### UNITED STATES DISTRICT COURT EASTERN DISTRICT OF MISSOURI EASTERN DIVISION

BANCORP SERVICES, L.L.C.,	)
Plaintiff,	) )
VS.	)
SUN LIFE ASSURANCE COMPANY OF CANADA,	)
Defendant.	)

No. 4:00-CV-1073 (CEJ)

### MEMORANDUM AND ORDER

This matter is before the Court on the motion of defendant Sun Life Assurance Company of Canada (Sun Life) for summary judgment. Plaintiff Bancorp Services, LLC, (Bancorp) has filed a motion in opposition and the issues are fully briefed.<sup>1</sup>

### I. <u>Background</u>

Bancorp is the holder of United States Patent No. 5,926,792 (the '792 patent) and Patent No. 7,249,037 (the '037 patent). The patents describe a system for administering and tracking the value of separate-account life insurance policies issued pursuant to Corporate Owned Life Insurance ("COLI") and Bank Owned Life Insurance ("BOLI") plans. These plans are purchased by corporations and banks to insure the lives of their employees in order to fund future post-retirement benefits on a tax-advantaged basis. <u>Bancorp Services, LLC v. Hartford Life Ins. Co.</u>, 359 F.3d 1367, 1369 (Fed. Cir. 2004).

<sup>&</sup>lt;sup>1</sup>Also pending are the parties' motions for a status hearing, to amend the case management order, to compel discovery, and to stay the case pending decision on the summary judgment motion.

The value of a separate-account policy fluctuates with the market value of the underlying securities. The bank or corporation is required to report this fluctuating market value, and the volatility inherent in short-term market values has made some companies reluctant to purchase the plans. Stable value protected investments provide a mechanism for stabilizing the reported value of the policies by arranging for a third party guarantor – the "stable value protected writer" – to guarantee, for a fee, a particular value (the "book value") of the life insurance policy, regardless of its market value, in the event the policy must be paid out prematurely. <u>Id.</u> The patents describe a computerized system for tracking the book value and the market value of the policies and calculating the credits representing the amount the stable value protected writer must guarantee. <u>Id.</u>

Bancorp asserts that Sun Life infringes claims 9, 17, 18, 28, and 37 of the '792 patent. Claims 9 and 28 are independent claims, with 9 representative of both. Claim 9 provides:

A method for managing a life insurance policy on behalf of a policy holder, the method comprising the steps of:

generating a life insurance policy including a stable value protected investment with an initial value based on a value of underlying securities;

calculating fee units for members of a management group which manage the life insurance policy;

calculating surrender value protected investment credits for the life insurance policy;

determining an investment value and a value of the underlying securities for the current day;

calculating a policy value and a policy unit value for the current day;

storing the policy unit value for the current day; and one of the steps of:

removing the fee units for the members of the management group which manage the life insurance policy, and

accumulating fee units on behalf of the management group.

('792 patent, 16:55-17:8). Dependent claims 17 and 37 are the methods according

to claims 9 and 28, wherein the steps of claims 9 and 28 are performed by a computer.

Dependent claim 18 is a computer readable media for controlling a computer to

perform the steps. ('792 patent, 17:61-18:15).

Bancorp asserts claims 1, 8, 9, 17-21, 27, 28, 37, 42, 49, 52, 60, 63, 66-68, 72-

77, 81-83, 87, 88, and 91-95 of the '037 patent. Claim 1, a representative claim,

provides:

A life insurance policy management system comprising:

a policy generator for generating a life insurance policy including a stable value protected investment with an initial value based on a value of underlying securities of the stable value protected investment;

a fee calculator for calculating fees for members of a management group which manage the life insurance policy;

a credit calculator for calculating credits for the stable value protected investment of the life insurance policy;

an investment calculator for determining an investment value and a value of the underlying securities of the stable value protected investment for the current day;

a policy calculator for calculating a policy value and a policy unit value for the current day;

digital storage for storing the policy unit value for the current day; and

a debitor for removing a value of the fees for members of the management group which manages the life insurance policy.

('037 patent, 15:28-48). The other independent claims in this patent describe a "life insurance management system" (42), a "computer system for administering an existing life insurance policy" (19), and a "computer readable media" for controlling a computer (18 and 63). Claims 9, 28, and 52 provide "a method for managing a life insurance policy." The remaining dependent claims add limitations for calculating a targeted return for an upcoming time period; receiving a targeted return for an upcoming time period; adjusting the targeted return to amortize for an initial fee; adjusting the investment value to amortize for an initial fee; calculating fees for members of the management group; and removing and/or accumulating those fees.

