## BRIEF AND SUPPLEMENTAL APPENDIX FOR APPELLEE DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

# UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

2007-1232 (Serial No. 09/387,823)

### IN RE LEWIS FERGUSON, DARRYL COSTIN AND SCOTT C. HARRIS

Appeal from the United States Patent and Trademark Office, Board of Patent Appeals and Interferences

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### Representative Claims

### 1. A method of marketing a product, comprising:

developing a shared marketing force, said shared marketing force including at least marketing channels, which enable marketing a number of related products;

using said shared marketing force to market a plurality of different products that are made by a plurality of different autonomous producing company, so that different autonomous companies, having different ownerships, respectively produce said related products;

obtaining a share of total profits from each of said plurality of different autonomous producing companies in return for said using; and

obtaining an exclusive right to market each of said plurality of products in return for said using.

A275.

## 24. A paradigm for marketing software, comprising:

a marketing company that markets software from a plurality of different independent and autonomous software companies, and carries out and pays for operations associated with marketing of software for all of said different independent and autonomous software companies, in return for a contingent share of a total income stream from marketing of the software from all of said software companies, while allowing all of said software companies to retain their autonomy.

A280-81.

## TABLE OF CONTENTS

STATEM	ENT (	OF THE ISSUE		
STATEM	ENT (	OF THE CASE2		
STATEM	ENT (	OF FACTS 3		
A.		guson's Invention: Method and Paradigm for Product rketing		
В.	Boa	ard Decisions		
SUMMAR	RY OF	THE ARGUMENT 8		
ARGUME	ENT			
A.	Star	ndard of Review		
В.	_	erguson's Method Claim 1 Runs Afoul of the "Abstract Idea" adicial Exception		
	1.	The Courts Have Used Two Tests For Assessing Patent Eligibility: 1) The "Transformation Test" And 2) The "Useful, Concrete, And Tangible Result Test"		
	2.	Ferguson's Claims Do Not Transform Any Subject Matter Into a Different State or Thing		
	3.	Ferguson's Claimed Method Does Not Produce a Useful, Concrete, And Tangible Result		
	4.	Ferguson's Claims Encompass a Disembodied Abstract Idea		
C.	Ferg	uson's Arguments Are Unpersuasive		

	D.	Ferguson's Paradigm Claims Are Conceptually Similar To The Method Claims, And Fall Under The "Abstract Idea" Exception For Similar Reasons
	Е.	Ferguson's Paradigm Claim 24 Does Not Fall Within Any Statutory Category Under 35 U.S.C. § 101
	F.	Although Not Specifically Determined by the Board, It Is Likely That Ferguson's Method Claim 1 Is Not a "Process" As That Term Is
CON	CLUS:	Understood in 35 U.S.C. § 101

## TABLE OF AUTHORITIES

<u>CASES</u> <u>Page</u>
Alappat, In re, 33 F.3d 1526 (Fed. Cir. 1994) passim
Arrhythmia Research Technology v. Corazonix Corp., 958 F.2d 1053 (Fed. Cir. 1992) passim
AT&T Corp. v. Excel Communications, Inc., 172 F.3d 1352 (Fed. Cir. 1999) passim
Bergy, In re, 596 F.2d 952 (CCPA 1979)
Burr v. Duryee, 68 U.S. (1 Wall.) 531 (1863)
Cochrane v. Deener, 94 U.S. 780 (1876)
CTS Corp. v. Dynamics Corp. of America, 481 U.S. 69 (1987)
Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448 (Fed. Cir. 1998)
Diamond v. Diehr, 450 U.S. 175 (1981) passim
Fisher, In re, 421 F.3d 1365 (Fed. Cir. 2005)
Gottschalk v. Benson, 409 U.S. 63 (1972) passim
Hotel Security Checking Co. v. Lorraine Co.,         160 F. 467 (2d Cir. 1908)       20
King, In re, 801 F.2d 1324 (Fed. Cir. 1986)
Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc.,         126 S. Ct. 2921 (2006)       18, 19
Morris, In re, 127 F.3d 1048 (Fed. Cir. 1997)

NTP, Inc. v. Research In Motion, Ltd., 418 F.3d 1282 (Fed. Cir. 2005) 18, 19
O'Reilly v. Morse, 56 U.S. (15 How.) 62 (1853)
Parker v. Flook, 437 U.S. 584 (1978)
Patton, In re, 127 F.2d 324 (CCPA 1942)
Rubber-Tip Pencil Co. v. Howard, 87 U.S. (1 Wall.) 498 (1874)
Schrader, In re, 22 F.3d 290 (Fed. Cir. 1994) passim
State Street Bank & Trust Co. v. Signature Fin. Group, Inc., 149 F.3d 1368 (Fed. Cir. 1998) passim
Tilghman v. Proctor, 102 U.S. 707 (1880)
Trustees of Dartmouth College v. Woodward, 17 U.S. (4 Wheat.) 518 (1819)
Warmerdam, In re, 33 F.3d 1354 (Fed. Cir. 1994)
<u>STATUTES</u>
35 U.S.C. § 101
35 U.S.C. § 102
35 U.S.C. § 103
35 U.S.C. 8 112

## **OTHER AUTHORITIES**

Adam Smith, The Wealth of Nations (1776)	3
Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, 1300 Off. Gaz. Pat. & Trademark Office 142 (Nov. 22, 2005)	6
Webster's New World Dictionary (1966)	34

### STATEMENT OF RELATED CASES

The Director is not aware of any other appeal from the Board of Patent Appeals and Interferences in connection with application Serial No. 09/387,823 that has been previously been before this or any other court.

