

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF IOWA
CEDAR RAPIDS DIVISION

TRANSAMERICA LIFE INSURANCE
COMPANY, WESTERN RESERVE
LIFE ASSURANCE CO. OF OHIO, and
TRANSAMERICA FINANCIAL LIFE
INSURANCE COMPANY,

Plaintiffs,

vs.

LINCOLN NATIONAL LIFE
INSURANCE COMPANY,

Defendant.

No. C 06-110-MWB

MEMORANDUM OPINION AND
ORDER ON MOTIONS RELATING
TO TRANSAMERICA'S
COMPLIANCE WITH PERMANENT
INJUNCTION

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After a jury verdict finding patent infringement and awarding damages based on a reasonable royalty rate, and after the court's entry of a permanent injunction against further infringement, the parties in this litigation have filed post-trial motions concerning the infringer's compliance with the permanent injunction. The infringer asserts that changed circumstances, consisting of its implementation of various "design arounds," make prospective application of the permanent injunction inequitable and, indeed, that one of its "design arounds" warrants refund of the royalties that it has paid since implementing that "design around." The patent holder asserts that the infringer's "design arounds" still infringe, so that, pursuant to the terms of the permanent injunction, the patent holder is now entitled to a further royalty, at a further enhanced rate, for continued infringement.

I. INTRODUCTION

A. Background

1. The lawsuit

On August 8, 2006, Transamerica Life Insurance Company, Western Reserve Life Assurance Co. of Ohio, and Transamerica Financial Life Insurance Company, collectively “Transamerica,” filed a Complaint For Declaratory Judgment (docket no. 1) initiating this action. In its Complaint, Transamerica asserted, in essence, that it is not infringing a patent held by Lincoln National Life Insurance Company (Lincoln) by selling various annuity product contracts. Transamerica also alleged that the patent-in-suit is invalid on “anticipation” and “obviousness” grounds, pursuant to 35 U.S.C. §§ 102 and 103, respectively, and subsequently clarified in amended pleadings that it was also asserting invalidity of the patent for an “inadequate specification,” pursuant to 35 U.S.C. § 112. *See* Amended And Substituted Complaint (docket no. 52).¹ In contrast, in an Answer To Plaintiffs’ Complaint And Patent Infringement Counterclaim (docket no. 14), filed December 29, 2006, Lincoln sought declarations that the patent-in-suit is not invalid and that Transamerica is infringing the patent, as well as damages for infringement, injunctive relief from such infringement, and reasonable attorney fees for litigating this matter.

¹The court subsequently denied as untimely Transamerica’s motion to amend its pleadings further to assert invalidity of the patent-in-suit for “absence of patent-eligible subject matter,” pursuant to 35 U.S.C. § 101 and *In re Bilski*, 545 F.3d 943 (Fed. Cir. 2008) (*en banc*). *See* Memorandum Opinion And Order Regarding Transamerica’s Motions To Amend Pleadings (docket no. 167); *Transamerica Life Ins. Co. v. Lincoln Nat’l Life Ins. Co.*, 590 F. Supp. 2d 1093 (N.D. Iowa 2008).

2. *The patent and the constructions of pertinent terms*

This litigation involves United States Patent No. 7,089,201 B1 (the ‘201 patent), entitled “METHOD AND APPARATUS FOR PROVIDING RETIREMENT INCOME BENEFITS,” which is assigned to Lincoln. In pertinent part, the ‘201 patent is a “business method” patent. *See State Street Bank & Trust Co. v. Signature Fin. Group, Inc.*, 149 F.3d 1368, 1375 (Fed. Cir. 1998) (taking the opportunity “to lay [to rest] this ill-conceived notion” that a method of doing business was not “within the statutory classes” of patentable inventions); *accord In re Comiskey*, 499 F.3d 1365, 1374 (Fed. Cir. 2007) (explaining that *State Street Bank* held that patentability of a business method “does ‘not turn on whether the claimed subject matter does “business” instead of something else’” (quoting *State Street Bank*, 149 F.3d at 1377)). The business methods claimed in the ‘201 patent are “[c]omputerized methods for administering variable annuity plans.” The ‘201 patent, Abstract.

Independent Claim **35** of the ‘201 patent, the claim at issue for present purposes, claims a five-step computerized method for administering a variable annuity plan having, *inter alia*, a guaranteed minimum payment feature associated with a systematic withdrawal program. Claim **35** is quoted below, with bold text indicating claim terms for which the parties had agreed on a construction and italicized text indicating claim terms for which the parties disputed the proper construction.

35. A computerized method for administering a *variable annuity plan having a guaranteed minimum payment feature associated with a systematic withdrawal program*, and for *periodically determining an amount of a scheduled payment to be made to the owner under the plan*, **comprising the steps of:**

- a) **storing data relating to a variable annuity account**, including data relating to at least one of

- an account value, a withdrawal rate, a scheduled payment, a payout term and a period of benefit payments;*
- b) *determining an initial scheduled payment;*
 - c) *periodically determining the account value associated with the plan and making the scheduled payment by withdrawing that amount from the account value;*
 - d) *monitoring for an unscheduled withdrawal made under the plan and adjusting the amount of the scheduled payment in response to said unscheduled withdrawal; and*
 - e) *periodically paying the scheduled payment to the owner for the period of benefit payments, even if the account value is exhausted before all payments have been made.*

In a Memorandum Opinion And Order Regarding Construction Of Disputed Patent Claim Terms (the *Markman* Ruling)² (docket no. 64), entered March 10, 2008, the court adopted the parties' agreed constructions of certain terms and construed the disputed claim terms. *See Transamerica Life Ins. Co. v. Lincoln Nat'l Life Ins. Co.*, 550 F. Supp. 2d 865 (N.D. Iowa 2008). As to the language of Claim 35 at issue here, the parties agreed that "comprising the steps of" is open-ended language meaning that the method includes the steps listed in the claim, but is not limited to those steps or the order in which the steps are recited in the claim. They also agreed that "storing data relating to a variable annuity account" means "storing information relating to a variable annuity account." The disputed claim terms of Claim 35, the parties' proffered constructions of those terms, and the court's determination of the appropriate constructions are set forth in the following table:

²*See Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996).

THE '201 PATENT

THE '201 PATENT					
Claim Term		Lincoln's Construction	The Transamerica Plaintiffs' Construction	Court's Construction	
Claim 35 (Preamble)					
a.	Annuity	A contract that guarantees the payment or distribution of a sum of money at intervals of time.	[None offered.]	A contract that guarantees the payment or distribution of a sum of money at intervals of time.	
b.	Variable annuity	An annuity in which the owner bears the investment risks, as opposed to a "fixed annuity," in which the insurer bears the investment risks.	A contract that pays an annuitant "benefit payments" of which the amounts vary in accordance with the market value of the securities in the separate account of the insurer on the respective valuation days.	An annuity contract in which the account value may vary with time, depending on the performance of the fund(s) in which deposits have been invested, and the dollar amount of the annuity benefit payments may also vary depending upon the account value at each succeeding valuation date.	

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Claim Term		Lincoln's Construction	The Transamerica Plaintiffs' Construction	Court's Construction
Claim 35 (Preamble) (continued)				
c.	Systematic withdrawal program	A process for distributing money from a deferred annuity contract without requiring the owner to irrevocably exchange or relinquish the account value and without any guarantee that distributions will continue.	Required "scheduled payments" taken from the "account value" and made to the owner or beneficiary at the predetermined intervals established by the "period of benefit payment" during the "payout term."	A program for withdrawals from an active, unannuitized deferred annuity contract (or mutual fund) that, as an alternative to annuitization, provides full liquidity and provides for distributing retirement income to contract holders in the form of scheduled withdrawals that are set either at a specified dollar level or as a percent of account value in which the insurer must allow and pay the full scheduled withdrawal or make it available to the contract holder, but the contract holder may elect to take none, some, or all of the scheduled withdrawal up to the specified dollar level or specified percent of account value.

THE '201 PATENT

Claim Term	Lincoln's Construction	The Transamerica Plaintiffs' Construction	Court's Construction	
Claim 35 (Preamble) (continued)				
d.	Guaranteed minimum payment feature associated with a systematic withdrawal program	Distributions or disbursements of money from an annuity plan that do not exceed a predetermined percentage established by the insurer and that are guaranteed by the insurer without a relinquishment of account value by the owner.	"Guaranteed minimum payment feature" means that the "scheduled payment" will not fall below an amount (floor) predetermined by the insurance company. Therefore, "guaranteed minimum payment feature associated with a systematic withdrawal program" means required "scheduled payments" of an amount equal or greater than a preset minimum (floor) level made on a periodic basis during a systematic withdrawal program.	A feature of a systematic withdrawal program in which the insurer guarantees that withdrawals of at least a predetermined percentage of the initial account value or the account value at some subsequent date, as provided under the terms of the plan, for a given withdrawal frequency will last the period prescribed, if the (actual) withdrawals under the systematic withdrawal program do not exceed that predetermined percentage.
e.	Scheduled payment	A distribution or disbursement of money in accordance with the guarantees of an annuity plan.	A required monetary distribution taken from the "account value" of at least the guaranteed (floor) amount periodically paid at the predetermined intervals established by the "period of benefit payments" during the "systematic withdrawal program."	One of the systematic withdrawals, in a guaranteed minimum amount, to be made to the owner under a systematic withdrawal program of a variable annuity plan.

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Claim Term		Lincoln's Construction	The Transamerica Plaintiffs' Construction	Court's Construction
Claim 35 (Preamble) (continued)				
f.	Periodically determining an amount [of a scheduled payment]	From time to time calculating or establishing the amount of money to be distributed or disbursed in accordance with the guarantees of the annuity plan.	The action undertaken at time intervals established by the "period of benefit payments" in which the insurance company authoritatively sets the amount of the required "scheduled payment" based upon the performance of the investments within the variable annuity account (net investment returns) as a necessary precursor to calculating and making the next required, minimum "scheduled payment" of at least the guaranteed (floor) amount.	At the regular intervals for scheduled payments, calculating the amount of a scheduled payment based on the account value associated with the plan.
Claim 35 (Step a)				
g.	Account value	The dollar value of or amount of proceeds associated with a variable annuity account, that includes deposits and earnings, less disbursements, withdrawals or payments, benefits, and charges.	A monetary value that is maintained on a variable annuity contract upon which the required "scheduled payments" are based.	The dollar or monetary value associated with a variable annuity contract at a given time or valuation date, including deposits and investment return, less withdrawals or payments, fees, and expenses.

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Claim Term		Lincoln's Construction	The Transamerica Plaintiffs' Construction	Court's Construction
Claim 35 (Step a) (continued)				
h.	Withdrawal rate	A percentage that may be applied when determining amounts to be distributed.	A predetermined percentage of the "account value" which percentage is established by the insurance company for a given "scheduled payment" made during the "systematic withdrawal program."	A percentage rate, established by the insurer, of the initial account value or the account value at some subsequent date, as provided under the terms of the plan, that determines the "guaranteed minimum payment" for "scheduled payments" in the "systematic withdrawal program."
i.	Payout term	The time period (e.g., lifetime) for which distributions or disbursements of money are guaranteed under the annuity plan.	The duration of the systematic withdrawal program during the post-annuitization phase (also called the payout phase or distribution phase) of the "variable annuity" during which required "scheduled payments" are made by the insurance company.	The length of time for which systematic withdrawals (scheduled payments) of a systematic withdrawal program are guaranteed under the terms of the variable annuity plan.
j.	Benefit payments	The "scheduled payments" referenced above.	Income payments made in the post-annuitization phase (also called the payout phase or distribution phase) of the "variable annuity."	Scheduled payments.

THE '201 PATENT

Claim Term		Lincoln's Construction	The Transamerica Plaintiffs' Construction	Court's Construction
Claim 35 (Step a) (continued)				
k.	Period of benefit payments	The frequency of distributions or disbursements of money (e.g., yearly, monthly, etc.).	The frequency or interval (a length of time) between "scheduled payments" (i.e., monthly distributions, quarterly distributions, semi-annual distributions, or annual distributions) during the "payout term" of the systematic withdrawal program.	The interval between or cycle of benefit payments.
Claim 35 (Step b)				
1.	Determining an initial scheduled payment	"Determining" is an act of calculating or establishing. "Initial scheduled payment" means a first amount of money to be distributed in accordance with the guarantees of the variable annuity plan.	The authoritative decision and action by the insurance company to set a dollar amount level for the first required distribution from the "account value" made during the "period of benefit payments" to the contract owner or beneficiary.	Calculating the amount of a first scheduled payment of a systematic withdrawal program based on the account value associated with the plan.

THE '201 PATENT

Claim Term		Lincoln's Construction	The Transamerica Plaintiffs' Construction	Court's Construction
Claim 35 (Step c)				
m.	Periodically determining account value	From time to time calculating the account value.	The action by the insurance company to calculate the net investment return of the "variable annuity account" at the predetermined intervals established by the "period of benefit payments" as a necessary precursor to calculating and making the next required "scheduled payment" of at least the guaranteed (floor) amount taken from the "account value."	At the regular intervals for scheduled payments, calculating the dollar or monetary value associated with a variable annuity contract, including deposits and investment return, less withdrawals or payments, fees, and expenses.
n.	Making the scheduled payment [by withdrawing that amount from the account value]	Distributing money from the account value in accordance with the guarantees of the variable annuity plan.	The action by the insurance company of periodically paying the required distribution at the predetermined intervals established by the "period of benefit payments" during the "systematic withdrawal program."	The claim term requires no further construction.

THE '201 PATENT

THE '201 PATENT					
Claim Term		Lincoln's Construction		The Transamerica Plaintiffs' Construction	Court's Construction
Claim 35 (Step d)					
o.	Monitoring	An act of observing, checking or keeping track of.		[None offered.]	The act of observing, checking, or keeping track of.
p.	Unscheduled withdrawal	A withdrawal means that exceeds a predetermined percentage established by the insurer to keep the guaranteed payment program in place.		A discretionary monetary distribution of an amount set by the authoritative decision of the contract owner or beneficiary made by the insurance company on a date selected by the contract owner or beneficiary. An "unscheduled withdrawal" is always an excess withdrawal in that it exceeds the "withdrawal rate" and the guaranteed minimum payment feature. An "unscheduled withdrawal" is never a "scheduled payment."	A withdrawal by the contract holder that is in excess of the predetermined percentage established by the insurer to keep the guaranteed payment program in place and that may be made at a different time than a scheduled payment.

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Claim Term		Lincoln's Construction	The Transamerica Plaintiffs' Construction	Court's Construction
Claim 35 (Step d) (continued)				
q.	Adjusting the amount of the scheduled payment in response to said unscheduled withdrawal	Reducing the amount of the scheduled payment in response to an unscheduled withdrawal.	The actions by the insurance company of reducing the "account value" maintained under the annuity contract by the amount of the "unscheduled withdrawal" and calculating the decrease factor resulting in a reduction of the amount of the required "scheduled payments" to be made for the remainder of the "payout term" of the "systematic withdrawal program."	Reducing the amount of the scheduled payment in response to said unscheduled withdrawal.
Claim 35 (Step e)				
r.	Periodically paying the scheduled payment to the owner for the period of benefit payments even if the account value is exhausted before all payments have been made	The guarantee of scheduled distributions or disbursements of money will continue if the account value reaches zero or an amount less than the amount of the scheduled payment during the payout term.	Making the required scheduled distribution of at least the guaranteed (floor) amount taken from the "account value" at predetermined intervals during the postannuitization phase (also called the payout phase or distribution phase) of the "variable annuity," and "before all payments have been made" means during the "payout term" of the "systematic withdrawal program."	At the regular intervals required by the plan, paying the scheduled payment to the owner for the period of benefit payments, even if the account value is less than the scheduled payment amount or zero before all payments guaranteed under the plan have been made.

3. *The jury verdict, post-trial motions, and permanent injunction*

On February 13, 2009, a jury found infringement by Transamerica of all pertinent claims the '201 patent beginning August 8, 2006; awarded damages for a reasonable royalty from the infringement date to the time of trial in the amount of \$13,098,349, at a royalty rate of 11 basis points, with a base of \$11,907,589,871; and rejected all of Transamerica's invalidity claims. *See* Verdict Form (docket no. 276). By Memorandum Opinion And Order (docket no. 313), dated June 8, 2009, the court denied Transamerica's post-trial motions, granted Lincoln's post-trial motion for a Permanent Injunction, and granted Lincoln's motion for prejudgment interest. *See Transamerica Life Ins. Co. v. Lincoln Nat'l Life Ins. Co.*, 625 F. Supp. 2d 702 (N.D. Iowa 2009).

Somewhat more specifically, the Permanent Injunction entered by the court on June 8, 2009, (1) enjoined Transamerica from using and continuing to use a claimed computerized method or one that was not "colorably distinct" to administer variable annuity riders, including riders with certain specified annuities; (2) required an accounting and payment by Transamerica of a royalty at the rate of 11 basis points, as determined by the jury for pre-trial infringement, for the time from trial to commencement of the injunction (five months); (3) gave Transamerica ten days from the date of the Permanent Injunction to implement non-infringing alternatives and provided that, ninety days after the implementation period, Transamerica had to provide an accounting and pay a royalty at the rate of 22 basis points for using the claimed method or a method that was not "colorably distinct" for any riders during that ninety-day period; and (4) provided that, if, at the end of the ninety-day period (*i.e.*, one hundred days after entry of the Permanent Injunction), Transamerica had failed to show to Lincoln's "reasonable satisfaction" that Transamerica had ceased using a claimed method or a method that is not "colorably distinct" from a claimed method, Lincoln "may" move the court for an accounting and a

further royalty payment at a further enhanced rate of 44 basis points. *See* Permanent Injunction (docket no. 313).³

³The text of the Permanent Injunction, in its entirety, is as follows:

This matter comes before the court pursuant to Lincoln's March 4, 2009, Motion For Permanent Injunction And Alternative Relief (docket no. 280), following a jury verdict of patent infringement in favor of Lincoln and against defendants Transamerica Life Insurance Co., Western Reserve Life Assurance Co. of Ohio, and Transamerica Financial Life Insurance Co. (collectively "Transamerica"). Transamerica filed a Brief In Support Of Resistance To Lincoln's Motion For Permanent Injunction And Alternative Relief (docket no. 301) on April 6, 2009, and Lincoln filed a Reply In Support Of Its Motion For Permanent Injunction And Alternative Relief (docket no. 304) on April 21, 2009. At the court's request, Lincoln tendered a Proposed Permanent Injunction Order (docket no. 310) and Transamerica filed Comments on the Proposed Permanent Injunction Order (docket no. 312). The court has fully considered the motion and resistance, along with the proposed order and comments, and expressly finds that (1) because Lincoln and Transamerica are direct competitors, among other reasons, Lincoln will be irreparably harmed without an injunction; (2) in light of the statutory right to exclude and, again, the fact that Lincoln and Transamerica are direct competitors, the remedies at law are inadequate to compensate Lincoln for its injuries; (3) a permanent injunction will not harm Transamerica, who has argued it has many non-infringing alternatives; and (4) the public interest in enforcing valid patents fully supports entry of a permanent injunction.

Accordingly, Lincoln's March 4, 2009, Motion For Permanent Injunction And Alternative Relief (docket no. 280) is **granted** on the terms stated herein.

THEREFORE, IT IS ORDERED, ADJUDGED, AND DECREED as follows:

(continued...)

³(...continued)

1. Defendants Transamerica Life Insurance Company, Transamerica Financial Life Insurance Company, and Western Reserve Life Assurance Company of Ohio (collectively “Transamerica”); their officers, agents, servants, employees, and attorneys who receive actual notice of this order by personal service or otherwise; and other persons who receive actual notice of this order by personal service or otherwise who are in active concert or participation with any of the persons previously listed, are, for the duration of United States Patent No. 7,089,201 (the “‘201 Patent”), **permanently enjoined and restrained** from infringing Claims **35** through **39** and **42** of the ‘201 Patent **in the following ways:**

Using and continuing to use a claimed computerized method or any computerized method that is not colorably distinct from a claimed computerized method to administer variable annuity riders, including using or continuing to use any such method to administer variable annuities with Guaranteed Principal Solution, 5 for Life, 5 for Life with Growth, Income Select for Life, and/or Retirement Income Choice riders.

2. Transamerica shall, within thirty (30) days of this Order, provide to counsel for Lincoln an accounting of the cumulative account values of the variable annuities with Guaranteed Principal Solution, 5 for Life, 5 for Life with Growth, Income Select for Life, and/or Retirement Income Choice riders as of the date of this Order, together with a royalty payment (determined by multiplying the cumulative account value by 0.11% and prorated (5 months/12)) to compensate Lincoln for Transamerica’s infringement during 2009 through commencement of the permanent injunction.

3. Transamerica shall have ten (10) days from the date of this order (the “implementation period”) in which to disseminate this permanent injunction order and to implement

(continued...)

The Permanent Injunction was entered after soliciting a proposed permanent injunction from Lincoln, *see* Order (docket no. 309); Lincoln’s Proposed Permanent Injunction Order (docket no. 310), and objections to the proposed language by Transamerica, *see* Transamerica’s Comments On Proposed Permanent Injunction Order (docket no. 312). The court modified some proposed language for the final version of the Permanent Injunction in light of Transamerica’s objections. *See* Memorandum Opinion And Order (docket no. 313).

³(...continued)

non-infringing alternatives. Ninety (90) days after conclusion of the “implementation period,” Transamerica shall provide counsel for Lincoln with an accounting of the cumulative account values of the variable annuities, including variable annuities with Guaranteed Principal Solution, 5 for Life, 5 for Life with Growth, Income Select for Life, and/or Retirement Income Choice riders, for which it has used a claimed computerized method of administration or a computerized method of administration that is not colorably distinct from a claimed method during that ninety-day period, together with a royalty payment (determined by multiplying the cumulative account value by 0.22% and prorated (3 months/12)) to compensate Lincoln for any infringement by Transamerica after the ten-day “implementation period.”

4. If Transamerica fails to show to Lincoln’s reasonable satisfaction that it has ceased and desisted using a claimed computerized method or a computerized method that is not colorably distinct from a claimed computerized method to administer variable annuities after one hundred (100) days from the date of this Order, Lincoln may move the court for a further accounting and royalty payment at the rate of 0.44% for the period of further infringement.

Permanent Injunction (docket no. 313).

B. Motions Now Before The Court

Two motions are now before the court. The first is Transamerica's October 18, 2009, Motion For Relief From And Modification Of Permanent Injunction And Refund Of Royalty Payments Made Under Protest (docket no. 345) (Transamerica's Motion). The second is Lincoln's November 4, 2009, Motion For A Further Accounting And Ongoing Royalty Payments (docket no. 349) (Lincoln's Motion).