Defendant Sun Life argues that, under <u>Bilski v. Kappos</u>, --- U.S. ---, 130 S. Ct. 3218 (2010), the asserted claims are not drawn to patent-eligible subject matter under § 101 of the Patent Act, but instead seek patent protection for an abstract idea.

### II. Legal Standard

Rule 56(c) of the Federal Rules of Civil Procedure provides that summary judgment shall be entered "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." In ruling on a motion for summary judgment the court

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is required to view the facts in the light most favorable to the non-moving party and must give that party the benefit of all reasonable inferences to be drawn from the underlying facts. <u>AgriStor Leasing v. Farrow</u>, 826 F.2d 732, 734 (8th Cir. 1987). The moving party bears the burden of showing both the absence of a genuine issue of material fact and its entitlement to judgment as a matter of law. <u>Anderson v. Liberty</u> <u>Lobby</u>, Inc., 477 U.S. 242 (1986); <u>Matsushita Electric Industrial Co. v. Zenith Radio</u> <u>Corp.</u>, 475 U.S. 574, 586-87 (1986); Fed. R. Civ. P. 56(c). Once the moving party has met its burden, the non-moving party may not rest on the allegations of his pleadings but must set forth specific facts, by affidavit or other evidence, showing that a genuine issue of material fact exists. Fed. R. Civ. P. 56(e). Rule 56(c) "mandates the entry of summary judgment, after adequate time for discovery and upon motion, against a party who fails to make a showing sufficient to establish the existence of an element trial." Celotex Corporation v. Catrett, 477 U.S. 317, 322 (1986).

#### III. Discussion

Section 101 of Title 35, United States Code, defines the subject matter that may be patented under the Patent Act:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

35 U.S.C. § 101.

By choosing "such expansive terms . . . modified by the comprehensive 'any,' Congress plainly contemplated that the patent laws would be given wide scope. <u>Bilski</u>

<u>v. Kappos</u>, 130 S. Ct. at 3225 (quoting <u>Diamond v. Chakrabarty</u>, 447 U.S. 303, 308 (1980)). The Supreme Court has established three exceptions to § 101's broad patent-eligibility principles: laws of nature, physical phenomena, and abstract ideas. <u>Id.</u> "Phenomena of nature, though just discovered, mental processes and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work." <u>Gottschalk v. Benson</u>, 409 U.S. 63, 67 (1972).

Bancorp argues that to establish invalidity Sun Life must present clear and convincing evidence of facts underlying the invalidity. However, whether asserted claims are invalid for failure to claim statutory subject matter under 35 U.S.C. § 101 is a question of law. *In re* Comiskey, 554 F.3d 967, 975 (Fed. Cir. 2009).

#### A. <u>Preliminary Issues</u>

Bancorp asserts that Sun Life's motion is premature because the Court has not yet completed claims construction. The parties have submitted two rounds of briefing on claims construction issues. In April 2007, Bancorp filed proposed constructions for three terms in the '792 patent: "Stable value protected investment," "surrender value protected investment credit," and "surrender value protected investment writer." Sun Life, by contrast, proposed constructions for 63 individual claim terms. With respect to seven means-plus-function terms (*e.g.*, "generating means for generating a life insurance policy"), Bancorp asked the Court to construe the underlying structure as "computer hardware and software components." Sun Life argued that means-plus-function claims that are directed to a general purpose computer programmed to perform a certain function must be construed to cover only the disclosed algorithm. This appears to be an accurate statement of the relevant law. See Harris Corp. v.

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Ericsson Inc., 417 F.3d 1241, 1253 (Fed. Cir. 2005) ("A computer-implemented means-plus-function term is limited to the corresponding structure disclosed in the specification and equivalents thereof, and the corresponding structure is the algorithm.") Sun Life further argued that the means-plus-function claim terms in this instance cannot be construed because the specification failed to disclose the structure, *i.e.*, the algorithm. This again appears to be an accurate statement of the relevant law. See Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc., 296 F.3d 1106, 1113-14 (Fed. Cir. 2002) (court must determine what structure in the specification corresponds to the claimed function; if no embodiment discloses corresponding structure the claim fails to satisfy the definiteness requirement of § 112). In December 2009 and January 2010, the parties submitted proposed constructions for both patents. Once again, Bancorp proposed construction for very few terms, while Sun Life proposed constructions for very many terms.