There is no known related case pending in this or any other court. However, the Director, on March 6, 2007, filed a supplemental letter brief with this Court in *In re Comiskey*, Appeal No. 2006-1286, which, like the present appeal, focused on subject matter eligibility for process claims. In addition, the Director filed his brief in *In re Bilski*, Appeal No. 2007-1130, on June 13, 2007, in which the Board rejected a method claim for hedging the cost risks of a commodity under 35 U.S.C. § 101. The Director brings these other pending appeals to the Court's attention because, although unrelated, there have been relatively few decisions examining the eligibility of process claims, and the decision in one appeal could affect the outcome in the others.

## Brief and Supplemental Appendix for Appellee Director of the United States Patent and Trademark Office

United States Court of Appeals for the Federal Circuit

Appeal No. 2007-1232 (Serial No. 09/387,823)

IN RE LEWIS FERGUSON, DARRYL COSTIN AND SCOTT C. HARRIS

Appeal from the United States Patent and Trademark Office, Board of Patent Appeals and Interferences

#### STATEMENT OF THE ISSUE

Ferguson's¹ claims, styled as "paradigm" claims (24-35) or method claims (1-23 and 36-68), broadly encompass the concept of a marketing company devoted to selling/marketing products produced by other companies in return for a share of their profits. The question on appeal is whether the Board properly rejected representative method claim 1 and paradigm claim 24 as nonstatutory subject matter under 35 U.S.C. § 101, which includes the following subsidiary issues:

Throughout this brief, Appellants are referred to collectively as "Ferguson", Ferguson's Appendix is referred to as "A\_\_", Ferguson's Brief is referred to as "Br. at \_\_," and the USPTO's Supplemental Appendix is referred to as "SA\_\_."

- (i) Do Ferguson's method and paradigm claims, which describe a marketing scheme in which a party markets a product in exchange for some remuneration, represent nothing more than a nonstatutory abstract idea?
- (ii) Do the claims preempt all ways of carrying out Ferguson's business concept?
- (iii) Can a method that includes steps for carrying out marketing efforts and specific financial and contractual obligations, but does not convert any input(s) into an output, be said to produce a result that is "concrete and tangible?"
- (iv) Does a "paradigm" comprising a "marketing company" fall within one of the statutory categories of 35 U.S.C. § 101?

#### STATEMENT OF THE CASE

This appeal arose out of the examination of patent application 09/387,823, filed by Lewis Ferguson, Darryl Costin, and Scott C. Harris.<sup>2</sup> The claims before the Board included (i) method claims for marketing (1-23 and 36-68) and (ii) paradigm claims that encompass the business model for a marketing company (24-35). The Examiner originally held that the claims were unpatentable over several rejections based on 35 U.S.C. §§ 102, 103, and 112, first and second paragraphs. In a decision mailed August 27, 2004, the Board reversed the 35

Mr. Harris is also the attorney for Applicants.

U.S.C. §§ 102, 103, and 112 rejections, then added a new grounds of rejection for all of the claims under 35 U.S.C. § 101, citing a lack of statutory subject matter. Ferguson requested a rehearing, and the Board mailed its decision on July 27, 2006, maintaining the rejection. Finally, the Board mailed out another decision maintaining the section 101 rejection on December 18, 2006 after a second request for rehearing. This appeal followed.

#### STATEMENT OF FACTS

## A. Ferguson's Invention: Method and Paradigm for Product Marketing

Ferguson's application (A401-25, A444-45), entitled "A New Paradigm for Bringing New Products to Market," describes the general concept of a marketing service provider "used to market different products from a number of different autonomous companies." A444. The underlying rationale for Ferguson's business "paradigm" is essentially the theory of "division of labor" in which different tasks are handled by different entities to promote efficiency. Thus, manufacturing companies that would prefer to save the time and costs of developing their own inhouse marketing team can outsource their marketing needs to Ferguson's company. A401.

<sup>&</sup>lt;sup>3</sup> See, e.g., Adam Smith, The Wealth of Nations (1776).

Ferguson fashions some of his claims as "paradigm" claims. The Board (A31) treated paradigm claim 24 as representative:

## 24. A paradigm for marketing software, comprising:

a marketing company that markets software from a plurality of different independent and autonomous software companies, and carries out and pays for operations associated with marketing of software for all of said different independent and autonomous software companies, in return for a contingent share of a total income stream from marketing of the software from all of said software companies, while allowing all of said software companies to retain their autonomy.

A280-81 (emphasis added). Claim 24 thus encompasses a business paradigm for a company that handles the product marketing for various software companies, in return for a share of their income stream.

Ferguson also crafted other claims to cover his business paradigm in the form of a "method." Claim 1 is representative:

## 1. A method of marketing a product, comprising:

developing a shared marketing force, said shared marketing force including at least marketing channels, which enable marketing a number of related products;

using said shared marketing force to market a plurality of different products that are made by a plurality of different autonomous producing company [sic], so that different autonomous companies, having different ownerships, respectively produce said related products;

obtaining a share of total profits from each of said plurality of different autonomous producing companies in return for said using; and

obtaining an exclusive right to market each of said plurality of products in return for said using.

A275 (emphasis added). Claim 1 thus follows the same guidelines recited in paradigm claim 24, redrafted as a "method," by claiming the "steps" to carry out the business model described in the paradigm claim.

