

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS**

)	
)	
UNILOC USA, INC., and UNILOC)	
LUXEMBOURG S.A.,)	
)	
)	CIVIL ACTION No. 6:12-cv-375
Plaintiffs,)	
v.)	
)	
RACKSPACE HOSTING, INC., and)	
RACKSPACE US, INC.,)	JURY TRIAL DEMANDED
)	
)	
Defendants.)	
)	

**DEFENDANTS' BRIEF IN SUPPORT OF THEIR MOTION TO DISMISS
PLAINTIFFS' COMPLAINT FOR FAILURE TO ALLEGE INFRINGEMENT OF
A PATENTABLE CLAIM UNDER 35 U.S.C. § 101**

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MOTION

Defendants Rackspace Hosting, Inc. and Rackspace US, Inc. (collectively “Rackspace”) respectfully request that the Court dismiss the Complaint filed by Uniloc USA, Inc. and Uniloc Luxembourg S.A. (collectively, “Uniloc”) under Rule 12(b)(6) of the Federal Rules of Civil Procedure.

CONCISE STATEMENT OF THE REASONS IN SUPPORT OF THE MOTION

The Court should dismiss Uniloc’s Complaint because it alleges infringement of a patent directed to abstract ideas and mathematical algorithms. The patent asserted in the Complaint — U.S. Patent No. 5,892,697 (“’697 patent”) — seeks to establish exclusive rights in the processing and conversion of numbers. As such, the ’697 patent violates the Supreme Court’s “*bright-line prohibition*” against patenting . . . mathematical formulas and the like.” *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S.Ct. 1289, 1303 (2012) (emphasis added).

Indeed, the Supreme Court’s leading decision in *Gottschalk v. Benson* — addressing precisely the same issues raised by Uniloc’s claims — compels dismissal of the Complaint. The patent in *Benson*, like Uniloc’s ’697 patent, purported to cover “*the programmed conversion of numerical information in general-purpose digital computers*” from one format to another. *Gottschalk v. Benson*, 409 U.S. 63, 64 (1972) (emphasis added). The Supreme Court held that the claimed mathematical formulas were not patentable. *Id.* at 71-72. Moreover, it confirmed in doing so that the prohibition against patenting abstract ideas and mathematical algorithms applies regardless of whether the patent claims are drafted as method or apparatus claims, *id.* at 72, and regardless of whether they include references to computers or computer components. *Id.* at 64, 72-74.

Uniloc’s claims also fail the Federal Circuit’s “machine-or-transformation” test. Federal Circuit case law confirms that the “utilization of a computer for performing calculations” does

not satisfy the machine prong of this test, *Dealertrack, Inc v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012), and “[m]anipulation or reorganization of data [] does not satisfy the transformation prong.” *CyberSource Corporation v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2012).

As the Supreme Court has emphasized in its recent decisions in *Ashcroft v. Iqbal* and *Bell Atlantic Corp. v. Twombly*, “when the allegations in a complaint, however true, could not raise a claim of entitlement to relief, this basic deficiency should . . . be exposed at the point of minimum expenditure of time and money by the parties and the court.” *Bell Atlantic Corporation et al. v. Twombly*, 550 U.S. 544, 558 (2007) (quoting 5 Wright & Miller § 1216, at 233-34); see also *Ashcroft et al., v. Iqbal et al.*, 556 U.S. 662, 679 and 85 (2009) (given the “heavy costs” of litigation, “only a complaint that states a plausible claim for relief survives a motion to dismiss”). The ’697 Patent plainly violates the Supreme Court’s “bright-line” rules on patentability. In keeping with the Supreme Court’s decisions in *Benson*, *Iqbal*, and *Twombly* and this Court’s stated desire to move cases to their proper resolution in a timely and economic manner, Defendants respectfully request that the Court address this issue now, before the parties proceed to time consuming and expensive discovery. Uniloc’s Complaint for infringement of the ’697 Patent is fatally flawed, and should be dismissed.

