
No. 10-1971

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

HERSHLEY FLOW CONTROLLERS

Defendant-Appellant

v.

BILLY BONKA'S CANDY EMPORIUM

Plaintiff-Appellee

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE DISTRICT
OF NORTH TAKOMA

BRIEF FOR THE DEFENDANT-APPELLANT HERSHLEY FLOW CONTROLLERS

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STATEMENT OF JURISDICTION

This is an appeal from the final judgment of the United States District Court for the District of North Dakota entering judgment for Billy Bonka's Candy Emporium. The District Court properly exercised jurisdiction pursuant to 28 U.S.C. § 1338(a). This Court has exclusive jurisdiction over this appeal pursuant to 28 U.S.C. § 1295(a)(1).

STATEMENT OF THE ISSUES

- I. WHETHER CLAIM 1 OF THE '645 PATENT IS PATENT-ELIGIBLE SUBJECT MATTER UNDER 35 U.S.C. § 101.
- II. WHETHER THE DISTRICT COURT ERRED IN FINDING AN ABSENCE OF INEQUITABLE CONDUCT.

STATEMENT OF THE CASE

Billy Bonka's Candy Emporium [hereinafter "Bonka"] is the owner by assignment of U.S. Patent No. 9,428,645 [hereinafter "'645 patent"], titled "Method for Plugging Pipeline Leaks." Claim 1 of the '645 patent claims a computer-implemented method for notifying a user of a leak in a pipeline that calculates an approximate effective amount of a chicle-starch mixture to plug the leak. In 2008, Hershley Flow Controllers [hereinafter "Hershley"] began installing the computer flow control systems stipulated to infringe the '645 patent.

Bonka timely filed suit in 2008 alleging infringement of claim 1 of the '645 patent. At trial, the United States District Court for the District of North Dakota [hereinafter

"District Court"] found claim 1 valid as patent-eligible subject matter and not unenforceable due to inequitable conduct.

Hershey now appeals the judgment on both grounds.

STATEMENT OF THE FACTS

Bonka produces candy products in North Takoma. (R. at 1). Dr. Barnaby Parry [hereinafter "Parry"] was an employee of Bonka and was charged with developing a new system of chocolate transport. (R. at 3-4). During the operation of this new system, leaks developed causing almost ten million gallons of chocolate to escape from the pipes. (R. at 6). This culminated in a "tsunami of liquid chocolate" as well as a "chocolate river" that flowed into the watershed for almost four weeks. (R. at 7-9). Consequently, Parry was assigned the task of developing a method to seal these leaks. (R. at 6,9). It was necessary that this method be able to detect and seal leaks that could not be seen or easily accessed. (R. at 9). In addition, the problem required that the sealant be non-toxic. (R. at 10).

During Parry's brief research, he remembered an episode from his favorite television show, MacGalver. (R. at 11). This episode disclosed the use of a mixture of bubble gum and starch to seal leaks in a pipeline. (R. at 12). This disclosure inspired Parry to mix chicle (a main ingredient in bubble gum) with starch, as shown in MacGalver, to develop a sealant to plug pipeline leaks. (R. at 14-16). Furthermore, Parry frequently

stated that "if it weren't for MacGalver, we would have never solved this problem." (R. at 29). Having found an acceptable sealant, he continued his research to develop a means for detecting leaks remotely. (R. at 18,24-25). This method is the subject matter of the '645 patent. (R. at 24).

Claim 1 of the '645 patent claims a method of sending an email to a user when a leak is detected in a pipeline. (R. at 24). Further, claim 1 includes steps to determine the presence of a pipeline leak through the calculation of differential flow rate data. (R. at 24). In addition, the method of claim 1 utilizes a mathematical algorithm to calculate the approximate amount of chicle-starch mixture to plug the leak. (R. at 24).

In prosecuting the patent, Parry met with attorney Jim Que [hereinafter "Que"] to discuss his invention and disclosed U.S. Patent No. 8,064,578 when asked if he knew of any prior art. (R. at 19). Parry was a fan of MacGalver and was aware of the episode that showed the use of bubble gum and starch to plug a leak in a pipeline. (R. at 11-12). Despite the knowledge he gained from the show, Parry intentionally did not disclose the MacGalver reference to Que or the United States Patent and Trademark Office [hereinafter "PTO"]. (R. at 19-20,29,34). Furthermore, Que was also a big fan of the show and owned copies of all episodes, including the episode that inspired Parry's invention. (R. at 21). Despite this knowledge, Que

intentionally did not disclose the MacGalver reference to the PTO. (R. at 36). In fact, Que's knowledge of the MacGalver reference was so in-depth that he remembered the precise moment the mixture was used. (R. at 36). Parry and Que concluded it was unnecessary to disclose the MacGalver reference because they believed it was fictitious and, accordingly, they didn't disclose it during prosecution of the patent. (R. at 20,33-36).

