damages for patent infringement

is reviewed for abuse of discretion, that is, whether the decision was based on clearly erroneous findings of fact, an incorrect conclusion of law, or a clear error of judgment. 35 U.S.C.A. § 284.

49. Patents ⇔319(3)

Decision whether to grant enhanced damages for patent infringement requires a two-step process: (1) the fact-finder must determine whether an infringer is guilty of conduct, such as willful infringement, upon which increased damages may be based; and (2) if so, the court then determines, exercising its sound discretion, whether, and to what extent, to increase the damages award given the totality of the circumstances. 35 U.S.C.A. § 284.

50. Patents ⇔319(3), 325.11(3)

Upon a finding of willful patent infringement, a trial court should provide reasons for not increasing a damages award or for not finding a case exceptional for the purpose of awarding attorney fees. 35 U.S.C.A. § 284.

51. Patents ⇔319(3)

Enhanced damages for patent infringement are punitive, not compensatory, and can be awarded only in the trial court's discretion. 35 U.S.C.A. § 284.

52. Patents ⇔325.11(3)

District court abused its discretion in failing to explain why award of attorney fees was unwarranted, where competitor willfully infringed patents for automating delivery of professional services and backing up client data. 35 U.S.C.A. § 285.

53. Patents ⇔325.11(3)

Although an attorney fees award is not mandatory when willful patent infringement has been found, trial court should explain its decision not to award attorney fees. 35 U.S.C.A. § 285.

54. Patents ◊319(3)

District court abused its discretion in failing to award, or explain its reason for denying, damages for the period between jury's verdict and judgment in action for infringement of patents for automating delivery of professional services and backing up client data. 35 U.S.C.A. § 284.

55. Patents ◊319(3)

District courts have discretion to award damages for periods of patent infringement not considered by the jury. 35 U.S.C.A. § 284.

56. Patents ◊325.11(3)

District court acted within its discretion in denying request by patentee's principal for sanctions and exceptional-case attorney fees against infringer; infringer's litigation against principal, although questionable, was not vexatious. 35 U.S.C.A. § 285; Fed.Rules Civ.Proc.Rule 11, 28 U.S.C.A.

57. Federal Courts ◊813

A district court's sanctions determination is reviewed for an abuse of discretion. Fed.Rules Civ.Proc.Rule 11, 28 U.S.C.A.

Patents ◊328(2)

5,895,468, 6,049,801, 6,182,078. Infringed.

Patents ◊328(2)

5,903,881. Cited as Prior Art.

Patents ◊328(2)

6,981,007. Invalid in Part.

Gene S. Winter, St. Onge Steward Johnston & Reens, LLC, of Stamford, CT, argued for plaintiff/counterclaim defendant-cross appellant and Third party defendant-cross appellant. With him on the brief

were Erin R. Woelker, Michael J. Kosma, and Stephen Ball.

John A. Krause, Fitzpatrick, Cella, Harper & Scinto of New York, New York argued for defendant/counterclaim plaintiff-appellant. With him on the brief were Douglas Sharrott, Marc J. Pensabene and Robert J. Czarnecki, Jr. Of counsel was Robert H. Fischer.

Before PROST, MAYER and O'MALLEY, Circuit Judges.

Opinion for the court filed by Circuit Judge O'MALLEY.

Dissenting opinion filed by Circuit Judge MAYER.

O'MALLEY, Circuit Judge.

This patent case, presenting myriad issues, includes an appeal from a jury's finding of willful infringement of four patents, a cross-appeal of the trial court's denial of various post-trial motions, and a separate cross-appeal of a denial of sanctions and attorneys' fees. On the appeal, we affirm the jury's finding of infringement, affirm the jury's finding of no anticipation of most, but not all, claims, and we vacate the jury's damages award and remand for a new trial on damages. On the cross-appeal, we remand for a proper determination of the post-trial motions at issue. As to the separate cross-appeal, we affirm the denial of fees and sanctions.

BACKGROUND

This case is between WhitServe, LLC ("WhitServe"), a company owned by Wesley Whitmyer, Jr., and Computer Packages, Inc. ("CPI"). Mr. Whitmyer is WhitServe's sole principal and employee, and is both an inventor and a practicing patent attorney. CPI is in the business of helping other businesses pay their patent maintenance fees on time. WhitServe sued CPI,

alleging that CPi's systems infringe four of its patents, all of which list Whitmyer as their inventor and have been assigned to WhitServe.

The patents at issue are U.S. Patent No. 6,981,007 (the '007 Patent), entitled "On-site Backup for Internet-Based Data Processing," and the "'468 Family" of patents: U.S. Patent No. 5,895,468 (the '468 Patent), entitled "System Automating Delivery of Professional Services"; U.S. Patent No. 6,182,078 (the '078 Patent), entitled "System for Delivering Professional Services Over the Internet"; and U.S. Patent No. 6,049,801 (the '801 Patent), entitled "Web Site Providing Professional Services." The '468 Family is directed to automating the delivery of professional services while the '007 Patent covers technology for backing up client data. At trial, WhitServe asserted that CPi's products—Desktop EARS, TERMS, CPi OnLine, Hosted EARS, and Hosted PMS—infringe Whit-Serve's four patents. EARS and TERMS are computer software programs operated by a CPi customer, such as a law firm, to generate and send reminders to its clients of upcoming patent or trademark annuity or maintenance fee deadlines. CPi OnLine, Hosted EARS, and Hosted PMS serve the same purpose, but the CPi software and annuity database are "hosted" on CPi's servers, rather than stored on the client's computers.

CPi answered WhitServe's complaint with affirmative defenses and a counterclaim against WhitServe seeking a declaratory judgment of non-infringement, invalidity and unenforceability. CPi also named Whitmyer as a "counterclaim de-

fendant," asserting that he is the alter ego of WhitServe, that he is the true owner of the asserted patents, and that he personally engaged in inequitable conduct in the prosecution of those patents.¹

The primary factual dispute at trial concerned how CPi's products operated, and whether they fell within the '468 Family claims' definition of "automatic." There was also a dispute over whether the '007 Patent was anticipated by the prior art. The jury found that CPi failed to prove any claims invalid, that CPi's systems infringed the four patents, that CPi's infringement was willful, and that WhitServe was entitled to \$8,378,145 in damages.²

After trial, the trial court denied all of WhitServe's requested post-trial relief. First, the court denied Whit-Serve's request for a permanent injunction on the merits, and did not address a request for a compulsory license. WhitServe's requests for enhanced damages and attorneys' fees, prejudgment interest, prejudgment remedy, and disclosure were then dismissed as "moot" in light of the trial court's order entering judgment, in which it stated that "[t]he court concludes that the . . . jury verdict . . . is fair, just, and reasonable and adequately addresses all legal and equitable considerations." WhitServe's motion for post-trial accounting was denied as "moot" without explanation. The district court later reconsidered WhitServe's "mooted" motions and this time denied them on the merits after stating that the "damages awarded in favor of the plaintiff . . . constitute complete compensation with respect to this matter." The court entered judgment in favor of Whitmyer on the

1. Because Whitmyer was not a plaintiff to the original action, he was later realigned as a third-party defendant, though it is unclear when that occurred and whether it was done by court order or stipulation.

2. Willfulness has not been appealed. See Oral Arg. at 36:47–37:00, available at <http://www.cafc.uscourts.gov/oral-argument-recordings/2011-1206/all> ("The only reason we didn't appeal it is because there are so many issues in the case already.').

third party complaint “consistent with the jury’s verdict,” but denied a motion by Whitmyer seeking fees and sanctions from CPi for the assertion of that claim. The court explained its denial of Whitmyer’s motion by stating that he had “failed to set forth facts warranting such relief.” The court also denied as “moot” a series of motions CPi filed seeking judgment as a matter of law (JMOL) and/or a new trial, again on the grounds that the jury verdict was “fair, just and reasonable.”

CPi appealed and WhitServe and Whitmyer each cross-appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

CPi claims that the trial court erred in denying its post-trial motions for JMOL and/or a new trial. It argues that (1) its products do not infringe the ’468 Family because they do not work “automatically”; (2) the ’007 Patent is anticipated by the prior art; and (3) the damages award should be reduced or vacated for a new trial.³ WhitServe cross-appeals on grounds that it should have been granted a permanent injunction or compulsory license against CPi and that it was entitled to prejudgment interest, enhanced damages, attorneys’ fees, and a post-trial accounting. Whitmyer cross-appeals requesting his fees and expenses.

DISCUSSION

I. CPi’s Appeal

[1] We first address CPi’s arguments on appeal. As noted, we affirm the trial court’s denial of JMOL on infringement because substantial evidence supports the jury’s verdict. We also affirm the denial of JMOL on anticipation on most claims, but reverse-in-part because we find that substantial evidence does not support the

jury’s finding that Claim 10 of the ’007 Patent is not anticipated. We remand for a new trial on damages because the jury’s damages verdict is unsupported by the record and the trial court abused its discretion when it failed to order a new damages trial.

[2–5] This court reviews denial of post-trial motions under regional circuit law, the Second Circuit in this case. *See Revolution Eyewear, Inc. v. Aspek Eyewear, Inc.*, 563 F.3d 1358, 1370 (Fed.Cir.2009). The Second Circuit reviews a denial of JMOL *de novo*. *AMW Materials Testing, Inc. v. Town of Babylon*, 584 F.3d 436, 456 (2d Cir.2009). Similar to the frequently applied substantial evidence standard,

a district court may set aside the [jury’s] verdict pursuant to Rule 50 only where there is “such a complete absence of evidence supporting the verdict that the jury’s findings could only have been the result of sheer surmise and conjecture, or there is such an overwhelming amount of evidence in favor of the movant that reasonable and fair minded men could not arrive at a verdict against him.”

Id. (quoting *Cross v. N.Y.C. Transit Auth.*, 417 F.3d 241, 248 (2d Cir.2005)). The Second Circuit considers the evidence in the light most favorable to the non-moving party and gives that party the benefit of all reasonable inferences that the jury might have drawn in the non-movant’s favor. *Caceres v. Port Auth.*, 631 F.3d 620, 622 (2d Cir.2011).

A. Infringement

Claim 1 of ’468 Patent is representative of the claims in the ’468 Patent Family. It recites:

ship” are not at issue in this appeal.