BRIEF IN SUPPORT OF THE MOTION

I. INTRODUCTION

Uniloc’s Complaint should be dismissed because it depends entirely on a claim for patent infringement that violates the Supreme Court’s “bright-line prohibition against patenting . . . mathematical formulas and the like.” *Prometheus Laboratories*, 132 S.Ct. at 1303. Uniloc’s Complaint alleges infringement of a patent that does nothing more than process numbers — a

classic unpatentable algorithm. The Complaint fails to state a claim upon which relief can be granted, and should be dismissed.

II. UNILOC'S COMPLAINT

A. Uniloc's Allegation of Infringement

Uniloc's Complaint alleges infringement of "at least claim 1" of U.S. Patent No. 5,892,697. This patent can and should be considered on this motion to dismiss because it is the basis for Uniloc's allegations of infringement, and is specifically cited in and attached to the Complaint. *See, e.g., Tellabs, Inc. v. Makor Issues & Rights, Ltd.*, 551 U.S. 308, 322 (2007) (courts must consider complaint in its entirety, including "in particular documents incorporated into the complaint by reference," in ruling on Rule 12(b)(6) motions); *Wilson v. Birnberg*, 667 F.3d 591, 595 (5th Cir. 2012) (motion to dismiss analysis focuses on "the complaint and its proper attachments").

Claim 1, like every other claim in the '697 patent, is directed to the processing of numbers that are expressed in a format known as "floating point." '697 Patent, Abstract, 1:9-10.¹ The patent describes an alternative method for performing "floating-point arithmetic" that, in contrast to prior methods, "rounds" the number at a different stage of the algorithm. *Id.* at 2:66-3:4, 4:33-48. The disclosure asserts that rounding the "operands" rather than the result increases the efficiency of the "arithmetic operations," *id.* at 4:41-45, and allows computers to more efficiently handle "overflow" and "underflow" situations (where the exponent portion of

¹ A "floating-point number" is a number in which the decimal point can "float," moving anywhere relative to the significant digits, because the change in the decimal point location is compensated for by a corresponding change in the exponent. For example, the number 12345×10^{-4} can also be written as 1234.5×10^{-3} , because when the decimal "floats" one space to the left, the exponent adjusts accordingly. In this example, the digit 12345 is referred to as the "mantissa," and -3 or -4 as the "exponent." '697 Patent at 1:28-41. This flexibility in decimal placement allows floating-point numbers to express a wide range of values, including very large or very small numbers. *Id.* at 1:54-58.

the number is too large or too small to represent) while performing “floating-point arithmetic.”

Id. at 1:54-58; 2:65-3:3.

B. Asserted Claim 1

Uniloc’s Complaint asserts only Claim 1 of the ’697 Patent. Pl.’s Original Complaint For Patent Infringement (“Complaint”), ¶ 14 (asserting infringement of “at least claim 1”). Claim 1 recites nothing more than a mathematical formula:

1. A ***method for processing floating-point numbers***, each floating-point number having at least a sign portion, an exponent portion and a mantissa portion, comprising the steps of:

converting a floating-point number memory register representation to a floating-point register representation;

rounding the converted floating-point number;

performing an arithmetic computation upon said rounded number resulting in a new floating-point value; and

converting the resulting new floating-point register value to a floating-point memory register representation.

Id. at 14:46-56 (emphasis added).

The preamble confirms that this is a method claim for processing numbers. The four claim elements describe how those numbers are processed. The number is first “convert[ed]” from one format (“floating-point number memory register representation”) to another format (“floating-point register representation”). *Id.* at 14:50-51. The converted number is then “round[ed].” *Id.* at 14:52. An “arithmetic computation” is then performed on that rounded number. *Id.* at 14:53. The resulting value of that arithmetic computation is then “converted” back into the original format (the “floating-point memory register representation.”). *Id.* at 14:55-

56.² So the only asserted claim consists entirely of the conversion, rounding, computation, and reconversion of a number.

