



## Debunking the Grassy Knoll Theory of Business Method Patents

Paul E. Rossler, [GABLEGOTWALS](#)

It almost goes without saying that credit card fraud was around long before Internet shopping, but Internet shopping has been a boon to fraudsters, helping increase the scope, scale, and (perhaps) ease by which they ply their trade. Credit card processing companies, which depend a great deal on preventing this type of fraud, not only try to outwit the fraudsters but also one another by coming up with new and better fraud detection schemes or methods. One of those companies, CyberSource Corporation (“CyberSource”), thought its method of fraud detection was so new and inventive that it applied for, and subsequently received, a patent on it.<sup>1</sup> However, getting a patent is one thing, enforcing it is another, and whenever a patent holder sues an alleged infringer, the patent is placed at risk of being declared invalid. This is especially true of patents like the one CyberSource held because it was directed to a “business method.” What the Federal Circuit Court of Appeals decided about the validity of this patent is instructive about what is, and what is not, patent-eligible subject matter when it comes to business methods.

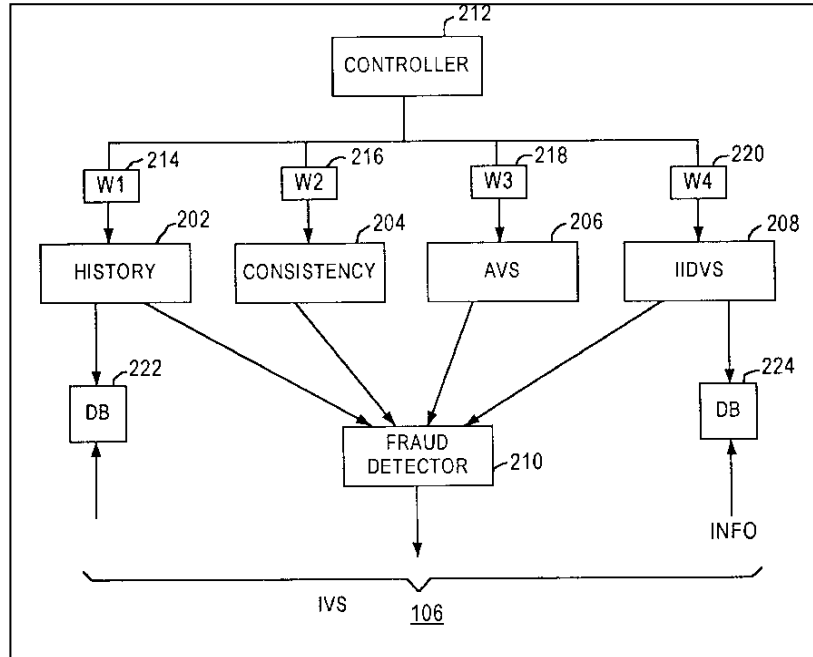
### Better Suited

CyberSource’s patented method of “verifying the validity of a credit card transaction over the Internet” required the steps of

- a) obtaining information about other transactions that have utilized an Internet address that is identified with the [ ] credit card transaction;
- b) constructing a map of credit card numbers based upon the other transactions and;
- c) utilizing the map of credit card numbers to determine if the credit card transaction is valid.<sup>2</sup>

Another one of the patent’s claims required a “computer readable medium containing program instructions” which carried out the above steps on a computer. The computer readable medium also carried out the steps of:

- a) obtaining credit card information relating to the transactions from the consumer; and
- b) verifying the credit card information based upon values of plurality of parameters, in combination with information that identifies the consumer, and that may provide an indication whether the credit card transaction is fraudulent,



<sup>1</sup> U.S. Pat. No. 6,029,154 (“the ‘154 patent”).

<sup>2</sup> *CyberSource Corp. v. Retail Decisions, Inc.*, \_\_\_ F.3d \_\_\_, 2011 WL 3584472 at \*3 (Fed. Cir., Aug. 16, 2011) (quoting claim 3 of the ‘154 patent) (brackets in written opinion).

wherein each value among the plurality of parameters is weighted in the verifying step according to an importance, as determined by the merchant, of that value to the credit card transaction, so as to provide the merchant with a quantifiable indication of whether the credit card transaction is fraudulent.<sup>3</sup>

All of this was supposed to be better suited for Internet transactions because each used “Internet address” information such as the Internet protocol (IP) address or email address instead of the billing address and other personal information typically used in face-to-face transactions.<sup>4</sup> From CyberSource’s point of view, Retail Decisions Inc. (“Retail Decisions”) must have thought it better suited too because, according to CyberSource, Retail Decisions was infringing the patented method and system. Retail Decisions not only denied this but concluded that CyberSource’s patent was invalid because it claimed an idea and not an invention. Therefore, one of Retail Decisions’ first line of defenses was to have CyberSource’s patent invalidated.