3. CPi’s claim that the patents are unenforceable and its request for a “correction of owner-

A device for automatically delivering professional services to a client comprising:

a computer;

a database containing a plurality of client reminders, each of the client reminders comprising a date field having a value attributed thereto;

software executing on said computer for *automatically querying* said database by the values attributed to each client reminder date field to retrieve a client reminder;

software executing on said computer for *automatically generating* a client response form based on the retrieved client reminder;

a communication link between said computer and the Internet;

software executing on said computer for *automatically transmitting* the client response form to the client through said communication link; and,

software executing on said computer for *automatically receiving* a reply to the response form from the client through said communication link.

'468 Patent col. 6 l. 56 to col. 7 l. 8 (emphases added).

The district court interpreted “automatic” in the claims as:

a process that, once initiated, is performed by a machine without the need for manually performing that process, that is, without the need for human in-

tervention. A machine may still perform the claimed process automatically, even though a human might manually initiate or interrupt the process.

In reaching the conclusion that the term “automatic” as used in claim 1 does not exclude all possible human intervention, the trial court relied on our decision in *CollegeNet, Inc. v. ApplyYourself, Inc.*, 418 F.3d 1225, 1235 (Fed.Cir.2005), where we explained that dishwashers and autopilots could still be automatic even though they must be started by a human, or their operation may be interrupted by a human. As we did in *CollegeNet*, the trial court focused on the use of the term “comprising” in the claim to find that unrecited elements of manual, human actions were not excluded from its scope. *See id.* at 1235 (stating that, “[w]hile claim 1 does not expressly provide for human intervention, the use of ‘comprising’ suggests that additional, unrecited elements are not excluded. Such elements could include human actions to expressly initiate the automatic [querying, generating, transmitting, or receiving], or to interrupt such functions.”). The trial court then explained why it believed this construction of automatic was supported both by the patent’s specification and by its prosecution history.

[6, 7] CPi does not challenge the trial court’s claim construction on appeal.⁴ Instead, CPi argues that, even allowing for the presence of some manual intervention in the elements of the claims, its products

4. While CPi alluded to the possibility that the trial court’s claim construction was contrary to the patent’s specification and prosecution history at times in its opening brief, it did not raise the issue in the “Statement of the Issues,” cited no legal support for its claim construction “arguments,” and did not even recite the standard of review for claim construction. It has, accordingly, waived the ability to argue for an alternative claim construction. *See Kao Corp. v. Unilever U.S., Inc.*,

441 F.3d 963, 973 n. 4 (Fed.Cir.2006) (stating that failure to set forth substantive discussion of claim construction in the statement of the issues presented, summary of the argument, and argument itself, constitutes waiver of any alternative claim construction). This finding renders moot WhitServe’s motion, filed after CPi’s opening brief, asking that we prohibit CPi from later requesting *de novo* review of the court’s claim constructions.

do not infringe because they require a type of manual intervention not contemplated by or consistent with the asserted claims. CPi contends that, while all of the asserted claims of the '468 Family require "software executing on said computer for automatically querying said database by values attributed to each client reminder date field to retrieve a client reminder," "the accused products all require, at minimum, the manual entry of a due date range during the execution of the querying process." Appellant's Br. 30 (original emphasis deleted).⁵ Essentially, CPi argues that, because a person using their products must manually choose a due date range to be queried, and, in its view, choosing the date range occurs *during* the querying process, there is no infringement because that manual action neither initiates nor interrupts the querying process. WhitServe counters that this argument is illogical because the "querying process does not start until the user enter[s] a date range and starts the process." Cross-Appellant's Br. 59. We agree with WhitServe. We find that there is substantial evidence to support the jury's implicit finding that choosing a due date range is separate from CPi's automated querying process and that all other manual operations required by CPi's products are outside the automated tasks required by the claims.

Dr. Sayward was WhitServe's expert on the fields of computer science, docketing systems, database management, and Internet and network applications. He testified that in analyzing CPi's products for infringement, he spent "hundreds of hours" looking at the products' source code and user manuals, and experimenting with test accounts. Dr. Sayward explained, element

by element, how, for example, CPi's Hosted EARS product worked and infringed claim 1 of the '468 Patent. Regarding the "automatically querying" element, he explained that, after "enter[ing] a date range," the user "press[es] the search button." "After pressing the search button what happens under the scene is that the database of client reminders are searched and then a display is produced which shows the results of that search." "So after the law firm enters the information and clicks the search button, Hosted EARS automatically queries at that time." Thus, Dr. Sayward testified that "entering a date range" happens before the querying begins in Hosted EARS and the querying process itself (checking the database entries against a desired date range) happens automatically. Dr. Sayward testified similarly about Desktop EARS/TERMS, and CPi Online.

When CPi's counsel cross-examined Dr. Sayward, he asked whether the querying process could start before due dates were manually entered by the user. Dr. Sayward rejected that proposition and stated that entering the date range can not be part of the querying process because prior to entering the date range "you haven't formed a proper question." To be a query, "you need a date range, so that you know what you're searching for." The jury was entitled to credit this explanation and reject CPi's theory that querying involves choosing the date range to be searched.

CPi's argument that their products require "date entry" and other manual steps does not negate the fact that, when the evidence is viewed in the light most favorable to WhitServe, there was substantial

5. In a footnote, CPi raises another reason why it believes the '801 Patent is not infringed. Appellant's Br. 32 n.4. This argument is waived. *SmithKline Beecham v. Apotex Corp.*,

439 F.3d 1312, 1320 (Fed.Cir.2006) ("[A]rguments raised in footnotes are not preserved.').

evidence to support a finding to the contrary. Thus, we affirm the trial court's denial of CPI's motion for JMOL of noninfringement.⁶

B. Anticipation

[8] The jury found that two of CPI's products, Hosted EARS and Hosted PMS, infringed all 15 claims of the '007 Patent. It also found that CPI's Desktop Ears product infringed claim 10 of the '007 Patent. CPI concedes that it infringes the '007 Patent, if valid, but argues that the '007 Patent is invalid under 35 U.S.C. § 102 as anticipated by U.S. Patent No. 5,903,881 ("the Schrader Patent"). We conclude that claim 10 of the '007 Patent is invalid as anticipated, but that substantial evidence supports the jury's finding of no anticipation as to the other claims.

[9–13] "[A] claim is anticipated if each and every limitation is found either expressly or inherently in a single prior art reference." *Celeritas Techs., Ltd. v. Rockwell Int'l Corp.*, 150 F.3d 1354, 1361 (Fed.Cir.1998). The "elements must be arranged or combined in the same way as in the claim," but "the reference need not satisfy an *ipsissimis verbis* test." *In re Gleave*, 560 F.3d 1331, 1334 (Fed.Cir.2009) (internal citations and quotation marks omitted). Also, the reference must "enable one of ordinary skill in the art to make the invention without undue experimentation." *Impax Labs., Inc. v. Aventis Pharm. Inc.*, 545 F.3d 1312, 1314 (Fed.Cir.2008). Patents are presumed to be valid and invalidity must be proven by clear and convincing evidence. *Microsoft Corp. v. i4i Ltd. P'ship*, — U.S. —, 131 S.Ct. 2238, 2242, 180 L.Ed.2d 131 (2011). Anticipation is a

question of fact reviewed for substantial evidence when tried to a jury. *Orion IP, LLC v. Hyundai Motor Am.*, 605 F.3d 967, 974 (Fed.Cir.2010). Because the jury found that the patents were not invalid, under the Second Circuit's JMOL standard, we review the evidence to see if there is such an "overwhelming amount of evidence in favor of [CPI] that reasonable and fair minded men could not arrive at a verdict against [it]." *AMW*, 584 F.3d at 456. This is a high burden.

The '007 Patent is entitled "Onsite Backup from Internet-Based Data Processing." It recognizes that many companies have moved their data processing systems from their private networks to the Internet and now allow their customers to access and manipulate their data via a web interface. '007 Patent col. 1 ll. 21–24. The object of the '007 Patent is to allow clients to backup to their own computer a copy of their Internet-based data, which, from the specification, appears to be data resulting from outsourced data-processing that is stored on a central computer separated from the client's network by the Internet. *Id.* col. 1 ll. 21–24, col. 2 ll. 6–24. This objective is the opposite of traditional backup systems, which allow the client to copy data from their own computer onto an external computer or server. *Id.* col. 1 ll. 49–56. In addition to saving a copy of the Internet-based data, dependent claims 3, 6, and 9 go on to claim "software executing on said central computer for retrieving said data backup." *Id.* col. 3 ll. 48–50, col. 4 ll. 12–15, col. 4 ll. 49–51. Essentially, those claims recite the central computer's ability to restore any lost data by retrieving it from the client's personal computer.

6. From this evidence, the jury reasonably also could have concluded that CPI's products infringed under the doctrine of equivalents. The jury was instructed that they could find infringement under the doctrine, but CPI ap-

pealed only on the basis that its products do not literally infringe. There is, accordingly, more than one basis upon which to conclude that substantial evidence supports the jury's infringement verdict.

CPI focused its anticipation case on claim 10. It recites:

A system for local storage of data through the Internet comprising:
 a central computer connected to the Internet;
 a client computer connected to the Internet;
 at least one storage having a plurality of *client data* records, said at least one storage accessible by said central computer, each *client data* record having an identifier that relates the *client data* record to a client;
 a *client data request*, sent from said client computer via the Internet to said central computer; and
client data corresponding to said *client data request*, sent from said central computer via the Internet to said client computer and saved on said client computer.

Id. col. 4 ll. 52–64 (emphases added).

The Court construed “client data” to mean “a complete or partial backup or copy of data records corresponding to a particular client.” It interpreted “data request” to mean “a data backup request.” Neither party appeals these claim constructions. Thus, claim 10 requires: a client and central computer, each connected to the Internet; backups or copies of data records corresponding to a particular client that are identifiable by client and accessible by the central computer; a data backup request sent by the client computer to the central computer; and a complete or partial backup or copy of data records corresponding to that client sent from the central computer to the client computer where they are then saved. Basically, it allows clients to access and copy their own files or files associated with them from across the Internet. On its face, claim 10

(as well as claims 11–15, which depend from claim 10) does not recite Internet-based data, which is differentiated from general client data by the fact that it must be accessible and modifiable by the client’s act of processing the data over the Internet. *See* ’007 Patent col. 1 ll. 21–24, col. 2 ll. 6–24.