C. Claims 2-28

The other '697 claims do nothing to render patentable the mathematical algorithm described in Claim 1. Claims 6-14 and 19-20 are dependent on Claim 1, and describe additional steps that can be taken in the algorithmic process of “converting” the floating-point number from a “floating-point number memory register representation” to a “floating-point register representation,” and back again. These steps include, for example, using a “comma code” to represent the degree of underflow and overflow in the numbers³; “transcribing,” “extending” or “testing” portions of the numbers; “setting” or “encoding” bits or values; and “add[ing]” or “subtract[ing]” values from the exponent. *Id.* at 15:12-59, 16:9-19.

Claims 2-5, 15-18, and 21-28 reference, in addition to these basic algorithms, standard components of a general computer where these processes might be implemented including, for example, a “register,” “circuits,” “memory,” and an “arithmetic unit.” *Id.* at 14:57-15:12, 15:60-16:8, 16:20-18:18. The patent acknowledges that these structures are not new. *Id.* at 2:31-32 (prior art used “circuitry to handle overflow and underflow numbers”); *id.* at 2:36-40 (“[i]n the current era . . . there are specific floating-point registers and a dedicated floating-point unit. Data movement, both to and from memory, is handled by floating-point load and store instructions.”). The specification also makes clear that these structural elements are not integral to the invention.

² The initial “conversion” entails moving data into a format with more placeholders, because the “floating point register format normally utilizes additional bits beyond those needed for the memory format(s).” *Id.* at 8:20-22. The second “conversion” (or reconversion) returns the number to the original memory format with the original number of placeholders.

³ As the patent specification confirms, the comma code is part of the way the number is expressed in the “memory representation” format; it appears at the “least significant end” of the mantissa, and indicates the degree to which the number is too large (overflow) or too small (underflow) to represent. *Id.* at 7:12-18.

Id. at 5:57 (“well-known structures and circuits have not been shown in detail *in order not to unnecessarily obscure the present invention.*”) (emphasis added).

III. UNILOC’S COMPLAINT SHOULD BE DISMISSED UNDER RULE 12(B)(6)

A. Section 101 Determinations Can and Should Be Made At the Motion to Dismiss Stage In Cases Such as This One, Where The Asserted Claims Are Plainly Not Patentable

The primary issue presented by this motion — invalidity under § 101 — is a question of law. *In re Bilski*, 545 F.3d 943, 951 (Fed. Cir. 2008). As the Supreme Court emphasized in its recent decisions in *Ashcroft v. Iqbal*, and *Bell Atlantic Corp. v. Twombly*, “only a complaint that states a plausible claim for relief survives a motion to dismiss.” *Iqbal*, 556 U.S. at 679. The litigation process “exact[s] heavy costs in terms of efficiency and expenditure of valuable time and resources” *Id.* at 685. Accordingly, “when the allegations in a complaint, however true, could not raise a claim of entitled to relief, ‘this basic deficiency should . . . be exposed at the point of minimum expenditure of time and money by the parties and the court.’” *Twombly*, 550 U.S. at 558 (*quoting* 5 Wright & Miller § 1216, at 233-34). “It is no answer to say that a claim just shy of a plausible entitlement to relief can, if groundless, be weeded out early in the discovery process” or during summary judgment. *Id.* at 559. Instead, a deficient complaint should be dismissed at the Rule 12(b)(6) stage.

This Court has similarly recognized that addressing critical legal issues at the outset of a case can spare substantial burdens on the courts and save the parties very significant sums of money in legal fees. In *Parallel Networks, LLC v. Abercrombie & Fitch*, for example, the Court was able to resolve the case “in a manner of months – as opposed to years – for the vast majority of Defendants” by addressing three dispositive legal issues at the outset of the case. *Parallel Networks*, No. 6:10-cv-111, 2011 WL 3609292 at *10 (E.D. Tex. 2011).

Section 101 issues are properly addressed at the motion to dismiss stage in cases, such as this one, where the asserted patent claims plainly cover subject matter that is not patentable. *See, e.g., Glory Licensing LLC v. Toys “R” Us, Inc.*, No. 09-4252, 2011 WL 1870591, *1-4 (D.N.J. May 16, 2011) (dismissing patent infringement complaint for failure to state a claim because claims covering a “system for processing information” on a programmed computer were directed to an “abstract idea” and thus unpatentable under § 101).