The Court has decided to address Sun Life's § 101 arguments before proceeding with claims construction. There is no requirement that claims construction be completed before examining patentability. <u>See Ultramercial, LLC v. Hulu, LLC</u>, No. CV 09-6918 RGK, 2010 WL 3360098, at \*6 (C.D. Cal. Aug. 13, 2010) ("While the Court (and the parties) consulted the claims and the specification, there is no need to formally construe any of the claims. The patent terms are clear, and Plaintiff has not brought to the Court's attention any reasonable construction that would bring the patent within patentable subject matter."); <u>Fuzzysharp Technologies, Inc. v. 3D Labs, Inc., Ltd.</u>, No. C07-5948 SBA, 2009 WL 4899215 at \*2, n.1 (N.D. Cal. Dec. 11, 2009)

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(declining to complete claims construction before ruling on validity, but indicating that patent holder's construction would be utilized if necessary).

Bancorp suggests that there is a meaningful distinction in the analysis of "process" claims versus "system" claims.<sup>2</sup> The Court disagrees. "System" does not appear among the four categories of patentable subject matter identified by the statute: "Whoever invents or discovers any new and useful process, machine,<sup>3</sup> manufacture, or composition of matter . . . may obtain a patent thereof." § 101. "[T]he claimed subject matter must fall into at least one category of statutory subject matter." *In re* Nuijten, 500 F.3d 1346, 1354 (Fed. Cir. 2007). Thus, the claims at issue are process claims and will be analyzed accordingly. The Patent Act defines "process" as "process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material." 35 U.S.C. § 100(b).

### B. <u>Bilski v. Kappos</u>

The Supreme Court recently examined the application of § 101 to a process claim in <u>Bilski v. Kappos</u>, --- U.S. ---, 130 S. Ct. 3218 (2010). The invention at issue was a method for hedging investments in the energy market. The Federal Circuit had held that the patent was invalid under § 101 because it failed the "machine-or-transformation" test; furthermore, the Federal Circuit declared, the machine-or-

<sup>&</sup>lt;sup>2</sup>For example, Claim 8 of the '037 patent states "A system according to claim 1, further comprising a calculator for calculating a targeted return for an upcoming time period."

<sup>&</sup>lt;sup>3</sup>A "machine" is "a concrete thing, consisting of parts, or of certain devices and combination of devices. This includes every mechanical device or combination of mechanical powers and devices to perform some function and produce a certain effect or result." <u>In re Ferguson</u>, 558 F.3d 1359, 1364 (Fed. Cir. 2009) (<u>quoting In re Nuijten</u>, 500 F.3d 1346, 1355 (Fed.Cir. 2007)) (internal quotation marks omitted).

transformation test was "the sole test" for determining patent eligibility of a process under § 101. <u>In re Bilski</u>, 545 F.3d 843, 956 (Fed. Cir. 2008). Under this test, a process is patent-eligible under § 101 if "(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing." <u>Id.</u> at 954.

The Supreme Court agreed that the patent application for hedging risk fell outside § 101, but on a different basis. The Court characterized the claims in <u>Bilski</u> as an attempt to patent "both the concept of hedging risk and the application of that concept to energy markets." 130 S. Ct. at 3229. The majority rejected the patent on the basis of its prior decisions in <u>Benson</u>, <u>Flook</u>, and <u>Diehr</u>,<sup>4</sup> "which show that [the] claims are not patentable processes because they are attempts to patent abstract ideas." <u>Id.</u> at 3229-30. "The concept of hedging, described in [one claim] and reduced to a mathematical formula in [another claim], is an unpatentable abstract idea . . . Allowing petitioners to patent risk hedging would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea." <u>Id.</u> at 3221.

The Supreme Court rejected the Federal Circuit's assertion that the "machine-ortransformation" test was the <u>sole</u> test for determining patent-eligibility of a process,<sup>5</sup> but concluded that the test remains "a useful and important clue, an investigative tool, for determining whether some claimed inventions are processes under § 101." <u>Bilski</u>, 130 S. Ct. at 3227.

<sup>&</sup>lt;sup>4</sup><u>Gottschalk v. Benson</u>, 409 U.S. 63, 67 (1972); <u>Parker v. Flook</u>, 437 U.S. 584, 590 (1978); <u>Diamond v. Diehr</u>, 450 U.S. 175 (1981).

<sup>&</sup>lt;sup>5</sup>The majority also rejected a categorical rule that all business methods are ineligible for patent protection.