The Schrader Patent is the only piece of prior art upon which CPI relied for its anticipation defense. It discloses an electronic checkbook system that reconciles pending financial transactions against cleared transactions.⁷ Among other things, it claims: a computer-based system that allows the user to send transactions from his computer to a financial institution’s computer system for processing; a display showing an account balance of all cleared transactions; a display showing an account balance of both cleared and uncleared transactions; the ability to receive from the financial institution a list of transactions cleared since the last time they were checked; and then updating the two account balances. Schrader Patent col. 19 l. 48 to col. 20 l. 25. In the section of the specification entitled “Update Statement,” it explains that, once a user requests an update, the “personal finance application connects to the financial institution computer system” over the Internet. *Id.* col. 16 l. 63 to col. 17 l. 5. Then the software “creates a request file that includes a request for all cleared transactions since the date of the last update” that is sent to the financial institution. *Id.* col. 17 ll. 6–9, ll. 15–19. In response, the financial institution’s computer system “creates a response file that contains the set of transactions that have been cleared” since the last update. *Id.* col. 17 ll. 22–25. The response file is then sent back to the application and processed, which includes “ex-

7. The Schrader Patent is sold under the trade-

mark Quicken®.

tracting each of the cleared transactions from the response file and storing them.” *Id.* col. 1711.26–38.

CPI’s expert, Dr. Alexander, testified about claim 10 and stated that, in Schrader, the users “retriev[e] from the financial institution these records, just as the ’007 Patent requires downloading to a client.” He also stated that the download is “to your business or personal computer from the bank’s computer.” “[T]he banks maintain the database with your checkbook record” and “these are records that are specific to you.” “So there’s a request. In the case of the Quicken Schrader prior art, you’re at a personal computer, at your business or at home, and you request the downloading of records that essentially are unposted records that the bank has processed.” Then, according to Dr. Alexander, the “the bank giv[es] you the response file, which is the records that are specific to you, based on your client ID, your account number.” “And these records are saved on your computer in the case of Quicken, the Schrader patent, they are saved on your computer, and/or business computer.” His testimony tracks all of claim 10’s elements. CPI argues that, therefore, the Schrader Patent, which describes a computer downloading files specific to the user from a central computer, contains all of the limitations claimed in the ’007 Patent.

WhitServe argues that Schrader is missing certain elements claimed in the ’007 Patent. WhitServe states that “Dr. Sayward testified at trial that Schrader was missing additional key claim elements: (1) a central computer for transmitting client data to a client computer (required by all claims 1–15); (2) Internet-based data (required by claims 1–9); and (3) data conversion (required by claims 7–9 and 12–15).” We conclude that claim 10 of the ’007 Patent is anticipated by the Schrader Pat-

ent despite these asserted differences. First, Schrader clearly discloses a central computer in the form of the financial institution’s computer. Additionally, claim 10 recites neither Internet-based data nor data conversion. In fact, the only rebutting testimony offered by WhitServe specifically regarding claim 10 was its expert’s conclusory testimony that claim 10’s limitations “aren’t taught by Schrader.”

[14] In its brief, WhitServe argues that Schrader does not anticipate claim 10: “Schrader does not relate to a system for backing up *client data*” because “the Schrader request file is not a request for a data backup of *existing* data, but rather is a request for *new* data relating to cleared transactions since the client was last online.” Cross-Appellant’s Br. 70 (emphases added). Such “arguments of counsel cannot take the place of evidence lacking in the record.” *Estee Lauder Inc. v. L’Oreal, S.A.*, 129 F.3d 588, 595 (Fed.Cir.1997) (internal citations and quotation marks omitted). Moreover, claim 10 does not distinguish between data that is “existing” or “new,” and instead recites only “client data,” which was defined as “a complete or partial backup or copy of data records corresponding to a particular client.” Data corresponding to a user’s cleared financial transactions clearly satisfies the definition of a “copy of data records corresponding to a particular client.”

WhitServe points to no other elements that distinguish claim 10 from the Schrader Patent and does not argue that the Schrader Patent is not enabling. *See Amgen Inc. v. Hoechst Marion Roussel, Inc.*, 314 F.3d 1313, 1355 (Fed.Cir.2003) (explaining that there is “a [rebuttable] presumption . . . that both the claimed and unclaimed disclosures in a prior art patent are enabled.”). Thus, in this case, even viewing the evidence in a light most favorable to WhitServe, no reasonable juror

could have found that claim 10 was not anticipated by the Schrader Patent. Therefore, the trial court's denial of CPI's motion for JMOL regarding claim 10 is reversed because claim 10 is anticipated by the Schrader Patent. Contrary to CPI's arguments, however, the fact that claim 10 is invalid does not cause all of the other claims of the '007 Patent to fail.

[15, 16] We do not invalidate the rest of the claims because they contain additional elements that CPI has not established were either anticipated or obvious. The law states:

Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim. . . . The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting invalidity.

35 U.S.C. § 282. "Typically, testimony concerning anticipation must be testimony from one skilled in the art and must identify each claim element, state the witnesses' interpretation of the claim element, and explain *in detail* how each claim element is disclosed in the prior art reference." *Schumer v. Lab. Computer Sys., Inc.*, 308 F.3d 1304, 1315 (Fed.Cir.2002) (emphasis added).

[17] In *Koito Manufacturing Co. v. Turn-Key-Tech, LLC*, 381 F.3d 1142, 1151 (Fed.Cir.2004), the defendant entered another patent into evidence as anticipatory prior art, "but otherwise failed to provide any testimony or other evidence that would demonstrate to the jury how that reference met the limitations of the

claims. . . ." Instead, the defendant's expert testified about four prior art patents simultaneously and stated:

All these prior art patents provide for products and ways of making products with thick and thin sections. The gate locations are shown, and they all have inherently crossing flows in sections of the product, sometimes substantial sections of these products, such that they all would have a cross-laminated section as Turn Key is applying that term to the accused lenses.

Id. at 1152. We held that such "[g]eneral and conclusory testimony . . . does not suffice as substantial evidence of invalidity." *Id.* Because general and conclusory testimony is not enough to be even substantial evidence in support of a verdict, it is certainly not enough to require us to overturn a jury's finding of no invalidity.

[18] In this case, CPI's expert, Dr. Alexander, explained what part of the Schrader Patent anticipated each element in claim 10. When asked if encryption and data format conversion were well known at the time the '007 Patent was filed, he answered affirmatively. CPI's attorney then asked, "Do you have an opinion on the validity of Claims 1, 2, 3, 7, 8, 9, 10, 11, 12, 13, 14 and 15 of the '007 Patent?"⁸ Dr. Alexander replied, "Yes, they're all invalid because of prior art." Finally, CPI's attorney asked, "And are all the elements of those claims disclosed in the Schrader patent?" Dr. Alexander stated, "Yes, they are." We find this generalized exchange, which failed to articulate how the Schrader Patent anticipated the other claims' specific elements, to be a far cry from the "overwhelming amount of evidence" needed to require us to overturn the jury's verdict. *See Id.*

8. It is unclear why Dr. Alexander did not mention claims 4 through 6, but it would not

change the result if he had.

There are several additional elements contained in the other claims, moreover, which a reasonable jury could find absent from the Schrader Patent. For example, dependent claims 3, 6, and 9 require that there be “software executing on said central computer for retrieving said data backup.” The Schrader Patent has not been shown to allow the financial institution to retrieve the data previously sent to the user. Also, claims 1–9 require Internet-based data,⁹ which is not clearly disclosed by the Schrader Patent. While CPi argues that WhitServe’s expert conceded that Schrader disclosed Internet-based data, what he actually said was that the “client computer get[s] the data from the financial institution computer system ‘over a network.’” A jury reasonably could have concluded that the fact that data is transferred over the Internet does not automatically make it “Internet-based data” because, as disclosed in the ‘007 Patent, that element requires the ability to *modify* centrally stored data from across the Internet, rather than simply *sending* it across the Internet.¹⁰

9. For example, claim 1 of the ‘007 Patent recites:

A system for onsite backup of *internet-based data* comprising:
a central computer;
a client computer;
a communications link between said central computer and the Internet;
a communications link between said client computer and the Internet;
at least one database containing a plurality of data records accessible by said central computer, each data record containing a client identification number;
software executing on said central computer for receiving a data backup request from said client computer;
software executing on said central computer for transmitting said data backup to said client computer for onsite backup of *internet-based data* on said client computer.

[19, 20] CPi also states that the ‘007 patent is rendered obvious by the Schrader patent. However, “an obviousness determination . . . is based on underlying factual inquiries including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) objective evidence of nonobviousness.” *Eli Lilly & Co. v. Teva Pharm. USA, Inc.*, 619 F.3d 1329, 1336 (Fed.Cir.2010). Other than the cursory statement that data conversion and encryption were “well known” at the time of patenting by CPi’s expert, CPi has not pointed to facts necessary for us to conclude that no reasonable jury could have found the rest of the ‘007 Patent’s claims to be nonobvious. Therefore, while we conclude that claim 10 of the ‘007 Patent is invalid as anticipated, we find that substantial evidence supports the jury’s verdict of no invalidity as to the remaining ‘007 Patent’s claims.

C. Damages

[21–25] CPi appeals the trial court’s denial of its post-trial motions for JMOL

‘007 Patent col. 3 ll. 30–44 (emphases added).

10. The ‘007 Patent describes an Internet-based data processing system in which a “client computer *executes software 20, residing on the data processing system 15*, for displaying, *updating*, and deleting data 12 stored on the central data processing system 15.” ‘007 Patent col. 2 ll. 50–53 (emphases added). WhitServe’s expert accurately described Internet-based data as “[i]f you have data that you constructed and you send it to a central computer for further processing, Internet based data is that data that you created yourself, plus the data that gets created as a consequence of doing that processing on a server computer.” He also agreed that a good definition is: “information that could be created on an application on the other side of the Internet from a client computer[.]”

or a new trial on damages on the grounds that the jury's \$8,378,145 damages award is not supported by substantial evidence and is, in fact, against the clear weight of the evidence. "When reviewing damages in patent cases, we apply regional circuit law to procedural issues and Federal Circuit law to substantive and procedural issues pertaining to patent law." *Wordtech Sys., Inc. v. Integrated Networks Solutions, Inc.*, 609 F.3d 1308, 1318 (Fed.Cir. 2010) (internal citations and quotation marks omitted). In the Second Circuit, "a district court may grant a new trial pursuant to [Federal Rules of Civil Procedure] Rule 59 even when there is evidence to support the jury's verdict, so long as the court 'determines that, in its independent judgment, the jury has reached a seriously erroneous result or its verdict is a miscarriage of justice.'" *AMW*, 584 F.3d at 456 (quoting *Nimely v. City of New York*, 414 F.3d 381, 392 (2d Cir.2005)). Denial of a motion for a new trial is reviewed for abuse of discretion. *Id.* "The standard for ordering a new trial is therefore somewhat less stern than that for entering judgment as a matter of law, but our review of a district court's disposition of a Rule motion is more deferential." *Id.* "A district court abuses its discretion when its decision is based on clearly erroneous findings of fact, is based on erroneous interpretations of the law, or is clearly unreasonable, arbitrary or fanciful." *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1460 (Fed.Cir. 1998) (en banc).