As the Federal Circuit and this Court have both confirmed, Section 101 issues can be determined without claim construction. *See, e.g., Bancorp Services, L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, No. 11-1467, 2012 WL 3037176 at *5 (Fed. Cir. July 26, 2012) (noting that, in *Bilski*, “the Supreme Court f[ound] subject matter ineligible for patent protection without claim construction”); *Ultramercial, LLC v. Hulu, LLC*, 657 F.3d 1323, 1325 (Fed. Cir. 2011) (“the subject matter at stake and its eligibility does not require claim construction”), *vacated on other grounds, WildTangent, Inc. v. Ultramercial, LLC*, 132 S.Ct. 2431 (2012); *CyberFone Sys., LLC v. Cellco P'ship*, No. 11-827, 2012 WL 3528115 at *4 (D. Del. Aug. 16, 2012) (holding claims to the use of a telephone for capturing, processing, and storing data not patentable under § 101 “without the benefit of claim construction”); *H-W Tech., L.C. v. Apple, Inc.*, No. 3:11-cv-651, 2012 WL 959316, at *5 (N.D. Tex. Feb. 23, 2012) (“claim construction may not always be necessary for determining subject matter eligibility”), *report and recommendation adopted*, 2012 WL 923751 (N.D. Tex. Mar. 19, 2012); *Prompt Medical Systems, L.P. v. Allscriptsmysis Healthcare*, No. 6:10-cv-71, 2012 WL 678216 at *2 (E.D. Tex. Feb. 13, 2012) (Davis, J.) (claim construction is “not always necessary”).

The dispositive issue of law is whether Uniloc can state a claim for relief based on the '697 Patent. The patent itself, which Uniloc attached to its Complaint, answers the question:

Uniloc cannot state a claim for relief because the patent attempts to cover abstract ideas and mathematical algorithms. The Court can and should address this threshold issue now, before the parties engage in expensive and time-consuming discovery and claim construction.

B. Uniloc has Failed to State a Claim Upon Which Relief May Be Granted Because the '697 Patent Claims Are Not Patentable

As the Supreme Court has repeatedly emphasized, “laws of nature, physical phenomena, and abstract ideas” are “part of the storehouse of knowledge of all men . . . free to all men and reserved exclusively to none.” *Bilski v. Kappos*, 130 S.Ct. 3218, 3225 (2010) (quoting *Funk Brothers Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)). Mathematical algorithms are a paradigmatic example of “abstract ideas.” *Benson*, 409 U.S. at 65. The Supreme Court accordingly has enforced “a bright-line prohibition against patenting . . . mathematical formulas and the like.” *Prometheus*, 132 S.Ct. at 1303. Uniloc’s Complaint violates this “bright-line prohibition” and should be dismissed.

1. Claim 1 — The Only Claim Identified in the Complaint — Is Not Patentable, Because it Purports to Claim an Abstract Idea.

Under black-letter law, Uniloc cannot state a claim for relief based on Claim 1 of the '697 patent — the only claim specifically referenced in Uniloc’s Complaint — because it claims a mathematical formula that is not patentable. Claim 1 is quintessentially abstract. It is directed to a method for processing numbers through format conversions and arithmetic operations, and it recites no tangible objects whatsoever, and no “physical transformation” of anything. *See* '697 Patent at 14:45-56. Instead, the claim recites nothing more than an algorithm that manipulates data formats, rounds a number, performs a computation, and converts the data back into the original format.