In its motion, Transamerica seeks modification of the Permanent Injunction to allow Transamerica to use three "design arounds," implemented on March 30, 2009, July 6, 2009, and September 12, 2009, respectively, to administer specified riders on the ground that Transamerica's "design arounds" are more than "colorably distinct" from Lincoln's claimed method (*i.e.*, the "design arounds" are not infringing). The March 30, 2009, "design around" purportedly instituted a "manual" method to pay guaranteed benefits when account values were low or exhausted, thereby avoiding infringement of Step (e) of Claim 35 of the '201 patent. The July 6, 2009, "design around," described by Transamerica as an "interim" solution, purportedly "off-shored"⁴ to a Transamerica affiliate in Canada calculations of initial maximum annual withdrawal amounts (MAWAs) for policies with new or upgraded guaranteed minimum withdrawal benefit (GMWB) riders, thereby avoiding infringement of Step (b) of Claim 35 for those new or upgraded riders. The September 12, 2009, "design around" purportedly "off-shored" various calculations to an unrelated third party in Canada, described herein as Citi Canada, so that Transamerica now "determin[es]" the initial scheduled payment under all pertinent riders

⁴At the hearing on the pending motions, the parties agreed with the court that describing Transamerica's performance of some parts of its policy administration in Canada as "off-shore" performance is not strictly accurate, in light of the geography of the United States and Canada. A better description here would be "extraterritorial" performance.

and makes all “adjust[ments]” to the amount of the scheduled payment under those riders in Canada, thereby avoiding infringement of Steps (b) and (d) of Claim **35**. Transamerica also seeks a refund of royalties paid under protest since the March 30, 2009, “design around,” because Transamerica contends that it was not infringing Claim **35** after that “design around.” Lincoln contends that no modification of the Permanent Injunction is appropriate, because Transamerica’s “design arounds” still infringe.

In its motion, Lincoln seeks a further royalty at a further enhanced rate of 44 basis points, pursuant to paragraph 4 of the Permanent Injunction, for continued infringement after one hundred days from entry of the Permanent Injunction, because Lincoln is not “reasonably satisfied” that Transamerica is no longer infringing. Transamerica asserts that such an enhanced royalty rate is a “contempt” penalty, which is not appropriate here, either because Transamerica is no longer infringing or because Transamerica has made good faith efforts to create a non-infringing method.

C. The Evidentiary Hearing

The court held an evidentiary hearing on the motions concerning Transamerica’s compliance with the Permanent Injunction on February 8 and 9, 2010. The parties offered thousands of pages of exhibits, all of which were admitted without objections. *See* Witness And Exhibit List (docket no. 392). However, because the court did not receive those exhibits until the last business day before the hearing, even though the hearing had been set more than two months in advance, the court was unable to review all of the exhibits before the hearing. Under the circumstances, the court did its best to identify and review the most important exhibits prior to the hearing.

Transamerica also presented the testimony of Tracy Martin, its director of post-issue operations and the “lead” from an operational side of planning for the March 30, 2009,

and July 6, 2009, “design arounds”; Keith Neill, Transamerica’s implementation lead for product development, who was responsible, with his staff, for effecting the July 6, 2009, and September 12, 2009, “design arounds” in the Transamerica policy administration system; and Dr. John Patrick Joseph Kelly, a computer scientist and Transamerica’s expert witness concerning the “design arounds” in the Transamerica policy administration system. Lincoln presented the testimony of its expert witness, Richard Romano, the regional practice director for a consulting company that provides professional consultancy services to financial services companies related to program management, business analysis, technical analysis, and quality assurance. Lincoln also submitted deposition designations from depositions on October 14, 2009, of Ms. Martin, Mr. Neill, and Lynn Blankenship, Transamerica’s director of business applications; a deposition on November 4, 2009, of Robert Frederick, senior vice president of Transamerica Life Insurance Company and chief operating officer of Transamerica Capital Management; and a deposition on November 5, 2009, of David Hopewell, chief financial officer for the retail annuity business unit within Transamerica.

The briefing by the parties was very thorough, perhaps even to the point of over-briefing, and counsel were obviously well-prepared for the hearing. Thus, the opening statements were very illuminating, and the examination of witnesses was well-conducted.

D. The Tentative Ruling

At the conclusion of the evidentiary hearing, the court promised the parties that it would, before the end of the following week, provide them with a “tentative draft ruling” on the pending motions for their comment in final closing arguments, to be held telephonically at a later date. The court has followed a similar procedure of providing the parties with tentative draft rulings before final arguments for claim construction rulings in

this and two prior patent cases. *See Transamerica Life Ins. Co.*, 550 F. Supp. 2d at 872; *Ideal Instruments, Inc. v. Rivard Instruments, Inc.*, 498 F. Supp. 2d 1131, 1136 (N.D. Iowa 2007); *Maytag Corp. v. Electrolux Home Prods, Inc.*, 1008, 1015-16 (N.D. Iowa 2006). The court has found that such a procedure is very effective in focusing the parties' arguments on true disputes. The court fulfilled its promise in this case on February 22, 2010, by providing the parties with a "tentative draft ruling" some eighty-two pages in length. That same day, the court entered an Order (docket no. 396, as amended docket no. 397) setting telephonic closing arguments for February 26, 2010.

E. The Closing Arguments And Final Comments

The closing arguments took place, as scheduled, on February 26, 2010. As anticipated, the closing arguments focused on the key disputes in light of the court's "tentative draft ruling," albeit without waiving any prior arguments. The closing arguments were also quite illuminating.

However, apparently not content with the closing arguments on the record, on February 27, 2010, Transamerica's counsel included in an e-mail to the court, intended primarily to convey citations for certain cases referenced in its closing argument, additional argument concerning whether or not facts were in dispute and whether or not expert testimony was appropriate. Lincoln's counsel responded to Transamerica's additional comments in an e-mail of his own on February 28, 2010. With leave of the court, Transamerica then replied by e-mail dated March 1, 2010.

II. ANALYSIS

A. *Standards And Burdens Of Proof*

Prior to the evidentiary hearing, the parties disputed the order of presentation of arguments and evidence at the hearing, the standards and burdens of proof applicable to the motions now pending before the court, and, indeed, the nature of Lincoln's motion. Transamerica filed a Motion For Determination Of The Burdens Of Proof (docket no. 380), on January 19, 2010, seeking expedited pre-hearing determination of these questions. The court summarily denied that motion on January 21, 2010, because Transamerica had had ample opportunity to request such a pre-hearing ruling in the months between filing of the present motions and the evidentiary hearing, but had not done so. The court stated however, that Transamerica, as the first movant, would proceed first at the hearing, unless the parties reached some other agreement. *See* Order (docket no. 381). At the hearing, the parties continued to dispute the applicable standards and burdens of proof, as well as the nature of Lincoln's motion. The court must now resolve those disputes.

1. *Arguments of the parties*

When Transamerica's Motion was the only motion before the court, Transamerica acknowledged that it bore the burden to prove that modification of the Permanent Injunction is appropriate. Transamerica asserted that it was entitled to modification of the Permanent Injunction according to each of three standards. First, Transamerica asserted that it was entitled to modification of the Permanent Injunction pursuant to the first clause of Rule 60(b)(5) of the Federal Rules of Civil Procedure, on the ground that the "judgment has been satisfied, released, or discharged," because it had implemented "design arounds" that were no longer infringing, citing *Newhouse v. McCormick & Co.*, 157 F.3d 582, 584 (8th Cir. 1998). Second, Transamerica asserted that it was entitled to modification of the Permanent Injunction pursuant to the last clause of Rule 60(b)(5), on the ground that

“applying [the judgment] prospectively is no longer equitable,” citing *Horne v. Flores*, 129 S. Ct. 2579, 2593 (2009) (proof that prospective application of a judgment is no longer equitable may include a change in factual conditions or law that renders continued enforcement of the judgment detrimental to the public interest); *Kaler v. Bala*, 571 F.3d 729, 734 (8th Cir. 2009) (modification pursuant to Rule 60(b)(5) (last clause) is appropriate if a critical element of the original ruling no longer exists). Finally, Transamerica asserted that it is entitled to modification of the Permanent Injunction pursuant to what appears to be a “free-standing” equitable standard, based on the court’s equitable power to modify a permanent injunction owing to changed circumstances, citing *Pro Edge L.P. v. Gue*, 411 F. Supp. 2d 1080, 1086-87 (N.D. Iowa 2006) (indicating that this is, in fact, a Rule 60(b)(5) (last clause) standard); *International Rectifier Corp. v. Samsung Elec. Co.*, 361 F.3d 1355, 1359 (Fed. Cir. 2004) (stating that modification of a patent-based injunction should be made after applying Federal Circuit law, and “District courts have broad discretion in determining the scope of injunctive relief, and this court reviews a district court’s decision granting, denying, or modifying an injunction, in a patent case, for abuse of discretion, applying Federal Circuit law,” in turn citing *Carborundum Co. v. Molten Metal Equip. Innovations, Inc.*, 72 F.3d 872, 881 (Fed. Cir. 1995), without reference to Rule 60(b)(5)).

In Lincoln’s Combined Brief (docket no. 349), in resistance to Transamerica’s Motion and in support of its own, Lincoln asserted that, at least as to its own motion, the court has the power to grant the relief necessary to effect compliance with its decree, citing *Hartman v. Lyng*, 884 F.2d 1103, 1106 (8th Cir. 1989). Lincoln then relied on its reading of paragraph 4 of the Permanent Injunction as requiring Transamerica to show that it has made more than colorable changes to its infringing method and that Lincoln’s dissatisfaction with the changes was not “reasonable.” Lincoln conceded that “reasonable

satisfaction” under paragraph 4 is determined objectively, citing *Advantage Consulting Group, Ltd, v. ADT Security Sys., Inc.*, 306 F.3d 582, 589 (8th Cir. 2002), although the “reasonable satisfaction” language at issue in that case pertained to performance of a contract, not to a permanent injunction. Thus, Lincoln contended that the applicable standard, as dictated by paragraph 4 of the Permanent Injunction, was whether or not Lincoln was “reasonably satisfied” that Transamerica was no longer infringing, but Lincoln argued that paragraph 4 places the burden on *Transamerica* to show to the court’s reasonable satisfaction, just as Transamerica had tried to show to Lincoln’s reasonable satisfaction, that Transamerica is *not* infringing.

In Transamerica’s Resistance and Reply (docket no. 364), that is, its resistance to Lincoln’s Motion and its Reply in support of its own Motion, Transamerica asserted that Lincoln’s Motion is for “contempt,” so that Lincoln must prove by clear and convincing evidence that Transamerica is in violation of the Permanent Injunction, citing *Pro Edge L.P. v. Gue*, 377 F. Supp. 2d 694, 698 (N.D. Iowa 2005) (stating that substance, not nomenclature, controls the nature of a motion, although this was not a “contempt” ruling); *Hartman*, 884 F.2d at 1106 (stating that the power to effect necessary relief is the power to craft a remedy for “contempt”); *KSM Fastening Sys., Inc. v. H.A. Jones Co.*, 776 F.2d 1522, 1524 (Fed. Cir. 1985) (the patent holder “bears the heavy burden of proving violation [of an injunction] by clear and convincing evidence” to obtain contempt sanctions); *id.* at 1532 (using “violation of an injunction” and “in contempt of an injunction” interchangeably). Transamerica also argued that contempt is not appropriate when a former infringer has made a good faith effort to modify its infringing conduct, citing *Arbek Mfg. v. Moazzam*, 55 F.3d 1567, 1570 (Fed. Cir. 1995). Transamerica also argued that the following cases explain what is meant by “colorably distinct”: *Acumed LLC v. Stryker Corp.*, 525 F.3d 1319, 1324 (Fed. Cir. 2008); *KSM Fastening Sys., Inc.*

v. H.A. Jones Co., 776 F.2d 1522, 1531-32 (Fed. Cir. 1985). Transamerica argued that, because Lincoln’s motion is for “contempt,” if Lincoln fails to carry its “heavy burden,” then whether the modified method infringes must be determined in a separate action, not a summary contempt proceeding, citing *MAC Corp. of Am. v. Williams Patent Crusher & Pulverizer Co.*, 767 F.2d 882, 885 (Fed. Cir. 1985); *KSM*, 776 F.2d at 1531 (“If substantial issues need to be litigated, particularly if expert and other testimony subject to cross-examination would be helpful or necessary, the court may properly require a supplemental or new complaint.”). In Transamerica’s subsequent motion for pre-hearing determination of burdens (docket no. 380), which the court summarily denied, Transamerica added a citation to *Additive Controls & Measurement Sys. v. Flowdata, Inc.*, 154 F.3d 1345, 1349 (Fed. Cir. 1998) (if there are “substantial open issues” of infringement, then contempt proceedings are inappropriate, and the issue of infringement must be determined in a separate action).

In Lincoln’s Reply (docket no. 369), in support of its Motion, Lincoln asserted that its Motion is not a motion for “contempt,” but a motion pursuant to paragraph 4 of the Permanent Injunction, so that, as the party seeking modification of the Permanent Injunction, and the party on whom paragraph 4 places the burden, Transamerica bears the burden of proving that its “design arounds” are “colorably distinct” and non-infringing, so that Lincoln should have been “reasonably satisfied.”

2. Tentative Analysis

The court tentatively found that the happenstance of the filing of motions by both parties concerning substantially the same issue—Transamerica’s compliance with the Permanent Injunction—does not shift the entire burden to one party or the other. Rather, the court tentatively found that each party continues to bear the appropriate burden of proof otherwise applicable to its motion.

a. The status quo

Specifically, the court tentatively found that the status quo, in the absence of relief to either party, is that Transamerica remains subject to the enhanced royalty rate of 22 basis points provided in paragraph 3 of the Permanent Injunction for failure to implement non-infringing alternatives within the ten-day implementation period. Transamerica can obtain relief from a royalty at that rate only by showing that it is no longer infringing. Similarly, Lincoln can only obtain a higher royalty rate, if Lincoln shows that it is entitled to a further enhancement of the royalty rate. The court did not read the Permanent Injunction to impose a royalty rate of 22 basis points *only* for the 90 days after the ten-day implementation period. Rather, the court read it to impose a royalty rate of 22 basis points after the ten-day implementation period, *unless* further enhancement or other modification is appropriate. Thus, the court tentatively concluded that both parties are attempting to upset the “status quo” of continued royalty payments for continued infringement at the rate of 22 basis points.

b. Transamerica’s burden

The court also tentatively concluded that, to obtain a modification of the Permanent Injunction, Transamerica has the burden to prove that circumstances have changed, so that it is no longer equitable to apply the injunction prospectively. FED. R. CIV. P. 60(b)(5) (last clause). Under Rule 65(b), the party seeking relief from the judgment (or injunction), here Transamerica, bears the burden of establishing that changed circumstances warrant relief. *Horne*, 129 S. Ct. at 2593. Although *International Rectifier Corp. v. Samsung Elec. Co.*, 361 F.3d 1355, 1359 (Fed. Cir. 2004), and the cases cited therein, state that modification of a patent-based injunction should be made after applying Federal Circuit law, and “District courts have broad discretion in determining the scope of injunctive relief,” with no explicit citation to Rule 60(b)(5), the “discretion” to “modify” an

injunction in a patent case is nowhere excluded from Rule 60(b)(5), and the Rule 60(b)(5) (last clause) standard appeared to this court to be an appropriate guide to the court’s exercise of the “discretion” it has under *International Rectifier*. Moreover, the court tentatively found that it may disregard Transamerica’s argument based on Rule 60(b)(5) (first clause)—that Transamerica is entitled to relief because it has “satisfied” the judgment by full compliance with the Permanent Injunction—because the court tentatively found that the disposition of Transamerica’s motion would be the same whether the court uses a “satisfied the judgment” or a “no longer equitable to enforce the injunction” standard.

In its “tentative draft ruling,” in the introduction to its analysis of Transamerica’s Motion, the court added, further, that a showing that any one (or more) of Transamerica’s “design arounds” does not infringe—that is, is more than “colorably distinct” from the infringing method—would plainly be a “significant change in factual conditions” sufficient to render continued enforcement of the Permanent Injunction inappropriate as “detrimental to the public interest.” *Id.*; FED. R. CIV. P. 65(b)(5) (last clause). The court rejected, at least tentatively, any contention that some lesser showing—for example, that Transamerica has made a significant *effort* to create a non-infringing “design around”—is sufficient basis to find that it is no longer equitable to apply the injunction prospectively. The court explained that, in light of the public interest in protecting patent rights, evident from the patent laws themselves, however hard an infringer may have tried to create a non-infringing method, if the resulting “new” method still infringes, it is still subject to an injunction against infringement, and applying the injunction prospectively remains equitable.

c. The nature of Lincoln’s motion and Lincoln’s burden

Transamerica contends that Lincoln’s motion is necessarily one for “contempt,” on which Lincoln bears the burden of proof by “clear and convincing evidence” that

Transamerica is still infringing, and Transamerica can escape a finding of “contempt” by a showing that it has made “good faith” efforts to avoid infringement. The court tentatively concluded that, if the Permanent Injunction consisted of just paragraph 1—the prohibition on using and continuing to use the claimed method or a method that is not colorably distinct from the claimed method to administer certain specified riders—then the court would probably agree with Transamerica that Lincoln’s motion for a further accounting and payment of a further royalty based on continued infringement by Transamerica’s “design arounds” is a motion for “contempt.” See, e.g., *Hartman v. Lyng*, 884 F.2d 1103, 1106 (8th Cir. 1989) (the purposes of contempt power are to effectuate compliance with the court’s order or process and to compensate individuals from harm incurred by noncompliance); *KSM Fastening Sys., Inc. v. H.A. Jones Co., Inc.*, 776 F.2d 1522, 1524 (Fed. Cir. 1985) (explaining when a patent holder’s action is properly considered a “contempt” action and when it should be a separate action).

Here, however, the court tentatively agreed with Lincoln that Lincoln’s motion is for a specific remedy provided in paragraph 4 of the Permanent Injunction. Paragraph 4 provides that, if, at the end of the 100-day period following entry of the Permanent Injunction, Transamerica has failed to show to Lincoln’s “reasonable satisfaction” that Transamerica has ceased using a claimed method or a method that is not “colorably distinct” from a claimed method, Lincoln “may” move the court for an accounting and a further royalty payment at the further enhanced rate of 44 basis points. Thus, the court tentatively concluded that the Permanent Injunction itself provides for the motion that Lincoln has filed and, at least arguably, states the applicable procedure, standards, and burden of proof for resolving that motion.

Lincoln contends that paragraph 4 places the burden on *Transamerica* to show to the court’s reasonable satisfaction, just as Transamerica had to try to show to Lincoln’s

reasonable satisfaction, that Transamerica is *not* infringing. The court disagreed in its tentative ruling. The court tentatively concluded, instead, that whatever burden Transamerica may have had before Lincoln filed its motion, Lincoln now has the burden as the movant pursuant to paragraph 4 to prove whatever is required to obtain a further royalty at a further enhanced rate. This conclusion was again based on the language of the Permanent Injunction, which provides that once Transamerica has attempted to make the showing that it is no longer infringing to Lincoln's "reasonable satisfaction," Lincoln "may" move the court for an accounting and further royalty payment. By authorizing Lincoln to make such a motion, the court tentatively reasoned, paragraph 4 of the Permanent Injunction at least implicitly places the burden on Lincoln to show that it is entitled to the further relief provided in paragraph 4.

As to what Lincoln must prove, under the plain language of the Permanent Injunction, the court tentatively concluded that, to *seek* a further enhancement of the royalty rate to 44 basis points, Lincoln must prove that it was not "reasonably satisfied" that Transamerica's "design arounds" are "colorably distinct" from Transamerica's infringing method. Permanent Injunction, ¶ 4. Lincoln concedes that the "reasonable satisfaction" standard is an "objective" one, but Lincoln assumes that, if it shows that it was not "reasonably satisfied," then it is entitled to a further royalty at a further enhanced rate. In its tentative analysis, the court read paragraph 4 to provide that Lincoln's "reasonable" dissatisfaction just opens the door to the court's consideration, in its discretion, of whether or not to require an accounting and payment of a further royalty at a further enhanced rate. The Permanent Injunction says nothing about the court being required to raise the royalty rate, if Lincoln so moves or if Lincoln was not "reasonably satisfied." Rather, the Permanent Injunction expressly gives Lincoln the discretion to decide whether or not to move for a further enhancement of the royalty rate, if Lincoln is

not “reasonably satisfied.” Permanent Injunction, ¶ 4 (“Lincoln may move the court. . . .”). The court tentatively concluded that paragraph 4 of the Permanent Injunction then leaves the court with the discretion to decide whether or not to require an accounting and payment of a further royalty at a further enhanced rate under the circumstances presented.

In its tentative ruling, the court found the differences between paragraphs 3 and 4 of the Permanent Injunction were instructive. While paragraph 3 provides that Transamerica must do an accounting and pay a royalty at an enhanced rate of 22 basis points for infringement during the 90-day period after the implementation period, without any “trigger” or motion by Lincoln, paragraph 4 provides for a further accounting and further royalty payment at a further enhanced rate of 44 basis points only if Lincoln is not “reasonably satisfied” *and moves the court*. The court tentatively reasoned that court action is required by paragraph 4, but not by paragraph 3, specifically because the court retains the discretion under paragraph 4 to decide whether or not to grant the relief provided in that paragraph.

Thus, pursuant to what the court found was the plain language of paragraph 4 of the Permanent Injunction, the court tentatively concluded that Lincoln must prove the following: (1) that it was not “reasonably satisfied” with Transamerica’s “design arounds,” to “open the door” to the court’s consideration of whether or not to grant further relief, and if Lincoln makes that showing, (2) that a further accounting and payment of a further royalty at a further enhanced rate are appropriate (and for what period of further infringement).

d. The interplay between the motions

The question still remaining after these tentative conclusions was whether resolution of one of the motions before the court has a determinative or preclusive effect on the other

motion now before the court. The court's tentative answer was not necessarily. There is plainly some relationship between whether Transamerica's "design arounds" are more than "colorably distinct" from a claimed method and whether Lincoln's dissatisfaction with those "design arounds" is "reasonable," but the court tentatively concluded that does not mean that those questions are two sides to the same coin.