The PTO issued the '645 patent and, subsequently, Bonka used the invention and licensed the patent rights. (R. at 23,28). Thereafter, Bonka learned that Hershley had implemented technology embodied in the '645 patent and filed suit for infringement. (R. at 30).

SUMMARY OF THE ARGUMENT

The District Court erroneously held that claim 1 of the '645 patent is patent-eligible subject matter under 35 U.S.C. § 101 because the Court improperly applied tests for patent-eligibility. The Court correctly held that claim 1 failed the machine-or-transformation test because the method of claim 1 is not tied to a machine in any meaningful way, nor is there a substantive transformation of an article. Nevertheless, the Court improperly applied the results of this analysis and de-emphasized the machine-or-transformation test in favor of a test proposed in *Chakrabarty*. Reliance on this test is inappropriate because *Chakrabarty* addresses claims drawn to manufactures and

compositions of matter, not processes. In addition, the Court failed to recognize that claim 1 preempts the use of a fundamental principle and is therefore patent-ineligible under well-established Supreme Court precedent.

Regardless of whether claim 1 is patent-eligible subject matter, the '645 patent is nevertheless unenforceable due to inequitable conduct. The District Court improperly failed to apply the entirety of the applicants' actions in its analysis of inequitable conduct. This holding was improper because, when viewed in their entirety, the applicants' actions demonstrate an intent to deceive which compels a finding of inequitable conduct. Both the inventor and the attorney had knowledge of material prior art and intentionally withheld this information from the PTO. Accordingly, Hershley respectfully requests that this Court reverse the District Court and find that claim 1 of the '645 patent is patent-ineligible subject matter, and unenforceable due to inequitable conduct.

ARGUMENT

I. THE DISTRICT COURT IMPROPERLY HELD THAT CLAIM 1 OF THE '645 PATENT IS PATENT-ELIGIBLE SUBJECT MATTER

Whether a claim is drawn to patent-eligible subject matter under § 101 is an issue of law reviewed de novo by an appellate court. *In re Bilski*, 545 F.3d 943, 951 (Fed. Cir. 2008), *aff'd*, 130 S. Ct. 3218 (2010). Section 101 of the Patent Act sets forth the categories of patent-eligible subject matter: "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”

35 U.S.C. § 101 (2006). The Supreme Court has interpreted the statute literally and has broadly construed its scope. *Bilski v. Kappos*, 130 S. Ct. 3218, 3225-26 (2010); *Diamond v. Chakrabarty*, 447 U.S. 303, 307-10 (1980). However, § 101 is not without limits and “laws of nature, physical phenomena, and abstract ideas” are per se patent-ineligible. *Bilski v. Kappos* 130 S. Ct. at 3225; *Chakrabarty*, 447 U.S. at 309.

This Court has proposed a machine-or-transformation test as the definitive test for determining whether a process is patent-eligible under § 101. See *In re Ferguson*, 558 F.3d 1359, 1363 (Fed. Cir. 2009), *cert. denied*, 130 S. Ct. 3541 (2010); *In re Bilski*, 545 F.3d at 954. However, the Supreme Court has rejected the exclusivity of this test, holding that it provides a “useful and important clue” in the patent-eligible subject matter determination. *Bilski v. Kappos* 130 S. Ct. at 3227 (emphasis added). Therefore, the machine-or-transformation test continues to play an important role in a patent-eligibility analysis. *Id.*; *Prometheus Labs. v. Mayo Collaborative Servs.*, 97 U.S.P.Q.2d (BNA) 1097, 1103 (Fed. Cir. 2010); *King Pharms., Inc. v. Eon Labs, Inc.*, 616 F.3d 1267, 1278 (Fed. Cir. 2010).

The District Court correctly held that claim 1 of the ‘645

patent did not satisfy the machine-or-transformation test, but erred by finding that it was still patent-eligible under an inapplicable standard found in *Diamond v. Chakrabarty*, 447 U.S. 303 (1980). The District Court's judgment is contrary to Supreme Court precedent and exalts form over substance, validating a patent claim that preempts substantially all uses of a fundamental principle.¹

A. The District Court Correctly Held That Claim 1 Fails The Machine-Or-Transformation Test; An Important Clue That Claim 1 Is Not Patent-Eligible Subject Matter

The District Court properly held that claim 1 failed the machine-or-transformation test by finding that the use of a computer was insufficient to tie the claim to a particular machine or apparatus and the subject matter of the claim (data) was not transformed into a different state or thing. Any physical or transformative limits present in claim 1 are nothing more than inherent data gathering steps, non-essential extra-solution activity, or insignificant field of use limitations that do not meaningfully limit the claim's scope.

The machine-or-transformation test provides a "useful and important clue, an investigative tool" for assessing the patent-eligibility of process claims. *Bilski v. Kappos*, 130 S. Ct. at 3227. Although it is no longer the sole test, this Court has

¹ See *In re Bilski*, 545 F.3d 943, 952 n.5 (Fed. Cir. 2008) ("fundamental principles means laws of nature, physical phenomena, and abstract ideas") (internal quotations ommitted).

continued to utilize the machine-or-transformation test following *Bilski v. Kappos* and has recognized its continued importance. See *Prometheus*, 97 U.S.P.Q.2d at 1103 (recognizing that the Supreme Court did not “disavow” the machine-or-transformation test); *King Pharms.*, 616 F.3d at 1278 (“We therefore understand the Supreme Court to have rejected the exclusive nature of our test, but not necessarily the wisdom behind it.”).