After CPI made its initial post-trial motions in this case, the trial court issued an order upholding the verdict. The only analysis it provided was that "[t]he court concludes that the \$8,378,145.00 jury verdict entered on May 25, 2010, is fair, just, and reasonable and adequately addresses all legal and equitable considerations." It then dismissed as moot all post trial mo-

tions, including CPI's motion regarding damages.

[26] We have said that "[m]ost jury damages awards reviewed on appeal have been held to be supported by substantial evidence." *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1336 (Fed.Cir. 2009). "Nonetheless, on post-trial JMOL motions, district court judges must scrutinize the evidence carefully to ensure that the 'substantial evidence' standard is satisfied, while keeping in mind that a reasonable royalty analysis 'necessarily involves an element of approximation and uncertainty.'" *Id.* (quoting *Unisplay, S.A. v. Am. Elec. Sign Co.*, 69 F.3d 512, 517 (Fed. Cir.1995)). The same rule requiring the trial court to scrutinize the evidence applies to motions for new trials. In this case, we believe that, had the trial court scrutinized the damages evidence properly, it would have concluded that the evidence did not support the award. Because the jury's verdict lacked evidentiary support, we conclude that the trial court abused its discretion when it denied the motion for a new trial.

[27-29] When a patent is infringed, the 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." 35 U.S.C. § 284. The patentee bears the burden of proving damages. *Lucent*, 580 F.3d at 1324. "Two alternative categories of infringement compensation are the patentee's lost profits and the reasonable royalty he would have received through arms-length bargaining." *Id.* If lost profits are not at issue, the reasonable royalty is the floor for damages. *Id.* The jury's verdict form does not indicate how the award was calculated, whether it is a lump sum or running royalty, or whether it includes damages in addition to a reasonable royalty. At trial, both parties based

their damage theories primarily on the 15 *Georgia-Pacific* factors, see *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F.Supp. 1116, 1120 (S.D.N.Y.1970),¹¹ which are meant to provide a reasoned economic framework for a “hypothetical negotiation, . . . [which] attempts to ascertain the royalty upon which the parties would have agreed had they successfully negotiated an agreement just before infringement began.” *Lucent*, 580 F.3d at 1324.

CPI’s main arguments against the verdict concern the testimony by WhitServe’s damages expert, Dr. Shapiro, and the closing argument made by WhitServe’s counsel. It argues that WhitServe improperly relied on a “business-wide” damages theory that included non-infringing revenue and caused the royalty base relied upon by the jury to be inflated by several times. It also argues that WhitServe’s damages expert’s testimony can not support the verdict because the royalty rate upon which he based his reasonable royalty calculation is merely speculative, as is WhitServe’s “other damages” theory based on the cost to develop CPI’s systems. Finally, it argues that WhitServe’s closing arguments were prejudicial and require a new trial because the trial court’s correcting state-

ments were insufficient to prevent the jury from being tainted by WhitServe’s misstatements of law and fact.

In response, WhitServe proffers two main theories in support of the verdict. First, it argues that the lump sum licenses it presented at trial along with the *Georgia-Pacific* factors support Dr. Shapiro’s royalty rate of 16–19%, which, when applied to \$42–43 million in infringing revenue yields a royalty of about \$8 million. Second, it argues that the jury may have awarded a reasonable royalty of about \$3 million and then increased the damages award based on “other damages” it felt WhitServe suffered. We find that neither theory supports the jury’s verdict.

i. Reasonable Royalty

[30] When a hypothetical negotiation would have yielded a running royalty, the classic way to determine the reasonable royalty amount is to multiply the royalty base, which represents the revenue generated by the infringement, by the royalty rate, which represents the percentage of revenue owed to the patentee. See, e.g., *Finjan, Inc. v. Secure Computing Corp.*,

11. We have stated that the factors include:

(1) royalties the patentee has received for licensing the patent to others; (2) rates paid by the licensee for the use of comparable patents; (3) the nature and scope of the license (exclusive or nonexclusive, restricted or nonrestricted by territory or product type); (4) any established policies or marketing programs by the licensor to maintain its patent monopoly by not licensing others to use the invention or granting licenses under special conditions to maintain the monopoly; (5) the commercial relationship between the licensor and licensee, such as whether they are competitors; (6) the effect of selling the patented specialty in promoting sales of other products of the licensee; (7) the duration of the patent and license term; (8) the established profitability of the product made under the patent, including

its commercial success and current popularity; (9) the utility and advantages of the patent property over old modes or devices; (10) the nature of the patented invention and the benefits to those who have used the invention; (11) the extent to which the infringer has used the invention and the value of that use; (12) the portion of profit or of the selling price that may be customary in that particular business to allow for use of the invention or analogous inventions; (13) the portion of the realizable profit that should be credited to the invention as opposed to its non-patented elements; (14) the opinion testimony of qualified experts; and (15) the results of a hypothetical negotiation between the licensor and licensee. *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 853 n. 3 (Fed.Cir.2010), *aff’d*, — U.S. —, 131 S.Ct. 2238, 180 L.Ed.2d 131 (2011).

626 F.3d 1197, 1208 (Fed.Cir.2010). In this case, CPI's expert stated that there were 1,036,877 accused infringing transactions. WhitServe adopted that number at trial and on appeal. Thus, the royalty base is equivalent to the revenue generated by those transactions, which equals 1,036,877 times the average transaction fee charged by CPI for transactions that infringe WhitServe's patents. There was a factual dispute over whether the average infringing service fee charged by CPI was \$15.69 or \$41. WhitServe's expert, Dr. Shapiro, had based his original calculations on the \$15.69 figure provided by CPI. Dr. Shapiro changed his opinion to incorporate the \$41 figure on the eve of trial, however. By multiplying \$41 by a little more than 1 million infringing transactions, WhitServe argues the infringing revenue base was \$42–43 million.

CPI argues that number is far too high because Dr. Shapiro came up with the number by dividing CPI's gross revenues by the total number of all transactions—including non-infringing transactions. It argues that including non-infringing transactions in the average fee calculation makes the revenue base unsupported by the evidence because it sweeps in non-infringing use, for which CPI says it charges higher fees. CPI's expert testified that the correct revenue base was about \$18 million. WhitServe argues that CPI stipulated to evidence supporting the jury's verdict in the form of its past financial data and that Dr. Shapiro properly used that information to determine that CPI's average infringing service fee was about \$41. We find that the jury was entitled to find that \$41 accurately represented the average service fee charged for infringing products.

In *Finjan*, the patentee's expert calculated the infringer's profit margin on accused products by using "company-wide,

instead of product-specific, gross profits." 626 F.3d at 1209. The expert "explained to the jury that he found that the gross profit margin for the [accused] products was similar to the company-wide margin (both roughly 70%), so that 'the [accused] products . . . have a gross profit margin . . . that's close.'" *Id.* at 1209–10. We concluded that substantial evidence supported the award based on that profit margin because the expert "provided more than just a conclusory opinion, on which the jury was entitled to rely." *Id.* at 1210.

As in *Finjan*, we do not find reversible error in Dr. Shapiro's calculation of the average service fee because he explained that, as CPI automated more and more transactions, the average service fee remained the same over time. *See* J.A. 15667–68 (explaining that "one would expect a lower average service fee when the proportion of electronic transactions increased"). Non-infringing use, which commands a higher fee according to CPI, accounted for 97% of all transactions in 2003 but dropped to 60% in 2009 as CPI moved away from manual transactions and started conducting more automated transactions, using computers and the Internet. Dr. Shapiro explained that the average fee remained the same during that whole period, however. J.A. 15667. Thus, the jury was free to reason that the average fee would have decreased as the allegedly cheaper infringing transactions progressively made up a larger proportion of total transactions. Because that did not happen, it was reasonable to conclude that the infringing transactions were not, in fact, cheaper and that the average transaction fee is a fair approximation of the fee charged in the infringing transactions. *See Bluebonnet Sav. Bank, F.S.B. v. United States*, 266 F.3d 1348, 1355 (Fed.Cir. 2001) (explaining that damage calculations are not an exact science and "it is enough if the evidence adduced is sufficient to

enable a court or jury to make a fair and reasonable approximation” (internal quotation marks and citations omitted).

[31] Although it would have been preferable to have broken the data down by specific transaction type, we do not find that Dr. Shapiro’s reasoning on this point was impermissible speculation. Instead, “vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence.” *i4i Ltd. P’ship v. Microsoft Corp.*, 598 F.3d 831, 856 (Fed.Cir.2010) (citing *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 596, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993)), *aff’d*, — U.S. —, 131 S.Ct. 2238, 180 L.Ed.2d 131 (2011). Here, CPi cross-examined Dr. Shapiro on the issue and presented contrary evidence.¹² The jury was entitled to believe that the average fee for the infringing transactions was about \$41. Thus, if there was evidence to support the corresponding royalty rate that would have yielded an \$8.3 million verdict, we could affirm.

12. CPi complains that Dr. Shapiro came up with his higher average transaction fee the night before he testified and presented the trial court with a conclusory expert report with no analysis and no citations to data. The trial court excluded the report after CPi objected but allowed Dr. Shapiro to testify as to his conclusion and permitted WhitServe to publish a chart including the information to the jury during closing. CPi states this information was inadmissible, prejudicial, and requires a new trial. Upon reviewing the trial transcript, it is unclear whether the trial court’s ruling should have prohibited Dr. Shapiro from testifying as to the higher amount. At one point, the judge said that “whatever was furnished to [CPi] is going to be excluded, and that includes the material that’s on that slide, and it’s got to be excluded.” However, Dr. Shapiro was permitted to testify over objections. We review the admission of

We agree with CPi, however, that multiple errors in Dr. Shapiro’s royalty rate calculation cause his ultimate opinion regarding a reasonable royalty rate to be speculative. Dr. Shapiro concluded that the royalty rate that would have resulted from a hypothetical negotiation between CPi and WhitServe was 16–19% of revenue. A 19% of revenue rate, if upheld, would support the jury’s verdict because 19% of \$42–43 million is roughly \$8 million. WhitServe attempts to justify this royalty rate with several points of evidence.