Specifically, the court reasoned in its tentative draft ruling that, to satisfy its first burden, Lincoln does not have to be *right* that Transamerica's "design arounds" still infringe or are not "colorably distinct" to open the door to the court's consideration of whether Transamerica must pay a further royalty at a further enhanced rate, Lincoln's belief that the "design arounds" still infringe just has to be *objectively reasonable*. Thus, a finding that Lincoln's dissatisfaction was "reasonable" does not foreclose a finding that Transamerica's "design arounds" *are*, in fact, "colorably distinct," and, hence, does not foreclose a finding that it is no longer equitable to apply the injunction prospectively, so that modification of the Permanent Injunction might be appropriate. Similarly, a finding that it is *not* appropriate to enhance the royalty rate further, for equitable reasons that have nothing to do with whether or not the "design arounds" can be found definitively to infringe, even if Lincoln's dissatisfaction with the "design arounds" was "reasonable," would not necessarily mean that Transamerica is entitled to modification of the Permanent Injunction. One example of an equitable reason not to enhance the royalty rate, the court suggested in its tentative ruling, might be that Transamerica has made good faith attempts to design around infringement.

On the other hand, if Transamerica proves that its "design arounds" *are* "colorably distinct," then the court tentatively reasoned that, not only would Transamerica be entitled to modification of the Permanent Injunction, but there would be no question that Lincoln is *not* entitled to a further enhancement of the royalty rate, because it would be inequitable

to require payment of a further royalty, at a further enhanced rate, for using a method that *is* “colorably distinct.” If Transamerica fails to show that modification of the Permanent Injunction is appropriate, then it would be necessary to reach Lincoln’s contention that a further royalty should be paid at a further enhanced rate for continued infringement. Transamerica’s request for a refund of royalties paid under protest likewise depends upon Transamerica making an adequate showing that the March 30, 2009, “design around” was “colorably distinct,” so the issue of whether Transamerica is entitled to a refund of royalties based on that “design around” is subsumed in the question of whether that “design around” avoids infringement.

3. *The parties’ closing arguments*

At the end of its closing argument, Transamerica reiterated its contention that imposing ongoing royalties must be based on a finding of a violation of the permanent injunction under the two-prong test stated in *KSM*. Transamerica argued that it is inappropriate to modify the permanent injunction to impose an ongoing royalty and to force Transamerica to pay until Transamerica proves to this court that its method no longer infringes. Rather, Transamerica asserted that, instead of the present summary proceedings—which Transamerica still asserted are “contempt” proceedings, in light of the size of the ongoing royalties, which makes them “punitive”—the question of whether Transamerica’s “design arounds” still infringe should be decided in a new action, tried to a jury. Transamerica argued that such a course was all the more appropriate, because expert testimony is necessary, and Transamerica (the former infringer) has made a good faith effort to modify its procedures to avoid infringement. Transamerica cited in support of these contentions *Abbott Laboratories v. Torpharm, Inc.*, 503 F.3d 1372 (Fed. Cir. 2007); *Arbek Mfg., Inc.* 55 F.3d at 1570; and *KSM*, 776 F.2d at 1531.

Although Lincoln did not address most of these preliminary points specifically in its closing argument, beyond suggesting that the court had analyzed them properly, Lincoln did devote a significant portion of its closing argument to supporting the court's rejection of the argument that Transamerica's "effort" matters, citing Transamerica's concession at the evidentiary hearing that "effort" does not matter on the purely legal question of whether or not the "design arounds" are colorably different, and *TiVo, Inc. v. Dish Network Corporation*, 640 F. Supp. 2d 853 (E.D. Tex. 2009), as finding "effort" irrelevant to whether or not an infringer was in contempt of a permanent injunction. Lincoln's counsel also did point out in its post-closings e-mail that, even if the proceedings were for "contempt," whether or not expert testimony was required was not dispositive of whether or not summary proceedings or new proceedings were appropriate, citing *Additive Controls*, 154 F.3d at 1349.

4. Final analysis

Transamerica's closing argument has done nothing to convince the court that its tentative analysis of the various preliminary points is erroneous. First and foremost, as explained above, in the court's tentative analysis, which the court now expressly adopts and reaffirms, Lincoln's motion is not a motion for "contempt," but a motion authorized by paragraph 4 of the Permanent Injunction. Second, the court has not herein "modified" the Permanent Injunction to provide for an ongoing royalty, the Permanent Injunction so provided from its filing, because, as the court explained above, the Permanent Injunction established a "status quo" pursuant to which Transamerica must pay an ongoing royalty, at 22 basis points, for ongoing infringement after the ten-day implementation period. Third, Transamerica is the party that sought modification of the Permanent Injunction on the ground that it was purportedly *no longer* infringing. It makes no sense to assert that modification proceedings would have been appropriate for Transamerica to try to show that

it is *no longer* infringing, because of its “design arounds,” but that separate proceedings are now necessary to determine whether or not Transamerica’s “design arounds” still infringe. Fourth, as the *Abbott Laboratories* case now cited by Transamerica makes clear, the need for expert testimony is not dispositive of whether or not separate proceedings are required, even if the present action were one for “contempt.” *See Abbott Labs.*, 503 F.3d at 1379 (citing *Additive Controls*, 154 F.3d at 1349). Consequently, the court now adopts all of the factual findings in Section II.A. of its tentative ruling and, for all of the reasons stated in the tentative ruling and those stated here, expressly reiterates as final its tentative conclusion that the parties’ motions must be adjudicated according to the standards applicable to each, that is, with Transamerica bearing the burden on its motion for modification of the Permanent Injunction to show that its “design arounds” do not infringe, and Lincoln bearing the burden on its motion pursuant to paragraph 4 of the Permanent Injunction to show that it was not reasonably satisfied with Transamerica’s “design arounds” and, further, that it is appropriate for the court to impose an ongoing royalty at a further enhanced rate of 44 basis points.

Turning to the question of the import of any evidence of Transamerica’s “effort” to design around the patent, it is true that the court tentatively rejected the argument that Transamerica’s “effort” matters to the question of whether or not it is equitable to modify the Permanent Injunction pursuant to Rule 65(b) on Transamerica’s Motion, but the court also tentatively concluded that, in the context of Lincoln’s Motion, one example of an equitable reason not to enhance the royalty rate might be that Transamerica has made good faith attempts to design around infringement, *i.e.*, that “effort” does matter in that context. In the *TiVo* decision, on which Lincoln relied to support its closing argument that “effort” does not matter, the infringer had devoted thousands of hours and hundreds of thousands of dollars in attempting to “design around” the patent—indeed, the infringer had “invested

8,000 man-hours of work and over \$700,000 in its redesign efforts,” comparable to, if not more than, the time and expense that Transamerica has invested here. *TiVo*, 640 F. Supp. 2d at 869. Nevertheless, in the context of determining whether the infringer’s redesigned products were colorably different from its original products, the court noted that it would not consider evidence of the amount of money that the infringer spent on advertising, the number of hours that it spent redesigning its modifications, or the fact that it obtained opinions of counsel, but would, instead, “limit[] itself to a comparison between the infringing and modified products in light of the claim language and the Court’s construction thereof.” *Id.*

Similarly, here, for the reasons stated in the tentative ruling, the court reiterates its tentative conclusion that “effort” does not matter to the determination, on Transamerica’s Motion, of whether or not Transamerica has modified its method sufficiently that enforcing the Permanent Injunction is no longer equitable. Specifically, in light of the public interest in protecting patent rights, evident from the patent laws themselves, however hard an infringer may have tried to create a non-infringing method, if the resulting “new” method still infringes, it is still subject to an injunction against infringement, and applying the injunction prospectively remains equitable. However, for the reasons stated in the tentative ruling, the court now reiterates that, where the question is whether or not the court should, in its discretion, impose a further enhanced royalty for further infringement, a question raised by Lincoln’s Motion, the court may properly consider the infringer’s “effort” and “good faith” in attempting to avoid further infringement. It is not clear that Lincoln argues otherwise.

The court adopts and reaffirms all other findings of fact in Section II.A. and adopts and reaffirms as final its tentative conclusions on all other preliminary matters addressed in Section II.A.

With these preliminary questions resolved, the court turns to consideration of the parties' motions in turn.

B. Transamerica's Motion

In Transamerica's Motion, Transamerica asserts that it made three separate modifications or "design arounds" to its method for administering the riders in question, each of which avoids infringement of one or more steps of the claimed method in Claim 35. Transamerica contends that, because one or more of these "design arounds" avoid infringement, it is no longer equitable to impose the Permanent Injunction prospectively, pursuant to the last clause of Rule 60(b)(5). Transamerica also asserts that it is entitled to a refund of royalty payments that it has made since the implementation of the first "design around."

As explained and reaffirmed above, to obtain relief from the Permanent Injunction, Transamerica has the burden to prove that circumstances have changed, so that it is no longer equitable to apply the injunction prospectively. FED. R. CIV. P. 60(b)(5) (last clause); *Horne*, 129 S. Ct. at 2593 (under Rule 65(b), the party seeking relief from the judgment (or injunction) bears the burden of establishing that changed circumstances warrant relief). The Supreme Court has explained that modification is appropriate under this clause when "a significant change either in factual conditions or in law renders continued enforcement detrimental to the public interest." *Horne*, 129 S. Ct. at 2593 (internal quotation marks and citations omitted).

Although Transamerica discusses its "design arounds" in reverse chronological order, the court will consider them in chronological order.

1. The March 2009 “design around”

Transamerica contends that, on March 30, 2009, it implemented a procedure whereby it would manually calculate and process all scheduled payments for all riders more than one year before their account values would equal one maximum annual withdrawal amount (one MAWA). Transamerica contends that this modification avoids infringement of Step (e) of Claim 35, which requires use of a computerized method to periodically pay the scheduled payment, even if the account value is exhausted before all payments have been made. Lincoln disputes whether this “design around” is truly “manual” and whether it would avoid infringement, even if it is “manual.”

a. Nature of the “design around”

In its brief, Transamerica explains its March 30, 2009, “design around” as follows:

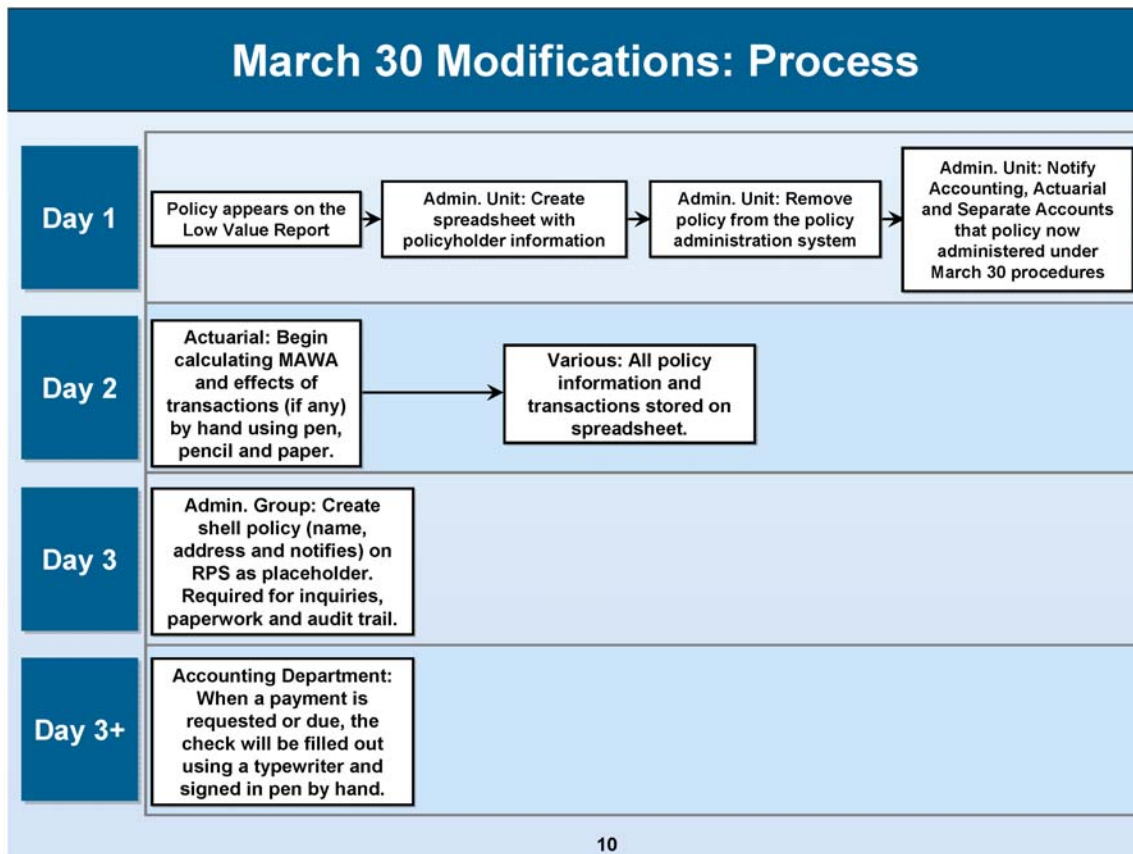
The March 30, 2009 modification utilizes an existing procedure whereby Transamerica’s policy administration system runs a scan—called the “Low Value Report”—at the end of each month to identify policies with riders which have account values less than two times MAWA. See Martin Decl. ¶¶ 36-37. After March 30, 2009, if any policy ever appears on the “Low Value Report,” it would be immediately removed from the policy administration system and thereafter administered manually. All future calculations and scheduled payments would be performed by an individual using paper, pen or pencil, and a calculator. Id. ¶¶ 39-49.

Transamerica’s Brief (docket no. 345-1) at 12-13. This description is consistent with the testimony at the evidentiary hearing of Tracy Martin, Transamerica’s director of post-issue operations and the “lead” from an operational side of planning for the March 30, 2009, and July 6, 2009, “design arounds,” although Ms. Martin provided further detail in her testimony.

Ms. Martin explained at the hearing that, prior to implementation of the new procedure in March 2009, Transamerica had, at best, a “vague procedure” concerning

manual payment of benefits for policies at or near exhaustion. Her group invested some 400 hours in developing a procedure that was adequate from an operations standpoint. The majority of that time was spent “putting together the documentation as far as fine detail from a processing standpoint on how to handle a policy of this nature as well as the process flow and design.” Hearing Transcript, Vol. 1, 100:19-21. The result was the “Manual Rider Administration at Exhaustion” step-by-step procedure documented in Exhibit No. 718⁵ and summarized graphically in Exhibit No. 720. Ms. Martin distilled an explanation of the March 30, 2009, procedure further in a demonstrative graphic, reproduced below.

⁵The procedure is also documented in Exhibit No. 1549, which is identical in almost all respects to Exhibit No. 718, but corrects a misstatement that an initial report is run nightly, when it is actually run monthly.



As Ms. Martin explained in her testimony, the process takes a few days, because the administrative system has to cycle between steps to make sure that there are no errors before proceeding to the next step. She explained that, both before and after March 30, 2009, the Vantage policy administration system would generate a “low value report” when a policy’s value falls below two times MAWA, that is, more than one year before the policy value is exhausted. As a result, a spreadsheet is now created under the March 30, 2009, procedure with the policy holder information to hold the final values and information from Vantage, and an operator would manually deactivate the policy from the Vantage administration system, so that the Vantage system could no longer value it, send a

statement, print any values, cut a check, or anything else. The policy would be left in place on the Vantage system, however, for an audit trail and trace back to last policy values, if there were any problems. The operator would also notify the various units affected by the change to March 30, 2009, procedures for a manual process. On the second day, the actuarial unit does any calculation that needs to be done, using a calculator, paper, and pencil. An operator stores the resulting policy information or transactions on the spreadsheet, which is in electronic form on a computer, but only stores information and does not do any calculations. *See* Exhibit No. 707 (example of a spreadsheet). On the third day, operators would build a “shell policy” on the repetitive payment system (RPS), but the “shell policy” contains only name, address, and any notification requirements to serve as a “tickler” to an operator to perform a manual process to send out information or a payment. The RPS, which is ordinarily used to automate payments for individuals with immediate annuities, not variable annuities, does not make any further payments for the variable annuities under the manual process. Instead, when a payment is due, the accounting unit would verify the check information and payment due, then use check stock and typewriter to create a check, obtain a real signature, and mail the check to the beneficiary. Ms. Martin testified that, since implementation of this policy, it would not be possible to process a payment on a policy at or near exhaustion any other way. Hearing Transcript, Vol. 1, at 106-116. Ms. Martin testified that no policies have ever been exhausted and, at least since the March 30, 2009, procedure was implemented, only two policies have ever appeared on the “low value report,” but both were “false positives,” owing to high policy loan amounts. Hearing Transcript, Vol. 1, at 171:1-9.

On questioning by Lincoln, Ms. Martin conceded that the prior “vague procedure”—as described at trial and in a “functional specification” submitted as Exhibit

No. 1146—was, in “broad strokes,” essentially the same as the March 30, 2009, procedure, in that it also required stopping automated payments, closing the Vantage account, and sending a manually-created check to the policy holder. Ms. Martin pointed out, however, that the March 30, 2009, procedure has the procedural detail necessary for actual implementation of a manual payment procedure from an operations standpoint, while the prior “vague procedure” did not. Ms. Martin also conceded that various computer or automated systems are still used in relation to the “manual” payment system, but she pointed out that none of those systems does more than hold information; the calculations are done by a person using paper and pencil and the checks are created, signed, and mailed by a person. She also testified that the system would no longer be able to make electronic payment transfers, if a policy holder had previously received scheduled payments in that way.

Transamerica’s expert, Dr. Kelly, confirmed that no software changes were made to implement the March 30, 2009, procedure, although subsequently, a change was made at the time of the September 12, 2009, “design around” to restrict policies identified in a low value report to prevent further operations on that account and to require manual payment. Hearing Transcript, Vol. 2, 331:2-17. Therefore, he opined that no “computerized method” was used to perform Step (e) after March 30, 2009. *Id.* at 331:21-334:2.

b. Arguments of the parties

Transamerica argues that, after the March 30, 2009, “design around,” Transamerica would not use any computerized method to make any scheduled payments to its customers “even if” their account values ever become “exhausted,” that is, would be less than one MAWA. Lincoln responds that Transamerica merely recasts the argument it raised and lost at trial and on a motion for judgment as a matter of law, and as a result, cannot meet

its burden to establish that it is no longer using a claimed computerized method to administer variable annuities. Lincoln also argues that the evidence presented by Transamerica post-trial shows that Transamerica continues to use a computerized method to perform the step of periodically paying the scheduled payment even if account value is exhausted, because Transamerica's "redesign" uses multiple computer systems, including the same Vantage, RPS, automated work distribution system (AWD), and General Ledger computer systems and software programs previously identified for account administration "even if" account value is exhausted. Lincoln contends that, as Transamerica admits here, even the "manual" writing of checks requires the use of multiple computer systems to balance Transamerica's accounts and to withdraw funds from those accounts to be paid to Transamerica's policyholders. In its reply, Transamerica argues, in essence, that using computers for functions other than paying scheduled payments to rider owners does not constitute performance of Step (e).

At the evidentiary hearing, the court asked the parties why the March 30, 2009, "design around" matters, if it only applies to a situation, account value exhaustion, that has never happened. In response, Lincoln asserted that the court had held, in its claim construction and ruling on a motion in limine that account value exhaustion is not required for Step (e) to be performed, so that Step (e) is being performed with respect to every policy for which payments are made. For this reason, Lincoln described the March 30, 2009, "design around" as a "non-starter." Transamerica responded that, at trial, in order to try to prove infringement in a circumstance where the event had never happened, Lincoln argued that it is not just that Transamerica performed the method, but that Transamerica necessarily will perform the method based on contract obligations and computer systems that are in place or going to be in place, citing Jury Instruction No. 7. Transamerica asserted that Step (e) means that, in order to infringe, the infringer has to

have a “computerized method” in place to periodically pay scheduled payments. Consequently, Transamerica argued, if Transamerica has in place a manual procedure to handle the circumstance of payments when the account value is exhausted, it does not infringe Step (e), because there is no “computerized method” that will necessarily perform that step.

c. Tentative analysis

Step (e) of the computerized method, which Transamerica argues is avoided by its March 30, 2009, “manual” procedure, involves a computerized method for “periodically paying the scheduled payment to the owner for the period of benefit payments even if the account value is exhausted before all payments have been made.” In its *Markman* Ruling, the court construed this step to mean “at the regular intervals required by the plan, paying the scheduled payment to the owner for the period of benefit payments, even if the account value is less than the scheduled payment amount or zero before all payments guaranteed under the plan have been made.” Step (e), like all other steps of the claimed method in Claim 35, requires use of a “computerized method.” See ‘201 patent, Claim 35.

Lincoln argues that the March 30, 2009, “design around” still involves a “computerized method,” not a “manual” procedure, to pay scheduled payments, if account value is exhausted, because some parts of the “manual” procedure still involve computerized or “automated” systems to generate or store information or to notify personnel that action is required on accounts in question. In its tentative analysis, the court expressly rejected that argument. The court tentatively concluded that the procedure detailed in Exhibit No. 718, as explained by Ms. Martin, is one in which, at the regular intervals required by the plan, *a person or persons must manually* pay the scheduled payment to the owner for the period of benefit payments, *in the event* the account value is less than the scheduled payment amount or zero before all payments guaranteed under

the plan have been made. Specifically, the March 30, 2009, procedure requires that some person or persons, not a computer, stop automated payments, close the Vantage account, and manually create and send a check to the policy holder. Thus, the court tentatively concluded that the March 30, 2009, procedure is “manual,” not “computerized.”

Nevertheless, the court tentatively found that the March 30, 2009, “design around” fails to avoid infringement of Step (e) of the computerized method. The court tentatively found that the March 30, 2009, “design around” is based on Transamerica’s bullheaded adherence to a construction of Step (e) as *requiring* that account value be exhausted for Step (e) to be performed. Only if Step (e) requires that account value be exhausted would a “design around” that is only triggered by account value exhaustion or imminent exhaustion avoid infringement. This court noted in its tentative ruling that it has expressly rejected such a construction of Step (e).