The machine-or-transformation test holds that a claimed process is likely patent-ineligible unless (1) it is tied to a particular machine or apparatus or (2) it transforms a particular article into a different state or thing. *In re Bilski*, 545 F.3d at 954 (citing *Diamond v. Diehr*, 450 U.S. 175, 192 (1981); *Parker v. Flook*, 437 U.S. 584, 589 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 788 (1876)). See also *Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of Bilski v. Kappos*, 75 Fed. Reg. 43922-01, 43924 (United States Patent and Trademark Office July 27, 2010). The use of a particular machine or transformation of a particular article must impose meaningful limits on the claim’s scope and must amount to more than merely insignificant extra-solution activity or a field-of-use limitation. *In re Bilski* at 957, 961-62 (citing *Diehr*, 450 U.S. at 191-92; *Flook*, 437 U.S. at 590;

Benson, 409 U.S. at 71-72). Moreover, the addition of data-gathering steps to an algorithm is insufficient to make that otherwise ineligible process patent-eligible. *Id.* at 963 (citing *In re Grams*, 888 F.2d 835, 840 (Fed. Cir. 1989); *In re Meyer*, 688 F.2d 789, 794 (C.C.P.A. 1982)).

1. Claim 1 Fails The First Prong Of The Machine-Or-Transformation Test Because It Is Not Tied To A Particular Machine Or Apparatus

The District Court properly determined that claim 1 fails the first prong of the machine-or-transformation test because the use of a general purpose computer imposes no meaningful limits to the scope of the claim and is not a “particular machine” within the meaning of the test. This Court has not definitively held whether recitation of a computer suffices to tie a process claim to a particular machine. *See In re Bilski*, 545 F.3d at 962. However, district courts and the Board of Patent Appeals and Interferences have held that the use of a general-purpose computer does not satisfy the “machine” prong of the test.² Although these cases do not control, this Court has

² *See, e.g. DealerTrack, Inc. v. Huber*, 657 F.Supp.2d 1152, 1156 (C.D. Cal. 2009) (holding claim ineligible because “the claimed central processor is nothing more than a general-purpose computer that has been programmed in some unspecified manner”); *Ex Parte Nawathe*, No. 2007-3360, 2009 WL 327520, at *4 (B.P.A.I. Feb. 9, 2009) (holding claim for a “computerized method” of inputting and representing XML documents as insufficiently tied to “a particular computer specifically programmed for executing the steps of the claimed method” under § 101); *Ex parte Gutta*, No. 2008-3000, 2009 WL 112393, at *3 (B.P.A.I. Jan. 15, 2009) (holding claim reciting “a computerized method performed by a

endorsed that interpretation:

In order for the addition of a machine to impose a meaningful limit on the scope of a claim, it must play a significant part in permitting the claimed method to be performed, 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.*

SiRF Tech., Inc. v. Int'l Trade Comm'n, 601 F.3d 1319, 1333 (Fed. Cir. 2010) (emphasis added).

Similar to the claims at issue in *DealerTrack, Nawathe, Gutta*, and *Cornea-Hasegan*, there is no indication that claim 1 requires the use of a *particular* computer that has been programmed in a certain way to perform the method. Rather, claim 1 merely recites a general-purpose computer in the preamble and the only other reference to a computer is the term "processor." Implementation of claim 1 with a general-purpose computer thus imposes no meaningful limit on the claim's scope. Furthermore, the use of this general-purpose computer is nothing more than "an obvious mechanism for permitting a solution to be achieved more quickly." *SiRF*, 601 F.3d at 1333.

The recited pipeline, flow-rate sensors, and non-transitory computer-readable medium likewise impose no meaningful limitation on the scope of the claim. First, the pipeline is "merely an object on which the method operates." *Interim*

data processor" ineligible under § 101); *Ex Parte Cornea-Hasegan*, 89 U.S.P.Q.2d (BNA) 1557, 1560-61 (B.P.A.I. Jan. 13, 2009) (rejecting claims under § 101, finding the recitation of a processor is nothing more than a general purpose computer and does not tie the process steps to a particular machine).