[32] First, it argues that the jury was presented with a royalty rate as high as 31.8% during Dr. Shapiro’s testimony. That rate was based on a *proposed*, but unaccepted, license based on the greater of \$5 or 7% per transaction. Dr. Shapiro stated that \$5 divided by CPi’s asserted average service fee of \$15.69 equals 31.8%. This evidence can not support the jury’s verdict because it is based on fiction and contradicts Dr. Shapiro’s other testimony. Basically, Dr. Shapiro took WhitServe’s hypothetical value of \$5 and applied it to a \$15.69 value that he had already opined was incorrect. We acknowledge that proposed licenses may have some value for

evidence under the standard of the law of the pertinent circuit, *Micro Chemical, Inc. v. Lextron, Inc.*, 317 F.3d 1387, 1390–91 (Fed.Cir. 2003), which is abuse of discretion in this case. *United States v. Roberts*, 660 F.3d 149, 157 (2d Cir.2011). It is difficult to tell if the trial court abused its discretion. Certainly, had CPi had more warning about Dr. Shapiro’s proposed testimony, it may have more effectively countered it. On the other hand, the trial court was in the best position to evaluate the threat of prejudice, if any, from the late disclosure, and he chose to allow some aspects of it. Ultimately, we do not decide whether the trial court’s admission of this testimony was erroneous because we have determined a new trial is warranted on other grounds. If it is admitted again on remand, CPi will have time to formulate its rebuttal.

determining a reasonable royalty in certain situations. Their evidentiary value is limited, however, by, *inter alia*, the fact that patentees could artificially inflate the royalty rate by making outrageous offers. See *Deere & Co. v. Int'l Harvester Co.*, 710 F.2d 1551, 1557 (Fed.Cir.1983) (upholding district court's decision to give little probative value to an offer to license).

In this case, the proposed offer and 31.8% rate have no probative value because Dr. Shapiro used the lower \$15.69 transaction fee amount to determine that \$5 represents 31.8% of the fee. Such an assertion is directly contrary to his argument in favor of a \$41 transaction fee. Dr. Shapiro can not have it both ways. He can not use \$41 to boost the royalty base and then use \$15.69 to boost the royalty rate. No reasonable juror could have credited both values. The 31.8% value is therefore based on pure conjecture and, like the 25% rule of thumb, is irrelevant. See *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1318 (Fed.Cir.2011) (“Gemini’s starting point of a 25 percent royalty had no relation to the facts of the case, and as such, was arbitrary, unreliable, and irrelevant.”) Had he divided \$5 by the higher \$41 fee he urged, the result would have been about 12%, significantly lower than the roughly 19% upon which WhitServe argues the verdict is based.

[33] Next, WhitServe cites to the two lump sum royalties it successfully negotiated with CPi competitors. WhitServe argues that the 19% royalty rate is supported by the fact that it secured two limited, lump-sum licenses, both approximately in the \$2–3 million range. WhitServe states those licenses were limited and based on little to no infringement, and, thus, justify an increased royalty rate.

CPi counters that parties must use comparable patent licenses when determining reasonable royalty damages and that these were not comparable to what WhitServe sought at trial. In *Lucent*, we said that “[f]or a jury to use a running-royalty agreement as a basis to award lump sum damages . . . some basis for comparison must exist in the evidence presented to the jury.” 580 F.3d at 1330. In that case, the running royalties did not constitute substantial evidence in support of the verdict because “the jury had almost no testimony with which to recalculate in a meaningful way the value of any of the running royalty agreements to arrive at the lump-sum damages award.” *Id.* The converse of that rule applies here because lump sum payments similarly should not support running royalty rates without testimony explaining how they apply to the facts of the case.

In this case, Dr. Shapiro cited to the two lump sum payments as evidence to support an increased royalty rate under *Georgia-Pacific*, but did not offer any testimony to explain how those payments could be converted to a royalty rate. He is correct to state that those payments support a “higher” rate, but he offered no explanation of how much the rate should have been increased.¹³ As in *Lucent*, “we therefore can not understand how the jury could have adequately evaluated the probative value of those agreements.” 580 F.3d at 1328. Thus, to the extent WhitServe argues the award is based on a running royalty, the lump-sum agreements are not substantial evidence in support of the jury’s verdict. Additionally, even if the award is meant to be a lump sum, which it does not appear to be, we note the jury’s verdict of \$8.3 million was over 3 times the

13. In contrast, CPi’s expert, Mr. Tate, explained how he converted one of the lump-sum payments into what he called an effective

royalty rate of 1.3% by dividing the license fee by the revenue generated by accused infringing sales.

average of the lump sum licenses presented. As in *Lucent*, where the award was a multiple of the average license amounts presented, here, there is “little evidentiary basis under *Georgia-Pacific* Factor 2 for awarding roughly three to four times the average amount in the lump-sum agreements in evidence.” 580 F.3d at 1332.

WhitServe also argues that the *Georgia-Pacific* factors support the 19% rate. As the starting point of his analysis, Dr. Shapiro used the now discarded rule of thumb that assumes the patentee would get about 25% of the infringer’s expected profit had they reached an agreement before infringement began.¹⁴ See *Uniloc*, 632 F.3d at 1315 (“Evidence relying on the 25 percent rule of thumb is . . . inadmissible under *Daubert* and the Federal Rules of Evidence, because it fails to tie a reasonable royalty base to the facts of the case at issue.”). He testified that, starting at the 25% figure, it is appropriate to adjust the rate up or down using the *Georgia-Pacific* factors. He did not explain how much each factor affected the rate,¹⁵ however, and he testified that almost all factors justified an increase in the applicable rate, a few were neutral in terms of their im-

pact, and none justified a decreased rate. This type of superficial recitation of the *Georgia-Pacific* factors, followed by conclusory remarks, can not support the jury’s verdict.

[34] We do not require that witnesses use any or all of the *Georgia-Pacific* factors when testifying about damages in patent cases. If they choose to use them, however, reciting each factor and making a conclusory remark about its impact on the damages calculation before moving on does no more than tell the jury what factors a damages analysis could take into consideration. See *Lucent*, 580 F.3d at 1329 (explaining that a “damages award cannot stand solely on evidence which amounts to little more than a recitation of royalty numbers” and jurors cannot rely on “superficial testimony” with “no analysis”). Expert witnesses should concentrate on *fully* analyzing the *applicable* factors, not cursorily reciting all fifteen. And, while mathematical precision is not required, some explanation of both why and generally to what extent the particular factor impacts the royalty calculation is needed. We believe that Dr. Shapiro’s testimony

14. We do not reverse based on the 25% rule, which we have held to be inadmissible under *Daubert*, because we announced that new rule of evidence after trial. See *Landgraf v. USI Film Prods.*, 511 U.S. 244, 275 n. 29, 114 S.Ct. 1483, 128 L.Ed.2d 229 (1994) (assuming that “a new rule of evidence would not require an appellate remand for a new trial”). Additionally, neither party objected to its use at trial and the trial court was under no obligation to exclude the use of the 25% rule. See *Lucent*, 580 F.3d at 1325 (explaining that when neither party objected to the evidence and the trial judge had “no independent mandate to exclude” the evidence we must accept that it was properly before the jury). In fact, unlike in *Uniloc*, where Microsoft challenged its use, *both parties* used the 25% rule in this case. See 632 F.3d at 1312. On remand, use of the 25% rule should be revisited in light of *Uniloc*.

15. For example, we note the entire discussion of factors 9 and 13, which is representative of all of Dr. Shapiro’s testimony, was:

Q: And here you have a slide showing the analysis of the ninth and thirteenth factors, and if you could please explain what those factors are about and how you applied them in this case?

A: Yes. The ninth factor refers to the advantages of a patented product over the old method. 13 refers to the portion of the profit due to the invention. Basically there’s a whole host of CPi internal documents that discuss the disadvantages of the old paper-based process prior to 2002, and that would also support a higher royalty rate.

and the arguments premised thereon encouraged the jury to reach a purely speculative judgment.

After his generalized discussion of the *Georgia-Pacific* factors, Dr. Shapiro concluded his testimony by opining on the results of a hypothetical negotiation between the parties. He testified:

There's two steps in a reasonable royalty calculation. One is to determine the royalty base, which are the revenues upon which the royalty rate is applied. The second step is the royalty rate itself. And multiplying the royalty rate by the . . . royalty base results in the reasonable royalty damages. And in this matter, what I used as a royalty rate was 16 percent for any . . . revenues earned prior to 2008 [and] a 19 percent royalty for any revenues from 2008 up to the present.

Dr. Shapiro did not actually state the royalty base he used or the final reasonable royalty amount he thought was reasonable, but WhitServe's attorney directed the jury's attention to a demonstrative:

Q: Thank you, Dr. Shapiro—oh, I'm sorry. Dr. Shapiro, this is a chart that summarizes CPI's overall revenue and gross profits from the years 2005 to 2009, and do you believe that the damages that you've associated with CPI are reasonable in view of these numbers?

A: Yes.

After reviewing his testimony, we are left with the unmistakable conclusion that the jury heard that Dr. Shapiro started at

16. Much of Dr. Shapiro's testimony consists of his references to demonstrative charts shown to the jury, but without explanation or even recitation of the numbers presented therein. It is possible that useful information was on the charts, but they are not before us or even referenced by WhitServe. Additionally, we are aware that the trial judge excluded much of Dr. Shapiro's damages report. The

25% of *profit* and adjusted that rate "up." He then announced that the appropriate royalty rate in this case is 16–19% of *revenue*. The record contains no evidence regarding CPI's expected profit margins that would explain how Dr. Shapiro converted a percent of profit royalty rate into one applied to a percent of revenue. Without some guideposts, the task of determining a reasonable royalty under 35 U.S.C. § 284 is impossible. "The law does not require an expert to convey all his knowledge to the jury. . . ." *Lucent*, 580 F.3d at 1329. But we have also said that "superficial testimony" and the simple recitation of royalty numbers that happen to be in the ballpark of the jury's award will not support the jury's award when no analysis is offered to the jury which would allow them to evaluate the probative value of those numbers. *See id.*

[35] When asked during oral argument where in the record we could find an explanation for Dr. Shapiro's shift from a percentage of profits to a percentage of revenue, WhitServe's counsel responded that he could not recall the number his own witness came up with but "the record is complete with his analysis of what the profit margin is." Oral Arg. at 27:18–27:40. It may be, but we could not find it.¹⁶ CPI's expert did testify to CPI's profit margins, asserting that the profit margin was 21.9% for all transactions between 2002 and 2007 and 26.3% for infringing transactions conducted between 2002 and 2010. If these numbers are accurate, a 19% of revenue royalty represents be-

record and briefs are silent on which charts were excluded and which went to the jury. When parties rely on demonstratives to present evidence or mathematical calculations to the jury, it is their burden to assure that the record captures the substance of the data so presented. We can not guess at what the jury saw.

tween 86.75% and 72.24% of CPI's profit.¹⁷ Thus, we must assume Dr. Shapiro started at 25% of profit and somehow arrived at a royalty amount that accounted for about three quarters of CPI's profits. After reviewing Dr. Shapiro's bare-bones *Georgia-Pacific* analysis, these amounts do not appear to be supported anywhere in the evidence. Therefore, we do not believe the jurors would have been able to determine whether such an amount is "reasonable." See *Lucent*, 580 F.3d at 1330 (explaining that a past royalty amount of \$2.00 per unit is "difficult, if not impossible, to evaluate" without any testimony on the price of the product). Thus, the royalty rate suggested by Dr. Shapiro does not support the verdict because his testimony is conclusory, speculative and, frankly, out of line with economic reality.