In its January 8, 2009, Memorandum Opinion And Order Regarding Motions In Limine Concerning Certain Evidence And Arguments (docket no. 221); *Transamerica Life Ins. Co. v. Lincoln Nat’l Life Ins. Co.*, 597 F. Supp. 2d 897 (N.D. Iowa 2009), the court addressed Transamerica’s statement of Step (e) as “periodically paying the scheduled payment after the account value is exhausted,” and Transamerica’s assertions that “‘there must have been a scheduled withdrawal made on or after August 8, 2006 and on or before August 21, 2021 with the account value exhausted’ to satisfy step (e)” and “that [Transamerica] has never performed this step of the method, because no account value of any accused rider has ever been exhausted.” *Transamerica Life Ins. Co.*, 597 F. Supp. 2d at 912. The court found “[t]hese constructions of step (e) are impermissible,” for the following reasons:

The pertinent claim language is the following:
“Periodically paying the scheduled payment to the owner for the period of benefit payments *even if* the account value is

exhausted before all payments have been made.” ‘201 patent, Claim 35, step (e) (emphasis added). The import of the “even if” and “exhausted” language of this step were critical issues in the litigation of the proper construction of this term. *Markman* Order at 174-81. The court expressly concluded that the “even if the account value is exhausted” clause stated the most extreme circumstance in which the guaranteed scheduled payment will still be made, not a requirement that the account value be exhausted. *Id.* at 179. Therefore, the court construed this claim language as follows: “At the regular intervals required by the plan, paying the scheduled payment to the owner for the period of benefit payments, even if the account value is less than the scheduled payment amount or zero before all payments guaranteed under the plan have been made.” *Id.* at 210 (emphasis added). Thus, Transamerica’s omission of the critical “even if” language from its construction is inexcusable. Moreover, in light of the “even if” language, neither the claim term itself nor the court’s construction *requires* that the account value has been exhausted for step (e) to be performed, as Transamerica contends; to the contrary, the claim language and the court’s construction do not require exhaustion of the account value for this step to be performed. In short, Transamerica’s constructions of step (e) blithely ignore the actual claim language, the court’s construction of that language, and the court’s “commentary” in support of its construction. The court simply will not allow assertion of this or any other construction that is plainly contrary to the court’s construction, nor will the court allow reassertion of rejected constructions of this or any other terms. To be clear, the court will exclude constructions that vary at all from the court’s, and if any party persists in asserting constructions that are plainly at odds with either the plain language of a claim term or the court’s construction of that claim term, the court will consider appropriate sanctions against the offending party.

Transamerica Life Ins. Co., 597 F. Supp. 2d at 912-13 (emphasis in the original). In its tentative ruling, the court concluded that Transamerica's reassertion of its rejected construction, in an attempt to escape the Permanent Injunction, is equally inexcusable.

Moreover, the court tentatively concluded that Transamerica's "new" assertion that computerized performance of Step (e) at exhaustion of the account value "must necessarily" occur for the step to be infringed is simply another semantic reincarnation of the same "must be exhausted to infringe" argument that the court has already rejected. The court explained that, in its view, neither the actual claim language of Step (e), the court's construction of that language, the court's commentary in support of its construction, nor Jury Instruction No. 7, in which the "must necessarily" language appears, requires that exhaustion of account value must occur or must necessarily occur for Step (e) to be performed. To put it another way, the court said, Step (e) is infringed if the infringer uses a computerized method that, *inter alia*, "periodically pay[s] the scheduled payment to the owner for the period of benefit payments," whether or not the extreme circumstance of account value exhaustion occurs before all payments have been made. Thus, the court tentatively concluded that Transamerica's attempt to obnubilate the issue by purported reliance on a "must necessarily" prong of Jury Instruction No. 7 changes nothing.

The evidence that Transamerica presented, both at trial and at the evidentiary hearing on February 8 and 9, 2010, is that exhaustion of account value has never occurred so far, and indeed, is unlikely to occur. In its tentative ruling, the court found that it is absurd to imagine that Transamerica could perform all five steps of the computerized method for all of the riders for which account value has not been and never will be exhausted, but not infringe the claimed method, simply because it has in place a "manual" procedure to make payments in the unlikely event that, at some point in the future, the

account value on some policy might be exhausted before the end of the period of benefit payments. As noted above, no policy value has ever been exhausted before the end of the period of benefit payments and only two policies have ever appeared on the “low value report,” but both were “false positives,” owing to high policy loan amounts.

Thus, the court tentatively concluded that, because Transamerica’s March 30, 2009, “design around” fails to “design around” Step (e), it does not avoid infringement, and Transamerica cannot show that the March 30, 2009, “design around” constitutes a changed circumstance that makes it inequitable to impose the Permanent Injunction prospectively. *See* FED. R. CIV. P. 60(b)(5) (last clause); *Horne*, 129 S. Ct. at 2593 (proof that prospective application of a judgment is no longer equitable may include a change in factual conditions or law that renders continued enforcement of the judgment detrimental to the public interest); *Kaler*, 571 F.3d at 734 (modification pursuant to Rule 60(b)(5) (last clause) is appropriate if a critical element of the original ruling no longer exists). No modification of the Permanent Injunction on the basis of this “design around” is appropriate, the court found. For the same reasons, the court found that Transamerica is not entitled to a refund of royalty payments made since the March 30, 2009, “design around.”

d. The parties’ closing arguments

The extent of Transamerica’s closing argument concerning the March 30, 2009, “design around” was to assert that Transamerica is not arguing that exhaustion must occur. Rather, Transamerica is arguing that, pursuant to Jury Instruction No. 7, all steps must be performed or necessarily performed by a computer and, because payments cannot be made post-exhaustion using a computer, there is no infringement under the claim construction used at trial. Lincoln pointed out that Transamerica is not appealing the court’s construction of Step (e), just the sufficiency of the evidence. Lincoln asserted that the

court has consistently ruled that its claim construction does not require exhaustion, but Transamerica's March 30, 2009, "design around" is premised on the mistaken notion that exhaustion is required.

e. Final analysis

Transamerica's closing argument has done nothing to convince the court that its tentative analysis of the inadequacy of the March 30, 2009, "design around" is erroneous. The court now reiterates as final all of its findings of fact in Section II.B.1. of the tentative ruling and, for all of the reasons stated in that portion of the tentative ruling, reiterates as final its conclusion that Transamerica's March 30, 2009, "design around" fails to "design around" Step (e), so that it does not avoid infringement, and Transamerica cannot show that the March 30, 2009, "design around" constitutes a changed circumstance that makes it inequitable to impose the Permanent Injunction prospectively. *See* FED. R. CIV. P. 60(b)(5) (last clause); *Horne*, 129 S. Ct. at 2593 (proof that prospective application of a judgment is no longer equitable may include a change in factual conditions or law that renders continued enforcement of the judgment detrimental to the public interest); *Kaler*, 571 F.3d at 734 (modification pursuant to Rule 60(b)(5) (last clause) is appropriate if a critical element of the original ruling no longer exists). No modification of the Permanent Injunction on the basis of this "design around" is appropriate. For the same reasons, Transamerica is not entitled to a refund of royalty payments made since the March 30, 2009, "design around."

2. *The July 6 and September 12, 2009, "design arounds"*

Transamerica argues that, on July 6, 2009, it modified its policy administration system, as an "interim" measure, to export to a Transamerica affiliate in Canada calculations of initial MAWAs for policies with new or upgraded guaranteed minimum withdrawal benefit (GMWB) riders. Transamerica contends that it implemented a more

comprehensive “design around” on September 12, 2009, to export to an unrelated third party in Canada, described herein as Citi Canada, *all* calculations of MAWAs for the administration of variable annuities with GMWB riders. Thus, Transamerica asserts that after the July 6, 2009, “design around,” at least as to the new and upgraded riders, it no longer infringed Step (b) of the claimed computerized method, and after the September 12, 2009, “design around,” it no longer infringed Step (b) or Step (d) as to any riders, because it now “determin[es]” the initial scheduled payment in Canada and makes all “adjust[ments]” to the amount of the scheduled payment in Canada. Lincoln contends that neither “design around” avoids infringement. The court finds it appropriate to analyze the “interim” and “final” extraterritorial “design arounds” together. Indeed, the parties gave the July 6, 2009, interim “design around” relatively short shrift at the evidentiary hearing, focusing their attention instead on the September 12, 2009, final “design around.”

a. Nature of the “design arounds”

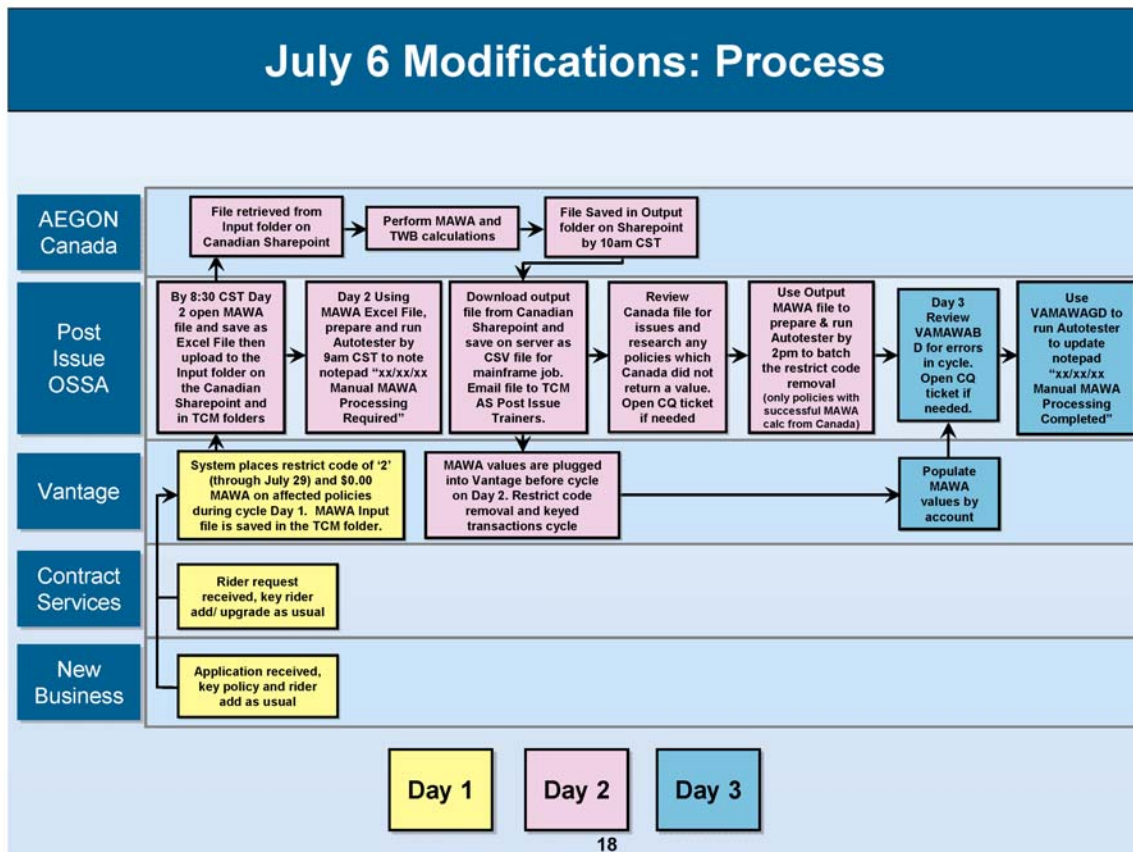
i. The July 6, 2009, “design around.” In its brief, Transamerica explains its July 6, 2009, “design around” as follows:

Between July 6, 2009 and September 11, 2009, the data needed to calculate the first MAWA on all new and upgraded riders entered daily into the policy administration system was placed into comma-delimited files on a nightly cycle. See Martin Decl. ¶¶ 62-63; Neill Decl. ¶¶ 27-29. The following morning, these files were converted to an Excel spreadsheet. A Transamerica employee then manually uploaded the spreadsheet to Transamerica Canada’s SharePoint site. See Martin Decl. ¶¶ 64-66; Neill Decl. ¶¶ 30-31. Transamerica Canada then calculated—in Canada—the MAWA values for these riders and populated the appropriate columns in the spreadsheet with the results the same day. These spreadsheets were then placed back onto the SharePoint site in Canada (by Transamerica Canada employees) and retrieved from the SharePoint site (by Transamerica employees). See Martin

Decl. ¶¶ 67-69. Finally, the MAWA information was processed by Transamerica's policy administration system in the next batch cycle, so that the data was in the system by the following day. Id. ¶¶ 70-71; Neill Decl. ¶ 32.

Transamerica's Brief (docket no. 345-1), 11. Again, this description is consistent with the testimony at the evidentiary hearing of Tracy Martin, who was also responsible for operational planning for the July 6, 2009, "design around," and the testimony of Keith Neill, Transamerica's implementation lead for product development, who was responsible, with his staff, for effecting the July 6, 2009, and September 12, 2009, "design arounds" in the Transamerica policy administration system, although Ms. Martin and Mr. Neill provided further detail in their testimony.

Ms. Martin testified that the July 6, 2009, "design around" was always intended to be "interim," because it was set up quickly to address the circumstances of the Permanent Injunction and in anticipation of a full computer system modification to address the Permanent Injunction. She also testified that about 1,526 policies were processed under this "interim" system for initial MAWA calculations. She testified that Exhibit No. 1510 is a detailed procedure from an operations standpoint for representatives and processors to know exactly what steps they would need to take under the new procedure. She again provided a demonstrative graphic, reproduced below, to describe how the process operated.



Ms. Martin explained that the “return file” from the Canadian affiliate contained calculations of “the total withdrawal base [(TWB)] and life MAWA amounts.” Hearing Transcript, Vol. 1, at 129:5-7. Those values would then be entered into the Vantage system in the United States, so that the processor or the representative could function as normal in response to requests from a client. *Id.* at 131:12-14. She testified that the July 6, 2009, “design around” was not used after the September 12, 2009, “design around.”

Mr. Neill described the July 6, 2009, “design around” from the perspective of revision of the programming code for the policy administration system. As he explained this “design around,” when a new or upgraded rider “came through,” an extract program

created by a member of his staff produced a file for that rider, which was sent to the operations area. Operations personnel sent the file through a share point site to the Canadian affiliate, where the required values were calculated, then sent back, and the computer system did a file conversion of returned files every night. *Id.* at 185:22-186:4.

ii. The September 12, 2009, “design around.” In its brief, Transamerica explains its September 12, 2009, “design around,” which superseded the July 6, 2009, “design around,” as follows:

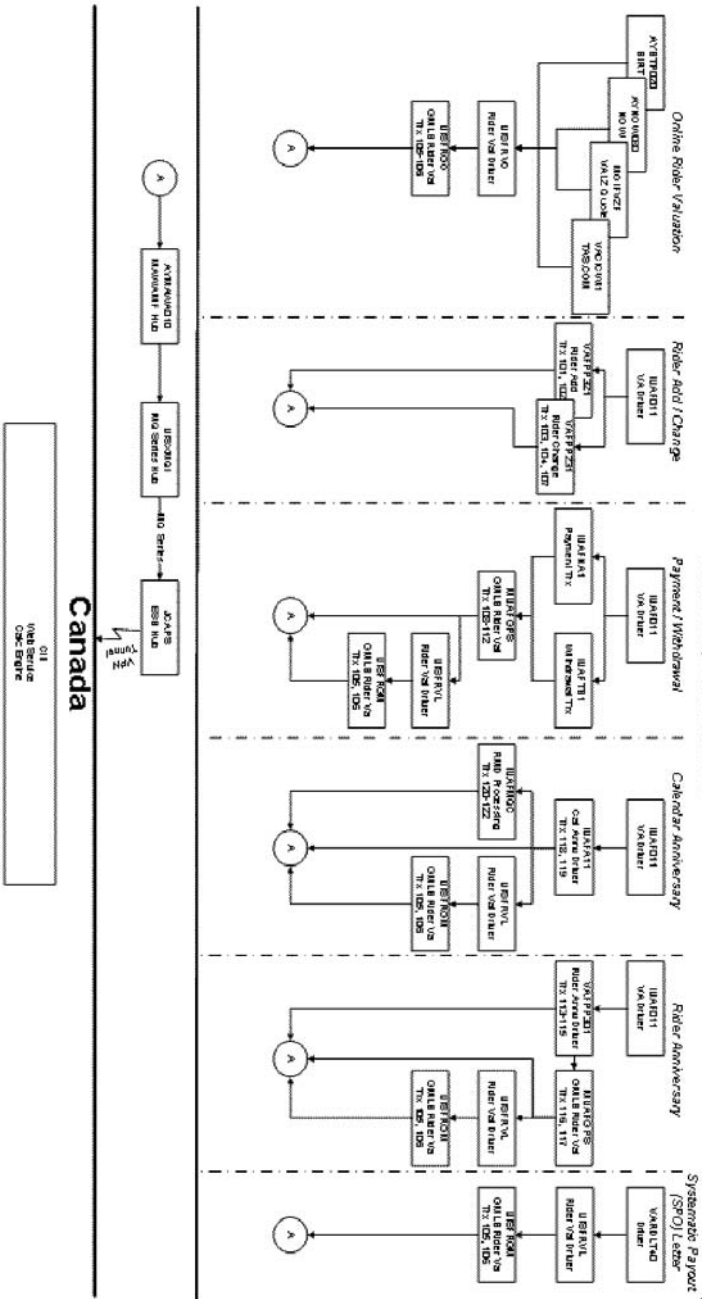
Beginning on September 12, 2009, Transamerica exported to Canada every calculation of MAWA and Required Minimum Distribution (“RMD”) related to rider administration, and every calculation of TWB used to calculate MAWA. See generally Blankenship Decl. ¶¶ 61-66; Neill Decl. ¶¶ 35-91. These calculations include not only the first MAWA calculations, but every MAWA calculation performed before the first payments to rider owners. See Neill Decl. ¶¶ 35, 67-71. These offshored calculations also include every such calculation made thereafter, including those that are required to adjust scheduled payments in response to unscheduled withdrawals. *Id.* In other words, every calculation and adjustment made to MAWA, RMD and TWB (used to calculate MAWA) related to rider administration is now performed outside the United States and is, therefore, beyond the boundaries of the ‘201 Patent.

Transamerica contracted with Citi Canada to perform all calculations of MAWA, RMD and TWB for rider administration in Canada. Citi Canada commenced performing these calculations on September 12, 2009. See Blankenship Decl. ¶¶ 61-62; Neill Decl. ¶¶ 35, 50, 67-71; Matys Decl. ¶¶ 12-16. Citi Canada now performs all the calculations for twenty-four different transactions. Neill Dec. ¶¶ 72-89; Matys Decl. ¶¶ 13, 16. Citi Canada independently designed and constructed the calculator that performs these twenty-four transactions, as well as the secure interface for transfer of message requests from Transamerica. See Blankenship Decl.

¶¶ 63-66; Matys Decl. ¶¶ 11-12. The source code for Transamerica’s policy administration system, where these calculations were previously performed, has been deactivated (i.e., “commented out”) and replaced with instructions to call Citi Canada where the calculations are now performed. See Neill Decl. ¶¶ 39-47, 53-66. The results of the calculations from Citi Canada are then sent back to Transamerica. Each request message to Citi Canada includes all relevant data fields, while the response message includes the calculated numbers and adjustments that are then mapped into Transamerica’s policy administration system. *Id.* ¶¶ 53-89. Transamerica does not—and cannot—perform any of these calculations using its policy administration system. *Id.*

Transamerica’s Brief (docket no. 345-1), 7-8. Again, this description is consistent with the testimony at the evidentiary hearing of Mr. Neill.

Mr. Neill testified that he and members of his team put in around 5,000 hours to implement the September 12, 2009, “design around,” most of them working well over forty hours per week to effect the changes required before the end of the 100-day implementation period in the Permanent Injunction. He also explained that the necessary modifications were not as simple as finding a couple of variables and calling somebody in Canada to ask them to multiply them, because the calculations, as performed in the Vantage system, were spread out in several places, all of which had to be redirected to Canada. Indeed, he explained that 26 business functions (involving 24 unique calls to Canada), some 136 programs, and over 500 total elements had to be modified for determination of MAWA in Canada. Exhibit No. 706, reproduced below, is a diagram that Mr. Neill created “to help educate our staff and also I think from a legal perspective,” to show “how does all this stuff work.” Hearing Transcript, Vol. 1, at 188:21-25.

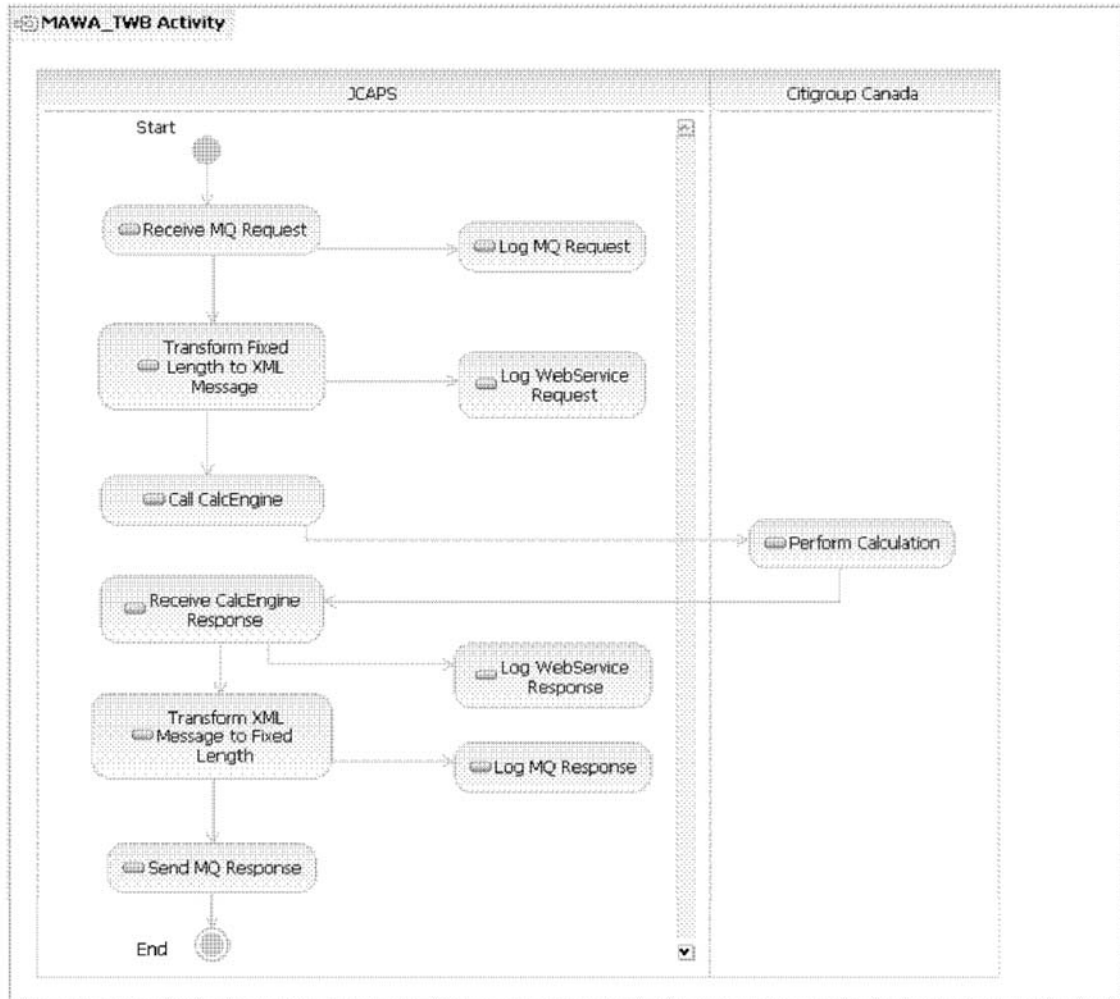


**Plaintiff's Exhibit
1:06cv0110
X706**

Mr. Neill explained that this Exhibit shows, at the top of each column, a program that is implicated by a rider transaction, and each column demonstrates that the transaction in question eventually requires a call to Canada, indicated by Circle A. At Circle A, a new program, identified as AYMAWA 10, now sets up and establishes messages that allow the United States system to communicate with the Canadian system via a virtual private network (VPN). On the United States side is a new element, identified as JCAPS, which is an enterprise service bus (ESB) hub. It allows the web services communications with Canada. On the Canadian side is another new element, the “Canadian Calc Engine,” built to perform the requested calculations. *Id.* at 191-94. Page 8 of Exhibit No. JX711, reproduced below, displays the actions in JCAPS, on the United States side of the process, and the actions in Canada:

Process Flow

Below activity diagram shows various flows within this service.