Guidance, 75 Fed. Reg. at 43925 (weighing against eligibility). Moreover, it is at most a field of use limitation because it only limits the claim's scope to those broad uses that also incorporate a pipeline. See *Flook*, 437 U.S. at 586 (holding that limiting a process of updating an alarm limit to "catalytic conversion of hydrocarbons" cannot impart patent-eligibility). Second, the flow-rate sensors are nothing more than token physical elements used in a data-gathering step; a meaningless limitation because every algorithm inherently requires the gathering of data inputs. *In re Bilski*, 545 F.3d at 963; *In re Grams*, 888 F.2d at 839-40. Third, the step of storing the result on a "non-transitory computer-readable medium" is not a physical limitation, but rather insignificant extra-solution activity because it serves merely to record the result of the calculation. *In re Schrader*, 22 F.3d 290, 295 (Fed. Cir. 1994). Furthermore, the mere act of storing information on computer memory cannot tie a claim to a machine in any meaningful way. *Ultramercial, LLC v. Hulu, LLC*, No. CV 09-06918 RGK (PLAX), 2010 WL 3360098, at *4 (C.D. Cal. 2010). For the above reasons, the District Court properly held that claim 1 is insufficiently tied to a particular machine.

2. Claim 1 Fails The Second Prong Of The Machine-Or-Transformation Test Because It Merely Performs A Calculation On A Data Set And Displays The Result

The District Court correctly ruled that claim 1 did not transform an article to a different state or thing because the data that are the subject matter of the process were not transformed in a way that meaningfully limits the scope of the claim.

Claim 1 merely performs a calculation on a set of numbers and displays the result. No physical transformation is involved and one number is merely converted to another number. The only step of the claim that might be considered transformative is the final step of sending a user an electronic mail notification with the results of the calculation. However, this step is nothing more than insignificant extra-solution activity because it is not essential to the claimed process; it is nothing more than a token step added after the equation is solved to make claim 1 appear patent-eligible. *See Flook*, 437 U.S. at 590. Just as "the mere transfer of data from one memory disk on one computer to another memory space in a second computer is not 'transformation of article' under § 101," the mere sending of an electronic mail message with the results of a calculation is an insignificant transformation of the underlying data. *Ultramercial*, 2010 WL 3360098, at *5. Therefore, the District Court's determination that claim 1 does not transform an article

was proper.

B. The District Court Improperly De-Emphasized The Usefulness Of The Machine-Or-Transformation Test In Determining The Patent-Eligibility of Claim 1

The District Court erroneously concluded that claim 1 of the '645 patent remained patent eligible despite failing the machine-or-transformation test. While not all claims that fail the test are patent-ineligible, the District Court failed to appropriately balance the results of the § 101 analysis.

In *Bilski v. Kappos*, the Supreme Court held that the machine-or-transformation test was not an exclusive test, but “a useful and important clue, an investigative tool” for determining whether a process is patent-eligible under § 101. *Bilski v. Kappos*, 130 S. Ct. at 3227. Apart from this holding however, nothing in the Court’s opinion suggests that it is not a good test; in fact, quite the opposite.

Justice Breyer’s concurring opinion “highlight[ed] the substantial *agreement* among many Members of the Court,” noting that the machine-or-transformation test has never been the only test, but is an “important example” of how a court can determine patent-eligible subject matter under § 101. *Bilski v. Kappos*, 130 S. Ct. at 3258-59 (Breyer, J., concurring) (emphasis in original). Further, Justice Breyer concluded that in rejecting the exclusivity of the machine-or-transformation test “the Court intends neither to de-emphasize the test’s usefulness nor to

suggest that many patentable processes lie beyond its reach.”
Id. at 3259 (Breyer, J., concurring).

This Court has adopted the Supreme Court’s position as highlighted by Justice Breyer, recognizing the continued importance of the machine-or-transformation test following *Bilski v. Kappos*. See *Prometheus*, 97 U.S.P.Q.2d at 1103; *King Pharms.*, 616 F.3d at 1278. In *Prometheus*, this Court relied solely on the machine-or-transformation test to evaluate whether a process was patent-eligible subject matter under § 101. *Prometheus*, 97 U.S.P.Q.2d at 1102-05.

The District Court thus misinterpreted *Bilski v. Kappos* and ignored Justice Breyer’s logic by holding claim 1 patent-eligible despite failing the machine-or-transformation test. Rather than treating the test as a useful and important clue, the District Court treated it as merely one test in a group of many and failed to weigh it appropriately, finding claim 1 nevertheless patent-eligible under an inapplicable standard found in *Chakrabarty*, 447 U.S. at 309. (R. at 41-42). This Court should follow *Prometheus* and find claim 1 patent-ineligible for failure to satisfy the machine-or-transformation test because claim 1 is not one of those rare processes that “lie beyond its reach.” *Bilski v. Kappos* 130 S. Ct. at 3259 (Breyer, J., concurring).

C. Claim 1 Is An Attempt To Patent And Preempt The Use Of A Fundamental Principle And Is Not Patent-Eligible Subject Matter Under Long-Standing Supreme Court Precedent

The District Court erroneously concluded that claim 1 met the standard for patent-eligible subject matter, as guided by *Bilski v. Kappos*, because claim 1 preempts the use of a fundamental principle and the additional claim limitations are not meaningful; they merely serve to outline the scope of that principle. Therefore, to uphold the validity of claim 1 would be contrary to Supreme Court precedent.