None of the method claims, however, transform any subject matter into a different state or thing. The claims do not produce any machine, manufacture, or composition of matter, nor do they produce a data signal based on a set of inputs. In other words, the result produced by the claims does not yield any physical change to matter or energy. Nor do the claims recite the use of any machine, manufacture, or composition of matter to carry out the claimed method. The claims do not specify any technique for how the marketing will be carried out or how the marketing force's "share of total profits" will be calculated. Moreover, the paradigm claims do not recite any devices, machines, or compositions of matter. Instead, Claims 1 and 24 simply recite the conceptual underpinnings for manufacturers to use a shared organization to perform marketing tasks on a profit sharing basis.

#### B. Board Decisions

In its initial decision (A1-29), the Board reversed the Examiner's rejections under 35 U.S.C. §§ 102, 103, and 112, but entered a new ground of rejection, determining that claims 1-68 were not patentable under 35 U.S.C. § 101. A12. On Ferguson's request for reconsideration, the Board (A30-65) maintained its section 101 rejection of the claims, concluding that 1) Claims 24-35 (the paradigm claims) do not fall within one of the four statutory categories of invention; and 2) Claims 1-68 are directed to nothing more than an abstract idea. A38-39.

The Board observed that Ferguson's invention "is essentially a new idea, theory or model for bringing products to market" (A33), and the claims "essentially recite a paradigm or theory for marketing a product by securing an agreement to market products in return for a share of the income stream" (A35). In analyzing whether the claims were directed to a practical application of an abstract idea, rather than for the abstract concept itself, the Board relied on the case law and guidance set forth in the *Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility*, 1300 Off. Gaz. Pat. & Trademark Office (O.G.) 142 (Nov. 22, 2005) ("*Interim Guidelines*"). A30-31.

The Board determined that the claims did not satisfy either of the two tests for patent eligibility articulated by the courts. First, the Board found that the

claims did not meet the Supreme Court's "transformation" test, because none of the steps or elements in the claims relate to transforming any subject matter to a different state or thing. A35-36. Second, the Board determined that the claims do not produce a "useful, concrete and tangible result" because the "only result produced by independent claim 1 is an agreement to market products in exchange for a share of profits. An agreement is not a useful, tangible and concrete result, and the mere marketing of products does not produce anything that is useful, tangible and concrete." A36-37 (emphasis in original). Thus, the fact that the claims do not meet these tests and are not carried out by a machine is an indication that the claims are for a disembodied abstract idea. A38. Moreover, the Board concluded that the claimed plan or paradigm for marketing a product is an "abstract idea" also because "no concrete and tangible means for accomplishing the plan is claimed" and the claimed method "covers any and every possible way of implementing the plan." A38.

Finally, the Board rejected the paradigm claims (claims 24-35) under section 101 for the additional reason that a "paradigm" is a "pattern, example, or model" (A33), which is neither process, nor machine, nor manufacture, nor composition of matter. A34. Even though paradigm claim 24 recites a "marketing"

company," the Board found nothing in the record that suggests that a marketing company falls within one of the statutory categories of invention. *Id*.

Ferguson requested reconsideration of the section 101 rejection a second time, but the Board denied the second request, concluding there was no reason to disturb the findings in its previous decision. A66-71.

#### SUMMARY OF THE ARGUMENT

Ferguson has conceived a business plan for a service provider to handle the marketing of products made by other companies. That plan, as framed in method claim 1 and paradigm claim 24, is not patentable under 35 U.S.C. § 101 because it runs afoul of the "abstract idea" judicial exception. This doctrine emphasizes that one cannot patent an idea itself, but only a practical application of such an idea.

Courts have set forth two tests for examining whether a claimed invention is patent eligible, neither of which Ferguson's claims satisfy. First, Ferguson's claims do not harness his business concept to transform any subject matter into a different state or thing, nor are they implemented by a machine. Second, Ferguson's claims are not a practical application of his business idea because the claims do not apply that idea in a way that produces a "useful, concrete, and tangible result." The results of Ferguson's claimed invention are not concrete and tangible, because neither the alteration of contractual and financial relationships,

nor the act of marketing a product can be said to produce a concrete and tangible result. In other words, Ferguson's claims do not produce any physical change to any input(s), such as matter or energy. Accordingly, the claimed invention is wholly unlike any claim previously found to produce a useful, concrete, and tangible result, such as the data signal transformations by a machine in *State Street*, *AT&T*, *Arrhythmia*, and *Alappat*.

Moreover, the Board also correctly determined that method claim 1 and paradigm claim 24 are for a disembodied abstract idea because the claims do not recite any underlying subject matter that is being transformed, do not recite any means for accomplishing the business plan, and ultimately pre-empt all applications of the concept.

Paradigm claim 24 fails to satisfy section 101 for the additional reason that a "paradigm" or "marketing company" does not fall within any of the categories of statutory subject matter. Finally, Ferguson's proposed test that a claim is patent eligible if it recites "more than a scintilla of interaction with the real world in a specific way" is inconsistent with this Court's requirement that a claim must harness a law of nature, natural phenomenon, or abstract idea to produce a practical (*i.e.*, useful, concrete, and tangible) result.

#### ARGUMENT

#### A. Standard of Review

Claim interpretation is a question of law that this Court reviews de novo on appeal. *Cybor Corp. v. FAS Techs., Inc.,* 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc). Since patents receive their "broadest reasonable interpretation" during prosecution, this Court reviews the USPTO's interpretation of disputed claim language to determine if it is "reasonable" in light of all the evidence presented to the Board. *In re Morris*, 127 F.3d 1048, 1055 (Fed. Cir. 1997).

Whether a claimed invention is eligible statutory subject matter under 35 U.S.C. § 101 is also a question of law reviewed de novo. *AT&T Corp. v. Excel Communications, Inc.,* 172 F.3d 1352, 1355 (Fed. Cir. 1999); *Arrhythmia Research Technology v. Corazonix Corp.,* 958 F.2d 1053, 1055 (Fed. Cir. 1992).