The Supreme Court’s decision in *Benson*, involving highly similar patent claims, compels dismissal of this case. The patent in *Benson* — like the '697 patent — was directed to “the

programmed conversion of numerical information [sic] in general-purpose digital computers.” *Benson*, 409 U.S. at 64. The purported inventors claimed a method of programming a general purpose computer to convert signals from binary-coded decimal form (“BCD”) into pure binary form. *Id.* at 65. The Court held that the claimed formulas for the conversion from one form of numerical representation to another were not patentable, because they were “mental processes, and abstract intellectual concepts.” *Id.* at 67-68. The general computer system referenced in the patent was not a “particular machine,” and the mathematical conversion was not a sufficient “[t]ransformation and reduction of an article ‘to a different state or thing.’” *See id.* at 70-71. The Court emphasized that “one may not patent an idea,” and warned that this would have been the practical result of allowing to stand a patent that covered a mathematical algorithm for converting numbers that had “no substantial practical application except in connection with a digital computer.” *Id.* at 71-72.

Uniloc’s ’697 patent not only purports to cover a comparable technology to *Benson*, but the claims are also written in almost the same format. *Compare Benson*, 409 U.S. at 74 (claiming a “processing method for converting binary coded decimal number representations into binary number representations”); *with* ’697 Patent, claim 1, 14:45-51 (claiming “a method for processing floating point numbers” by “converting memory register representations” into “floating-point register representations.”). Like the claims in *Benson*, Claim 1’s formula for “converting” floating-point numbers could be executed entirely within the human mind, or by a person using a pencil or paper. For example, an individual would be practicing Claim 1 if she:

- wrote down any number in the memory register representation format;
- rewrote it in the register representation format;
- rounded that number in any direction;

- added, subtracted, multiplied, or divided that number by any other number; and
- rewrote the result in the original format.

See '697 Patent at 14:45-56.

In fact, Claim 1 of the '697 patent is even *more* abstract than the claim rejected by the Supreme Court in its subsequent decision in *Parker v. Flook*, 437 U.S. 584, 585 (1978). The claim at issue in *Flook* covered a “new and presumably better method for calculating . . . values” in order to adjust an alarm limit for a catalytic conversion process. 437 U.S. at 594-95. The claimed method included three steps: measuring operating conditions such as temperature, pressure, and flow rates; using an algorithm to calculate an updated alarm-limit value; and adjusting the alarm limit to the updated value. *Id.* at 585. The algorithm had a practical and limited application — it was “primarily useful for computerized calculations producing automatic adjustments in alarm settings.” *Id.* at 585-86. The Court nevertheless held that the claim failed as a matter of law because it was “directed essentially to a method of calculating, using a mathematical formula,” even though the solution had a specific purpose. *Id.* at 595 (quoting *In re Richman*, 663 F.2d 1026, 1030 (CCPA 1977)). Claim 1 — in contrast — has *no* such link to the physical world. Nor is it limited to any specific, real-world application.

As the Federal Circuit has similarly confirmed, “mental processes” — such as those in *Benson*, *Flook*, and Claim 1 of the '697 patent — are not patentable, whether they are completed manually, or require computer implementation. *Bancorp*, 2012 WL 3037176 at *1-3, 11 (holding unpatentable *both* independent method claims for tracking the values of life insurance policies *and* dependent claims that required this method be “performed by a computer,” because a computer’s increased efficiency “does not materially alter . . . patent eligibility”).

Even if Claim 1 *had* disclosed a computer or its components — which it does not — such a recitation would not rescue the unpatentable mental process. The Supreme Court invalidated the *Benson* claims in precisely such circumstances, where “the mathematical formula . . . has no substantial practical application except in connection with a digital computer.” 409 U.S. at 71-72. Claim 1 is invalid whether its process can be performed by a person using pen and paper, or may only be practiced on a computer, and this legal result is no accident. Abstract ideas, mental processes, and mathematical algorithms are unpatentable in every form because they “are not the kind of ‘discoveries’ that the [Patent] statute was enacted to protect.” *Flook*, 437 U.S. at 593.

2. Claims 6-14 and 19-20 Do Not Render the Algorithm Patentable Because They Purport to Claim the Same Abstract Ideas As Claim 1.