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Bancorp argues that in Bilski the Supreme Court rejected the machine-ortransformation test for evaluating process claims. This argument overstates the language of the majority opinion, as set forth above. Indeed, following Bilski, courts have determined that the "machine-or-transformation" test remains a key indicator of patentability. Prometheus Labs., Inc. v. Mayo Collaborative Services, --- F.3d ---, 2010 WL 5175124 \*7 (Fed. Cir. Dec. 17, 2010) (the Supreme Court did not disavow the machine-or-transformation test and the "useful and important clue, an investigative tool" leads to a clear and compelling conclusion of patentability); King Pharmaceuticals, Inc. v. Eon Labs, Inc., 616 F.3d 1267, 1278 (Fed. Cir. 2010) ("We . . . understand the Supreme Court to have rejected the exclusive nature of our test, but not necessarily the wisdom behind it."); Ultramercial, LLC v. Hulu, LLC, 2010 WL 3360098, at \*3 (C.D. Cal. Aug. 13, 2010) ("[E]ven after the Supreme Court's decision in Bilski, the machine or transformation test appears to have a major screening function -- albeit not perfect -- that separates unpatentable ideas from patentable ones."); Graff/Ross Holding LLP v. Federal Home Loan Mortgage Corp., a/k/a Freddie Mac, Case No. 1:07-CV-796 (RJL) (AK), Report & Recommendation, at 13 (D.D.C. Aug. 27, 2010) (noting that failure to meet the machine prong of the machine-ortransformation test supports conclusion that the claim attempts to patent an abstract idea).

The U.S. Patent and Trademark Office (USPTO) also continues to view the machine-or-transformation test as an indicator of patentability. <u>See</u> "Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of <u>Bilski v.</u> <u>Kappos</u>," 75 Fed. Reg. 43,922 (July 27, 2010). The Guidance may be viewed as

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persuasive authority. <u>Graff/Ross Holding LLP v. Federal Home Loan Mortgage Corp.</u>, <u>a/k/a Freddie Mac</u>, at 10. The Guidance lists several factors for patent examiners to address when determining whether a process claim should be disqualified as a claim to an abstract idea. 75 Fed. Reg. at \*43,925. The USPTO noted that:

Factors that weigh in favor of patent-eligibility satisfy the criteria of the machine-or-transformation test or provide evidence that the abstract idea has been practically applied. Factors that weigh against patent-eligibility neither satisfy the criteria of the machine-or-transformation test nor provide evidence that the abstract idea has been practically applied.

<u>Id.</u> More particularly, where a machine or apparatus is recited or inherent in a method claim, the USPTO will consider whether the method involves a particular machine, rather than any and all machines, and whether the use of the machine contributes only nominally to the execution of the claimed method. <u>Id.</u> A method claim that involves transformation of a particular article is more likely to be patent eligible than one that affects only a general transformation; similarly, the claimed process is more likely to be patent-eligible where the transformed article is a concept. <u>Id.</u>

The Board of Patent Appeals and Interferences (BPAI) has also continued to apply the machine-or-transformation test in assessing whether a claim is drawn to an abstract idea. <u>See *Ex Parte* Frank A. Hunleth, *et al.*</u>, No. 2009-5621, 2010 WL 4601413 (Nov. 10, 2010) (applying the machine-or-transformation test and rejecting as unpatentable "a system and method for a framework for organizing, selecting and launching media items); *Ex Parte* James R. Birle, Jr., *et al.*, No. 2009-10659, 2010 WL 4366518 (Nov. 1, 2010) (rejecting as unpatentable under § 101 a claim directed to a "financial instrument issued by a stock company" and comprising provisions requiring

the company to repay principal, pay interest, and making the instrument convertible into shares); *Ex Parte* Ameha Aklilu *et al.*, No. 2009-7075, 2010 WL 4315178 (Oct. 29, 2010) (rejecting a claim for "generating object classification models" that included the steps of "generating," "applying," and "storing"); *Ex Parte* Rod A. Cherkas *et al.*, No. 2009-11287, 2010 WL 4219765 (Oct. 25, 2010) (rejecting claims for methods to determine the future tax consequences of an investment transaction); *Ex Parte* <u>Mustansir Banatwala *et al.*</u>, No. 2009-6785, 2010 WL 4250887 (Oct. 18, 2010) (rejecting as unpatentable a claim directed to a "discussion forum resource" comprising a topic thread created for externally sourced content and a data aggregator).

The Court concludes that the machine-or-transformation test remains a useful tool in determining whether a claim is drawn to an abstract idea and thus unpatentable under § 101.

### C. <u>The Pre-Bilski Trilogy: Benson, Flook, and Diehr</u>

The majority opinion in <u>Bilski</u> relied on three precedent cases to reach a conclusion that the claimed hedging method was invalid because it was drawn to an abstract idea.