# B. Ferguson's Method Claim 1 Runs Afoul of the "Abstract Idea" Judicial Exception

While the Supreme Court has observed that the boundaries of patent eligible subject matter are to be given wide scope, it has also held that "[e]xcluded from ... patent protection are laws of nature, natural phenomena, and abstract ideas." Diamond v. Diehr, 450 U.S. 175, 185 (1981). "An idea of itself is not patentable." Id. (quoting Rubber-Tip Pencil Co. v. Howard, 87 U.S. (1 Wall.)

498, 507 (1874)); Gottschalk v. Benson, 409 U.S. 63, 67 (1972) ("[M]ental processes, and abstract intellectual concepts are not patentable."); see also id. at 71 ("It is conceded that one may not patent an idea."). In contrast, "[i]t is now commonplace that an application of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection." Diehr, 450 U.S. at 187 (italics in original). Thus, this judicial exception doctrine holds that patentable inventions should harness a law of nature or abstract idea for a particular application rather than seeking to patent the law of nature or idea itself.

1. The Courts Have Used Two Tests For Assessing Patent Eligibility: 1) The "Transformation Test" And 2) The "Useful, Concrete, And Tangible Result Test"

In the case where a claim is for a process, as opposed to a product, "[t]he line between a patentable 'process' and an unpatentable 'principle' is not always clear. Both are 'conception[s] of the mind, seen only by [their] effects when being executed or performed." *Parker v. Flook*, 437 U.S. 584, 589 (1978) (quoting *Tilghman v. Proctor*, 102 U.S. 707, 728 (1880)). Moreover, *non-machine* implemented process claims, such as Ferguson's, are more difficult to analyze under section 101, given that they are inherently more abstract than physical, tangible things, such as machines, manufactures, compositions of matter, and machine-implemented process claims. As noted in *AT&T*, articulating the

boundaries of patent eligible subject matter has not been an easy task. *AT&T*Corp. v. Excel Communications, Inc., 172 F.3d 1352, 1356 (Fed. Cir. 1999) ("this court (and its predecessor) has struggled to make our understanding of the scope of § 101 responsive to the needs of the modern world.").

In defining the boundaries for patent eligibility, the Supreme Court has repeatedly pointed to the "transformation of an article" test. *See, e.g., Diehr*, 450 U.S. at 182-84; *Cochrane v. Deener*, 94 U.S. 780, 788 (1876). In addition, this Court has set forth the "useful, concrete, and tangible result" test as the dividing line between an unpatentable abstract idea and a patentable practical application of an abstract idea. *In re Alappat*, 33 F.3d 1526, 1544 (Fed. Cir. 1994). As discussed below, Ferguson's representative method claim 1 and paradigm claim  $24^4$  do not satisfy either test.

# 2. Ferguson's Claims Do Not Transform Any Subject Matter Into a Different State or Thing

The "transformation test" is based on the Supreme Court's observation in Gottschalk v. Benson that "[t]ransformation and reduction of an article 'to a

In his initial appeal brief, Ferguson argued some of his claims separately to overcome the prior art rejections. In response to the Board's new ground of rejection under section 101, however, Ferguson did not argue his claims separately in his first request for rehearing. SA446-53. The Board thus properly chose method claim 1 and paradigm claim 24 as representative. *In re King*, 801 F.2d 1324, 1325 (Fed. Cir. 1986); A31-32.

different state or thing' is the clue to the patentability of a process claim that does not include particular machines." Benson, 409 U.S. at 70; see also Diehr, 450 U.S. at 192. Thus, essentially the "transformation test" states that a patent-eligible process must change an article to a different state or thing by enacting some measurable change upon it. See Benson, 409 U.S. at 70; Diehr, 450 U.S. at 192. More recently, this Court's AT&T decision explained that the transformation test is best understood as not only physically transforming an "article," as quoted in Diehr, but also includes transforming data signals, specifically citing, as an example, the heart activity signals transformed in Arrhythmia Research Technology, Inc. v. Corazonix Corp., 958 F.2d 1053, 1059-60 (Fed. Cir. 1992). AT&T, 172 F.3d at 1359; see also In re Schrader, 22 F.3d 290, 295 n.12 (Fed. Cir. 1994) (noting that the "subject matter" to be transformed does not need to be a physical object or substance, but also can be electrical signals "representative of or constituting physical activity or objects"). Accordingly, a claimed process's transformation of physical subject matter into a different state or thing is evidence that the process is more than an "abstract idea."

Ferguson's method claim 1 calls for setting up a marketing force that will handle marketing for companies that hire the force. In exchange, the marketing

<sup>&</sup>lt;sup>5</sup> The principal exception to this rule is when the machine-implemented method merely manipulates abstractions. *See Benson*, 409 U.S. at 71-72.

force will obtain a share of the profits from the companies. The claim does not require any machine to carry out the invention. Furthermore, the claim does not recite any underlying subject matter being acted upon or manipulated. Claim 1 thus does not transform any matter to a different state or thing. Nor does the claim transform data signals or other forms of energy. In other words, the claim does not recite any inputs or output. Moreover, claim 1 does not recite any steps to calculate the "share of total profits." In other words, the steps that occur when Ferguson's proposed process operates are *not* transformations of articles "to a different state or thing," as understood in the case law. *See, e.g, Diehr*, 450 U.S. at 177-78 (describing application of mathematical algorithm to mold raw, uncured synthetic rubber into cured precision products).