WhitServe next argues that perhaps the jury awarded a lower reasonable royalty and added in several million dollars of "other damages." We find that the "other damages" to which WhitServe refers have no relationship to the harm caused by CPI and also can not support the verdict.

ii. "Other Damages"

[36] WhitServe first argues that, because CPI spent \$5–10 million developing the infringing systems, \$5–10 million could be added to the award to help WhitServe "overcome the competitive harm and market distortion caused by CPI's infringement." Cross-Appellant's Br. 45. While CPI's development costs might be relevant to a hypothetical licensing negotiation, there is no justification for an award that adds those costs on top of a running royalty based verdict. 35 U.S.C. § 284 requires that patentees be compensated for the infringement, not that their entry into the industry be fully financed. See 35 U.S.C. § 284. WhitServe next mentions "sticky

customers," but points to no evidence to quantify how inertia has harmed WhitServe. Finally, WhitServe argues that the jury could have awarded a reasonable royalty of an unknown amount and added "other" damages in accordance with *Maxwell v. J. Baker, Inc.*, 86 F.3d 1098, 1108 (Fed.Cir.1996), and various district court cases that have upheld jury awards made up of a reasonable royalty plus other damages. We agree that the jury is entitled to award compensatory damages in addition to a reasonable royalty because a reasonable royalty is "merely the floor below which damages shall not fall." *Bandag, Inc. v. Gerrard Tire Co.*, 704 F.2d 1578, 1583 (Fed.Cir.1983). Patentees bear the burden of proving such damages, however and, here, there is no evidence to support a higher award.

In *Maxwell*, we upheld a jury award which expressly included \$.05 per pair of shoes plus other damages amounting to about \$.10 per pair, because it was supported by evidence of a \$.10 per pair royalty. 86 F.3d at 1110 ("Thus, the jury did not arbitrarily increase the award of damages. Instead, the jury's verdict reflects the actual damages sustained by Maxwell. . . ."). WhitServe has not demonstrated lost sales, diminished royalty rates, or other compensable damages. Therefore, any additional damages would be speculative and the damages do not fall "within the range encompassed by the record as a whole." *Unisplay*, 69 F.3d at 519.

[37] We find that the jury's damages award—whether characterized as a reasonable royalty or "other damages"—must be the result of sheer surmise and conjecture, "divorced from proof of economic harm linked to the claimed invention and . . . inconsistent with sound damages juris-

17. $19/21.9 = 86.75\%$ and $19/26.3 = 72.24\%$.

prudence” *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 868 (Fed.Cir.2010). We find, therefore, that the trial court abused its discretion when it failed to grant CPI a new trial on damages. See *AMW*, 584 F.3d at 456 (stating a new trial can be granted when the verdict is seriously erroneous). We vacate the award and remand for a new trial on damages.¹⁸

II. WhitServe’s Cross–Appeal

WhitServe has cross-appealed, asserting that the district court improperly denied its requests for a permanent injunction, compulsory license, prejudgment interest, enhanced damages, attorneys’ fees, and a post-trial accounting. As noted above, the trial court addressed each motion only briefly. The trial court denied WhitServe’s request for a permanent injunction in one page—stating that, because WhitServe had failed to establish irreparable harm from ongoing infringement, no injunction should issue. WhitServe’s motion for an accounting was denied as moot without explanation. WhitServe’s other motions were all originally denied as “moot” in light of the court’s order finding that the jury award “adequately addressed all equitable and legal considerations.” When WhitServe sought reconsideration and ar-

gued that its motions were not moot, the court denied the post-trial motions on the merits. Again, the court premised its ruling solely on its view that the “damages awarded in favor of the plaintiff on May 25, 2011(sic) constituted complete compensation with respect to this matter.” *WhitServe LLC v. Computer Packages, Inc.*, No. 06–CV–01935, slip op. at 1 (D.Conn. May 5, 2011) (“WhitServe’s Motion for Reconsideration as to Motions Denied as Moot”) (ECF No. 488).

The trial court’s treatment of the challenged post-trial motions was inadequate. The trial court’s order denying those motions is vacated and the motions are remanded for consideration in light of governing legal principles and consideration of the charge upon which the jury verdict in favor of the plaintiff was premised.

A. Relief for Ongoing Infringement

[38] WhitServe first cross-appeals the trial court’s refusal to provide any relief for CPI’s ongoing infringement of its patents. Specifically, WhitServe argues it was an abuse of discretion for the trial court to deny its request for either a permanent injunction or an ongoing royalty

18. CPI also urged a new trial because WhitServe made an impermissible emotional plea to the jury during closing arguments that was not sufficiently corrected by the trial court. See *Marcic v. Reinauer Transp. Cos.*, 397 F.3d 120, 124 (2d Cir.2005) (“A party is generally entitled to a new trial if the district court committed errors that were a clear abuse of discretion that were clearly prejudicial to the outcome of the trial.” (internal citations and quotation marks omitted)). During closing, WhitServe stated that “according to the law,” the jury could add \$5–10 million to the award as “compensation for the four years of hell” resulting from the litigation. It is beyond debate that juries may not award litigation costs or punish infringers. See *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1581 (Fed.Cir. 1996) (forbidding a “kicker” for heavy litiga-

tion expenses on top of a reasonable royalty); *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1223 (Fed.Cir.1995) (“[T]he purpose of compensatory damages is not to punish the infringer, but to make the patentee whole.” (citing *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 507, 84 S.Ct. 1526, 12 L.Ed.2d 457 (1964))). Because there are separate grounds for remand, we do not decide whether the trial court’s correcting statements, which did not clearly indicate that WhitServe was not entitled to “compensation” for “four years of hell,” were sufficient to prevent undue prejudice to CPI from this impermissible argument. On remand, we trust that the trial court will ensure such blatantly improper statements are not repeated.

and leave it uncompensated for future acts of infringement by CPi except via resort to serial litigation. CPi responds that the trial court properly refused to enjoin its infringement because WhitServe failed to establish it would suffer irreparable harm and that WhitServe was effectively granted prospective relief in the form of a paid-up license so no forward-looking relief was necessary.

[39] There are several types of relief for ongoing infringement that a court can consider: (1) it can grant an injunction; (2) it can order the parties to attempt to negotiate terms for future use of the invention; (3) it can grant an ongoing royalty; or (4) it can exercise its discretion to conclude that no forward-looking relief is appropriate in the circumstances. *See Telcordia Techs., Inc. v. Cisco Sys., Inc.*, 612 F.3d 1365, 1379 (Fed.Cir.2010) (“If the district court determines that a permanent injunction is not warranted, the district court may, and is encouraged, to allow the parties to negotiate a license.”); *Paice LLC v. Toyota Motor Corp.*, 504 F.3d 1293, 1314–15 (Fed.Cir.2007) (“[A]warding an ongoing royalty where ‘necessary’ to effectuate a remedy . . . does not justify the provision of such relief as a matter of course whenever a permanent injunction is not imposed.”).

[40] All of these decisions are reviewed for abuse of discretion. *See, e.g., eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388, 391, 126 S.Ct. 1837, 164 L.Ed.2d 641 (2006) (“The decision to grant or deny permanent injunctive relief is an act of equitable discretion by the district court, reviewable on appeal for abuse of discretion.”); *Telcordia*, 612 F.3d at 1379 (“[T]he district court did not abuse its discretion by directing the parties to negotiate the terms of the appropriate royalty.”); *Paice*, 504 F.3d at 1315 (“[T]his court is unable to determine whether the district court

abused its discretion in setting the ongoing royalty rate.”). Even under this highly deferential standard of review, we find the trial court’s treatment of the questions of prospective relief inadequate. Accordingly, we remand for further consideration of WhitServe’s alternative motions for a prospective remedy.

Preliminarily, we can not accept CPi’s suggestion that a paid-up license was awarded. Although the jury heard evidence of two lump-sum licenses WhitServe had previously granted, the parties limited their damages arguments to past infringement rather than projected future infringement. The jury was instructed to award “damages,” which by definition covers only past harm. The jury’s verdict did not indicate that the award was meant to cover future use of WhitServe’s patents, and the trial court did not interpret the award as such. *See Telcordia*, 612 F.3d at 1377–78 (Fed.Cir.2010) (explaining trial courts have discretion to interpret verdict forms). We, accordingly, decline to find that post-trial relief was properly denied because a paid-up license was awarded. *Cf. Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1380–81 (Fed.Cir.2008) (holding that injunctive relief was unwarranted when the jury’s award already included prospective relief).

As for the injunction, while the trial court stated that WhitServe had failed to establish irreparable harm, it did not explain why it reached that conclusion. For instance, the trial court did not address WhitServe’s contention that it was a direct competitor in the market via its subsidiary, NetDocket, nor discuss whether monetary damages were alternatively available and adequate to address the forward-looking harm, if any, WhitServe might suffer. From such a record, it is impossible to conclude that the trial court properly exercised its discretion to assess

whether injunctive relief is appropriate. While injunctive relief may very well not be appropriate on these facts, we simply can not tell on this record.¹⁹

[41] The record regarding the trial court's refusal to award a compulsory license is even more sparse; the trial court never even addressed it. While this may be because WhitServe apparently first requested this relief in its reply in support of its motion for permanent injunction, the record, again, does not allow us to draw that conclusion. In *Paice*, we explained that a trial court's failure to explain the basis for its ongoing royalty rate precludes this court from reviewing the decision for an abuse of discretion, and thus, that remand was appropriate so the trial court could give some "indication as to why that rate is appropriate." See 504 F.3d at 1315 (trial court's failure to explain reasons for its decision regarding ongoing royalty prevents meaningful appellate review). While a trial court is not required to grant a compulsory license even when an injunction is denied, the court must adequately explain why it chooses to deny this alternative relief when it does so.