In <u>Benson</u>, the Supreme Court rejected a patent application for a method for programming a general-purpose computer to convert binary-coded decimal numerals into pure binary numerals. <u>See</u> 409 U.S. at 65. The process used a piece of hardware -- the reentrant shift register -- to carry out calculations. The method included the steps of: "storing" binary coded signals in the shift register; "shifting the signals to the right by at least three places, until there is a binary '1' in the second position" of the register; "masking out" the 1; and completing two rounds of "adding" a binary 1 and

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"shifting" the signals again. <u>Id.</u> at 73-74, appendix. The Court described the claimed procedures as "a generalized formulation for programs to solve mathematical problems of converting one form of numerical representation to another. From the generic formulation, programs may be developed as specific applications." <u>Id.</u> Significantly, the method "varie[d] the ordinary arithmetic steps a human would use by changing the order of the steps, changing the symbolism for writing the multiplier. . ., and by taking subtotals after each successive operation." The described steps could be completed by existing computers without any new machinery being necessary or could be performed entirely without a computer. <u>Id.</u> at 67.

The Court determined that, even though the process included the use of the reentrant shift register, the claim at issue was "abstract and sweeping" and could cover "both known and unknown uses," varying from "the operation of a train to verification of drivers' licenses to researching the law books for precedents." Furthermore, the process could be performed through any existing or future machinery or without machinery at all. <u>Id.</u> at 68. The Supreme Court rejected a patent on an idea that would "wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself." <u>Id.</u> at 71-72.

<u>Parker v. Flook</u>, 437 U.S. 584, 590 (1978), concerned a procedure for monitoring conditions such as temperature, pressure and flow rates during catalytic conversion processes. When these variables exceeded predetermined "alarm limits," a signal indicated the presence of an abnormal condition. The patent application under consideration described a method for updating alarm limits, by measuring the present value of the variable at issue, using an algorithm to calculate an updated value, and

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adjusting the limit. Id. at 585. The only difference between the conventional method for changing alarm limits and the method in the patent application was the use of the algorithm. Id. at 585-86. The claims covered a broad range of potential uses of the method, but not every conceivable use, and thus the prohibition in Benson against wholly pre-empting a mathematical formula did not apply. Id. at 589-90. Nonetheless, the Supreme Court rejected the assertion that the presence of specific "post-solution" activity - in this case, adjusting the alarm limit to a figure calculated by the formula – could transform an unpatentable principle into a patentable process. Id. at 590. "A competent draftsman could attach some form of post-solution activity to almost any mathematical formula; the Pythagorean theorem would not have been patentable, or partially patentable, because a patent application contained a final step indicating that the formula, when solved, could be usefully applied to existing surveying techniques." Id. "Yet it is equally clear that a process is not unpatentable simply because it contains a law of nature or a mathematical algorithm." Id. "'While a scientific truth, or the mathematical expression of it, is not patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be."<sup>6</sup> Id. (quoting Mackay Radio & Telegraph Co. v. Radio Corp. of America, 306 U.S. 86, 94 (1939)).

<sup>&</sup>lt;sup>6</sup>It is the process itself, not merely the algorithm, that must be new. "Indeed, the novelty of the mathematical algorithm is not a determining factor at all. Whether the algorithm was in fact known or unknown at the time of the claimed invention, as one of the basic tools of scientific and technological work, it is treated as though it were a familiar part of the prior art." <u>Flook</u>, 437 U.S. at 591-92 (internal quotation and citation omitted).

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In <u>Diamond v. Diehr</u>, 450 U.S. 175 (1981), the Supreme Court examined a process for curing rubber in molded products that included the use of a well-known mathematical formula to determine the proper cure time. Achieving "perfect cure" depends on the thickness of the molded article, the temperature of the molding press, and the time the article remains in the press. <u>Id.</u> at 178. The Arrhenius equation can be used to calculate the time to open the press, but the problems in determining the temperature inside the press made it difficult to do the necessary computations. The patent applicants "characterize[d] their contribution to the art to reside in the process of constantly measuring the actual temperature inside the mold." <u>Id.</u> The claimed process automatically fed the temperatures to a computer which recalculated the cure time according to the Arrhenius equation. When the calculated time had elapsed, the computer signaled a device to open the press. <u>Id.</u> at 180.

The patent examiner had rejected the claims under <u>Benson</u>, finding that the claims defined a computer program for operating a rubber-molding press. The Supreme Court disagreed, finding that what was claimed was a physical and chemical process for molding rubber that used both a mathematical equation and a computer in the process. <u>Id.</u> at 183. Unlike <u>Benson</u> and <u>Flook</u>, the applicants did not seek to patent a mathematical formula or to pre-empt the use of the Arrhenius equation. They merely sought to foreclose its use by others in conjunction with all the other steps of their claimed process. <u>Id.</u> at 187.

The question before the Court is whether the patents at issue claim protection for a patentable "process" or for an abstract idea. In making this decision, the Court will first consider whether the claims satisfy the machine-or-transformation test and

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then will apply <u>Bilski</u> and examine whether what is claimed is an abstract idea under <u>Benson</u>, <u>Flook</u>, and <u>Diehr</u>.