In Ferguson's claims, the "using said marketing force" and "obtaining a share of total profits" and "obtaining an exclusive right" represent the administration of intangible, abstract legal and business obligations rather than transformation of physical elements, such as matter or energy. Thus, Ferguson's claims are distinguishable from those at issue in *Arrhythmia* (transforming electrocardiograph signals), *Alappat* (transforming digitized waveforms), *State*Street Bank & Trust Co. v. Signature Fin. Group, Inc., 149 F.3d 1368, 1373 (Fed. Cir. 1998) (transforming data signals into a final share price), and *AT&T* 

(transforming data signals "to create a signal useful for billing purposes"). Indeed, Ferguson's claims are more akin to the claimed method of bidding on items in *Schrader*, which this Court found "do not reflect any transformation or conversion of subject matter representative of or constituting *physical activity or objects*." *Schrader*, 22 F.3d at 294 (emphasis in original). Therefore Ferguson's invention does not meet the standards of the "transformation test."

## 3. Ferguson's Claimed Method Does Not Produce a Useful, Concrete, And Tangible Result

This Court developed the "useful, concrete, and tangible result" test in response to a series of cases concerning the eligibility of machines and machine-implemented methods employing mathematical algorithms. In assessing the eligibility of these specific types of claims, the Court adopted a rule requiring such claims to produce a "useful, concrete, and tangible result." *State Street*, 149 F.3d at 1373. This test originally appeared in *In re Alappat*, where circuitry elements for producing computer graphics were found to be patent-eligible because the algorithm for converting data samples into graphics produced a "useful, concrete, and tangible result," and therefore the claim was not merely for a "disembodied mathematical concept." *Alappat*, 33 F.3d at 1544. *State Street* also involved claims to a machine employing a mathematical algorithm, but in this instance for

managing a mutual fund investment portfolio. Finding the claim to be valid under § 101, *State Street* held the following: "Today, we hold that the transformation of data... by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces 'a useful, concrete and tangible result." *Id.* at 1373. Similarly, data transformations used in a telecommunications method patent were found to pass the "useful, concrete, and tangible result" test. *AT&T*, 172 F.3d at 1358.

Consistent with the facts of the above-cited cases, a claimed invention produces a result that is concrete and tangible if some physical change to an input occurs as a result of the process. The facts of *State Street* and its business-related patent are not to the contrary. Although in the broadest sense both the patent in *State Street* and Ferguson's method are business-related and seek to improve business efficiencies, the invention in *State Street* produced a physical result by using a machine to convert data signals into a final share price. In other words, while many business method patents, such as the invention in *State Street*, were historically directed toward computer systems and data processing for a real world use, a growing number of applications, including Ferguson's, attempt to cover business concepts themselves, without any requirement for processing one set of

data into another. But *State Street*'s statement that there is no categorical business method exception to statutory subject matter did not suggest that any "method of doing business" is automatically eligible for patent protection. Rather, a business method claim is still "subject to the same legal requirements for patentability as applied to any other process or method." *State Street*, 149 F.3d at 1375.

The results produced by Ferguson's claims are neither concrete nor tangible. Since the claimed steps dictate contract formation (*e.g.*, "marketing" which produces a sales agreement) and financial activities ("share of total profits"), rather than physically manifested changes, the end results of these actions are neither concrete nor tangible. The act of marketing a product is no more of a concrete and tangible result than is the act of standing on the side of the road, holding a sign that reads "Car Wash Ahead." Accordingly, Ferguson's method does not harness an abstract idea to produce a concrete and tangible result in the way found to be eligible in *Alappat*, *Arrhythmia*, *State Street*, and *AT&T*. Thus, Ferguson's method claim cannot meet the standards of the "useful, concrete and tangible result test" to avoid the label of an "abstract idea."

Although this Court has never specifically interpreted the meaning of the terms "concrete and tangible," an interpretation that requires a physical change to be produced is consistent with the Supreme Court's "transformation test." See

Lab. Corp. of Am. Holdings v. Metabolite Labs., Inc., 126 S. Ct. 2921, 2928 (2006) (Breyer, J., dissent from dismissal as improvidently granted) (observing that the Federal Circuit's statement that "a process is patentable if it produces a 'useful, concrete, and tangible result'..., if taken literally,... would cover instances where this Court has held the contrary"). Accordingly, the best reading of the precedent excludes inventions such as Ferguson's and others which do nothing more than produce changes in legal and financial obligations.

Alternatively, the "useful, concrete, and tangible result" test should be limited to the context of computer-controlled data transformation using a mathematical algorithm. This Court has specifically linked this test to inventions that perform "a series of mathematical calculations" to transform data. *State Street*, 149 F.3d at 1373. Indeed, this Court recently noted that the test was specifically devised to handle eligibility issues for claims encompassing mathematical algorithms, thereby suggesting that it is *not* a general test for eligibility. *See NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1324 (Fed. Cir. 2005) ("The requirement that a process transform data and produce a 'tangible result' was a standard devised to prevent patenting of mathematical abstractions" (citing *AT&T*, 172 F.3d at 1359)).

In the *Interim Guidelines* that the USPTO published for comment in 2005, the Agency attempted to apply the "useful, concrete, and tangible result" test as a general test for patent eligibility. In doing so, it attempted to follow the guidance in AT&T and State Street. However, in seeking to develop the final guidelines, the USPTO is concerned that those rubrics do not give adequate guidance as a general test. The test, if read broadly, fails to resolve the tension between State Street and Schrader, which expressly concludes that "a process claim [in] compliance with Section 101 requires some kind of transformation or reduction of subject matter." Id. at 295. As mentioned above, this Court has suggested in NTP that the test was adopted to address the specific problem of computer-implemented inventions. Also as noted above, three Justices of the Supreme Court have opined that, if applied as a general criterion, the test would conflict with prior Supreme Court decisions. See Lab. Corp., 126 S. Ct. at 2928 (Breyer, J., dissent from dismissal as improvidently granted). Accordingly, the best reading of the precedent limits that test to machines and machine-implemented methods using mathematical algorithms to transform data, rather than embracing it as a general eligibility test for any series of steps that may be recited as a "process." In any event, Ferguson's claims, which do not produce any physical change to matter or data signals, do not produce a result that is concrete and tangible.