[42] We, therefore, vacate and remand this matter and direct the trial court to address the propriety of prospective relief and to explain any decision it makes with respect thereto. Of course, this decision must be made in light of both any new damages award and all relevant equitable considerations.

B. Prejudgment Interest

[43–45] WhitServe also cross-appeals the trial court's denial of its motion for

prejudgment interest. "This court reviews a district court's denial of prejudgment interest for an abuse of discretion." *Crystal Semiconductor Corp. v. TriTech Microelectronics Int'l, Inc.*, 246 F.3d 1336, 1346 (Fed.Cir.2001). As a rule, "prejudgment interest should be awarded under [35 U.S.C. § 284] absent some justification for withholding such an award." *Gen. Motors Corp. v. Devex Corp.*, 461 U.S. 648, 657, 103 S.Ct. 2058, 76 L.Ed.2d 211 (1983). An award of prejudgment interest carries out Congress's "overriding purpose of affording patent owners complete compensation" since a patentee's damages also include the "forgone use of the money between the time of infringement and the date of judgment." *Id.* at 655–56, 103 S.Ct. 2058.

[46] When the trial court denied the request for prejudgment interest, it stated that "an award of prejudgment interest is not necessary as the jury's \$8,378,145.00 award is adequate to compensate for the defendant's infringement on the plaintiffs patents." District courts are given broad discretion to interpret verdict forms. See *Telcordia*, 612 F.3d at 1377–78. In this case, however, the judge specifically instructed the jury that they may "not award any interest on any damages." The jury's award could not, accordingly, constitute compensation for interest and the trial court abused its discretion in denying prejudgment interest without further analysis or justification. See *Devex*, 461 U.S. at 655, 103 S.Ct. 2058 (explaining prejudgment interest is "necessary to ensure that the patent owner is placed in as good a position as he would have been in had the

19. We note, moreover, that the trial court did not address any of the other factors relevant to the equitable analysis it generally is to employ when assessing the propriety of injunction relief. See *eBay*, 547 U.S. at 391, 126 S.Ct. 1837 (explaining that "a plaintiff seeking a permanent injunction must satisfy a

four-factor test"). For instance, as WhitServe argues, while there was considerable evidence that CPi had substantial non-infringing products in its portfolio, the trial court did not consider whether the possible absence of harm to CPi might weigh in favor of an injunction.

infringer entered into a reasonable royalty agreement”). The denial is vacated and remanded for a determination of whether prejudgment interest is warranted in light of any new damages award and, if deemed not warranted, for a full explanation as to why.

C. Enhanced Damages

[47, 48] WhitServe next cross-appeals the district court’s denial of enhanced damages and attorneys’ fees despite the jury’s finding of willful infringement. As with the other motions we now consider, the district court denied as “moot” WhitServe’s motion for enhanced damages, and, on reconsideration, denied them on grounds that the verdict constituted “complete compensation.” “The district court’s decision on whether to enhance damages is reviewed for abuse of discretion, that is, whether the decision was based on clearly erroneous findings of fact, an incorrect conclusion of law, or a clear error of judgment.” *Spectralytics, Inc. v. Cordis Corp.*, 649 F.3d 1336, 1347 (Fed.Cir.2011).

[49] The decision whether to grant enhanced damages as allowed under 35 U.S.C. § 284 requires a two-step process. *Jurgens v. CBK, Ltd.*, 80 F.3d 1566, 1570 (Fed.Cir.1996). “First, the fact-finder must determine whether an infringer is guilty of conduct upon which increased damages may be based. If so, the court then determines, exercising its sound discretion, whether, and to what extent, to increase the damages award given the totality of the circumstances.” *Id.* “An act of willful infringement satisfies th[e] culpability requirement and is, without doubt, sufficient to meet the first requirement to increase a compensatory damages award.” *Id.* (citing *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826–27 (Fed.Cir.1992), *superseded on other grounds as recognized by*

Hoechst Celanese Corp. v. BP Chems. Ltd., 78 F.3d 1575 (Fed.Cir.1996)).

[50–52] The jury found CPi’s infringement to be willful, and CPi has not appealed that finding. “Upon a finding of willful infringement, a trial court should provide reasons for not increasing a damages award or for not finding a case exceptional for the purpose of awarding attorneys fees.” *Id.* at 1572. In this case, the only reason provided for not increasing the award was that the jury’s verdict constituted “complete compensation.” Enhanced damages, however, are punitive, not compensatory, and can be awarded only in the judge’s discretion. *Id.* at 1570; *Odetics, Inc. v. Storage Tech. Corp.*, 185 F.3d 1259, 1274 (Fed.Cir.1999). Additionally, the judge explicitly told the jury that they “may not add anything to the amount of damages to punish the accused infringer or to set an example.” Thus, the jury’s verdict did not, and properly can not, include enhanced damages. We find, therefore, that the trial court abused its discretion in denying the motion for enhanced damages without independent justification; we remand the issue for a determination of whether enhanced damages are warranted and an explanation of the grounds for that determination.

D. Attorneys’ Fees

[53] WhitServe cross-appeals the trial court’s denial of its attorneys’ fees. “The court in exceptional cases may award reasonable attorney fees to the prevailing party.” 35 U.S.C. § 285. “Although an attorney fee award is not mandatory when willful infringement has been found, precedent establishes that the court should explain its decision not to award attorney fees.” *Spectralytics*, 649 F.3d at 1349. As in *Spectralytics*,

the district court did not separately analyze the attorney fee issue, but denied

attorney fees in conjunction with denial of enhanced damages. Indeed, similar considerations may be relevant to both enhanced damages and attorney fees. However, the situations in which § 284 and § 285 may be invoked are not identical. For example, attorney misconduct or other aggravation of the litigation process may weigh heavily with respect to attorney fees, but not for enhancement of damages.

Id. (internal citations omitted). Therefore, the trial court abused its discretion by failing to explain why attorneys' fees were unwarranted and the issue is remanded for a proper determination.

E. Post-Trial Accounting

[54, 55] Finally, WhitServe appeals the denial of a post-trial accounting. “[W]hen damages are not found by a jury, the court shall assess them.” 35 U.S.C. § 284 (emphasis added). District courts have discretion to award damages for periods of infringement not considered by the jury. *See Fresenius USA, Inc. v. Baxter Int'l, Inc.*, 582 F.3d 1288, 1303 (Fed.Cir.2009) (holding that “the district court was within its discretion to impose a royalty on [post-verdict sales not considered by the jury] in order to fully compensate” the patentee); *Finjan*, 626 F.3d at 1212–13 (explaining that the trial court erred when it did not award damages for the time between entry of judgment and entry of an injunction because otherwise the patentee would not be fully compensated); *Ecolab, Inc. v. FMC Corp.*, 569 F.3d 1335, 1353 n. 5 (Fed. Cir.2009), *modified in part by Ecolab, Inc. v. FMC Corp.*, 366 Fed.Appx. 154, 155 (Fed.Cir.2009) (stating that an accounting should be ordered in order to adequately compensate the plaintiff). WhitServe states that the jury’s verdict “was based

on financial data up to March 31, 2010, and therefore does not include compensatory damages for CPI’s infringement after this date.” CPI argues that the jury’s award was a paid-up license and no accounting is necessary.

“District courts have broad discretion to interpret an ambiguous verdict form, because district courts witness and participate directly in the jury trial process.” *Telcordia*, 612 F.3d at 1378. Here, however, not only did the trial court not exercise its discretion under *Telcordia* and find that the jury award included a paid-up license for post-verdict conduct, but we have already found that nothing in the record would support such a conclusion. Much like prejudgment interest, therefore, the trial court abused its discretion when it failed to award, or explain its reasons for denying, damages for the period between the jury’s verdict and judgment. Accordingly, we vacate and remand this ruling. While we would normally direct an accounting of damages flowing from post-verdict and pre-judgment infringement, our decision to vacate the damages award and order a new trial would make such an accounting premature. On remand, the trial court shall give due consideration to any request for an accounting following a new damages verdict.²⁰

III. Whitmyer’s Cross-Appeal

[56, 57] In his separate cross-appeal, Whitmyer claims the court erred in not awarding fees under 35 U.S.C. § 285 or sanctions under Federal Rule of Civil Procedure 11. A district court’s Rule 11 determination is reviewed for an abuse of discretion. *Antonious v. Spalding & Evensflo Cos., Inc.*, 275 F.3d 1066, 1072 (Fed. Cir.2002). A fee award under 35 U.S.C. § 285 first requires a finding that the case

20. WhitServe asks the court to fix damages for the period of time between March 31,

2010 and trial. This request is moot in light of the remand for a new damages trial.

was exceptional. *Forest Labs., Inc. v. Abbott Labs.*, 339 F.3d 1324, 1327 (Fed.Cir. 2003). Whitmyer asked for sanctions and fees against CPi because CPi allegedly engaged in “vexatious” litigation. The trial court denied the motion because Whitmyer “failed to set forth facts warranting such relief.”

On appeal, Whitmyer complains that CPi filed a declaratory judgment against him in his personal capacity and deposed him 5 times for a total of 17 hours. CPi states that Whitmyer was deposed in his personal capacity as the sole principal of WhitServe and NetDocket and as a member of the St. Onge law firm, which is NetDocket’s sole client and is representing Whitmyer in this matter. CPi also argues that, because WhitServe’s only assets are the patents, it was justified in counterclaiming against him personally in order to pierce the corporate veil and recover its fees. It also points out that Whitmyer never filed, or withdrew, any motions that argued that CPi failed to plead sufficient claims against Whitmyer, and thereby conceded that CPi was not acting vexatiously. While CPi’s claims against Whitmyer are certainly questionable, including its original designation of him as a “counterclaim defendant,” after reviewing Whitmyer’s motion for fees and sanctions, as well as his truncated briefing on the issue, we decline to find an abuse of discretion in the court’s denial of sanctions. We also find that the court did not err in concluding that the case was not exceptional. Therefore, the trial court’s denial of Whitmyer’s request for fees and sanctions is affirmed.

SUMMARY

- 1) The jury verdict of infringement is affirmed with regard to the valid claims.
- 2) The jury verdict finding the '007 patent to be not anticipated by the

Schrader Patent is affirmed in part. The jury’s verdict regarding claim 10 of the '007 is reversed because that claim is invalid as anticipated by the Schrader Patent.