Claims 6-14 and 19-20 are as abstract as Claim 1, and do not make the purported invention patentable. Instead, they simply describe further steps that can be taken in connection with the format conversion and calculations, without reference to anything more concrete than “representations” of numbers.

Several of the '697 claims recite almost exactly the same steps held unpatentable in *Benson*. For example, claims 13 and 19 provide for “testing” portions of the number being processed, just as the method in *Benson* called for “testing” the binary digit position. *Compare* '697 Patent, 15:51-55; *with* 409 U.S. at 74. Similarly, claims 12 and 14 recite “setting” bits in the converted format, which was accomplished in *Benson* by “shifting the signals to the right,” and subsequently “shifting the signals to the left.” *Compare* '697 Patent, 15:47-50 and 15:56-59; *with Benson*, 409 U.S. at 74.

The remaining claims are no more transformative. Claims 7-8 are directed to using a comma code to represent a set of numerical values. Claim 9 recites “transcribing” a portion of a number. Claim 10 extends the exponent portion of the number. Claim 11 adds to or subtracts

from a portion of a number. Finally, Claim 20 encodes an “accuracy value” for a number. None of these claims pass muster under Section 101, because the “determination of those values, and their subsequent manipulation, is a matter of mere mathematical computation.” *Bancorp*, 2012 WL 3037176 at *11 (invalidating patents for managing investments that required determining, storing, and adjusting multiple values, because they were directed to abstract ideas).

Like Claim 1, these claims represent precisely what *Benson* warned against: “a patent on the algorithm itself.” 409 U.S. at 72.

3. Claims 2-5, 15-18, and 21-28 Do Not Render The Algorithm Patentable Because They Add No More Than Components of A General Purpose Computer For Making Calculations.

Claims 2-5, 15-18, and 21-28 reference, in addition to the same basic algorithms, various well-known structures and circuits to facilitate the processing of floating-point numbers.⁴ These references to standard computer components cannot evade the Supreme Court’s categorical bar against patenting mathematical algorithms. As the Court emphasized in *Benson*, the rule against patenting abstract ideas cannot be avoided by drafting the claims as a machine or component, or by claiming that they are implemented on a computer or computer components. *Id.* at 72. Indeed, the claims in *Benson* failed as a matter of law even though they included limitations, like those in claims of the ’697 patent, referencing the storing and shifting of signals, the testing of positions, and the use of a “register.” *Id.* at 73 (quoting claims).

The Federal Circuit has similarly held that “the use of a computer [for] making calculations or computations . . . fails to circumvent the prohibition against patenting abstract

⁴ While Claims 22-28 are purportedly apparatus claims, this does not change the analysis, or render them any less abstract. *Benson*, 409 U.S. at 67-68, 72 (the “same principle applies” to product and process claims); *Bancorp*, 2012 WL 3037176 at *9 (Fed. Cir. July 26, 2012) (holding a machine or system “equivalent to an abstract mental process for purposes of patent ineligibility.”); *CyberSource*, 654 F.3d at 1374 (Fed. Cir. 2011) (“[r]egardless of what statutory category . . . A claim’s language is crafted to literally invoke, we look to the underlying invention for patent-eligibility purposes.”). The form of claiming is particularly a distinction without a difference here, because the apparatus claims merely paraphrase the method claims, and “appear to be no more than object[s] on which the method operates.” *Bancorp*, 2012 WL 3037176 at *8.

ideas and mental processes.” *Bancorp Services*, 2012 WL 3037176 at *1-3, 9, 11 (holding unpatentable claims that required method be “performed by a computer,” because a computer’s increased efficiency “does not materially alter . . . patent eligibility”). As the Federal Circuit recognized in *Cybersource*, this is “precisely the holding of the Supreme Court in *Gottschalk v. Benson*.” *Cybersource*, 654 F.3d at 1375 (holding that a claim for detecting fraud in a credit card transaction that recited “[a] computer readable medium containing program instructions” and “one or more processors of a computer system” was an “unpatentable abstract idea”); *see also Prometheus Laboratories*, 132 S.Ct. at 1301 (“implementing a mathematical principle on a physical machine, namely a computer, [is] not a patentable application of that principle”); *Dealertrack*, 674 F.3d at 1333 (“computer-aided” limitation does not render a claim patentable).⁵

The ’697 Patent’s only independent apparatus claims merely employ a computer to perform calculations. Claim 22, for example, recites “means for performing an arithmetic operation.” ’697 Patent, 16:48-65. Similarly, Claim 25 discloses “an arithmetic logic unit for performing arithmetic operations.” *Id.* at 17:7-18:8. The patent nowhere claims that these hardware elements are anything more than standard elements of a general purpose computer.