### 4. Ferguson's Claims Encompass a Disembodied Abstract Idea

Ferguson's claims also run afoul of the abstract idea exception, because they merely recite the disembodied concept for marketing the products of others in return for remuneration and would preempt all applications of that concept. In fact, the recited steps and elements are generic to the concept of marketing products and sharing profits and give no indication of how it would be done.

Ferguson's business method and paradigm lack two key ingredients —

(1) structural elements or means for carrying out the business concept and (2) any underlying subject matter on which the business idea is applied.

While it is true that there is no general business methods exception to patentability *per se*, case law suggests that a business method is directed to an abstract idea when there is no substantive means and end product. *See, e.g., In re Patton*, 127 F.2d 324, 327-28 (CCPA 1942) ("[I]t is sufficient to say that a system of transacting business, apart from the means for carrying out such system, is not within the purview of [the predecessor to section 101], nor is an abstract idea or theory, regardless of its importance or the ingenuity with which is was conceived, apart from the means for carrying such idea or theory into effect, patentable subject matter."); *Hotel Security Checking Co. v. Lorraine Co.*, 160 F. 467, 469 (2d Cir. 1908) ("In the sense of patent law, an art [process] is not a mere

abstraction. A system of transacting business disconnected from the means for carrying out the system is not, within the most liberal interpretation of the term, an art [process].")); *State Street*, 149 F.3d at 1376 n.15 (recognizing the patent ineligibility principle in the above-quoted language from *Patton* and *Hotel Security*, though characterizing it as not creating a general "business method exception"); *Schrader*, 22 F.3d at 298 (Newman, J., dissenting) (same).

In other words, Ferguson's claims are drawn to nothing but a disembodied abstract idea, and his "invention" is not patent-eligible unless claimed as a practical application of the idea that involves some physical manifestation.

Ferguson recites a "marketing force" but does not recite any technique or means for carrying out the results claimed. While "products" could refer to physical entities, the fact that the "products" are being "market[ed]" reflects that only abstract, contractual manipulations are being performed on any products that are involved in the method and that no genuine transformations of the products involving matter, energy or data is occurring.

Moreover, not only do the claims lack any structure for carrying out the steps, they also fail to recite any underlying physical subject matter that is being manipulated by the steps, a feature that exists in all previous cases in which the courts determined that the claimed invention was for a practical application of an

abstract idea. This Court has noted that process claims, in general, do not have to recite the means or structure for performing the claimed steps. *See, e.g., AT&T*, 172 F.3d at 1359. However, process claims that do not require machine implementation, and are therefore inherently more abstract than product claims or method claims which utilize machines, nevertheless require some underlying subject matter that is operated on, manipulated or generated to demonstrate that the method claim represents a specific application of an idea and is more than a concept itself. *See, e.g., id.* at 1358 (noting that "AT&T's claimed process" uses "switching and recording mechanisms to create a signal useful for billing purposes").

Without proper application of the "abstract idea" exception, potential abstract financial and legal procedures that produce conceptual outcomes might be patented. Examples include improved ways of executing a merger, negotiating a license, or cross-examining a witness. Similarly, artistic efforts have aesthetic benefits, which are conceptual and beyond the purview of patent protection (though the expression may be copyrighted). A method of marrying two people defines an abstract idea because even though physical steps may be involved in the ceremony, the end results are religious and civil rather than physical.

Clever claim drafting cannot circumvent these principles. That is, even when a claim appears to apply an idea or concept as part of a seemingly patentable "process," one must ensure that it does not in reality seek patent protection for that idea in the abstract. *Diehr*, 450 U.S. at 191. Accordingly, since a type of loan, contract, insurance policy or song is an abstract concept, the formation or performance of any of these concepts should not be patent eligible, simply by being re-styled as "process" claims.

Similarly, one cannot patent a process that comprises "every substantial practical application" of an abstract idea, because such a patent "in practical effect would be a patent on the [abstract idea] itself." *Benson*, 409 U.S. at 71-72. Such limitations on process patents are important because without them, "a competent draftsman [could] evade the recognized limitations on the type of subject matter eligible for patent protection." *Diehr*, 450 U.S. at 192. Here, the claims covers *any* means of marketing, and any means for calculating the share of profits.

Because Ferguson's claim is directed to the concept of marketing the products of others for a share of profits, it would impermissibly preempt any and all methods for carrying out that concept.

Put differently, the claim at issue in *State Street* was not just a concept of accounting for the daily changes in each mutual fund held in a portfolio. Instead,

the claim was for a machine comprising several different arithmetic logic circuits which calculated the daily gains and losses of each fund in the portfolio. State Street, 149 F.3d at 1371-72 (describing several of the means-plus-function elements as arithmetic logic circuits). If Ferguson claimed a computerimplemented algorithm generating information for successfully marketing products, then that hypothetical claim would be much closer to State Street's claim. In addition, AT&T's claim was not just reciting the concept of differential billing treatment for long distance phone calls - rather, the claim was for a particular application of that concept by having a telecommunications system generate a message record of the call which included a data field indicating whether the caller and the recipient shared the same long distance carrier. Thus, AT&T's claim was not just for the principle or concept or abstract idea. Ferguson's claim is more akin to the rejected eighth claim in Morse, which claimed writing letters at a distance using electromagnetism "however developed." O'Reilly v. Morse, 56 U.S. (15 How.) 62, 112 (1853). While Morse invented a particular process for achieving that result, the Supreme Court disallowed the eighth claim since it sought to patent the whole concept of using electromagnetism to write letters at a distance. Id. at 113; see also Benson, 409 U.S. at 68

(discussing *Morse* in support of its finding that Benson's claim is ineligible under section 101).