#### D. <u>Machine-or-Transformation Test</u>

It is important to note at the outset that not every patent that recites a machine or transformation of an article passes the machine-or-transformation test. "[T]he recited machine or transformation must not constitute mere 'insignificant postsolution activity.'" <u>In re Bilski</u>, 545 F.3d at 957 (quoting Flook, 437 U.S. at 590). This reasoning is applicable to any "extra-solution activity regardless of where it applies in the process," including a midprocess step of entering bids in a record or the presolution step of gathering data. <u>Id.</u> at 957 n.14 (citing <u>In re Schrader</u>, 22 F.3d 290 (Fed. Cir. 1994) and <u>In re Grams</u>, 888 F.2d 835 (Fed. Cir. 1989)).

### 1. <u>The Patents Are Not Tied to a Machine</u>

For the purposes of determining whether a claimed process if tied to a particular machine, a "machine" is "a concrete thing, consisting of parts, or of certain devices and combination of devices. This includes every mechanical device or combination of mechanical powers and devices to perform some function and produce a certain effect or result." <u>SiRF Technology, Inc. v. International Trade Com'n</u>, 601 F.3d 1319, 1332 (Fed. Cir. 2010) (citing *In re* Ferguson, 558 F.3d 1359, 1364 (Fed. Cir. 2009)).

The asserted claims of the '792 patent recite the steps of "generating" a life insurance policy; "calculating" fee units, surrender value protected investment credits, policy values and policy unit values; "determining" investment values and values of underlying securities; "storing" values; and "removing" or "accumulating" fee units. Col. 16:58 - Col. 17:8. Claim 17 states that these steps are performed by a computer.

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The claims in the '037 patent perform the same series of steps, but refer to a "generator," "calculators," a "debitor," and "digital storage." In Claims 18 and 19, the steps are performed by "computer readable media" or a "computer system."

The detailed description of the preferred embodiments states that the computer consists of a central processing unit, which can comprise any one of the commercially available units. '792 patent, Col. 6: 47-57; '037 patent, Col. 6: 45-55. Also listed are a "fax/modem card," "an automated voice response unit," "a digital storage means," and low- and high-density "removable medium storage means." The system also includes a keyboard, monitor and printer. <u>Id.</u>

The specified machines appear to be no more than "object[s] on which the method operates," a fact that weighs against validity. <u>Graff/Ross Holdings</u>, No. 07-796 at 12 (citing Interim Guidance, 75 Fed. Reg. 43,925). The central processor "is nothing more than a general purpose computer that has been programmed in some unspecified manner." <u>DealerTrack, Inc. v. Huber</u>, 657 F. Supp. 2d 1152, 1156 (C.D. Cal. 2009) (patent for a computer-aided method for managing credit applications invalid under § 101). The claims do not refer to "a specific machine by reciting structural limitations that narrow the computer implemented method to something more specific than a general purpose computer [or] recite any specific operations performed that would structurally define the computer." <u>Ex Parte Cherkas</u>, No. 2009-11287, 2010 WL 4219765, at \*3 (Oct. 25, 2010).

Bancorp cites <u>*Ex Parte* Moyer</u>, No. 2009-2154, 2010 WL 227951, at \*1 (Jan. 20, 2010), to support its argument that it satisfies the machine prong. The invention at issue was "a method and system for forming an immediate value/operand by a

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processor that uses one field to determine the positional location of the portion of the immediate value within the immediate value and one field of fill bit to fill the remainder of the immediate value." <u>Id.</u> The illustrative claim recited a data processing system. The BPAI found that the claim in <u>Moyer</u> was distinguishable from <u>Benson</u> because it was not a mathematical formula or algorithm but a data processor "limited to the use of a <u>particular claimed</u> combination of elements performing <u>particular claimed</u> data processing to form an immediate value/operand through a portion of the immediate value in processing a data processing instruction by a processor in a computer." <u>Id.</u> at \*5 (emphasis added).<sup>7</sup> The invention at issue in <u>Moyer</u> involves the fundamental mechanisms that make computers capable of performing calculations, while the patents at issue here concern making and storing specific calculations. <u>Moyer</u> is inapplicable to the issue at hand.

The recitation of "computer readable media" does not alter the outcome: "A machine readable medium can be considered a manufacture or machine under § 101." <u>Ex Parte Gopalan Ramanujam</u>, No. 2009-2483 2010 WL 3214559, at \*6 (Aug. 12,

<sup>&</sup>lt;sup>7</sup>The patent issued on June 8, 2010, under U.S. Patent No. 7,734,898, and is in Class 712, "Electrical Computers And Digital Processing Systems: Processing Architectures And Instruction Processing (*e.g.*, Processors)."