There are three well-established “exceptions to § 101’s broad patent eligibility principles: ‘laws of nature, physical phenomena, and abstract ideas.’” *Bilski v. Kappos* 130 S. Ct. at 3225 (quoting *Chakrabarty*, 447 U.S. at 309). “[T]hese exceptions have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years.” *Id.* (citing *Le Roy v. Tatham*, 55 U.S. (14 How.) 156 (1852)). Although it is well settled that these fundamental principles cannot be patented, “an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” *Id.* at 3230 (quoting *Diehr*, 450 U.S. at 188). Therefore, the patent-eligibility inquiry focuses on the scope of exclusion of the claims and distinguishes claims that seek to preempt the use of a fundamental principle from claims that seek only to foreclose a particular application of that

principle. *Diehr*, 450 U.S. at 187. See also *Bilski*, 545 F.3d at 953. In making this distinction, the claim must be considered as a whole and it is "inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis." *Bilski v. Kappos*, 130 S. Ct. at 3230 (quoting *Diehr*, 450 U.S. at 188). Furthermore, a claim to a fundamental principle cannot become patent-eligible merely by limiting the use of that principle to a particular field or adding insignificant extra-solution activity or inherent data-gathering steps. *Diehr*, 450 U.S. at 191-92; *Flook*, 437 U.S. at 590; *In re Bilski*, 545 F.3d at 957,963; *Grams*, 888 F.2d at 840.

As noted above, the patent-eligibility inquiry compares the scope of exclusion of the claim to the overall breadth of the fundamental principle. See *Diehr*, 450 U.S. at 187; *Benson*, 409 U.S. at 68,71-72; *In re Bilski*, 545 F.3d at 953. Thus, "substantially all uses" of a principle having narrow application may be preempted by a comparatively narrow claim, while "substantially all uses" of a broad principle (e.g., the Arrhenius equation) may only be preempted by a comparatively broad claim. See *In re Bilski*, 545 F.3d at 953. However, in evaluating patent-eligibility under § 101, no distinction is made between narrow and broad principles. Rather, all fundamental principles are categorically ineligible as they are

“part of the storehouse of knowledge of all men . . . free to all men and reserved exclusively to none.” *Id.* at 952 (quoting *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948)). See also *Benson*, 409 U.S. at 67 (noting that fundamental principles are “the basic tools of scientific and technological work”).

In *Diehr*, the Supreme Court held that claims directed to a method for curing rubber that applied the Arrhenius equation were patent-eligible because the claims did not preempt the use of that equation in and of itself. 450 U.S. at 187. The Arrhenius equation is a broad principle with a multitude of uses and the claims only sought to foreclose the use of that equation in connection with all the other steps in the rubber curing process. *Id.* Conversely, in *Benson*, the Supreme Court held that claims directed to a method for converting binary-coded-decimal numerals into pure binary numerals for use with a computer were patent-ineligible because the claimed mathematical formula had no use other than with a computer and the patent would therefore “wholly preempt the mathematical formula.” 409 U.S. at 65,71.

Parry discovered a fundamental principle, a natural correlation that can be expressed in the form of a mathematical equation. That principle allows one to correlate differential fluid flow through a pipeline with the approximate amount of a

chicle-starch mixture necessary to seal a leak in that pipeline. Unlike the Arrhenius equation in *Diehr*, this is a narrow principle that can only be used to make this limited correlation. Claim 1 thus preempts substantially all uses of this narrow principle because it merely performs that correlation in connection with meaningless extra steps. Like the claims at issue in *Benson*, the limits to claim 1 are dictated by the limits of the principle itself and the method of claim 1 has no practical application except in connection with calculating an approximate effective amount of a chicle-starch mixture necessary to seal a leak in a pipeline by comparing differential fluid flow. *Benson*, 409 U.S. at 71-72.

Limiting the method of claim 1 to computer implementation does not avoid preempting substantially all uses of a fundamental principle because it adds no meaningful limitation. *See SiRF*, 601 F.3d at 1333 (it is "an obvious mechanism for permitting a solution to be achieved more quickly"). Furthermore, other than an inherent antecedent data gathering step and the calculation itself, the only other limitations are that the result is stored on a non-transitory computer-readable medium and then sent to a user via an electronic mail message. These limitations are nothing more than insignificant extra-solution activities and are insufficient to "transform an unpatentable principle into a patentable process." *Diehr*, 450

U.S. at 191-92; *Flook*, 437 U.S. at 590; *In re Bilski*, 545 F.3d at 957,963; *Grams*, 888 F.2d at 840.

To uphold the validity of claim 1 would exalt form over substance and impermissibly allow the patenting of a claim that preempts substantially all uses of a fundamental principle. For the aforementioned reasons, this Court should reverse the District Court and hold that claim is patent-ineligible subject matter under § 101.