## C. Ferguson's Arguments Are Unpersuasive

Ferguson argues for a broad interpretation of section 101 to cover "any kind of innovation," noting that the Supreme Court observed that section 101 should be given "wide scope." Br. at 8-10. The Supreme Court has also pointed out, however, that its decisions have foreclosed an ordinary, dictionary reading of "process." See Flook, 437 U.S. at 589 ("The holding that the discovery of [Benson's] method could not be patented as a 'process' forecloses a purely literal reading of § 101."). To be sure, the scope of patentable subject matter under section 101 is broad. But it is not infinitely broad. "Congress included in patentable subject matter only those things that qualify as 'any . . . process, machine, manufacture, or composition of matter, or any . . . improvement thereof ...." In re Warmerdam, 33 F.3d 1354, 1358 (Fed. Cir. 1994) (quoting 35 U.S.C. § 101) (emphasis added). Thus, "[d]espite the oft-quoted statement in the legislative history of the 1952 Patent Act that Congress intended that statutory subject matter 'include anything under the sun that is made by man,' [citation omitted], Congress did not so mandate." Id.

Ferguson asserts that section 101 requires "only a scintilla of utility" and therefore the eligibility requirement should be similarly minimal. Br. at 11. First, Ferguson's understanding of section 101 utility is incorrect, as this Court held that an invention's utility must be both specific and substantial. *In re Fisher*, 421 F.3d 1365, 1371 (Fed. Cir. 2005). Second, Ferguson's analogy should not control, because the Supreme Court has already ruled that abstract ideas are excluded from patent protection. *See, e.g., Diehr*, 450 U.S. at 185.

Ferguson also argues that the "transformation test" and "useful, concrete, and tangible result test" are only safe havens, not exclusive tests, and proposes an alternative test—"does the claimed subject matter require that the product or process has more than a scintilla of interaction with the real world in a specific way." Br. at 29. However, Ferguson does not cite authority showing that his proposed alternative test is supported by case law or statute.

The Supreme Court's consideration of the types of innovations that are appropriate for the patent system has consistently been focused on technological advances, not legal or business concepts. In *Benson*, the Supreme Court declined to hold that the transformation principle will forever be the exclusive eligibility test for process claims: "It is argued that a process patent must either be tied to a particular machine or apparatus or must operate to change articles or materials to a

'different state or thing.' We do not hold that no process patent could ever qualify if it did not meet the requirements of our prior precedents." Benson, 409 U.S. at 71. However, the Supreme Court's decision to reserve the possibility for other eligibility tests for process claims was driven by the desire to allow for future, unanticipated technologies that deserved patent protection, but might otherwise be misperceived as abstract ideas. In particular, Benson and Flook raised the question of when computer programming inventions should be patentable. Although the claimed method in Benson was held to be ineligible for patent protection, the Court carefully noted that its decision did not necessarily prevent any and all computer programming inventions from being patented. Benson, 409 U.S. at 71 ("It is said that the decision precludes a patent for any program servicing a computer. We do not so hold."). The court even emphasized that it did not intend to "freeze process patents to old technologies, leaving no room for the revelations of the new, onrushing technology." Benson, 409 U.S. at 71 (emphasis added). Again in Flook, although the Supreme Court found that the computer programming claim in question fell outside of 35 U.S.C. § 101, it emphasized that its decision should not be "interpreted as reflecting a judgment that patent protection of certain novel and useful computer programs will not promote the progress of science and the useful arts." Flook, 437 U.S. at 595.

The USPTO agrees with Ferguson's statement that "[p]atents must be able to protect new technology." Br. at 16. But that position and the Supreme Court's refusal in *Benson* and *Flook* to foreclose other possible eligibility tests for process claims does not help Ferguson, since his method and paradigm claims are wholly lacking in any technological application. Marketing products is not technological in nature, nor is it a revolutionary, developing discipline like computer science was at the time of *Benson*. In fact, the concept of companies specializing in certain tasks has been around for centuries, raising the question why is it that the USPTO only recently has been receiving patent applications of this conceptual nature.

Indeed, Ferguson's proposed test essentially would open up the patent system to everything imaginable – walking down the street, singing a song, negotiating peace in the Middle East, designing various kinds of contracts between people or entities, all based on patent claims reciting the general guidelines for carrying out these "processes." Like Ferguson's claimed steps of marketing a product and obtaining a profit share, all of these methods are general concepts that do not produce some kind of physical, measurable change.