- 3) The jury’s damages award is vacated and remanded for a new trial.
- 4) The trial court’s holdings regarding WhitServe’s post-trial motions for a permanent injunction, compulsory license, prejudgment interest, enhanced damages, attorneys’ fees, and a post-trial accounting are vacated and remanded.
- 5) The trial court’s denial of Whitmyer’s request for sanctions and fees is affirmed.

AFFIRMED-IN-PART, REVERSED-IN-PART, VACATED-IN-PART, AND REMANDED.

Costs

No costs.

MAYER, Circuit Judge, dissenting.

I respectfully dissent. There can be no infringement of U.S. Patent Nos. 5,895,468, 6,049,801 and 6,182,078 (collectively the “WhitServe patents”) because they are invalid. The WhitServe patents are “barred at the threshold by [35 U.S.C.] § 101,” *Diamond v. Diehr*, 450 U.S. 175, 188, 101 S.Ct. 1048, 67 L.Ed.2d 155 (1981), because they are directed to the abstract idea that it is useful to provide people with reminders of approaching due dates and deadlines. See *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, — U.S. —, 132 S.Ct. 1289, 1303, 182 L.Ed.2d 321 (2012) (explaining that section 101 performs a vital “screening function”); *Bilski v. Kappos*, — U.S. —, 130 S.Ct. 3218, 3225, 177 L.Ed.2d 792 (2010) (noting that whether claims are directed to statutory subject matter is a “threshold test”).

I.

In *Bilski*, the Supreme Court rejected an application because it did not “add” anything to the otherwise abstract idea of minimizing economic risk. 130 S.Ct. at 3231. The claimed method failed to meet section 101’s eligibility requirements because it simply described the idea of hedging against economic risk and applied it using “familiar statistical approaches” and “well-known random analysis techniques.” *Id.* at 3224, 3231. In *Mayo*, likewise, process claims were invalidated under section 101 because they merely described a law of nature and applied it using “well-understood, routine, [and] conventional” means. 132 S.Ct. at 1294.

A similar analysis applies here. Prior to the “invention” disclosed in the WhitServe patents, attorneys and other professionals used manual docketing systems to keep track of upcoming deadlines for their clients. See U.S. Patent No. 5,895,468 col. 1 ll. 10–57. These manual docketing systems were inefficient and time-consuming because they required an attorney or other professional to “examin[e] a calendar periodically to notice upcoming deadlines,” and to “send [a client] multiple reminders if necessary.” *Id.* col. 1 ll. 38–41. “Another disadvantage” of these docketing systems was that they did “not employ modern computer communications media, such as the Internet.” *Id.* col. 1 ll. 54–56. The WhitServe patents purport to solve these problems by disclosing the use of general purpose computers and the Internet to keep track of upcoming client deadlines and to generate client reminders that such deadlines are approaching. See *id.* col. 2 ll. 21–22 (explaining that the claimed system “automatically prepares reminders . . . for client due dates”); see also *id.* col. 2 ll. 24–25 (stating that the system “transmits reminders” of client due dates “over the Internet”).

Because the WhitServe patents simply describe a basic and widely-understood concept—that it is useful to provide people with reminders of important due dates and deadlines—and then apply that concept using conventional computer technology and the Internet, they fail to meet section 101’s subject matter eligibility requirements. “While running a particular process on a computer undeniably improves efficiency and accuracy, cloaking an otherwise abstract idea in the guise of a computer-implemented claim is insufficient to bring it within section 101.” *MySpace, Inc. v. Graphon Corp.*, 672 F.3d 1250, 1267 (Fed. Cir.2012) (Mayer, J., dissenting) (footnote omitted); see *Bancorp Servs., LLC v. Sun Life Assurance Co.*, 687 F.3d 1266 (Fed. Cir.2012) (concluding that claims directed to a computerized method of managing a stable value protected life insurance policy fell outside section 101); *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012) (holding that claims drawn to a method of applying for credit did not satisfy section 101, notwithstanding the fact that they contained a limitation requiring the invention to be “computer aided”); *Fort Props., Inc. v. Am. Master Lease LLC*, 671 F.3d 1317, 1323 (Fed. Cir.2012) (concluding that claims which recited “using a computer” in implementing an otherwise abstract investment idea were patent-ineligible); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir.2011) (emphasizing “that the basic character of a process claim drawn to an abstract idea is not changed by claiming only its performance by computers, or by claiming the process embodied in program instructions on a computer readable medium”).

“[L]imiting an abstract idea to one field of use or adding token postsolution components [does] not make the concept patentable.” *Bilski*, 130 S.Ct. at 3231. Accord-

ingly, the fact that the claimed system is arguably limited to communications between attorneys and other professionals and their clients is insufficient to bring it within the ambit of section 101. Likewise, the fact that the WhitServe patents contain both method and apparatus claims is insufficient to render them patent-eligible. See *Bancorp*, 687 F.3d at 1277 (“[T]he district court correctly treated the asserted system and medium claims as no different from the asserted method claims for patent eligibility purposes.”); *CLS Bank Int’l v. Alice Corp.*, 685 F.3d 1341, 1353 (Fed.Cir.2012) (“Because mere computer implementation cannot render an otherwise abstract idea patent eligible, the analysis . . . must consider whether the asserted claims (method, system, and media) are substantively directed to nothing more than a fundamental truth or disembodied concept. . . .” (citations omitted)). When assessing whether method or apparatus claims meet the requirements of section 101, patent eligibility does not “depend simply on the draftsman’s art.” *Parker v. Flook*, 437 U.S. 584, 593, 98 S.Ct. 2522, 57 L.Ed.2d 451 (1978).

Because the patent system is designed to promote “the public disclosure of new and useful advances in technology,” *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 63, 119 S.Ct. 304, 142 L.Ed.2d 261 (1998), the section 101 analysis turns on whether the claims disclose some new technology or “inventive concept,” *Mayo*, 132 S.Ct. at 1294, for applying an abstract idea or law of nature. Section 101’s prerequisites cannot be satisfied where, as here, a patentee simply describes a well-known concept and applies it using conventional computer technology and the Internet. See *Mayo*, 132 S.Ct. at 1302 (concluding that a process for calibrating the proper dosage of thiopurine drugs fell outside section 101 because it “add[ed] nothing of significance” to the application of a law of nature).

II.

“[A] court may consider an issue antecedent to . . . and ultimately dispositive of the dispute before it, even an issue the parties fail to identify and brief.” See *U.S. Nat’l Bank v. Indep. Ins. Agents*, 508 U.S. 439, 447, 113 S.Ct. 2173, 124 L.Ed.2d 402 (1993) (citations and internal quotation marks omitted). It is appropriate to take up an issue not specifically raised by the parties where there have been significant changes in applicable law since the trial court’s decision. See *Hormel v. Helvering*, 312 U.S. 552, 558, 61 S.Ct. 719, 85 L.Ed. 1037 (1941); see also *Kamen v. Kemper Fin. Servs., Inc.*, 500 U.S. 90, 99, 111 S.Ct. 1711, 114 L.Ed.2d 152 (1991) (“When an issue or claim is properly before the court, the court is not limited to the particular legal theories advanced by the parties, but rather retains the independent power to identify and apply the proper construction of governing law.”).

When it was before the trial court, Computer Packages, Inc. (“CPI”) unsuccessfully sought to obtain a declaratory judgment that the WhitServe patents were invalid under section 101. See Joint App’x 136, 142. Although CPI did not include a discussion of section 101 when it filed its appeal briefs here, we can take it up because the Supreme Court’s *Mayo* decision, which issued after CPI’s briefs were filed, makes clear that the Whit-Serve patents disclose no “‘inventive concept,’” 132 S.Ct. at 1294, that would even arguably confer patent eligibility. See *Forshey v. Principi*, 284 F.3d 1335, 1356 (Fed.Cir.2002) (en banc) (“[D]ecision of an issue not decided or raised below is permitted when there is a change in the jurisprudence of the reviewing court or the Supreme Court after consideration of the case by the lower court.”). The majority errs in refusing to

address the question of whether the Whit-Serve patents meet section 101's eligibility requirements and in requiring CPI to return to the trial court to relitigate the appropriate measure of damages for its alleged infringement of plainly invalid claims. See *Bradley v. Sch. Bd. of Richmond*, 416 U.S. 696, 711, 94 S.Ct. 2006, 40 L.Ed.2d 476 (1974) (“[A] court is to apply the law in effect at the time it renders its decision, unless doing so would result in manifest injustice or there is statutory direction or legislative history to the contrary.”); *Hormel*, 312 U.S. at 557, 61 S.Ct. 719 (“Rules of practice and procedure are devised to promote the ends of justice, not to defeat them. A rigid and undeviating judicially declared practice under which courts of review would invariably and under all circumstances decline to consider all questions which had not previously been specifically urged would be out of harmony with this policy.”).



In re RAMBUS INC.

No. 2011-1247.

Reexamination No. 90/010,420.

United States Court of Appeals,
Federal Circuit.

Aug. 15, 2012.

Background: Patentee appealed final decision of the United States Patent and Trademark Office, Board of Patent Appeals and Interferences, 2011 WL 121775, in reexamination in which claim of patent for a method of operation for a synchronous memory device was found invalid as anticipated.

Holdings: The Court of Appeals, Linn, Circuit Judge, held that:

- (1) “memory device” in patent claim meant a component of a memory subsystem not limited to a single chip, where the device might have a controller that provided the logic necessary to receive and output specific data, and
- (2) Board’s determination, that patent claim was invalid as anticipated by prior art, was supported by substantial evidence.

Affirmed.

1. Patents ⇌324.5

Patent claim construction is a question of law that the Court of Appeals reviews de novo.

2. Patents ⇌140

While patent claims are generally given their broadest possible scope during prosecution, the Board of Patent Appeals and Interferences’ review of the claims of an expired patent during reexamination is similar to that of a district court’s review.

3. Patents ⇌314(5)

Anticipation of a patent by the prior art is a question of fact.

4. Patents ⇌113(6)

Court of Appeals upholds the Board of Patent Appeals and Interferences’ factual determinations unless they are not supported by substantial evidence.

5. Patents ⇌101(11)

“Memory device,” in claim in patent for method of operation of a synchronous memory device, meant a component of a memory subsystem, not limited to a single chip, where the device might have a controller that, at least, provided the logic necessary to receive and output specific data, but did not perform the control func-