D. The District Court Improperly Held Claim 1 Patent-Eligible Under An Inapplicable Standard Found In *Chakrabarty*: *Chakrabarty* Addressed Claims Drawn To Manufactures And Compositions Of Matter, Not Processes

The District Court erred by finding claim 1 patent-eligible under an inapplicable standard found in *Diamond v. Chakrabarty*, 447 U.S. 303 (1980). Although *Chakrabarty* provides a useful standard for evaluating the patent-eligibility of claims directed to a “manufacture” or “composition of matter,” but that standard is only tangentially applicable to process claims.

The claims at issue in *Chakrabarty* were drawn to a human-made, genetically engineered microorganism. 447 U.S. at 305. The issue before the Supreme Court was whether a living organism could be patented and, specifically, whether the particular microorganism at issue was a “manufacture” or “composition of matter” within the meaning of § 101. *Id.* at 307. The Court held that the microorganism at issue was patent-eligible subject matter because it was a “nonnaturally occurring *manufacture or*

composition of matter – a product of human ingenuity ‘having a distinctive name, character [and] use.’” *Id.* at 309–10 (emphasis added) (quoting *Hartranft v. Wiegmann*, 121 U.S. 609 (1887)). Therefore, manufactures and compositions of matter are patent-eligible if they are a product of human ingenuity having a distinctive name, character and use; *not* processes.

To hold that a process is patent-eligible based on this standard would vitiate Supreme Court precedent because it is overly broad and would permit the patenting of fundamental principles. Samuel Morse’s claim to “electromagnetism” and Gary Benson’s claim to a method for converting binary-coded-decimal numerals into pure binary numerals were surely the result of human ingenuity and surely had a distinctive name, character, and use, but § 101 requires more. Thus, the District Court erred by holding claim 1 patent-eligible under this inapplicable standard. *See generally Benson*, 409 U.S. 63 (1972); *O’Reilly v. Morse*, 56 U.S. (15 How.) 62 (1853).

II. THE DISTRICT COURT’S FINDING OF AN ABSENCE OF INEQUITABLE CONDUCT IS BASED UPON CLEARLY ERRONEOUS FINDINGS OF FACT AND EVIDENCES A CLEAR ERROR OF JUDGMENT

Inequitable conduct occurs when there is intent to deceive the PTO. *Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1368 (Fed. Cir. 2003). *See also FMC Corp. v. Manitowoc Co., Inc.*, 835 F.2d 1411, 1415 (Fed. Cir. 1987) (“To be guilty of inequitable conduct, one must have intended to act

inequitably.") Intent is determined by inferences drawn from the facts that deceit has occurred. *McKesson Info. Solutions, Inc. v. Bridge Med., Inc.*, 487 F.3d 897, 902 (Fed. Cir. 2007); *Akron Polymer Container Corp. v. Exxel Container*, 148 F.3d 1380, 1384 (Fed. Cir. 1998).

As noted in *McKesson*, the Manual of Patent Examining Procedure contains clear guidance on how to document "information specifically considered and discarded as not material." *McKesson*, 487 F.3d at 918. See also United States Patent and Trademark Office, *Manual of Patent Examining Procedure* § 2004 (8th ed. 2010) [hereinafter *MPEP*]. The *MPEP* states "[w]hen in doubt, it is desirable and safest to submit information. Even though the attorney . . . or applicant doesn't consider it . . . material, someone else may see it differently and embarrassing questions can be avoided." *MPEP* § 2004(10). Additionally, the *MPEP* states

If information was specifically considered and discarded as not material, this fact might be recorded in an attorney's file or applicant's file, including the reason for discarding it. If judgment might have been bad or something might have been overlooked inadvertently, a note made at the time of evaluation might be an invaluable aid in explaining that the mistake was honest and excusable.

MPEP § 2004(18).

Applying the standards of *McKesson* and the *MPEP*, the only reasonable conclusion that can be drawn from the applicant's behavior was an intent to deceive. The District Court concluded

that the MacGalver episode was material and that Parry understood its importance. (R. at 29,43). Parry repeatedly noted that, but for the MacGalver episode he would never have solved the problem and, he felt guilty using the information from MacGalver to expand the patent claims (R. at 29,32).

Like Parry, Que also intentionally withheld material information from the PTO, reasoning that "'no one in their right mind would submit a fictional television episode as prior art.'"³ (R. at 36). However, Que did not explain why he failed to disclose something that, if truly fictional and not prior art, would have had no negative impact on patent issuance. Que also failed to explain his reasons for not following the *MPEP* guidance by simply documenting his reasons for not disclosing the prior art. Of particular note is that Que raised his concerns about disclosing fictional material only upon a charge

³ The Court should note that the potential applicability of fictional material is not unheard of among the patent bar. In the early 1960's, Karl Krøyer received United Kingdom and German patents GB 1070600 and DE1247893, respectively, on a method of raising sunken vessels by filling them with buoyant bodies fed through a tube. The story persists that the corresponding Dutch patent NL 6514306 for which Krøyer applied was refused. Purportedly, the Dutch Patent Office found an issue of the 1949 Donald Duck story "*The Sunken Yacht*" which showed Donald and his nephews raising a ship by filling it with ping pong balls pushed through a tube. See *The Donald Duck as Prior Art Case*, <http://www.iusmentis.com/patents/priorart/donaldduck/> (last visited Jan. 22, 2011). There remains debate as to whether the Dutch patent was actually rejected on these grounds as the associated records claim to have been destroyed by the Dutch Patent Office. But see, "The Al-Kuwait," <http://www.starch.dk/isi/kroyer/schrooge.asp> (last visited Jan. 22, 2011).

of inequitable conduct. Further, Que's excuse lacks credibility because, had he disclosed the episode, there would have been no punishment involved other than perhaps a bit of laughter from the examiner. Had he acted according to *McKesson* and the *MPEP*, his explanation would perhaps then become credible.