⁵ Because these claims of the ’697 Patent merely implement a mathematical principle on a computer, they are fundamentally different from claims that have been held to contain eligible subject matter. The ’697 Patent produces no tangible product. *See, e.g., Research Corp Technologies, Inc. v. Microsoft Corp.*, 627 F.3d 859, 869 (Fed. Cir. 2010) (patentees did “not seek to patent a mathematical formula,” but claimed a process for rendering higher quality halftone images). The ’697 Patent is not inextricably linked to a particular machine. *See, e.g., SiRF Technology, Inc. v. Int’l Trade Com’n*, 601 F.3d 1319, 1332-1333 (Fed. Cir. 2010) (process for identifying the location of a particular GPS receiver was unlike the “utilization of a computer for performing calculations,” because the method would be impossible to execute without the particular GPS, whose position was “the precise goal of the claims”). And the ’697 Patent adds no practical limitation or application to its mathematical formula. *See, e.g., CLS Bank Int’l v. Alice Corp. Pty. Ltd.*, 685 F.3d 1341, 1351 (Fed. Cir. 2012) (recognizing that use of a computer to perform calculations cannot render a claim subject matter eligible, and finding patentability based on the “practical application of a business concept in a specific way”); *see also Prompt Medical Sys.*, 2012 WL 678216 at *8 (patent did “not designate[] a mathematical algorithm as its point of novelty,” but rather covered a method for generating medical treatment codes based on doctor-patient encounters). Far from rescuing the claims of the ’697 Patent, these decisions confirm the claims’ fatal flaw: they disclose nothing more than the implementation of a mathematical formula for processing floating point numbers. *See, e.g., Flook*, 437 U.S. at 585 (no subject matter eligibility exists where “the only novel feature of the method is a mathematical formula”).

Reciting a “computer” to perform calculations cannot rescue the ’697 Patent, and neither can reciting standard *parts* of a computer. *Benson*, 409 U.S. at 72 (warning against “indirect attempts to obtain patents and avoid the rejection by [claiming] a machine *or components thereof* programmed in a given manner”) (*quoting* The President’s Commission on the Patent System, emphasis added). In fact, the “register” element that appears in every apparatus claim of the ’697 patent was *also* present in the method claim deemed unpatentable in *Benson*. *Compare* 409 U.S. at 74; *with* ’697 Patent at 16:48-18:18, Claims 22-28.⁶

Disclosing such computer elements is particularly unavailing when the “mathematical procedures can be carried out in existing computers long in use, no new machinery being necessary.” *Benson*, 409 U.S. at 67. The ’697 Patent does not — and could not — assert that the “memory” referenced in Claims 18 and 22-24, the “arithmetic unit” referenced in Claims 15-17, 21, 25-26, or the “circuit(s)” referenced in Claims 2-5 and 25-28 represent “new machinery.” Instead, the patent *disclaims* any purported novelty for these elements, acknowledging that the invention employs “well known structures and circuits.” ’697 Patent at 5:56-59 (“well-known structures and circuits have not been shown in detail in order not to unnecessarily obscure the present invention”); *see also id.* at 2:31-32 (prior art used “circuitry to handle overflow and underflow numbers”); *id.* at 2:38 (prior art microprocessors already contained a “dedicated floating-point unit”); *id.* at 5:51-56 (although the patent describes “specific bit lengths, register contents, block diagrams, etc . . . [i]t will be obvious, however, to one skilled in the art that these specific details need not be used to practice the present invention”).