To date, the courts have been able to evaluate the eligibility of process claims in our modern, digital age (*Diehr*, *Arrhythmia*, *AT&T*) without having to

depart from the transformation principle (and the similar useful, concrete and tangible result test) to create a new, additional test. As suggested by the Supreme Court, there may come a day when faced with "new, onrushing technology," the courts may be compelled to move beyond the existing transformation test to embrace that new technology. But it would be inconsistent with the current understanding of the patent system as reserved for technological advances to expand patent eligibility to encompass non-technological inventions, such as contract schemes, dating strategies, teaching methods, and other methods, which while perhaps providing some form of benefit, do not appear to fall within the technologically useful arts. See AT&T, 172 F.3d at 1356 ("The sea-changes in both law and technology stand as a testament to the ability of law to adapt to new and innovative concepts, while remaining true to basic principles."); see also Schrader, 22 F.3d at 297 (Newman, J., dissenting) ("[A] statutory 'process' is limited only in that it must be technologically useful.") (describing methods in Arrhythmia and Diehr as processes that are "employed in the technologically useful arts"); In re Bergy, 596 F.2d 952, 959 (CCPA 1979) ("the present day equivalent of the term 'useful arts' employed by the Founding Fathers is 'technological arts.'").

Although the *Interim Guidelines* indicate that the current state of the law does not require a separate "technological arts" inquiry into whether a given claim recites any "technology," the statutory categories of invention inherently contain a technology requirement, given that machines, manufactures, compositions of matter, and machine-implemented processes all involve some form of technology. Moreover, the transformation principle likewise maintains non-machine implemented processes within the technologically useful arts, since that principle requires either matter or energy to be converted into a different state or thing, even when such a method claim does not recite any technological means for performing that transformation.

D. Ferguson's Paradigm Claims Are Conceptually Similar To The Method Claims, And Fall Under The "Abstract Idea" Exception For Similar Reasons

The paradigm of Claim 24 involves a company that performs a method similar to that described in Claim 1, except that Claim 24 does not specify an "exclusive right to market" step as in Claim 1. Because this paradigm essentially describes the same concept of marketing software using a shared marketing force that is recited in method Claim 1, it likewise constitutes an "abstract idea" for the reasons presented above, *i.e.*, the claimed paradigm does not transform any subject

matter, it does not produce a result that is concrete and tangible, and it is a disembodied concept that preempts the concept.

# E. Ferguson's Paradigm Claim 24 Does Not Fall Within Any Statutory Category Under 35 U.S.C. § 101

Ferguson characterizes Claim 24 as a "paradigm", which the Board defined as "a pattern, example, or model." *See, e.g.*, The World Publishing Company, *Webster's New World Dictionary* (1966). Since the statutory categories are "process, machine, manufacture, or composition of matter," there is no reason to believe that a "paradigm" falls under one of those categories. *See* 35 U.S.C. § 101.

Ferguson suggests that his paradigm comprises a company that operates as a physical entity and is therefore analogous to a section 101 "machine." Br. at 19. However, the Supreme Court has found that "A corporation is an artificial being, invisible, intangible, and existing only in contemplation of law." *CTS Corp. v. Dynamics Corp. of America*, 481 U.S. 69, 89, 107 S.Ct. 1637, 1649-1650 (1987) (citing *Trustees of Dartmouth College v. Woodward*, 17 U.S. (4 Wheat) 518 (1819)). While such legally-recognized entities may have real-world manifestations, a company itself does not fall within the meaning of a machine. "A machine is a concrete thing, consisting of parts, or of certain devices and

combination of devices." *Burr v. Duryee*, 68 U.S. (1 Wall.) 531, 570 (1863). Since, there is no evidence in the record to suggest that Ferguson's marketing company consists of a combination of devices, the Board properly determined that paradigm claim 24 does not fall within a section 101 statutory category. A34.

F. Although Not Specifically Determined by the Board, It Is Likely That Ferguson's Method Claim 1 Is Not a "Process" As That Term Is Understood in 35 U.S.C. § 101

The Board's section 101 analysis followed the guidance provided in the USPTO's *Interim Guidelines*, which does not set forth a separate analysis for determining whether a method claim qualifies as a section 101 "process." The Director believes that the Board correctly decided that Ferguson's claims are directed to an abstract idea, but brings to this Court's attention that the Director has also recently taken the position in two cases pending before this Court that a *non-machine* implemented method claim that does not transform any subject matter into a different state or thing fails to qualify as a section 101 "process." *See In re Comiskey*, No. 2006-1286, and *In re Bilski*, No. 2007-1130.

In response to an order last January by this Court for supplemental briefing in *In re Comiskey*, as to whether the claimed arbitration method is patent eligible under section 101, the Director posited, among other things, that Comiskey's arbitration method is not a section 101 "process" because the method did not

transform any subject matter to a different state or thing, nor was it implemented by a machine. The Director is defending that same legal position in *In re Bilski*, in which the Board determined that the claimed hedging method is not a "process." While the question of whether Ferguson's method claims constitute a statutory "process" is not at issue in this appeal, the Director simply wishes to notify the Court regarding the interplay between the present appeal and these other pending appeals, given that they all involve the eligibility of non-machine implemented method claims that do not transform any underlying subject matter. The USPTO will revise its *Interim Guidelines* in due course, once this Court renders decisions in these cases.

### **CONCLUSION**

The Board properly determined that Ferguson's claims 1-68 are not directed to patentable subject matter under 35 U.S.C. § 101. Since Ferguson has not shown any reversible error by the Board, this Court should affirm the Board's decision.

Respectfully submitted,

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### CERTIFICATE OF SERVICE

I hereby certify that on September 17, 2007, I caused two copies of the foregoing BRIEF AND SUPPLEMENTAL APPENDIX FOR APPELLEE DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE to be transmitted via overnight delivery to the addresses below:

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## RULE 32(a)(7)(c) CERTIFICATE OF COMPLIANCE

I certify pursuant to FRAP 32(a)(7) that the foregoing brief complies with the type-volume limitation. The total number of words in the foregoing brief, excluding the table of contents and table of authorities, is 7,421, as calculated by the WordPerfect 9 program.

Raymond T. Chen

**Associate Solicitor**