To prove the intent element of inequitable conduct, intent to deceive must be the singularly most reasonable inference that can be drawn from the facts. *Larson Mfg. Co. of S.D. v. Aluminart Prods.*, 559 F.3d 1317, 1341 (Fed. Cir. 2009). Given Que's knowledge of MacGalver, his failure to investigate it, and his failure to document his actions, the singularly most reasonable explanation, according to *Larson*, is that Que (and Parry) withheld material information with intent to deceive the PTO. Therefore, this Court should find the '645 patent invalid for inequitable conduct.

A. The District Court Failed To Apply The Entirety Of The Applicants' Actions in Their Analysis of Inequitable Conduct; Properly Viewed In Its Entirety, Such Behavior Rises Above The Threshold Of Inequitable Conduct

In evaluating omitted disclosures of material information, the involved conduct must be viewed in light of all the evidence. *Digital Control Inc. v. Charles Mach. Works*, 437 F.3d 1309, 1319 (Fed. Cir. 2006). In addition, "[a]bsolute honesty and good faith disclosure is necessary in the filing of a patent application." *Corning Glass Works v. Anchor Hocking Glass Corp.*, 253 F.Supp. 461, 470 (D. Del. 1966).

Inequitable conduct is reviewed by the Appellate Court under an abuse of discretion standard. *Kingsdown Med. Consultants, Ltd. V Hollister Inc.*, 863 F.2d 867, 876 (Fed. Cir. 1998); Fed. R. Civ. P. 52(a)(6). An abuse of discretion occurs when the trial court's decision is "clearly unreasonable, arbitrary or fanciful." *Northrop Corp. v. McDonnell Douglas Corp.*, 751 F.2d 395, 399 (D.C. Cir. 1984). Reversal is warranted if it is established that the trial court misapplied the applicable law or made clearly erroneous findings of fact. *PPG Indus., Inc. v. Celanese Polymer Specialties Co.*, 840 F.2d 1565, 1572 (Fed. Cir. 1988).

The totality of the applicants' conduct does not meet the standards of absolute honesty and good faith as described in *Digital*, 437 F.3d at 1319. Therefore, the District Court's finding of a lack of inequitable conduct is not supportable. *See Corning* 253 F.Supp. at 470. Parry freely noted that the very genesis of the invention was MacGalver and, but for that show, he never would have conceived of the invention (R. at 29). Parry admitted that even if he felt the show was fictional, he should have disclosed it. (R. at 33). This indicates his awareness of the importance and relevance of the show, yet he consciously chose not to disclose it either to Que or the PTO. These choices were intentional and were not the result of mere ministerial error as in *Kingsdown*. *See*

Kingsdown, 863 F.2d at 873 (holding that mere ministerial error cannot support a finding of deceitful intent in relation to inequitable conduct).

The totality of Que's conduct must also be evaluated. See *Duty to Disclose Information Material to Patentability*, 37 C.F.R. § 1.56 (2010). Though Parry did not specifically mention MacGalver, Parry nevertheless told Que he was inspired by a television show (R. at 19). An attorney unfamiliar with MacGalver could have reasonably dismissed Parry's reference, however, Que had extensive knowledge of the episode in question. (R. at 21). He owned a copy of the episode that inspired Parry and traveled to fan conventions. (R. at 21). His knowledge should have prompted him to investigate if the episode embodied any prior art, however, Que took no action following Parry's disclosure about inventive inspiration. (R. at 19,36). Unlike *Kingsdown*, Que's failure to investigate MacGalver was intentional and not mere ministerial error.

The trial court is free to select from a range of reasonable conclusions in reaching its findings, however, its decision must be rationally based on the evidence. *Premium Service Corp. v. Sperry & Hutchinson Co.*, 511 F.2d 225, 229 (Fed. Cir. 1975). Based on the overwhelming weight of the evidence, the findings of the District Court are clearly unreasonable as set forth in *Northrop* and *PPG*. Therefore, this

Court should reverse the findings of the trial court and enter judgment of inequitable conduct.