⁶ This element also appears in method Claim 21. *Id.* at 16:33.

C. All the Claims Fail the Federal Circuit’s “Machine-or-Transformation” Test

Prior to the Supreme Court’s decision in *Bilski*, the Federal Circuit evaluated Section 101 issues using a “machine-or-transformation” test. In *Bilski*, the Supreme Court held that, although this is “not the sole test” for determining whether a patent covers eligible subject matter, it can be a “useful and important clue.” *Bilski*, 130 S.Ct. at 3227.

Under the “machine-or-transformation” test, a process may be patentable if “(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.” *Bilski*, 130 S.Ct. at 3225-26 (quoting *In re Bilski*, 545 F.3d 943, 954 (Fed. Cir. 2008) (*en banc*)). However, the “machine” portion of the test requires more than simply performing an unpatentable process on a general purpose computer. The “particular” machine must impose a meaningful limit on the scope of the claim, “rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly, *i.e.*, through the utilization of a computer for performing calculations.” *Dealertrack, Inc.*, 674 F.3d at 1333. Moreover, the “transformation” portion of the test cannot be satisfied by the “[m]anipulation or reorganization of data,” or the transfer of data from one format to another. *CyberSource*, 654 F.3d at 1375 (holding that such manipulation of data was merely “the incidental use of a computer to perform [a] mental process”).

Claim 1 of the ’697 Patent recites no machine whatsoever. As the patent acknowledges, the “floating-point number memory register representation” and “floating-point register representation” referenced in these claims are simply “formats,” ways in which certain numbers are presented. *See, e.g.*, ’697 Patent at 1:10-13 (the purported invention “is directed to a technique for representing floating-point numbers in a memory register *format* and floating point

register *format*”) (emphasis added); *see also* 5:27-32 (Fig. 2 “illustrates a memory register format representation,” and Fig. 3 “illustrates a floating-point register format representation”).

As for the transformation portion of the test, as *Benson* confirms, “conversion” of a number from one format to another is not a patentable transformation. *Benson*, 409 U.S. at 70, 74 (conversion of numbers from one representative format to another not patentable). The ’697 patent fails the transformation test, because it does “not transform the raw data into anything other than more data.” *Bancorp*, 2012 WL at *5; *see also CyberSource*, 654 F.3d at 1375 (“[m]anipulation or reorganization of data [] does not satisfy the transformation prong”); *Glory Licensing*, 2011 WL 1870591 at *5 (where data “is merely transferred from one format . . . to another . . . a transformation cannot be said to have taken place.”).

The remaining unasserted claims are equally deficient. Claims 6-14, and 19-20, like Claim 1, are method claims that reference no physical apparatus, and merely disclose steps in the mathematical algorithm. Claims 2-5, 15-18, and 21-28 fare no better, because they simply recite standard elements of a general purpose computer, and do not disclose any *particular* machine that would pass the “machine-or-transformation” test. *See Benson*, 409 U.S. at 64 (claim directed to converting numbers on “general purpose computers,” not limited to “any particular apparatus,” was not patentable); *see also Dealertrack*, 674 F.3d at 1333 (subject matter cannot be made patent-eligible “through the utilization of a computer for performing calculations”). Moreover, all the claims fail the transformation portion of the test, because they do “not transform the raw data into anything other than more data.” *Bancorp*, 2012 WL 3037176 at *5. Instead, the ’697 Patent merely processes numbers. Such “[p]urported transformations or manipulations simply of . . . abstractions cannot meet the test because [numbers] are not physical objects or substances.” *In re Bilski*, 545 F.3d at 963.

IV. CONCLUSION

In summary, all the claims of the '697 patent are unpatentable because they express no more than abstract ideas and mathematical algorithms, and fail the "machine-or-transformation" test. No relief may be granted on Uniloc's Complaint for patent infringement. Rackspace accordingly requests that the Court dismiss the Complaint.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3)(A) on August 27, 2012.

/s/ Michael E. Jones