On the JCAPS side, requests are received from the mainframe (Vantage) system in MQ format. The information in the MQ request is then mapped into XML format, and the XML request is sent to Canada across the VPN. After calculations are performed in Canada, the results are returned to the United States in XML format, mapped back into

MQ format, and then sent back to the calling program on the Vantage system. The left side of this diagram was built specifically to achieve extraterritorial performance of MAWA calculations. The right side, or Canadian side, contains only one “box,” because Mr. Neill was not familiar with what Citi Canada built to perform its services. *Id.* at 198-99. The “mapping” back and forth between XML and MQ formats is achieved by using COBOL copy books, but it does not involve any alteration of the values sent or received. *Id.* at 214.

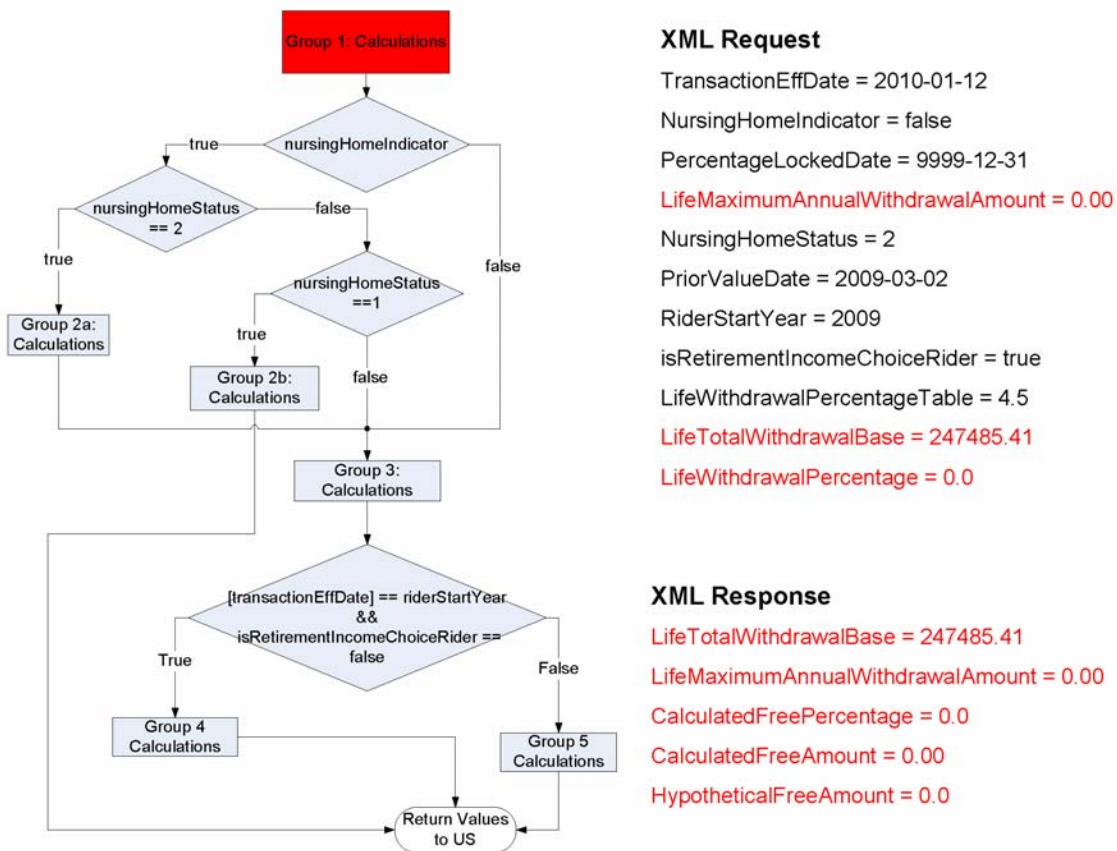
Citi Canada developed the programming code to perform the required transactions, Transamerica’s employees (disregarding lawyers and expert witnesses) do not have access to it, *see id.* at 200, and, indeed, Transamerica represents that Citi Canada considers that code proprietary. Citi Canada’s services were obtained through an arm’s length transaction. *Id.* at 210. Pursuant to the contract between Transamerica and Citi Canada, Citi Canada received a fee of more than \$250,000 to develop necessary systems that would meet Transamerica’s business requirements, set out in Exhibit Nos. 708 and 709, to receive messages, perform various calculations, and then send the messages back to Transamerica, and Citi Canada continues to receive per transaction fees. Exhibit No. JX717 (contract); Hearing Transcript, Vol. 1, at 205-207.

iii. Expert analyses. Transamerica and Lincoln both presented expert analyses of the July 6, 2009, and September 12, 2009, “design arounds.” Transamerica’s expert, Dr. Kelly,⁶ a computer scientist, opined that initial MAWA calculations for new and upgraded riders were performed in Canada after July 6, 2009, and that initial and subsequent MAWA calculations were performed in Canada after the September 12, 2009, “design around.” Hearing Transcript, Vol. 2, at 330-331. Indeed, he opined that

⁶Dr. Kelly’s expert report, styled a “declaration,” appears in the record as Exhibit No. 742.

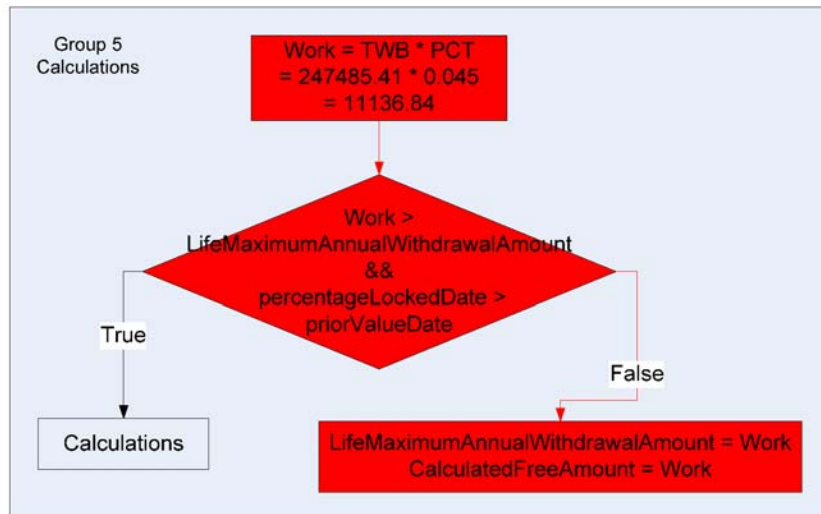
Transamerica cannot make payments without getting the MAWA amount from Canada, and that the current system is substantially different from what was in place before. *Id.* at 335.

Unlike Transamerica’s programmers, Dr. Kelly did have access to the Citi Canada programming code. He provided the following demonstrative graphic concerning the XML request to, the calculations performed by, and the XML response from the “Canadian Calc Engine”:



Dr. Kelly explained that the XML request sent to Canada would include current values and the required set of calculations by transaction type. Each “calculation group” on the

Canadian side involves one or more mathematical computations, but after each specific group of calculations, the Canadian Calc Engine verifies whether certain other factors are involved—such as, in this example, a “nursing home indicator”—that may require additional calculations to determine the values for the next group of calculations, and/or tests the results against prior values, before returning values to be sent back in the XML response. *See* Hearing Transcript, Vol. 2, at 305-07. For example, Dr. Kelly used the following demonstrative graphic to indicate the “Group 5 Calculations” in the preceding diagram:



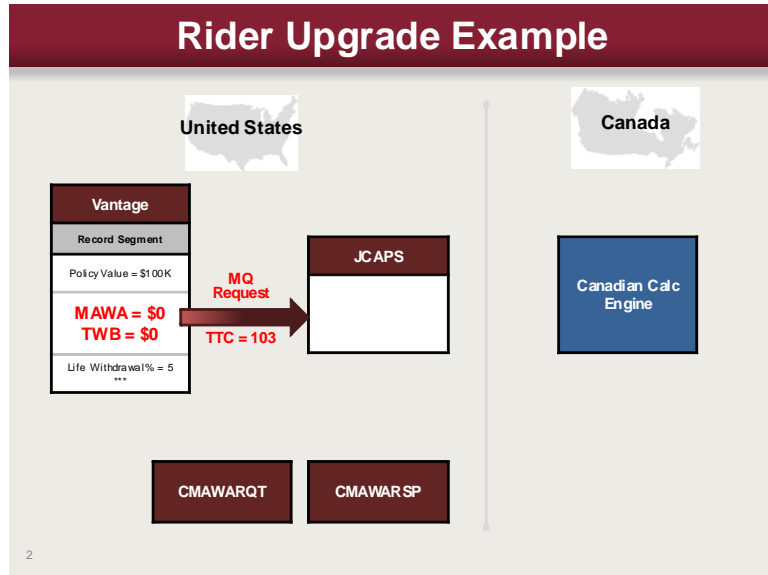
In Dr. Kelly’s opinion, all MAWA calculations for purposes of making payments are done in Canada, although some MAWA calculations, for other purposes, such as hedging, which he considered completely separate from the payment process, are still done in the United States. *Id.* at 310-11. Somewhat more specifically, he testified that a value

in the response from Canada “corresponds” to the initial scheduled payment, and that value gets taken out of the response and put back into and stored in the appropriate location in the Vantage policy administration system in the United States. *Id.* at 313-14. He opined, however, that “storing” a number that was calculated elsewhere or labeling that number as MAWA was not “calculation” or “determination” of MAWA within the meaning of Step (d) of Claim 35. *Id.* at 314.

Lincoln’s expert, Richard Romano, whose expertise is in annuity program management, business analysis, technical analysis, and quality assurance, took a decidedly different view. In his view, the July 6, 2009, and September 12, 2009, “design arounds” at issue are not colorably different and continue to infringe. *Id.* at 393-94. He opined that the determination of an initial scheduled payment can only be made once Vantage has the information that it can use “native” within its system. *Id.* at 411. Therefore, notwithstanding the computations in Canada under the September 12, 2009, “design around,” Mr. Romano takes the position that the Vantage system in the United States determines the initial scheduled payment, because there is no functional change, even if there have been extensive changes to the programming code. *Id.* at 412-13.

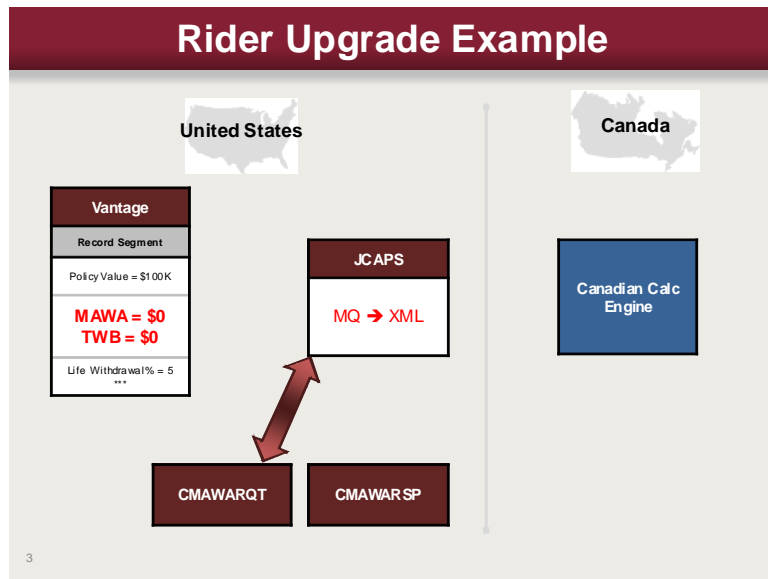
Mr. Romano used the following series of slides to demonstrate his analysis, treating the process as “a serial set of events that are happening within the code base.” *Id.* at 424:18-19.

Slide 1:



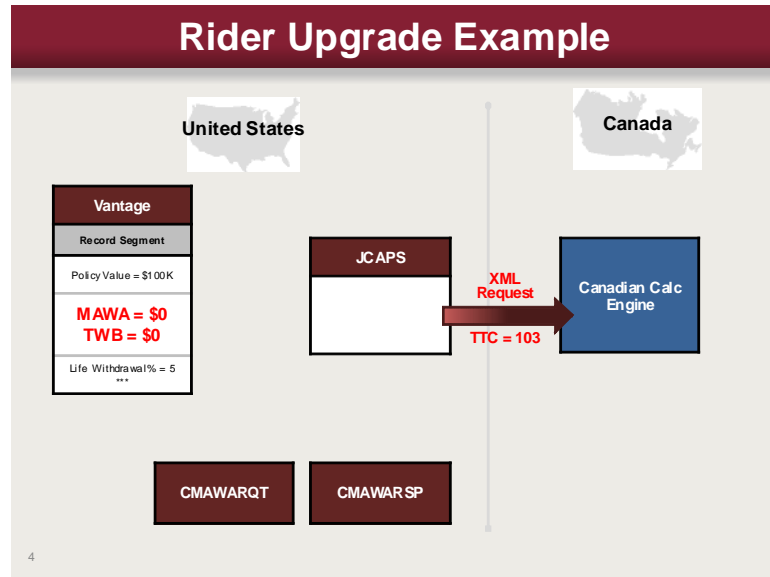
Mr. Romano explained that, in Slide 1, the Vantage system and the two copybooks are part of the administration system, and JCAPS is the server that does the MQ and XML changes. In this example, Vantage makes a request in MQ format for determination of MAWA and TWB for transaction type 103, a rider upgrade. Hearing Transaction, Vol. 2, at 415-16.

Slide 2:



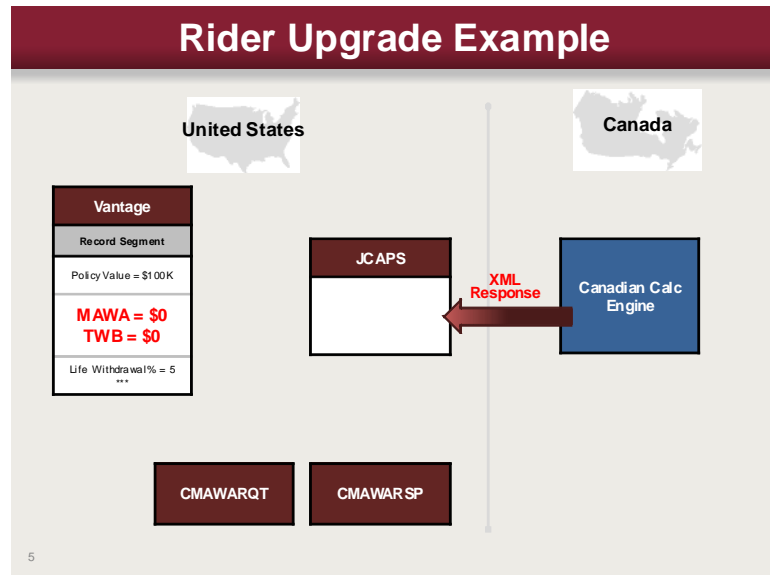
In Slide 2, a copybook is used to map the MQ values into the right locations in the XML request to send to the Canadian Calc Engine. MAWA and TWB remain zero, because no determination has been made within Vantage. Hearing Transcript, Vol. 2, at 417-18.

Slide 3:



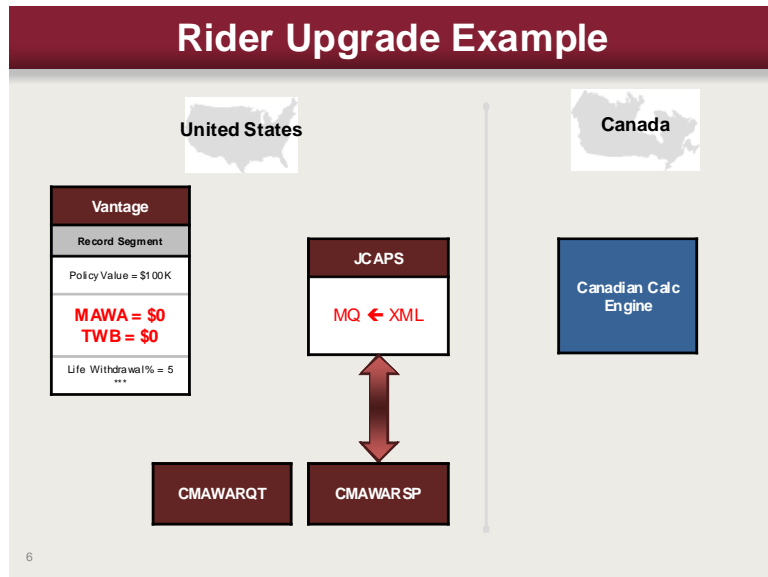
In Slide 3, the JCAPS service bus passes over the XML request to the Canadian Calc Engine through a VPN. No MAWA or TWB has yet been calculated. Hearing Transcript, Vol. 2, at 418-19. Mr. Romano explained that, in his opinion, although the data and transaction type have been sent to Canada at this point, “there’s no context from a policy administration perspective,” because there are no prior values, and the Canadian Calc Engine has “no idea kind of what’s happening on that policy,” so that the Canadian Calc Engine performs computations “in a vacuum.” *Id.* at 420.

Slide 4:



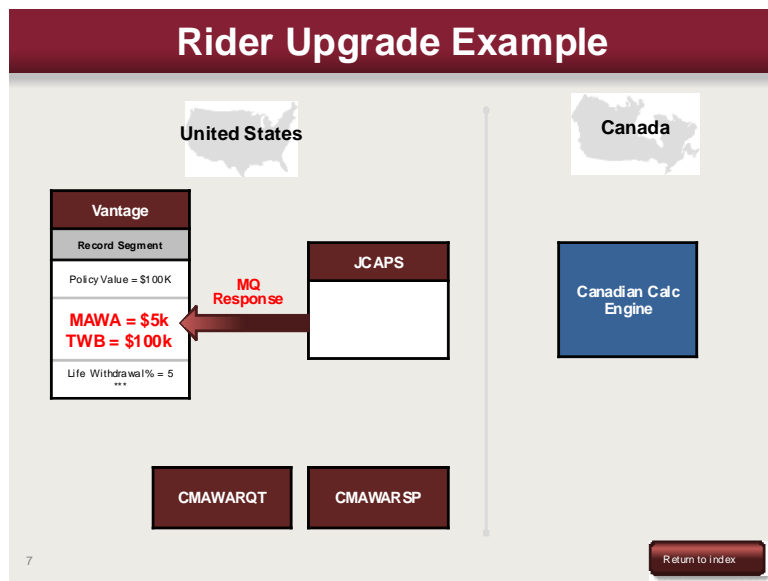
In Slide 4, the process is reversed, and the XML response with the results of the Canadian computation is sent back to the United States. Hearing Transcript, Vol. 2, at 421. Mr. Romano explained that, although the Canadian Calc Engine has done all it is going to do at this point, MAWA has not yet been established, because there is no context for the returned information in terms of the policy administration system, that is, the data is not in an interpretive fashion that means anything to Vantage. Although the information in the result might be “tagged” as MAWA, it could just as easily be tagged as “black dog,” for example. Moreover, Mr. Romano explained that, if a policy holder were to call at this point, there would be no determination of MAWA to give the policy holder. *Id.* at 422.

Slide 5:



In Slide 5, the XML response is mapped back into MQ format using a copybook. Hearing Transcript, Vol. 2, at 423.

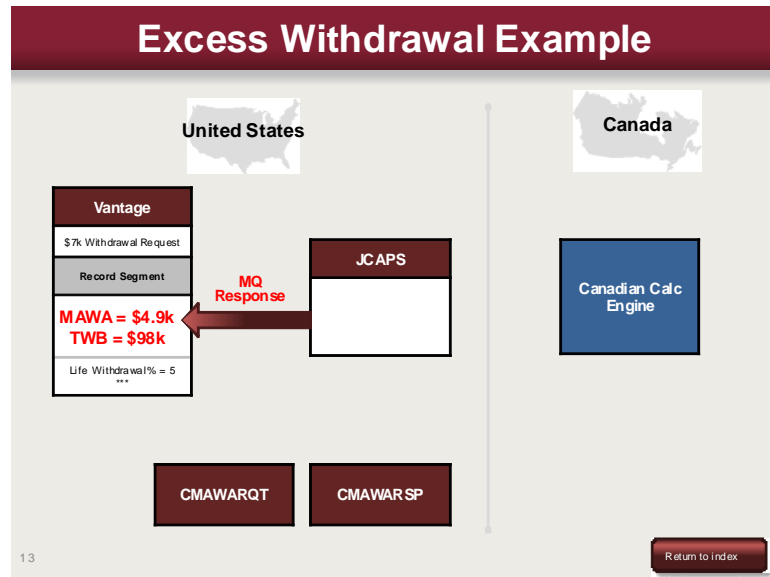
Slide 6:



Finally, in Slide 6, the response is received by the Vantage system, and “Vantage now knows that it has a MAWA on that policy and . . . a TWB for that policy based on the

transaction it had initiated.” Thus, only at this point, according to Mr. Romano, has MAWA been “determined.” Hearing Transcript, Vol. 2, at 423-24.

In Mr. Romano’s view, essentially the same process occurs with an “excess withdrawal example,” transaction type 112, using as an example the MAWA and TWB values in Slide 6 of the prior example, with a \$2,000 excess withdrawal. *Id.* at 425-27. After a successful load of data from the response from Canada to the Vantage system, the recalculated values are shown in the following slide:



The recalculated value for MAWA would be \$4,900, and the TWB would be \$98,000, and only at this point, in Mr. Romano’s view, when those values are in their proper location in the Vantage system, has there been an “adjustment” and “reduction” to the MAWA in response to an excess withdrawal. Hearing Transcript, Vol. 2, at 428-29.

To summarize, Mr. Romano explained that, at the time that the Canadian Calc Engine receives the XML request, it has all the data to lead it through the maze, but there is no context to that data from a policy administration context; rather, the XML request is simply transient data that the Canadian Calc Engine subjects to various computations.