1. The Failure Of Attorney Que To Fully Investigate The MacGalver Episode Demonstrates An Intent To Deceive Which Compels A Finding Of Inequitable Conduct

Those associated with the prosecution of a patent have an uncompromising duty of good faith and candor in disclosure to the PTO. *Beckman Instruments, Inc., v. Chemtronics, Inc.*, 428 F.2d 555, 565 (5th. Cir. 1970). Fraud before the PTO occurs when the applicants demonstrate anything other than an uncompromising duty of disclosure. *Beckman*, 428 F.2d at 565. Fraud before the PTO is based on a subjective test of whether the applicants knew or should have known that prior art posed a threat to patent eligibility. *Beckman*, 428 F.2d at 566.

37 C.F.R. § 1.56(a) states, "no patent will be granted on an application in connection with which . . . the duty of disclosure was violated through bad faith or intentional misconduct." "The Office encourages applicants to carefully examine . . . [t]he closest information . . . associated with the filing or prosecution of a patent application . . . to make sure that any material information contained therein is disclosed to the Office." 37 C.F.R § 1.56(a)(2). The threshold intent for inequitable conduct may be proven by "showing acts the natural consequence of which are presumably intended by the actor." *J.P. Stevens & Co. v. Lex Tex, Ltd.*, 747 F.2d 1553,

1560 (Fed. Cir. 1984) (*quoting American Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1363 (Fed. Cir. 1984)).

"Proof of deliberate scheming is not needed." *Stevens*, 747 F.2d at 1560.

The District Court's finding that Que's questioning of Parry satisfied Que's duty of candor (R. at 47) ignores the fundamental basis of an uncompromising duty of disclosure in *Beckman*. This finding also ignores the *MPEP* rule that requires careful examination and disclosure of any material information. Given Que's knowledge of MacGalver, he nevertheless consciously chose willful ignorance over investigation and enlightenment that would have led him to realize that this material information should have been disclosed. According to *Stevens*, Que's willful blindness had the natural consequence that such information was not brought to the attention of the PTO. Que's intentional failure to act cannot lead a reasonable fact-finder to the conclusion that he satisfied the uncompromising duty of disclosure in *Beckman*. Therefore, this Court should hold the '645 patent unenforceable due to inequitable conduct.

B. The District Court's Finding Of An Absence Of Inequitable Conduct Is Based Upon A Misinterpretation Of Applicable Law

A finding of inequitable conduct requires proof of (1) an affirmative misrepresentation, failure to disclose, or submission of false material information, coupled with (2) an

intent to deceive the PTO. *Star Sci., Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1365 (Fed. Cir. 2008). See also *Impax Labs., Inc. v. Aventis Pharms., Inc.*, 468 F.3d 1366, 1374 (Fed. Cir. 2006) ("To prove . . . inequitable conduct, the alleged infringer must provide clear and convincing evidence of . . . affirmative misrepresentation . . . failure to disclose . . . or submission of false material information and . . . an intent to deceive."); *Hoffmann-La Roche, Inc. v. Promega Corp.*, 323 F.3d 1354, 1359 (Fed. Cir. 2003) ("Inequitable conduct requires misrepresentation or omission of a material fact, together with an intent to deceive the PTO.").

Similar to *Beckman*, Que (and Parry) knew or should have known of the possible threat to their patent application posed by the disclosure in MacGalver. Que knew of the specific MacGalver episode in question yet he failed to take the simple step of investigating the show. Had he done so, he would have found material prior art. His failure to investigate does not meet the standard of uncompromising duty of disclosure as defined in *Beckman* and is therefore properly construed as fraud.

The District Court correctly reasoned that to satisfy the intent prong of inequitable conduct, the totality of the conduct must indicate sufficient culpability. However, the District Court erred by using gross negligence as the only indicia of the intent element to support a finding of inequitable conduct. As

described in *Stevens*, the threshold intent may be proven by showing acts the natural consequence of which are presumably intended by the actor and proof of deliberate scheming is not needed. 747 F.2d at 1560. Thus, gross negligence is not the only means to determine sufficient culpability to establish inequitable conduct.

The District Court found no direct evidence of intent to defraud. (R. at 46). However, applying a rule of law that requires direct evidence of intent ignores the above rule in *Stevens*. Que knew of the possibility of prior art in MacGalver. His failure to take any steps to investigate it had the natural consequence that material information was not disclosed and demonstrates intent to defraud. If Que truly believed the MacGalver episode was fictional, he risked absolutely nothing by disclosing it and no reasonable court can ignore the inference of fraud that this draws.

Therefore, because the thresholds of proof for both knowledge and intent have been reached, this Court should hold the '645 patent unenforceable due to inequitable conduct.

CONCLUSION

For the foregoing reasons, Hershley respectfully requests that this Court reverse the District Court's holdings and find that claim 1 of the '645 patent is (1) not patent-eligible subject matter, and (2) unenforceable due to inequitable conduct.

Respectfully submitted,

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CERTIFICATE OF SERVICE

We hereby certify that the required copies of the BRIEF OF DEFENDANT – APPELLANT HERSHLEY FLOW CONTROLLERS have been served on this twenty-eighth day of January, 2011, on the opposing counsel via FEDERAL EXPRESS, overnight courier service with proof of delivery signature.

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