### **Second Time is a Charm, Maybe**

In an attempt to invalidate CyberSource’s patent, Retail Decisions requested that the Patent Office “reexamine” the patent in hopes that the Patent Office would admit that it had made a mistake in even issuing the patent. Reexamination is essentially a do-over, with the exception that the party requesting the reexamination, in this case Retail Decisions, has to submit prior art that it believes the Patent Office ignored or did not adequately consider the first time around. Unfortunately for Retail Decisions, reexamination did not work in its favor. Instead of invalidating the patent, the Patent Office reissued it with amended claims, two of which appeared above, claim 2 (the computer readable media claim) and claim 3 (the method claim).<sup>5</sup>

From Retail Decisions’ perspective, all was not lost. Although the CyberSource patent essentially passed muster with the Patent Office twice, Retail Decisions remained (not surprisingly) unconvinced that the patent actually covered patent-eligible subject matter. Therefore, it asked the district court judge in the pending infringement suit to grant summary judgment in its favor on the ground that the reexamined (and now re-issued) CyberSource patent was invalid because it was directed toward non-patentable subject matter. The judge, who had stayed the initial lawsuit pending the outcome of the Patent Office’s reexamination, granted Retail Decisions’ motion. He concluded the patent’s claimed method recited “an unpatentable mental process for collecting data and weighing values,” which did “not become patentable by tossing in references to [I]nternet commerce.”<sup>6</sup> As far as the “computer readable media” claim was concerned, the judge concluded that it simply added computer readable media and program instructions to what is otherwise a non-patentable method. That kind of addition does not turn an unpatentable invention into a patentable one.<sup>7</sup>

CyberSource (not surprisingly) disagreed with the judge’s decision. It lodged an appeal with the Federal Circuit Court of Appeals.

### **Entirely in the Human Mind**

Part of the problem in deciding whether a business method is eligible for patent protection is the Patent Act itself, which defines a patent-eligible “process” tautologically, as a “process . . . or

---

<sup>3</sup> *Id.* at \*6 (quoting Claim 2 of the ‘154 patent as amended during reexamination).

<sup>4</sup> *Id.* at \*1,

<sup>5</sup> *Id.*

<sup>6</sup> *Id.* (quoting *CyberSource Corp. v. Retail Decisions, Inc.*, 620 F. Supp. 2d 1068, 1077 (N.D. Cal. 2009)).

<sup>7</sup> *CyberSource*, 2011 WL 3584472 at \*1 (citing *CyberSource*, 620 F. Supp. 2d at 1080).

method.”<sup>8</sup> Courts, therefore, have had to come up with ways to distinguish a patent-eligible method from those that try to claim ineligible principles (*i.e.*, laws of nature, physical phenomena, and abstract ideas).<sup>9</sup> Generally speaking, if a method is not drawn to these ineligible principles and instead (1) requires a machine to accomplish it or (2) results in a physical transformation of some sort, then the method is eligible for patent protection.<sup>10</sup> The method still must be novel and inventive, but at least it passes through this initial gate in the patent examination process.

The Federal Circuit concluded that CyberSource’s claimed method — obtaining information, constructing a map based upon that information, and using the map to determine whether a credit card transaction was valid — should never have passed through this gate. First, the method flunked the “machine-or-transformation” test. The plain language of the claim did not require any machine and, even if the Internet is considered to be a machine, the Internet “cannot perform the fraud detection steps of the claimed method.”<sup>11</sup> Rather, the Internet was simply a source of the information used by the method, providing the Internet protocol (IP) address or email address for the particular credit card transaction. Further, no physical transformation of any kind was involved. All the claimed method required was “collection and organization of data regarding credit card numbers and Internet addresses.”<sup>12</sup>