In other words, the computations in Canada occur in a vacuum, so that they are not a “determination” of a scheduled payment amount within the meaning of the claimed method. Similarly, when the XML response is sent from Canada, containing results of the requested computations, the response has no context, and the data is not in an interpretive fashion that means anything to Vantage, so no “determination” within the meaning of the claimed method has occurred. When the response is mapped from XML format to MQ format, using a COBOL copybook, in the United States, MAWA or an initial scheduled payment has still not been calculated, because Vantage still has no value for those variables. Mr. Romano opined that it is only when the values are imported into Vantage in the appropriate location that a “determination” or “adjustment” has occurred. *Id.* at 422-29.

b. Arguments of the parties

Transamerica argues that, as of no later than July 6, 2009, Transamerica’s policy administration system did not perform Step 35(b) for new or upgraded riders because it did not “[c]alculat[e] the amount of a first scheduled payment of a systematic withdrawal program based on the account value associated with the plan,” which is the court’s construction of that step. Rather, since at least that date, the initial scheduled payment for these riders has been calculated outside the United States and/or by hand. Similarly, Transamerica argues that, based on the court’s claim construction, after the September 12, 2009, “design around,” performance of Steps 35(b) and (d), the steps of “determining an initial scheduled payment” and “adjusting the amount of scheduled payments in response to an unscheduled payment,” are now performed by Citi Canada outside the United States. The data is sent to Canada, where the calculations are performed, and the results returned to Transamerica. Indeed, Transamerica contends that, not only does Transamerica not perform any of these calculations within the United States, no Transamerica affiliated

entity performs any of these calculations, and, moreover, Transamerica is unaware of the methods by which the calculations are performed by Citi Canada. Transamerica's primary authority for its extraterritorial performance arguments is *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1318 (Fed. Cir. 2005). Transamerica argues that, as in *NTP*, all MAWA calculations must now go through the Canadian Calc Engine, and the Vantage system in the United States cannot determine MAWAs without the Canadian Calc Engine.

Lincoln argues that the July 6, 2009, "design around" was temporary, affected only some instances of calculating MAWA, and is no longer in use, so that it is irrelevant. Lincoln also contends that the July 6, 2009, "design around" fails to address the claim language and the court's claim construction, which state that the method calculates "an," not "the," "initial payment," so there may be more than one "initial scheduled payment." In reply, Transamerica contends that this "design around" generated the only MAWA calculations for 1,526 policies added between July 6 and September 11, 2009, and there were no other MAWA calculations—let alone payments to rider owners—during this time period for these policies. Therefore, Transamerica contends that, after the July 6, 2009, "design around," the administration of these 1,526 policies did not infringe. Transamerica also argues that the July 6, 2009, "design around" implemented an "entirely new method" for calculating the first MAWA.

Lincoln contends that, even after the September 12, 2009, "design around," the "determining" and "adjusting" steps, as defined in this court's *Markman* Ruling, still occur in the United States. Lincoln argues that Transamerica cannot avoid infringement based on "use" merely by moving unclaimed steps of its policy administration system to Canada. To the contrary, Lincoln argues, the claimed step itself must occur outside of the United States, but here, Transamerica's argument falls apart factually when its computerized

method is compared to the claims as construed by the court, because Transamerica continues to determine an initial scheduled payment and adjust scheduled payments in the United States. Lincoln argues that the only difference between Transamerica's prior computerized system for administering variable annuities and Transamerica's purported "design around" is the addition of the "calculator" in Canada. Lincoln argues that the "doCalculation" step still occurs in the United States, long before Transamerica calls Canada, and Transamerica still determines in the United States the specific calculations to be made by the "calculator" in Canada, selects the variables to be used in that calculation in the United States, and plugs data from Canada back into its policy administration system in the United States. Thus, Lincoln argues that Transamerica only attempted to move a portion of one step of a claimed computerized method outside of the United States.

In reply, Transamerica contends that Lincoln has tried to suck into the meaning of "calculate" activities that occur before and after the calculations of initial scheduled payments or activities that are unrelated to the calculation of initial scheduled payments for actual administration of the riders.

c. Tentative analysis

In its tentative ruling, the court noted that, at the center of Transamerica's contentions that the July 6, 2009, and September 12, 2009, "extraterritorial design arounds" avoid infringement is 35 U.S.C. § 271(a), which prohibits the "use" of any patented invention, without authority, "within the United States." As the Federal Circuit Court of Appeals has explained, "The territorial reach of section 271 is limited. Section 271(a) is only actionable against patent infringement that occurs within the United States." *NTP*, 418 F.3d at 1313. This court recognized this principle in Jury Instruction No. 7, which requires performance of the claimed method "in the United States" to establish infringement. Transamerica contends that its July 6, 2009, extraterritorial "design around" avoids infringement of Step (b) of the claimed method, and that its September 12,

2009, extraterritorial “design around” avoids infringement of both Steps (b) and (d) of the claimed method, because after those “design arounds,” performance of the pertinent step or steps occurred in Canada.

Step (b) of the claimed computerized method is “determining an initial scheduled payment.” In its *Markman* Ruling, the court construed this term to mean “calculating the amount of a first scheduled payment of a systematic withdrawal program based on the account value associated with the plan.” Step (d), *inter alia*, is “adjusting the amount of the scheduled payment in response to said unscheduled withdrawal.” The court construed this term to mean “reducing the amount of the scheduled payment in response to said unscheduled withdrawal.” In its tentative ruling, the court found that the question is, has Transamerica shown that these steps are no longer performed in the United States, so that prospective application of the Permanent Injunction is no longer equitable, because Transamerica is no longer infringing?

Like the parties, the court’s tentative analysis relied, in large part, on the decision of the Federal Circuit Court of Appeals in *NTP*, which considered when a “method” claim or a “system” claim is practiced “within the United States.” The technology at issue in *NTP* “relate[d] to systems for integrating existing electronic mail systems (‘wireline’ systems) with radio frequency (‘RF’) wireless communication networks, to enable a mobile user to receive email over a wireless network.” *NTP*, 418 F.3d at 1287. The court identified the specific innovation in *NTP*’s patents for an electronic mail system as the integration of existing electronic mail systems with RF wireless communications networks. *Id.* at 1287-89. A jury found that defendant Research In Motion’s (RIM’s) BlackBerry system infringed both “system” and “method” claims of *NTP*’s patents. *Id.*

Somewhat more specifically, the particular patent claims in question claimed both “systems” and “methods” for transmitting an email message between an originating processor and a destination processor, and some of those claims included an “interface”

or “interface switch” limitation. *Id.* at 1313-14. For example, one of the “system” claims claimed at least one “interface switch” connecting gateway switches to the RF information transmission network and transmitting originating information received from the gateway switch to the RF information transmission network. Similarly, one of the “method” claims claimed a method for transmitting originating information from originating processors in an electronic mail system to destination processors in the electronic mail system comprising, among other things, transmitting information to and from an “interface switch.” *Id.* at 1294-95. RIM contended that it did not infringe the “system” or “method” claims with “interface” or “interface switch” limitations, because the BlackBerry Relay component of its accused system was located in Canada. *Id.* at 1314.

The Federal Circuit Court of Appeals noted, “Ordinarily, whether an infringing activity under section 271(a) occurs within the United States can be determined without difficulty.” *Id.* at 1313. The court found that the case before it “present[ed] an added degree of complexity, however, in that: (1) the ‘patented invention’ is not one single device, but rather a system comprising multiple distinct components or a method with multiple distinct steps; and (2) the nature of those components or steps permits their function and use to be separated from their physical location.” *Id.* The question before the Federal Circuit Court of Appeals was “whether the using, offering to sell, or selling of a patented invention is an infringement under section 271(a) if a component or step of the patented invention is located or performed abroad.” *Id.* at 1315.

The court in *NTP* concluded, from its prior precedent, that “infringement under section 271(a) is not necessarily precluded even though a component of a patented *system* is located outside the United States,” but “the effect of the extraterritorial component may be different for different infringing acts,” *and* the analysis “will also differ as the result of differences between different types of claims.” *Id.* at 1316 (emphasis added). These

differences played out in different results for the claims of “use” infringement of the “system” and “method” claims containing an “interface” or “interface switch” limitation.

As to “system” claims, the court concluded, “The use of a claimed system under section 271(a) is the place at which the system as a whole is put into service, *i.e.*, the place where control of the system is exercised and beneficial use of the system obtained.” *Id.* at 1317. Because RIM’s customers located within the United States controlled the transmission of the originated information and also benefitted from such an exchange of information, the location of RIM’s BlackBerry Relay in Canada did not, as a matter of law, preclude infringement of the asserted “system” claims in that case. *Id.* The court found that “the location of the use of the communication system as a whole occurs in the United States,” so that the jury was properly presented with questions of infringement of NTP’s “system” claims containing an “interface” or “interface switch” limitation. *Id.*

The result was different, however, for NTP’s “method” claims. As the Federal Circuit Court of Appeals explained,

Under section 271(a), the concept of “use” of a patented method or process is fundamentally different from the use of a patented system or device. *In re Kollar*, 286 F.3d 1326, 1332 (Fed. Cir. 2002) (recognizing “the distinction between a claim to a product, device, or apparatus, all of which are tangible items, and a claim to a process, which consists of a series of acts or steps. . . . [A process] consists of doing something, and therefore has to be carried out or performed.”); see *Joy Techs., Inc. v. Flakt, Inc.*, 6 F.3d 770, 773 (Fed. Cir. 1993) (“The law is unequivocal that the sale of equipment to perform a process is not a sale of the process within the meaning of section 271(a).”). Although the Supreme Court focused on the whole operable assembly of a system claim for infringement in *Deepsouth*, there is no corresponding whole operable assembly of a process claim. *A method or process consists of one or more operative steps, and, accordingly, “[i]t is well established that a patent for a method or process is not infringed unless all steps or stages of*

the claimed process are utilized.” Roberts Dairy Co. v. United States, 208 Ct.Cl. 830, 530 F.2d 1342, 1354 (1976).

Because a process is nothing more than the sequence of actions of which it is comprised, the use of a process necessarily involves doing or performing each of the steps recited. This is unlike use of a system as a whole, in which the components are used collectively, not individually. *We therefore hold that a process cannot be used “within” the United States as required by section 271(a) unless each of the steps is performed within this country. In the present case, each of the asserted method claims of the ‘960, ‘172, and ‘451 patents recites a step that utilizes an “interface” or “interface switch,” which is only satisfied by the use of RIM’s Relay located in Canada. Therefore, as a matter of law, these claimed methods could not be infringed by use of RIM’s system. See Eli Lilly & Co. v. Am. Cyanamid Co.*, 82 F.3d 1568, 1571 (Fed. Cir. 1996) (discussing the enactment of section 271(g) and stating that “[p]rior to the enactment of the [Process Patents Amendments Act of 1988], a patentee holding a process patent could sue for infringement if others used the process in this country, but had no cause of action if such persons used the patented process abroad to manufacture products, and then imported, used, or sold the products in this country”); *see also Zoltek Corp. v. United States*, 51 Fed.Cl. 829, 836 (2002) (stating that “if a private party practiced even one step of a patented process outside the United States, it avoided infringement liability, as [section 271(a)] was limited to acts committed within the United States”).

Thus, we agree with RIM that a finding of direct infringement by RIM’s customers under section 271(a) of the method claims reciting an “interface switch” or an “interface” is precluded by the location of RIM’s Relay in Canada. As a consequence, RIM cannot be liable for induced or contributory infringement of the asserted method claims, as a matter of law.

NTP, Inc., 418 F.3d at 1317-18 (footnotes omitted; emphasis added).⁷

⁷This court has found only two cases since *NTP* that squarely address the question
(continued...)

Transamerica contends that, as in *NTP*, it is no longer performing Steps (b) and (d) of the claimed method in the United States, because the “determining” and “adjusting”

⁷(...continued)

of whether each step of a method claim was performed “within the United States,” as required to find infringement by “use” under § 271(a). The first of these is the decision of the Federal Circuit Court of Appeals in *Zoltek Corporation v. United States*, 442 F.3d 1345 (Fed. Cir. 2006), which involved a claim of infringement by the United States, pursuant to 28 U.S.C. § 1498, of a method patent for manufacturing carbon fiber sheets with controlled surface electrical resistivity. The United States had contracted with Lockheed Martin Corporation to design and build the F-22 fighter, and Lockheed had, in turn, subcontracted for two types of silicide fiber products that it uses in the aircraft, one of which required fibers that are partially carbonized and manufactured into sheets in Japan, then imported into the United States, and the other of which is a silicide fiber mat made from Tyranno fibers manufactured exclusively in Japan, but processed into mats in the United States. *Zoltek*, 442 F.3d at 1349. Relying on *NTP*, the court held that “the United States is liable for use of a method patent only when it practices every step of the claimed method in the United States.” *Zoltek*, 442 F.3d at 1347. However, “where, as here, not all steps of a patented process have been performed in the United States, government liability does not exist pursuant to section 1498(a).” *Id.* at 1350. The *Zoltek* case is not particularly illuminating here, however, because it involved a manufacturing process, not a business method.

The second post-*NTP* case is *Ormco Corporation v. Align Technology, Inc.*, 609 F. Supp. 2d 1057 (C.D. Cal. 2009), which involved a claim that Align was infringing Ormco’s patent for “‘a system and method by which an orthodontic appliance is automatically designed and manufactured through digital low jaw and tooth shape data. . . .’” *Ormco Corp.*, 609 F. Supp. 2d at 1061. Align saved digital data to a server in Santa Clara, California, and to a server in Costa Rica; operators in Costa Rica installed the downloaded files on their computers: and operators in Costa Rica used this data with software to create an accurate representation of the patient’s teeth to create, in turn, digital files used to fabricate properly fitting aligners. *Id.* at 1061-63. Relying on *NTP*, the court in *Ormco* concluded that Ormco’s method claims were not infringed, because “[s]ignificant portions of the process are performed in Costa Rica.” *Id.* at 1067. Although *Ormco*, like the present case, involved export of data for further manipulation, it is nevertheless not particularly illuminating, because nothing in *NTP* requires that “significant portions” of the process be exported to avoid infringement, and the extent to which steps of the processes at issue in *Ormco* and this case have been exported differs by orders of magnitude.

steps are now performed in Canada. Lincoln responds that there is no “interface” or “interface switch” limitation in its method patent and, in any event, Transamerica is actually performing the “determining” and “adjusting” steps in the United States, because it has only attempted to move a portion of these steps of the claimed computerized method outside of the United States to avoid future infringement, rather than utilizing extraterritorial technology to perform the step in the first place, as in *NTP*. In reply, Transamerica asserts that Lincoln is improperly narrowing the holding of *NTP* by suggesting that it is confined to method claims reciting a physical component, such as an “interface” or “interface switch,” but the holding in *NTP* was not so limited. Moreover, Transamerica contends that *NTP* is directly applicable, because Citi Canada designed and built the calculator that performs the calculations as well as the secure interface for transfer of message requests from Transamerica, and both the calculator and the secure interface are in Canada. Transamerica also contends that the computers that perform the “determining” and “adjusting” steps are now in Canada, so that even under Lincoln’s misreading of *NTP* as requiring a physical component, that component in this case is in Canada.

In its tentative ruling, this court found that this case, like *NTP*, presents the problem of a method with multiple distinct steps and the nature of those steps permits their function and use to be separated from their physical location. *NTP*, 418 F.3d at 1313. The court noted that Lincoln is correct that the method claims at issue in *NTP* required transmitting information to and from a specific physical component, an “interface” or “interface switch,” which the alleged infringer had physically located outside of the United States, and there is no such physical component in the pertinent steps of the method at issue here. This court opined that the fact that the method claims at issue in *NTP* required a specific physical component perhaps made *NTP* a comparatively “easy” case, because the physical location of a claimed component that was required to perform the method could be

relatively easily determined. This court was not convinced in its tentative ruling, however, that the absence of a claim limitation requiring a specific physical component is necessarily dispositive here, as Lincoln contends. At the same time, the court was not convinced by Transamerica's assertion that a "computer" is a required component to perform the steps at issue here, but the "computer" that performs the "determining" and "adjusting" steps is now in Canada.⁸ Instead, in its tentative ruling, this court noted that the test, as defined by the Federal Circuit Court of Appeals in *NTP*, is not whether the method claim claims a particular physical component that is located outside of the United States, but whether "each of the steps [of the method] is *performed* within this country." *NTP*, 418 F.3d at 1318 (emphasis added). Thus, the court found that the question here is whether the computer that Transamerica is using in Canada is actually *performing* the "determining" and "adjusting" steps, or simply some antecedent or constituent computations.

In *NTP*, *performing* the step of the method claim involving an "interface" or an "interface switch" required "transmitting" information *through* the "interface" or "interface switch." *Id.* at 1294-95. In its tentative ruling, this court found that performing Steps (b) and (d) of the method claim at issue here, however, does not require transmission of any information; rather, it requires "determining" and "adjusting" the amount "of a scheduled payment." '201 patent, Claim 35, Steps (b) and (d). Thus, the undisputed fact that Transamerica now transmits information back and forth to Canada may simply miss the point. Moreover, the undisputed fact that Transamerica actually performs some computations with the information in Canada, and cannot satisfy the claim steps at issue if those computations do not occur, may *also* miss the point, if those computations are not

⁸Certainly, the fact that Transamerica now uses a secure interface built by Citi Canada and located in Canada for transfer of message requests from Transamerica is irrelevant, where *nothing* in Claim 35 claims use of an "interface" as a part of the method and the interface is only necessary *because of* Transamerica's attempt to perform the "determining" and "adjusting" steps outside of the United States.

the actual “determining” and “adjusting” claimed by the pertinent steps of the claimed method.⁹

The court found in its tentative ruling that it is confronted with conflicting expert testimony in this case—from experts who both have exceptional, but extremely different qualifications—as to *where* the “determining” and “adjusting” steps of the claimed method actually occur. Dr. Kelly (for Transamerica) opined that these steps occurred in Canada, when a “value” was determined. In contrast, Mr. Romano (for Lincoln) opined that these steps do not occur until the “values” are put back into the Vantage system in the United States, thus giving them the “context” to be understood as MAWAs, *i.e.*, scheduled payment amounts.

In its tentative ruling, the court found it interesting that even Dr. Kelly conceded that a “value” in a response from Canada “corresponds” to the initial scheduled payment (or to the reduced amount for a scheduled payment after an excess withdrawal), and that “value” gets taken out of the response and put back into and stored in the appropriate location in the Vantage policy administration system in the United States. Hearing Transcript, Vol. 2, at 313-14. Similarly, Mr. Neill, the computer systems professional for Transamerica, testified that the values computed in Canada had to be returned to the “calling program” to administer the policy. Hearing Transcript, Vol. 1, at 196-98. Thus, one could reasonably conclude, even from the testimony of Transamerica’s witnesses, that what is computed in Canada is a “value” that, at most, “corresponds” to, but does not in

⁹While it is apparently true that Transamerica *cannot* now “determine” or “adjust” the amount of the scheduled payment if the “Canadian loop” is shutdown, the court was not convinced in its tentative ruling that fact is dispositive. The same would be true if Transamerica’s computer were powered by a power station in Canada under some cross-border power compact, and that power station went down. Transamerica surely could not claim that it was not infringing, because it was receiving power to run its computer in the United States from outside the United States, and power for its computers was necessary to “determine” and “adjust” the amount of a scheduled payment.

fact “determine” or “adjust,” the amount of the scheduled payment. One could also reasonably conclude, as Mr. Romano asserts, that the value computed in Canada has no “context,” so that it would not mean anything in the absence of proper “context” within the Vantage system.

In construing the “determining” term in Step (b) as “calculating,” this court expressly recognized that “‘calculating’ does not necessarily suggest just ‘simple’ arithmetic, or even use of only mathematical processes,” and that “determining” requires “[m]ore than mere ‘naming’ or ‘stating explicitly or in detail.’” *Markman* Ruling at 120-21; *Transamerica Life Ins. Co.*, 550 F. Supp. 2d at 934. In its tentative ruling, the court concluded that Mr. Romano’s interpretation of what happens in Canada and what happens in the United States appears to be more consistent with this construction than Dr. Kelly’s interpretation, where, notwithstanding Dr. Kelly’s attempts to convince the court that more happens in Canada than “simple arithmetic,” all that is ultimately determined in Canada is a “value” that “corresponds” to something labeled “MAWA,” but which has no true meaning for purposes of policy administration until it is entered into the Vantage system in the United States.

Moreover, although Transamerica touted Dr. Kelly as an “independent” expert, the court found in its tentative ruling that there was nothing “independent” about his interpretation of Transamerica’s “extraterritorial design arounds.” On cross-examination, Dr. Kelly revealed for the first time that he was actually engaged by Transamerica prior to the September 12, 2009, “design around” being implemented and that, in fact, his team’s analysis affected the results of the September 12, 2009, “design around.” Hearing Transcript, Vol. 2, at 345:12-18. Although Transamerica made much of Dr. Kelly’s “forensic” analysis of the September 12, 2009, “design around” in its direct examination of Dr. Kelly, Transamerica’s counsel omitted to ask if Dr. Kelly’s analysis had then been utilized to correct or modify any part of the September 12, 2009, “design around.” In its

tentative ruling, the court stated that it also did not recall, and had not found on further review, that Dr. Kelly revealed in his expert report, *see* Declaration, Exhibit No. 742, that he had actually advised Transamerica on the September 12, 2009, “design around” prior to its implementation.¹⁰ The court also stated in its tentative ruling that matters were, if anything, made worse, when Transamerica’s counsel attempted on redirect examination to ameliorate the court’s obvious concerns about Dr. Kelly’s fees by asking him to identify any “value beyond an expert report and [his] testimony” that Dr. Kelly had provided to Transamerica, and Dr. Kelly then testified that he had created “flow charts” for the September 12, 2009, “design around” that “would be potentially very valuable to [Transamerica]” and had uncovered, in his investigation and forensic analysis of the programming code, “a number of computations that we thought should be also done in Canada.” Hearing Transcript, Vol. 2, 372:4-12. In the tentative ruling, the court observed that this belated admission cast further doubt on Dr. Kelly’s “independence.” Thus, the court tentatively concluded that, where Dr. Kelly had actually advised Transamerica on specific aspects of the September 12, 2009, “design around,” he was really giving purportedly “independent” expert testimony, in part, about his own professional advice, thus giving a far-fetched new meaning to the word “independent.”