This class provides, within a computer or digital data processing system, for subject matter represented by a particular arrangement that includes at least one of the following means: A) components of an individual complete processor, which may be formed on a single integrated circuit (IC); B) components of a complete digital data processing system; C) plural processors; or D) plural digital data processing systems.

United States Patent and Trademark Office, <u>Manual of Patent Classification</u>, available online at <u>http://www.uspto.gov/web/patents/classification/uspc712/defs712.htm</u> #C712S210000 (last accessed on Feb. 3, 2011).

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2010). However, "merely reciting data or instructions on a stored machine readable medium does not make a claim statutory under § 101." <u>Id.</u> Furthermore, although it would be inefficient to do so, the steps for tracking, reconciling and administering a life insurance policy with a stable value component can be completed manually. The recitation of the computer, computer system, and computer readable media do not satisfy the "machine" prong of the machine-or-transformation test.

Bancorp argues that the claim terms "storing" or "storage" indelibly tie the claims to a physical apparatus. This argument is unavailing: "[S]toring, retrieving, and providing data . . . are inconsequential data gathering and insignificant post solution activity. The claims neither refer to a specific machine by reciting structural limitations that narrow the computer implemented method to something more specific than a general purpose computer, nor recite any specific operations performed that would structurally define the computer." *Ex Parte Cherkas*, 2010 WL 4219765, at \*3.

### 2. <u>The Patents Do Not Affect a Transformation</u>

"A claimed process is patent-eligible if it transforms an article into a different state or thing." <u>In re Bilski</u>, 545 F.3d at 962. The transformation must be central to the purpose of the claimed process. <u>Id.</u> Bancorp argues that its process "transforms" raw data into values and fees. The Federal Circuit has characterized "the inherent step of gathering data" as "insignificant extra-solution activity" and rejected the notion that adding a data-gathering step can make an otherwise non-statutory claim statutory. <u>Id.</u> at 963 (citing Flook, 437 U.S. at 590; <u>In re Grams</u>, 888 F.2d 835, 840 (Fed. Cir. 1989); <u>In re Meyer</u> 688 F.2d 789, 794 (C.C.P.A. 1982)).

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Bancorp relies on In re Abele, 684 F.2d 902, 908 (C.C.P.A. 1982), to support its argument that its processes affect a transformation. That reliance is misplaced. The invention at issue was directed to an improvement in computed tomography that reduced exposure to x-rays while improving the reliability of the image. Several claims recited a process of graphically displaying variances of data from average values; these were determined to be invalid as directed solely to a mathematical algorithm. Id. Another claim was found to be valid because it specified that the data were "x-ray attenuation data produced in a two-dimensional field by a computed-tomography scanner." Bilski, 545 F.3d at 962. "This data clearly represented physical and tangible objects, namely the structure of bones, organs, and other body tissues. Thus, the transformation of that raw data into a particular visual depiction of a physical object on a display was sufficient to render that more narrowly-claimed process patenteligible." Id. at 962-63. Similarly, the valid claim in Abstrax, Inc. v. Dell, Inc., No. 2:07-CV-221 DF-CE, (E.D. Tex. Oct. 7, 2001), 2009 WL 3255085, at \*3, also represented "physical and tangible objects and their respective structures." Unlike the valid claims in <u>Abele</u> and <u>Abstrax</u>, the claims here do not transform the raw data into anything other than more data and are not representations of any physically existing objects. The "concepts of fetching and processing data" are not patentable processes but are "attempts to patent a mathematical algorithm - converting a value in one format to a value in another format." Ex Parte Gopalan Ramanujam 2010 WL 3214559, at \*5.

In summary, the Court concludes that the asserted claims do not meet either prong of the "machine-or-transformation" test.

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### D. <u>The Patents Disclose an Abstract Idea</u>

The Court now considers the asserted claims according to the analysis completed by the Supreme Court in <u>Bilski</u>. Based upon the discussion above, the Court finds that the asserted claims are more like those in <u>Bilski</u> (a method for hedging risk), <u>Benson</u> (a method for programming a general-purpose computer to convert binary-coded decimal numerals into pure binary numerals), and <u>Flook</u>, (a method for updating alarm limits during catalytic conversion) than those in <u>Diehr</u> (a method for determining cure time in the process of molding rubber).