Second, the method did nothing more than claim “unpatentable mental processes.” For example, all three steps could be performed entirely by any person who “simply reads records of Internet credit card transactions from a preexisting database,” constructs a map of credit card numbers by “writing down a list of credit card transactions made from a particular IP address,” and identifies a “likely instance of fraud based on the simple observation that numerous transactions using different credit cards, having different user names and billing addresses, all originate from the same IP address.”<sup>13</sup> The Court concluded that the steps

can all be performed in the human mind. Such a method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible . . . . Methods which can be performed entirely in the human mind are unpatentable not because there is anything wrong with claiming mental method steps as part of a process containing non-mental steps, but rather because computational methods which can be performed entirely in the human mind are the types of methods that embody the “basic tools of scientific and technological work” that are free to all men and reserved exclusively to none.<sup>14</sup>

In regard to the computer readable media claim, the Court held that rather than being “truly drawn to a specific” computer readable medium which was distinct from others capable of performing the required function, the claim was directed to the underlying method of detecting credit card fraud.<sup>15</sup> “[S]imply reciting the use of a computer to execute an algorithm that can be

---

<sup>8</sup> *Id.* at \*2 (citing 35 U.S.C. § 100(b)).

<sup>9</sup> *See id.*

<sup>10</sup> For a review of key cases involving what is, and what is not, patent-eligible subject matter, *see* Paul E. Rossler, WhatsUpinIP.com, [Process or Principle? A Look at What Makes a Method “Patent-Eligible”](#) (Jan. 5, 2011).

<sup>11</sup> *CyberSource*, 2011 WL 3584472 at \*3.

<sup>12</sup> *Id.*

<sup>13</sup> *Id.* at \*5.

<sup>14</sup> *Id.* at \*6 (internal footnote omitted) (citation omitted).

<sup>15</sup> *Id.* at \*7.

performed entirely in the human mind” does not somehow create a new machine in the same way that programming a general purpose computer to perform an algorithm does.<sup>16</sup>

Third, and last, the Court pointed out that CyberSource’s method and computer readable media claims were “entirely unlike other cases, where, as a practical matter, the use of a computer is required to perform the claimed method.”<sup>17</sup> One such case was *SiRF Tech*, in which a patent included claims to a “method for calculating an absolute position of a GPS receiver and an absolute time of reception of satellite signals.”<sup>18</sup> The *SiRF Tech* Court noted that not only could this method not be performed without a machine, but the calculations could not be “performed entirely in the human mind.”<sup>19</sup> Another such case was *Research Corp. Technologies*, which involved a method “for rendering a halftone image of a digital image by comparing, pixel by pixel, the digital image against a blue noise mask.”<sup>20</sup> As a practical matter, the human mind could not manipulate the computer data structures involved and output a modified computer data structure.

### Who’d of Think It?

The *CyberSource* decision makes it clear that if a method does not physically transform one thing into another — and most business methods do not — then simply adding a machine or computer to that method does not necessarily make it patentable. The test is whether the method requires, as a practical matter, the machine in order to perform the claimed method. Note that this is different than performing a commercial embodiment of the claimed method (which may not be practical without a machine). If the method and its associated calculations could be performed “entirely in the human mind,” then pulling a computer out from behind the Grassy Knoll will not change the conclusion that a person could act alone and perform the method.

---

### About the Author

**Paul E. Rossler** has an extensive background in intellectual property and engineering. In 1984 he received his bachelor of science in industrial engineering from the GMI Engineering & Management Institute (formerly General Motors Institute). He went on to receive his master’s degree and Ph.D. in industrial engineering from Virginia Tech before completing his juris doctorate at the University of Tulsa, where he graduated with highest honors. Prior to practicing law, Paul served on the engineering faculty at Kettering University and Oklahoma State University. At Oklahoma State, he taught in and directed the graduate degree program in Engineering & Technology Management, a program intended for practicing engineers, scientists and technologists. He continues to teach engineering law and engineering management courses at Oklahoma State University as an adjunct faculty member. Paul is a member of the Oklahoma Bar, is admitted to practice before the U.S. Patent and Trademark Office, and is a registered professional engineer in Michigan and Oklahoma. He can be reached by email at [prossler@gablelaw.com](mailto:prossler@gablelaw.com).

---

<sup>16</sup> *CyberSource*, 2011 WL 3584472 at \*7.

<sup>17</sup> *Id.* at \*9.

<sup>18</sup> *Id.* (quoting *SiRF Tech., Inc. v. Int’l. Trade Comm’n.* 601 F.3d 1319, 1331 (Fed. Cir. 2010).

<sup>19</sup> *Id.* (quoting *SiRF Tech*, 601 F.3d at 1333).

<sup>20</sup> *Id.* (quoting *Research Corp. Techs. v. Microsoft Corp.*, 627 F.3d 859, 868 (Fed. Cir. 2010).