In the tentative ruling, the court also found that Dr. Kelly’s hourly rate of \$750, which he claimed his corporation set for him and which was “absolutely [his] standard rate,” was troubling. Hearing Transcript, Vol. 2, at 387:1-3. First, Dr. Kelly acknowledged that, if he wanted to charge \$900 per hour tomorrow for his time, he could “certainly” do that, and that “the partners would get together and establish new rates.” Hearing Transcript, Vol. 2, at 374:19-24. Although there are other shareholders in

¹⁰Dr. Kelly asserted that he personally drafted his Declaration, but the court finds otherwise, for the reasons stated on the record during the evidentiary hearing. *See* Hearing Transcript, Vol. 2, at 465:8-471:10.

Dr. Kelly's corporation, the court found in its tentative ruling that it appears that, for all practical purposes, Dr. Kelly could control what the corporation charged for his time. Thus, the court found that Dr. Kelly's attempt to leave the impression that the corporation, rather than Dr. Kelly himself, sets his rate is not exactly a model of candor. Second, and perhaps more importantly, the court found that the composite hourly rate and the total fee for Dr. Kelly's "team" was well in excess of a quarter of a million dollars (prior to his coming to Sioux City for the two-day hearing), which, in the court's opinion, casts a long shadow over his alleged "independence." Indeed, the fact that Transamerica spent more on Dr. Kelly's evaluation of the Citi Canada calculation engine than Transamerica paid Citi Canada to develop it caused the court to have grave concerns about Dr. Kelly's "independence" and credibility. Thus, the court could not help but wonder if Dr. Kelly's testimony was simply purchased for a high price.

In the tentative ruling, the court also found that it had reasons to doubt Dr. Kelly's credibility on issues now before the court. Dr. Kelly is obviously a very bright person with wide-ranging qualifications, but those qualifications certainly are not in the area of variable annuities, which is the subject of this litigation. Also, while Dr. Kelly opined freely about difficult legal questions of infringement and quoted Federal Circuit patent opinions in his declaration, he was totally confused by the court's questions about how he could have "partners" in his corporation, when corporations have "shareholders," an extraordinarily simple legal principle of basic business organizations.

In the tentative ruling, the court ultimately did not find Dr. Kelly's testimony, on the whole, to be either "independent" or credible.

At this point in the analysis in the tentative ruling, the court stopped short of finding that Transamerica's "design arounds" either do or do not infringe—although it certainly could have made such a determination, and in fact did so in its analysis of Lincoln's Motion, *infra*. The court found that it did not have to settle the question of whether

Transamerica’s “extraterritorial design arounds” still infringe to resolve Transamerica’s Motion, because to resolve Transamerica’s Motion, the court simply has to decide whether or not Transamerica has met its burden to prove that it is no longer infringing and, therefore, that prospective application of the Permanent Injunction is no longer appropriate. FED. R. CIV. P. 60(b)(5) (last clause) (relief from a judgment is appropriate when “applying it prospectively is no longer equitable); *Horne*, 129 S. Ct. at 2593 (under Rule 65(b), the party seeking relief from the judgment (or injunction) bears the burden of establishing that changed circumstances warrant relief). The court tentatively concluded that Transamerica had not met that burden, where the parties’ experts had given irreconcilable opinions, and the court found Lincoln’s expert’s analysis and opinions more credible. Under these circumstances, the court tentatively concluded that Transamerica is not entitled to relief from the Permanent Injunction based on the July 6, 2009, and September 12, 2009, “extraterritorial design arounds.”

d. The parties’ closing arguments

i. Transamerica’s closing argument. Not surprisingly, the focus of Transamerica’s closing argument was the court’s tentative conclusion that the September 12, 2009, extraterritorial “design around” does not avoid infringement. Transamerica mounted a multi-prong attack on that tentative conclusion.

First, Transamerica contended that there is now no factual dispute that the amounts of the scheduled payments, for purposes of the “determining” and “adjusting” steps, are calculated in Canada. Thus, Transamerica asserted that the only disputes are about “claim construction,” a matter on which it is unnecessary, even inappropriate, for the court to make credibility determinations as between differing expert opinions. In support of that contention, Transamerica cited *Trading Technologies International v. eSpeed, Inc.*, ___ F.3d ___, ___, 2010 WL 653271 (Fed. Cir. Feb. 25, 2010). Indeed, Transamerica

asserted that, in litigation in Indiana, Lincoln has repeatedly asserted that it is inappropriate for the court to rely on expert testimony for claim construction.

Second, Transamerica asserted that, to the extent that it was appropriate for the court to determine the credibility of expert testimony, the question here was whether Transamerica moved enough of its computer operations and systems to Canada to avoid infringement and, on that question, Dr. Kelly, as a computer expert, was better suited than an actuary to offer an opinion.

Third, Transamerica contended that, contrary to the court's tentative finding, Dr. Kelly did disclose in his declaration that he discovered and that Transamerica then fixed certain "bugs" in Transamerica's attempted diversion of MAWA calculations to Canada. Specifically, Transamerica cited paragraph 13 and Exhibit B and notes 22 and 23 to Dr. Kelly's declaration, as well as pages 31:14-17 and 34:18-35:9 of his deposition testimony.

Fourth, Transamerica asserted that the application of the undisputed facts in the "tentative draft ruling" is inconsistent with the claim construction in the *Markman* Ruling. Transamerica asserted that the "electric power" analogy in footnote 9 (footnote 10 of the tentative draft ruling) was flawed, because electric power is not claimed in the patent, but here, the patent claims "determining" and "adjusting" steps, which now occur in Canada. Transamerica asserted that Lincoln argued, and the court concluded, that "determining" means "calculating the amount," so that "determining" must, at least, include "calculating the amount"—indeed, Transamerica asserted that is how Lincoln proved infringement at trial, as the act of multiplying—but there is no dispute that "calculating the amount" occurs in Canada, where Mr. Romano concedes that is where a number is calculated, so that there is now no infringement under the *NTP* standard. Transamerica took issue with the court's statement that only "constituent computations" occur in Canada, because that is the only place where the formula, factors, and flow of calculations are applied. Transamerica also

asserted that the values calculated in Canada *do* have the necessary “context,” contrary to Mr. Romano’s assertions, because they actually have context before they ever leave to go to Canada, they have context while they are in Canada, after the calculations are performed in Canada, the “context comes back,” then the answer and the context are inserted into the Vantage system in the United States. Thus, Transamerica asserted that it really is doing something outside the scope of the claim construction used at trial.

ii. Lincoln’s closing argument. In its closing argument, Lincoln asserted that the court properly concluded that the September 12, 2009, “design around” fails to avoid infringement. First, Lincoln asserted that it is simply not bound by the proof of infringement that it offered at trial, although it is bound by the court’s claim construction, citing *TiVo, Inc. v. Dish Network Corp.*, 640 F. Supp. 2d 853 (E.D. Tex. 2009).

As to consideration and credibility of expert testimony, Lincoln pointed out that the issues before the court are *not* issues of claim construction, but issues of infringement. On those issues, Lincoln contended that it is clear that the court may consider the testimony and credibility of experts, citing *Conoco, Inc. v. Energy & Environmental International, L.C.*, 460 F.3d 1349, 1362 (Fed. Cir. 2006). Lincoln also contended that the court properly evaluated the relative expertise and credibility of Dr. Kelly versus Mr. Romano on their testimony concerning comparison of the claims, as properly construed by court, with the proffered “design around.” Lincoln also pointed out that the portion of Dr. Kelly’s declaration to which Transamerica points as making adequate disclosure of his involvement in “debugging” the September 12, 2009, “design around” before it was implemented does not indicate that he identified any of problems with that “design around” prior to its implementation. In any event, Lincoln asserted that it is now clear, as the court tentatively found, that Dr. Kelly was offering expert testimony, at least in part, about the effect of a “design around” to which he contributed. As to construction of “determining” as “calculating,” Lincoln pointed out that the court, as well as Lincoln, has construed the

term as involving more than mere arithmetic, although in some contexts it might involve only simple arithmetic. Moreover, Lincoln pointed out that the parties' superficial agreement that something is "computed" or "calculated," in the sense of performing simple arithmetic, in Canada does not mean that there is agreement that the "determining" and "adjusting" steps are performed in Canada. Rather, Lincoln argued that the court correctly pointed out in its tentative ruling that even Dr. Kelly testified that a "value" that "corresponds" to the amount of the scheduled payment is "calculated" in Canada, but that "value" must then be placed in the proper context for the "determining" and "adjusting" steps to be completed.

Lincoln also asserted that no amount of "effort" by Transamerica would avoid the consequences of the failure of its extraterritorial "design arounds" to avoid infringement, citing as further support of this court's conclusion the similar conclusion of the district court in the *TiVo* case. Indeed, Lincoln pointed out the similarities in the costs and hours expended on unsuccessful "design arounds" in this case and the *TiVo* case.

iii. Transamerica's rebuttal. In its rebuttal, Transamerica conceded that nothing prevents the court from making a credibility determination as between experts, but Transamerica contended that no credibility determination was necessary here, because there were no factual disputes as to what occurs in Canada. Rather, Transamerica contended that the issue ultimately comes down to claim construction, and whether there must be at least a "calculation," in the sense of some arithmetic, for there to be a "determination." Moreover, Transamerica reasserted that the claim limitation cannot be satisfied without the actions in Canada. Transamerica asserted that, while the court is not bound by the claim construction and proof at trial, the court cannot now be inconsistent with them. Finally, Transamerica asserted that, if the key issue is credibility, then that is another reason that Transamerica deserves a separate trial on whether or not its "design arounds" infringe.

iv. The e-mail exchanges. In a post-closings e-mail, ostensibly for the purpose of providing the court with citations of cases and briefs in litigation in another district mentioned in the closing arguments, Transamerica’s counsel felt compelled to add a further response to a question posed by the court at the closing arguments about why a two-day evidentiary hearing had been necessary, if no facts were in dispute. Transamerica stated that it did not know that there would be no disputed facts until Mr. Romano agreed at the hearing that the MAWA was calculated in Canada. Transamerica also responded to the court’s question during the closing arguments about the impact of experts’ opinions on infringement. Transamerica asserted that when, as here, the facts are undisputed, then necessarily expert opinions are based on differing interpretations of the patent claims, so that the issue comes down to claim construction.

In an e-mail response, Lincoln’s counsel asserted that a credibility determination was appropriate as to the experts’ differing opinions about where the “determining” and “adjusting” steps were being performed. Lincoln pointed out that Dr. Kelly had opined that the steps were now performed in Canada, but Mr. Romano had opined that these steps still occur in the United States, notwithstanding the calculations performed in Canada, because the values received through Canada have no context until they are mapped with the copybooks in the United States and brought into Vantage. Lincoln also asserted that Transamerica’s contention that it “did not know” what Mr. Romano’s opinion would be is belied by Transamerica’s own hearing slide 16, in which Transamerica excerpted portions of Mr. Romano’s earlier expert report under a label “Romano Admits ‘Calculating the Amount’ Occurs in Canada.”

In an e-mail reply authorized by the court, Transamerica’s counsel argued that Lincoln has never identified any facts that are in dispute, so that the differences in the experts’ infringement opinions are necessarily about claim construction. Specifically, Transamerica asserted that Lincoln’s argument that a key disputed fact was whether the

September 12, 2009, redesign infringes is an attempt to disguise a legal conclusion as a finding of fact, in light of the many instances in which courts have granted summary judgment of non-infringement in situations where, as here, there is no significant controversy regarding how the alleged infringer's allegedly infringing activities occur. Transamerica also argued that credibility does not resolve the issues of claim construction now presented; rather, there is nothing in the intrinsic evidence, including the specification and the prosecution history, that supports a construction of "determining" as the point at which the data is entered into a computer. Transamerica asserted that the court should not now adopt a claim construction that is contrary to and inconsistent with the construction in its *Markman* Ruling, which was that "determining" and "adjusting" must, at least, include "calculating the amount," which now occurs in Canada. Transamerica also pointed to portions of Mr. Romano's deposition and hearing testimony that Transamerica contends shows that he shifted his position on what occurs in Canada, so that Transamerica could not know that there was no factual dispute until Mr. Romano conceded at the hearing that MAWA is calculated in Canada.

e. The final analysis

i. Dr. Kelly's participation in the September 12, 2009, "design around." The court begins with the question of whether Dr. Kelly made adequate disclosure prior to the evidentiary hearing of his participation in the September 12, 2009, "design around." In the "tentative draft ruling," the court stated that it did not recall, and had not found on further review, that Dr. Kelly revealed in his expert report, *see* Declaration, Exhibit No. 742, that he had actually advised Transamerica on the September 12, 2009, "design around" prior to its implementation. Transamerica now asserts that paragraph 13, Exhibit B, and notes 22 and 23 to Dr. Kelly's declaration make such a disclosure prior to the hearing, as do pages 31:14-17 and 34:18-35:9 of his deposition testimony.

Paragraph 13 and Exhibit B to Dr. Kelly's declaration do indicate, in part, that Dr. Kelly requested source code and other files related to the September 12, 2009, release, which were provided "before September 12, 2009," as well as source code related to the September 12, 2009, release provided on September 21, 2009, and October 1, 2009, and source code "related to bug fixes" provided after October 1, 2009. This disclosure falls well short, in and of itself, of indicating that Dr. Kelly had, himself, identified any "bugs" and recommended their correction prior to the implementation of the September 12, 2009, "design around." Notes 22 and 23 (and, for that matter, note 24) of Dr. Kelly's declaration do reveal "instances" in which Dr. Kelly discovered programming errors that were fixed, leading him to determine that the calculations in question were now determined in Canada. However, none of these disclosures indicate the precise time frame in which Dr. Kelly discovered the "bugs" and the "bugs" were fixed. In any event, all fall well short of indicating in a candid manner that Dr. Kelly participated—to some degree—in the creation and implementation of the September 12, 2009, "design around" on which he was purportedly providing "independent" expert evaluation. The deposition testimony to which Transamerica pointed was not provided to the court either at or after the evidentiary hearing, so that the court cannot evaluate the adequacy of the disclosure to Lincoln in that testimony, but clearly that testimony provided no such disclosure to the court.

Although the court must correct its findings to the extent that the court now finds that, prior to the evidentiary hearing, Dr. Kelly made some disclosure to Lincoln, albeit in a rather obscure manner, that he had participated in the correction of the code for Transamerica's September 12, 2009, "design around," that disclosure does not alter the basis for the court's questions concerning Dr. Kelly's "independence." The court reiterates its conclusion that, where Dr. Kelly had actually advised Transamerica on specific aspects of the September 12, 2009, "design around," he was really giving

purportedly “independent” expert testimony, in part, about his own professional advice, thus giving a far-fetched new meaning to the word “independent.”

ii. Credibility determinations. Transamerica asserted that it is, at the very least, unnecessary for the court to make credibility findings concerning the testimony of the expert witnesses, where the central issue is one of claim construction. This assertion does nothing to convince the court that its conclusions about the September 12, 2009, “design around” are erroneous.

First, as to whether the questions now before the court are questions of “claim construction” or “infringement,” the court notes that “[c]laim construction involves the search for the ordinary and customary meaning of a claim term to a person of ordinary skill in the art.” *Conoco*, 462 F.3d at 1362. On the other hand, an essential step in the determination of infringement is “application of the facts to that construction.” *Id.*; see also *Dow Chem. Co. v. United States*, 226 F.3d 1334, 1338 (Fed. Cir. 2000) (“An infringement analysis entails two steps. The first step is determining the meaning and scope of the patent claims asserted to be infringed. The second step is comparing the properly construed claims to the device [or process] accused of infringing.” (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*), *aff’d*, 517 U.S. 370 (1996)). “The first step, claim construction, is a question of law . . . [but] [t]he second step is a factual determination.” *Dow Chem. Co.*, 226 F.3d at 1338.

As to claim construction, the Federal Circuit Court of Appeals has recognized that the meaning of claim terms “may be informed by the surrounding claim language, the specification, the prosecution history, and extrinsic evidence.” *Conoco*, 462 F.3d at 1362. As the court explained, however,

Though not preferred over intrinsic evidence, [*Phillips v. AWH Corp.*, 415 F.3d 1303,] 1317 [(Fed. Cir. 2005)],
extrinsic evidence in the form of expert testimony can
be useful to a court for a variety of purposes, such as to

provide background on the technology. . . ., to explain how an invention works, to ensure that the court’s understanding of the technical aspects of the patent is consistent with that of a person of ordinary skill in the art, or to establish that a particular term in the patent or prior art has a particular meaning in the pertinent field.

Conoco, 460 F.3d at 1362 (quoting *Phillips*, 415 F.3d at 1318). The Federal Circuit Court of Appeals has reiterated that “claim construction is solely a question of law” for the court. See *Trading Techs. Int’l*, ___ F.3d at ___, 2010 WL 653271 at *7 (citing *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1451 (Fed. Cir. 1998) (*en banc*), as so construing *Markman*). The Federal Circuit Court of Appeals noted, further, that “[n]othing in the Supreme Court’s opinion [in *Markman*] supports the view that the Court endorsed a silent, third option—that claim construction may involve subsidiary or underlying questions of fact.” *Id.* (quoting *Cybor Corp.*, 138 F.3d at 1455). Although the district court may evaluate expert testimony in the course of claim construction, the appellate court reviews the district court’s factual decisions underlying its claim construction with no deference and, indeed, reviews the court’s claim construction “without the slightest iota of deference.” *Id.* In contrast, on the question of infringement, as application of the facts to the court’s construction, the court may properly consider the credibility of the parties’ experts’ opinions. See *Conoco*, 460 F.3d at 1362-63 (noting that the district court determined that Conoco’s witnesses were more credible than EEI’s on the “application of the facts to [the court’s] construction” of the terms in question, and quoting *Energy Capital Corp. v. United States*, 302 F.3d 1314, 1329 (Fed. Cir. 2002), for the proposition that “[a]s for the relative weight given to the testimony of both sides’ expert witnesses, we accord the trial court broad discretion in determining credibility because the court saw the witnesses and heard their testimony”).

Here, the court determined the appropriate claim constructions some time ago, in its *Markman* Ruling (docket no. 64), entered March 10, 2008. See *Transamerica Life Ins.*

Co. v. Lincoln Nat'l Life Ins. Co., 550 F. Supp. 2d 865 (N.D. Iowa 2008). What is at issue now is not the construction of the claim terms, but the application of the facts of Transamerica's September 12, 2009, "design around" to the pertinent claim constructions. See *Conoco*, 460 F.3d at 1362-63 (infringement determinations involve construction of the claim terms, a question of law, and application of the facts to that construction, a question of fact); *Dow Chem. Co.*, 226 F.3d at 1338 (same).

Specifically, the court does not agree with Transamerica that *no* facts are now in dispute. Rather, one fact is now undisputed, that some computation occurs in Canada. That undisputed fact would resolve the question of infringement, if "computing" a value was sufficient to satisfy the "determining" or "adjusting" step. It is not. In construing the "determining" term in Step (b) as "calculating" in the *Markman* Ruling, this court expressly recognized that "'calculating' does not necessarily suggest just 'simple' arithmetic, or even use of only mathematical processes," and that "determining" requires "[m]ore than mere 'naming' or 'stating explicitly or in detail.'" *Markman* Ruling at 120-21; *Transamerica Life Ins. Co.*, 550 F. Supp. 2d at 934. Thus, Transamerica's assertion that the proper construction of "determining" must "at least" include "calculating the amount" improperly equates "calculating" with "computing," *i.e.*, with "mathematical processes." As the court has construed the term, however, "determining" means something *more than* just "simple" arithmetic and *more than* use of "mathematical processes." Here, the fact that is still in dispute, is where the "more than math" parts of "determining" or "adjusting" the minimum scheduled payment occur.

It seems to the court that it is precisely the province of the court, under such circumstances, to determine which expert testimony properly applies the court's claim construction and that, in so doing, the court may consider the credibility of the experts. See *Conoco*, 460 F.3d at 1362-63. Moreover, as previously noted, the need for expert testimony and questions about the credibility of that testimony do not necessarily require

a separate trial of infringement issues, even if they arise in the context of a “contempt” proceeding, which is not the context here. *See Abbott Labs*, 503 F.3d at 1379. Therefore, the court concludes that it may properly assess the relative credibility of the proffered expert testimony.

Perhaps more importantly, the court reaffirms and adopts all of the factual findings in Section II.B.2. of the tentative ruling relating to the credibility of the experts, except as modified in this subsection, and for all of the reasons stated in the tentative ruling, except as modified in this subsection, reaffirms its tentative assessment of the experts’ credibility, including its ultimate finding that Dr. Kelly’s testimony, on the whole, was neither “independent” nor credible.

iii. Reconsideration of the September 12, 2009, “design around.” Finally, the court turns to a reconsideration of its tentative conclusion that the September 12, 2009, “design around” does not avoid infringement in light of Transamerica’s renewed and new arguments. The court notes that, on this point, Transamerica has not pointed to any evidence that the court did not consider. Rather, the court noted that Mr. Romano had agreed with Dr. Kelly and Mr. Neill that “a value” that “corresponds” to a scheduled payment amount is calculated in Canada. Indeed, the court never suggested that there was any dispute about where “a value” that “corresponded” to a scheduled payment amount was calculated.

The question that the court resolved against Transamerica was application of the facts to the construction of the claim and, more specifically still, whether the calculation of “a value” in Canada was the “determination” or “adjustment” of the scheduled payment amount required to practice Step (b) or (d) of Claim **35**, *under the court’s existing claim construction*. Based on the findings of fact in Section II.B.2. of the tentative ruling, which the court now reaffirms and adopts, except as specifically modified in this final ruling, and for all of the reasons stated in the tentative ruling, the court now reiterates as final its

conclusion that what happens in Canada is *not* the “determination” or “adjustment” of the scheduled payment amount required to practice Step (b) or (d) of Claim 35, *under the court’s existing claim construction*.

Again, as the court explained in its tentative analysis, and reiterates now, in construing the “determining” term in Step (b) as “calculating,” this court expressly recognized that “‘calculating’ does not necessarily suggest just ‘simple’ arithmetic, or even use of only mathematical processes,” and that “determining” requires “[m]ore than mere ‘naming’ or ‘stating explicitly or in detail.’” *Markman* Ruling at 120-21; *Transamerica Life Ins. Co.*, 550 F. Supp. 2d at 934. Again, contrary to Transamerica’s assertions, this construction does not mean that “determining” is “at least” computation, it means that it includes *more than* “simple” arithmetic and *more than* “mathematical processes.” Mr. Romano’s interpretation of what happens in Canada and what happens in the United States appears to the court to be more consistent with this construction than Dr. Kelly’s interpretation, where, notwithstanding Dr. Kelly’s attempts to convince the court that more happens in Canada than “simple arithmetic,” all that is ultimately determined in Canada is a “value” that “corresponds” to something labeled “MAWA,” but which has no true meaning for purposes of policy administration until it is entered into the Vantage system in the United States.