Bancorp argues that its claims are analogous to those in <u>Diehr</u>, because the process in <u>Diehr</u> used a computer program to calculate the cure time. The use of a computer is not what made the <u>Diehr</u> process patentable; after all, the unpatentable claims in <u>Benson</u> also used computer programs. The patent in <u>Diehr</u> sought protection "for a process of curing synthetic rubber," 450 U.S. at 187, and comprised continuous monitoring of an ongoing manufacture process with constant assessment of physical processes. Here, Bancorp claims an improved method for keeping track of several different values -- *i.e.*, the "initial value based on a value of underlying securities," the "fee units," the "surrender value protected investment credits," the "investment value and a value of the underlying securities for the current day," and the "policy value and a policy unit value for the current day" -- associated with the management of a separate account life insurance policy with a stable value protection feature. The determination of those values is a matter of the application of mathematical calculations, themselves unpatentable abstractions; and the storage and communication of those values is accomplished using existing devices. "[1]f a claim

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is directed essentially to a method of calculating, using a mathematical formula, even if the solution is for a specific purpose, the claimed method is nonstatutory." <u>Flook</u>, 437 U.S. at 595 (<u>quoting *In re* Richman</u>, 563 F.2d 1026, 1030 (Ct. Cust. App. 1977)); <u>see *In re* Cherkas</u>, 2010 WL 4219765, at \*2-3 (claims for methods for determining consequences of an investment transaction on future tax liability "do no more than lay out the concept of storing, retrieving, and providing data . . . and are inconsequential data gathering and insignificant post solution activity"). The Court assumes that the claims at issue here are, like those in <u>Flook</u>, "a new and presumably better method" for accomplishing the tasks associated with managing these policies. But, the fact that the claimed invention represents an improvement over the existing methods is not sufficient to render an abstract process patentable.

Bancorp asserts that the post-<u>Bilski</u> case, <u>Research Corp. Technologies</u>, Inc. v. <u>Microsoft Corp.</u>, 627 F.3d 859 (Fed. Cir. 2010), establishes that its asserted claims are not abstract. The patents in <u>Research Corp.</u> involved a method for digital halftoning of gray-scale and color images utilizing a pixel-by-pixel comparison of the images against a blue noise mask. <u>Id.</u> at 865. Halftoning techniques allow computers to present many shades and color tones with a limited number of pixel colors. <u>Id.</u> at 863. The invention produced higher quality half-tone images while using less processor power and memory space. <u>Id.</u> at 865. The district court had determined that some of the asserted claims were abstract and thus invalid under § 101. The Federal Circuit disagreed, finding that patent protection was sought for the process of halftoning and that the use of algorithms and formulas in the process did not alter that determination.

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Bancorp argues that <u>Research Corp.</u> stands for the proposition that the inclusion of hardware elements renders a claim patentable. The method at issue in <u>Research</u> <u>Corp</u>. involved a process for improving the visual display of digital images using less processor speed. The hardware thus is integral to the patent. By contrast, the hardware Bancorp relies on falls within the category of insignificant post-solution activity, which cannot render an abstract idea patentable.

Bancorp also argues that, like the invention in <u>Research Corp.</u>, its claims have "functional, palpable applications in the field of computers." <u>Id.</u> at 869-70. The Court disagrees. Rather than improving the functioning of computers, as Bancorp's argument would dictate, the claimed invention uses computers to improve the administration of separate-account life insurance policies. Bancorp's contention that its invention addresses a need in the art is similarly unavailing. The inventions in <u>Bilski</u>, <u>Benson</u>, and <u>Flook</u> arguably all addressed a need in the art and yet were determined to be drawn to abstract ideas and thus were unpatentable.

The Supreme Court has stated that it is error to assume that "if a process application implements a principle in some specific fashion, it automatically falls within the patentable subject matter of § 101." <u>Flook</u>, 437 U.S. at 593. This is an error because it makes "the determination of patentable subject matter depend solely on the draftsman's art." <u>Id.</u> "Mental processes -- or processes of human thinking -- standing alone are not patentable even if they have practical application." <u>In re Comiskey</u>, 554 F.3d 967, 979 (Fed. Cir. 2009) (rejecting under § 101 patent application for method for mandatory arbitration resolution).

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The asserted claims are not drawn to patentable subject matter under § 101 because they fail the machine-or-transformation test <u>and</u> because, under <u>Bilski v.</u> <u>Kappos</u>, they seek protection for abstract ideas.

Accordingly,

IT IS HEREBY ORDERED that the motion of defendant Sun Life Assurance Company of Canada for summary judgment [Doc. #363] is granted.

IT IS FURTHER ORDERED that all other pending motions are denied as moot.

Following disposition of defendant's counterclaims, judgment will be entered in favor of defendant on plaintiff's claims for infringement.

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CAROL E<sup>f</sup>. JACKSON/ UNITED STATES DISTRICT JUDGE

Dated this 14th day of February, 2011.