Transamerica contends that Lincoln’s assertion of infringement of the “determining” step by the redesigned method is inconsistent with the claim construction and proof of infringement of that step used at trial. In response, Lincoln asserts that the *TiVo* decision stands for the proposition that it is not bound by its proof of infringement at trial. In *TiVo*, in a contempt proceeding, when considering whether or not there were more than merely colorable differences between the infringer’s original products and the infringer’s modified products, the court found that it was bound by its previous rulings on the scope of the claims, but that the scope of the claims was not limited by a jury’s verdict or a patentee’s

theories at trial. *TiVo*, 640 F. Supp. 2d at 864. Similarly, when considering whether the patentee was judicially estopped from taking what the infringer argued were inconsistent positions at trial and in post-trial contempt proceedings, the court found that a party may take a *different but not inconsistent* position concerning proof of infringement at trial and in post-trial proceedings in the face of infringement in a dissimilar way. *TiVo*, 640 F. Supp. 2d at 867 (“The Court finds that the positions taken by TiVo during these contempt proceedings and previously at trial are not ‘clearly inconsistent’ with one another,” where the claim terms were construed in the same way, but the infringement before and after trial occurred in “dissimilar” ways).

Here, the court is not persuaded by Transamerica’s assertions that the court’s tentative conclusion that the September 12, 2009, “design around” does not avoid infringement of the “determining” claim is inconsistent with the construction of the “determining” step at trial, although it may be based on proof of infringement of this step that is somewhat different from what was presented at trial. Assuming that it is true that Lincoln proved infringement of the “determining” step at trial by proving that an arithmetic operation occurred in Transamerica’s Vantage policy administration system, that does not mean that Lincoln is now limited to a construction of “determining” as the performance of an arithmetic operation. *TiVo*, 640 F. Supp. 2d at 864 (the scope of the claims was not limited by a jury’s verdict or a patentee’s theories at trial). In the context of a policy administration system *that was entirely within the United States*, and administration of any particular policy entirely within that policy administration system, the arithmetic operation was already or instantly in the “context” that recognized the value produced by the operation as the amount of the scheduled payment. In other words, the “more than math” aspect of “determining” was necessarily present. Indeed, it would have been strange indeed for Lincoln to attempt to prove more than the existence of a computerized policy administration system in the United States in which an arithmetic

operation produced a value that was immediately recognized and used by the policy administration system as the scheduled payment amount to establish infringement of Step (b). In the September 12, 2009, “design around,” however, the arithmetic operation is now divorced from the context of the policy administration system that uses the value produced by the operation, because Transamerica has “looped” the arithmetic operation through Canada. In this dissimilar circumstance, it is not inconsistent to assert that the “determination” has not occurred until the result of the arithmetic operation is placed back into the context of and used by the policy administration system in the United States, *i.e.*, the “determination” does not occur until the “more than math” aspect has occurred, and that aspect is *only* performed in the United States. In other words, Lincoln and the court properly considered that Transamerica now infringes this step of the patent in a dissimilar way from the infringement shown at trial, but Transamerica still infringes within the construction of the claim term used at trial. *See TiVo*, 640 F. Supp. 2d at 864.

Nor is the court persuaded by Transamerica’s new argument that the arithmetic operation in Canada is given the appropriate “context” as a “determination” of the amount of a scheduled payment before, during, and after the arithmetic operation in Canada that yields a value that corresponds to the amount of the scheduled payment. It may be true that the Vantage system understands the “context” of its request to Canada and the “context” of the response it ultimately receives from Canada as the “determination” of the amount of a scheduled payment, but the request itself is only to determine a “value” from using certain variables in a specified formula, and all that Canada returns is a “value” that “corresponds” to the amount of a scheduled payment, even as Dr. Kelly explained the September 12, 2009, “design around.” This is an example of what the Federal Circuit Court of Appeals recognized in *NTP* as separation of function and use from physical location. *NTP*, 418 F.3d at 1313. The physical location of the computation is in Canada, but the function and use of the computation as the amount of a scheduled payment, the

“more than math” part of the “determination,” occurs only in the United States in the Vantage policy administration system.

In short, based on the findings of fact in Section II.B.2. of the tentative ruling, which the court now reaffirms and adopts as final, except as specifically modified in this final ruling, and for all of the reasons stated in the tentative ruling, which the court now adopts and reaffirms, as well as for the additional reasons stated in this final ruling, the court reiterates as final its tentative conclusion that Transamerica has failed to prove that the September 12, 2009, “design around” avoids infringement of Steps (b) and (d) of Claim **35**.

3. Summary

Transamerica’s October 18, 2009, Motion For Relief From And Modification Of Permanent Injunction And Refund Of Royalty Payments Made Under Protest (docket no. 345) (Transamerica’s Motion) will be denied. Transamerica has failed to prove that its March 30, 2009, “design around,” providing for “manual” payment of benefits if account value is exhausted, avoids infringement, because that “design around” is based on continued reliance on an impermissible construction of Step (e) of Claim **35** as requiring exhaustion of account value before the method can be performed. Transamerica has failed to prove that its July 6, 2009, and September 12, 2009, “extraterritorial design arounds” avoid infringement, because it has failed to prove that, after those “design arounds,” either Step (b) or Step (d) of the claimed method is actually performed in Canada, rather than in the United States. As explained above, in the absence of relief to Transamerica, Transamerica remains subject to the status quo enhanced royalty rate of 22 basis points provided in paragraph 3 of the Permanent Injunction for failure to implement non-infringing alternatives within the ten-day implementation period.

The court recognizes that Transamerica can (and does) argue that it is inequitable to impose a royalty, especially at a rate higher than the jury determined, for using methods

that have not been found by a jury to infringe the patent. The court also recognizes that Transamerica argues that it is inequitable to continue to enforce the Permanent Injunction against the “design arounds,” where Transamerica has invested so much time, effort, and money into developing those “design arounds.” As to both of these concerns, the response is the same: A permanent injunction is a matter of equity in the court’s discretion on which the party seeking modification bears the burden of establishing that relief is appropriate. *See* FED. R. CIV. P. 60(b)(5) (last clause) (one ground for modification of a judgment is that “applying [the judgment] prospectively is no longer equitable); *Horne*, 129 S. Ct. at 2593 (“The party seeking relief bears the burden of establishing that changed circumstances warrant relief,” and the question is whether “a significant change either in factual conditions or in law renders continued enforcement detrimental to the public interest.”); *International Rectifier Corp. v. Samsung Elec. Co.*, 361 F.3d 1355, 1359 (Fed. Cir. 2004) (stating that modification of a patent-based injunction should be made after applying Federal Circuit law, and “District courts have broad discretion in determining the scope of injunctive relief, and this court reviews a district court’s decision granting, denying, or modifying an injunction, in a patent case, for abuse of discretion, applying Federal Circuit law,” in turn citing *Carborundum Co. v. Molten Metal Equip. Innovations, Inc.*, 72 F.3d 872, 881 (Fed. Cir. 1995), without reference to Rule 60(b)(5)). Moreover, as the court observed, above, in light of the public interest in protecting patent rights, evident from the patent laws themselves, however hard an infringer may have tried to create a non-infringing method, if the resulting “new” method still infringes—and, the court now adds, if the infringer fails to show that the “new” method does *not* infringe—the “new” method is still subject to an injunction against infringement, and applying the injunction prospectively remains equitable.

C. Lincoln's Motion

Because the court has determined that Transamerica's Motion must be denied, in its entirety, the court must consider Lincoln's Motion, pursuant to paragraph 4 of the Permanent Injunction, seeking a further accounting and royalty payment at a further enhanced rate of 44 basis points, based on Transamerica's continued infringement after the implementation period. Transamerica asserts that Lincoln's Motion should be denied.

1. Arguments of the parties

Lincoln argues that, for the reasons that Transamerica's motion fails, Lincoln is entitled to an accounting and royalty payment for Transamerica's further infringement. In the alternative, Lincoln asserts that, even if Transamerica's "design arounds" do not technically infringe, for example, because some claim step is now performed outside of the United States, Transamerica is still infringing and should still be subject to a further royalty payment at a further enhanced rate. Lincoln contends that Transamerica is now guilty of "selling" and "offering to sell" the infringing method, citing *NTP*, 418 F.3d at 1319. The critical element of a "selling" claim here, Lincoln contends, is that Transamerica enters into annuity contracts with customers who pay for the administration of those contracts, so that a contractual obligation and money are being "transferred." Lincoln distinguishes *Ricoh Co. Ltd., v. Quanta Computer Inc.*, 550 F.3d 1325, 1335 (Fed. Cir. 2008), which rejected a claim of infringement by selling software containing instructions to perform a patented method, on the ground that Transamerica's contractual obligations mean that Transamerica is obligated to and does carry out the steps of the patented method. Lincoln also argues that Transamerica's sister companies are "contributory infringers" under 35 U.S.C. § 271(c).

As noted above, Transamerica argues that Lincoln's Motion is for "contempt," but the court has rejected that argument. Transamerica argues that its "design arounds" do not infringe, which the court has also now found Transamerica has failed to prove. As a "last

stand” position, Transamerica asserts that, where it has made a good faith effort—involving more than 5,000 hours of work to develop and implement substantial modifications to its method of policy administration—a further royalty at a further enhanced rate is not appropriate. Transamerica also reiterates its pre-trial arguments that a “selling” claim is not viable as to a business method patent or, at least, is not viable as to this business method patent. Finally, Transamerica argues that its sister companies do not engage in “contributory infringement,” because such a claim is not applicable to this kind of patent.

2. *Tentative analysis*

In its tentative ruling, the court found that, as elsewhere explained in that ruling, Lincoln’s motion is not a motion for “contempt,” but a motion authorized by paragraph 4 of the Permanent Injunction. Also as explained elsewhere in the tentative ruling, the court reiterated that, to get a further royalty at a further enhanced rate, Lincoln bears the burden to prove two things: (1) that Lincoln was not “reasonably satisfied” with Transamerica’s “design arounds,” to open the door to the court’s *consideration* of further royalty and further enhancement of the royalty rate, and, if Lincoln opens the door, (2) that a further accounting and payment of a further royalty at the further enhanced rate are appropriate (and for what period of infringement). Again, Lincoln concedes that the “reasonable satisfaction” standard is an “objective” one, but the court tentatively concluded that it has the discretion to determine whether Lincoln is entitled to the relief that Lincoln seeks.

As to the first element that Lincoln must prove, that Lincoln was not “reasonably satisfied” (*i.e.*, that its dissatisfaction was objectively reasonable) that Transamerica’s “design arounds” are not “colorably distinct” from infringing methods, the court tentatively concluded that Lincoln does not have to be *right* that Transamerica’s “design arounds” still infringe, Lincoln’s belief that the “design arounds” still infringe just has to be *objectively reasonable*. For essentially the same reasons that the court tentatively

concluded that Transamerica cannot show that circumstances have changed sufficiently to warrant relief from the Permanent Injunction, the court tentatively concluded that Lincoln *can* show that its dissatisfaction with Transamerica's modifications is objectively "reasonable." Somewhat more specifically, the court explained, Lincoln's dissatisfaction with Transamerica's "design arounds" was objectively reasonable either because the "design arounds" still infringe or because Transamerica has failed to prove that the "design arounds" do *not* infringe.

Next, the court turned to the requirement that Lincoln prove that a further accounting and payment of a further royalty, at a further enhanced rate of 44 basis points, is appropriate, as well as the period of the further infringement. Permanent Injunction, paragraph 4 (last clause). The court found that the question is, what standard does the court then apply to decide whether Lincoln has proved these things? Transamerica contends that it is a "contempt" burden to prove by clear and convincing evidence that Transamerica's "design arounds" still infringe. As the court explained elsewhere in its tentative ruling, the court reiterated that this is not a "contempt" action, nor did the court see why Lincoln would bear a more onerous burden pursuant to paragraph 4 of the Permanent Injunction to show that the "design arounds" infringe (if that is what is required) than Lincoln bore to prove infringement in the first place at trial. *See* Instruction No. 2 (Lincoln bore the burden at trial to prove infringement and damages by the greater weight of the evidence).

That said, the court tentatively concluded that proof that Transamerica is still infringing, by either the greater weight of the evidence or by clear and convincing evidence, would certainly suffice to prove that a further accounting and further royalty payment, at a further enhanced rate, are appropriate. The court found that it did not need to decide the difficult question of whether some lesser showing would suffice to warrant

a further royalty, because, with the burden now on Lincoln, the court found that Lincoln *has* proved that Transamerica is still infringing.

As explained elsewhere in the tentative ruling, the court reiterated that, in relation to Transamerica's Motion, the March 30, 2009, "design around" was premised on a misconstruction of the step of the method that it purported to avoid. The court then expressly found that, not only does the March 30, 2009, "design around" not avoid infringement, it does, in fact, still infringe Step (e) of Claim **35**.

As to the July 6, 2009, and September 12, 2009, "extraterritorial design arounds," as explained elsewhere in the tentative ruling, the court found that it not only doubted the "independence" and credibility of Dr. Kelly's expert testimony on behalf of Transamerica, but found that Mr. Romano's interpretation, on behalf of Lincoln, of what happens in Canada and what happens in the United States is more consistent with the court's construction of the pertinent terms of Steps (b) and (d) of Claim **35** than Dr. Kelly's interpretation. Again, notwithstanding Dr. Kelly's attempts to convince the court that more happens in Canada than "simple arithmetic," the court tentatively concluded that all that is ultimately determined in Canada is a "value" that "corresponds" to something labeled "MAWA," but which has no true meaning for purposes of policy administration until it is entered into the Vantage system in the United States.

Again, as in *NTP*, "the nature of [the] steps [of the claimed method] permits their function and use to be separated from their physical location," *NTP*, 418 F.3d at 1313, and, moreover, permits their *performance* to be separated from the physical location of an unclaimed part of a computer that performs them. The "method" claims in *NTP*, which the court found were not infringed as a matter of law, expressly required "transmitting" information through an "interface" or "interface switch," that is, required that information be "looped" through an "interface" or "interface switch," so that physical location of that "interface" or "interface switch" in Canada meant that the steps in question were not

performed “within the United States.” *Id.* at 1294-95 (method claim language) & 1318 (finding of non-infringement). This court tentatively concluded, however, that creation of a similar extraterritorial “information loop” for transmission of information, or even for certain computations with that information, in this case, however, does not result in extraterritorial performance or non-infringement of the method steps in question. This is so, this court reasoned, because *no such transmission through an “information loop” is required by the patent*. Rather, the court tentatively concluded that the *performance* of the method steps in question, the “determining” and “adjusting” of scheduled payments, occurs only within the Vantage policy administration system in the United States, where the computed values are given the context that allows them to be used in policy administration. The court tentatively found that Transamerica’s “extraterritorial design arounds” result in nothing more than an unnecessary “detour” through Canada. Under these circumstances, pursuant to paragraph 4 of the Permanent Injunction, the court tentatively concluded that Transamerica must make a further accounting and pay a further royalty, from the end of the 100-day period established in paragraph 3 of the Permanent Injunction to the date of this ruling.

Although the court tentatively found that all three of Transamerica’s purported “design arounds” still infringe the method claimed in Claim 35 of the ‘201 patent, and that a further accounting and payment of a further royalty are required, the court did not find that a further enhancement of the royalty rate is appropriate. This is so, the court explained in its tentative ruling, because the court concluded that, even though Lincoln’s Motion is not for “contempt,” the court has the discretion, in equity, to enhance or to decline to enhance the royalty rate to 44 basis points, and the court tentatively found that other equitable factors tip the balance against further enhancement of the royalty rate. Here, the court tentatively found it inequitable to further enhance the royalty rate, because Transamerica has made a “good faith” (albeit unsuccessful) effort to comply with the

Permanent Injunction. Where the evidence shows that Transamerica has invested thousands of hours and hundreds of thousands of dollars in attempting to “design around” the claimed method, the court tentatively concluded that it cannot find that the “design arounds” are merely shams, even if they are unsuccessful. Thus, the court tentatively concluded that Transamerica’s “good faith” warrants maintaining the status quo at a royalty rate at 22 basis points, the rate otherwise applicable, because Transamerica has failed to end infringement within the ten-day implementation period.¹¹

In the tentative ruling, the court declined to consider Lincoln’s alternative claims relying on other theories of infringement, infringement by “selling” the method and “contributory infringement.” The court found that Transamerica’s “design arounds” still infringe on a “use” theory of infringement, so that any finding under other theories of infringement would be superfluous. Also, the court concluded, because the Permanent Injunction specifically enjoined only “using and continuing to use” an infringing method, other theories of infringement are beyond the scope of a decision concerning compliance with the Permanent Injunction. Finally, the court concluded that Lincoln’s alternative claims of infringement involve entirely new theories of infringement and/or involve new entities not parties here, so that the claims and necessary parties are beyond the court’s current jurisdiction.

3. The parties’ closing arguments and the court’s final analysis

Neither Transamerica nor Lincoln made any challenges to any findings or conclusions in the court’s “tentative draft ruling” concerning continued infringement in the context of Lincoln’s Motion separate from their arguments on similar issues in the context of Transamerica’s Motion. Rather, the parties’ arguments about whether or not

¹¹The court observed in its tentative ruling that, at some point, if Transamerica makes no further effort to end infringement, a royalty rate at 44 basis points might be equitable.

Transamerica's "design arounds" continue to infringe were subsumed in arguments about whether or not Transamerica had proved that its "design arounds" avoid infringement. Nevertheless, a few points pertinent here were raised in the parties' closing arguments.

First, however, based on the findings of fact in the tentative ruling, which the court now expressly reaffirms, except as expressly modified in this final ruling, and for all of the reasons stated in the tentative ruling and reaffirmed here, as well as for any additional reasons stated in this final ruling, the court now reiterates as final its tentative conclusion that not only has Transamerica failed to prove that its "design arounds" do not infringe, but Lincoln has proved that the "design arounds" *do* infringe Claim 35 of the '201 patent. Thus, Lincoln was not "reasonably satisfied" with Transamerica's "design arounds," and the door is opened for the court's consideration of whether or not a further accounting and a further royalty payment, at a further enhanced rate, are required. Moreover, under these circumstances, pursuant to paragraph 4 of the Permanent Injunction, the court reiterates as final its conclusion that Transamerica must make a further accounting and pay a further royalty, from the end of the 100-day period established in paragraph 3 of the Permanent Injunction to the date of this ruling.

The first point raised by the parties' closing arguments is whether or not Transamerica's "effort" to avoid infringement matters to the disposition of Lincoln's Motion. Lincoln asserted that the court properly rejected any argument that Transamerica's "effort" matters, citing *TiVo, Inc. v. Dish Network Corporation*, 640 F. Supp. 2d 853 (E.D. Tex. 2009). However, the court rejected that argument only as to Transamerica's Motion to modify the Permanent Injunction. The court also expressly, if tentatively, concluded that Transamerica's "good faith" efforts to avoid infringement *were* a ground for *not* further enhancing the royalty to 44 basis points for infringement after the implementation period. Based on the findings of fact in the tentative ruling, which the court now expressly reaffirms, except as expressly modified in this final ruling, and for

all of the reasons stated in the tentative ruling and reaffirmed here, as well as for any additional reasons stated in this final ruling, the court now reiterates as final its tentative conclusion that, where the matter lies in the court's discretion pursuant to paragraph 4 of the Permanent Injunction, it is inequitable to further enhance the royalty rate, because Transamerica has made a "good faith" (albeit unsuccessful) effort to comply with the Permanent Injunction. Where the evidence shows that Transamerica has invested thousands of hours and hundreds of thousands of dollars in attempting to "design around" the claimed method, the court cannot find that the "design arounds" are merely shams, even if they are unsuccessful. Transamerica's "good faith" warrants maintaining the status quo at a royalty rate at 22 basis points, the rate otherwise applicable, because Transamerica has failed to end infringement within the ten-day implementation period.

Second, Lincoln noted in its closing argument that the court had not addressed the question of whether Transamerica should now be required to make regular royalty payments and the frequency with which Transamerica should be required to do so. Lincoln reiterated its request, in paragraphs 9 and 10 of its Motion, that the final order require an accounting for the period September 22, 2009, through the date of the final order and a royalty payment seven days later. Lincoln also requested that the final order incorporate a schedule for subsequent monthly accounting and royalty payments. Transamerica responded that, if further royalty payments were to be required, quarterly accountings and quarterly payments were sufficient and would be considerably less onerous on Transamerica. Lincoln conceded that a request for quarterly accountings and quarterly payments was reasonable. The court now finds that quarterly accountings and quarterly royalty payments are reasonable and appropriate.

4. Summary

The court will grant Lincoln's Motion as to a further accounting and payment of a further royalty after the 100-day period, but deny Lincoln's Motion as to further

enhancement of the royalty rate to 44 basis points, because the court concludes that, under the circumstances presented here, it is inequitable to impose a further enhancement of the royalty rate. Consequently, Transamerica continues to be subject to the Permanent Injunction as to all pertinent riders, but at a royalty rate of 22 basis points (not a further enhanced rate of 44 basis points) for failure to end infringement during the implementation period. Transamerica must provide an accounting and pay a royalty for the period from September 22, 2009, through the date of this order, such accounting and royalty to be paid not later than thirty days from the date of this order. Thereafter, Transamerica must provide an accounting and royalty payment at least quarterly, not later than thirty days after the end of the quarter.

III. CONCLUSION

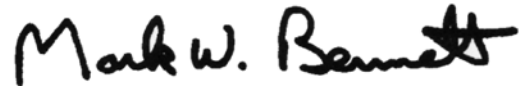
Upon the foregoing, it is the court's *final ruling* that:

1. Transamerica's October 18, 2009, Motion For Relief From And Modification Of Permanent Injunction And Refund Of Royalty Payments Made Under Protest (docket no. 345) (Transamerica's Motion) is **denied**; and
2. Lincoln's November 4, 2009, Motion For A Further Accounting And Ongoing Royalty Payments (docket no. 349) (Lincoln's Motion) is **granted**, to the extent that Lincoln is entitled to a further accounting and a further royalty payment pursuant to paragraph 4 of the Permanent Injunction, for infringement after the implementation period, but **denied** as to further enhancement of the royalty rate to 44 basis points. Consequently, such further royalty payment should be at the rate of 22 basis points.
3. Transamerica shall provide an initial accounting and pay an initial royalty pursuant to this order from September 22, 2009, through the date of this order, with such accounting and payment to be made not later than thirty days from the date of this order.

4. Transamerica shall thereafter provide an accounting and royalty payment at least quarterly, not later than thirty days after the end of the quarter.

IT IS SO ORDERED.

DATED this 8th day of March, 2010.

A handwritten signature in black ink that reads "Mark W. Bennett". The signature is written in a cursive style with a horizontal line underneath the name.

MARK W. BENNETT
U. S. DISTRICT COURT JUDGE
NORTHERN DISTRICT OF IOWA