No. 13-298

IN THE
Supreme Court of the United States

ALICE CORPORATION PTY LTD.,
Petitioner,

v.

CLS BANK INTERNATIONAL, *et al.*,
Respondents.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

BRIEF OF *AMICUS CURIAE* TONY DUTRA IN SUPPORT OF RESPONDENTS

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QUESTION PRESENTED

Whether claims to computer-implemented inventions—including claims to systems and machines, processes, and items of manufacture—are directed to patent eligible subject matter within the meaning of 35 U.S.C. § 101 as interpreted by this Court?

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INTEREST OF *AMICUS CURIAE*[1]

The author served for 25 years as a software programmer, manager and executive with a particular expertise in data networking technologies. He received his J.D. subsequent to that experience. He is listed as inventor on seven patents related to Internet telephony and was lead inventor on two of them. Though the patents have not yet expired, they will soon and the author has, in any case, no financial interest in them at this time.

The author is now and has been for almost six years a Legal Editor for Bloomberg BNA's *Patent, Trademark and Copyright Journal*. However, at no time did he solicit advice in preparing this brief from any other employee or manager of the journal's parent company. The brief only reflects author's continuing interest in the efficiency of and balance in the patent ecosystem, and he believes his contribution here can help to serve both. Neither he nor Bloomberg Inc. – to the extent the author is aware – otherwise has any interest in any part to this litigation or stake in the outcome of this case.

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[1] In accordance with Supreme Court Rule 37.6, the author states that this brief was not authored, in whole or in part, by counsel to a party, and that no contribution, monetary or otherwise, to the preparation or submission of this brief was made by any other person or entity. Petitioners and Respondent have consented to the filing of amicus briefs such as this one, and their consents have been filed with the Court.

SUMMARY OF ARGUMENT

The Court in the past has attempted to distinguish abstractness and application with little guidance to practitioners, and the briefing to date in the instant case does not appear to offer a solution. This brief would agree with many others that other sections of the Patent Act can provide alternatives for abstractness, but only in certain limited circumstances. The brief instead, though, offers an alternative, under 35 U.S.C. § 101, that could resolve questions of patent eligibility raised by the patent claims at issue here and many others like them.

A focus on distinguishing useful arts from other-than-useful arts would cover much of the same ground as abstractness and has the benefit of being explicitly rooted in the Intellectual Property Clause of the Constitution and required under Section 101. Though it does not provide a complete answer to the question presented in the petition in this case, it does offer a categorization of computer-related patent claims that simplifies the analysis and gives weight to Section 101 as a threshold test.

A claim for a patent on a method is, by statutory definition, eligible subject matter only as a process. The word "process," by Congressional intent in passing the 1952 Patent Act, replaced but is precisely equivalent to what all prior Patent Acts referred to as an "art." There are many types of arts, and creators in all fields of endeavor are capable of advancements in their specific art fields. But advancements only in the *useful* arts are worthy of a patent grant, per the IP Clause.

Computing is a useful art, and methods claiming advancements in the art of computing should be considered patentable eligible. The method claims at issue in this case, however, do not advance the art of computing. They are advancements in the art of financial contract risk management, which was an art known at the time the Constitution was written and was not then included in any definition of a useful art. Use of advances in other arts – whether employing computers, telephones or carrier pigeons – cannot turn a known other-than-useful art into a useful art. The method claims at issue here, therefore, are not patent eligible processes under Section 101.

System claims construed as machine-based may not necessarily rise and fall with related method claims, but the claims at issue here do. Book printing has always been a useful art, and systems that print books are patent eligible. Systems that print books, upgraded by use of computing resources, are patent eligible to the extent that they use those resources to advance the art of book printing. However, computing resources can be brought to bear, without changing the art of book printing, to implement an author's specific expression, for example, to remove all capitalization in emulation of E.E. Cummings. A system employing such computing resources cannot of itself impart patent eligible because its effect is to advance the patent ineligible literary art. Using the logic processing of a machine to give expression to a literary work does not impart patent eligibility to a claimed system. Similarly, the machine – the computer – employed to advance the art of financial

contract risk management here adds nothing to the patent eligibility of the system claims at issue.

A computer-readable medium claim is never patent eligible, and the Court should make that point clear, despite the lack of discussion of these claim types in any of the opinions below. Putting a specific instance of software on a storage medium is equivalent to putting a specific instance of literature – e.g., *War and Peace* – on paper. While advances in printing books (independent of the content of those books) may be patent eligible, using book printing tools to print *War and Peace* does not make *War and Peace* in book form patent eligible.

To be clear, the Court should not read any of the above or below as an argument against software patenting. Indeed, if the Court takes nothing else from this brief, it should be that describing "software" as a single patent type or a single analytical construct is a mistake. Software provides instructions that cause a machine to do something. If the machine following such instructions does something to advance a useful art – whether the art is computing or, in relevant example, curing rubber – the software will make that machine patent eligible and methods and systems related to that advance can be equally patent eligible. If the machine following such instructions does nothing more than advance an other-than-useful art, related method and system claims are not patent ineligible.

ARGUMENT

I. Computer-Implemented Method Claims Can Be Drawn To Patent Eligible Subject Matter But Alice's Claims Are Not.

a. "New And Useful" Requirements Matter, Especially The Latter.

Section 101 allows for the grant of a patent to a claim representing:

> any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof …[2]

While most other briefs have addressed application of the judicially-created "abstract idea" exception to the four statutory categories of patent eligible subject matter, this paper focuses on the requirements to be "new and useful" and in fact concedes that the patent claims relevant here meet the requirement to be "new." But new-ness is not enough.

An automated piano player is a previously patented device and unequivocally the base machine underlying a useful art.[3] Piano players and rolls processed by the piano player to produce sound enable the playing of instances of musical compositions. Of course, the compositions themselves are without question ineligible for patenting. There is also no evidence of any patent granted for a method of getting a piano player to

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[2] 35 U.S.C. § 101.

[3] An 1867 U.S. patent was the first of several advancements over the useful art of automated music playing.

play *Alexander's Ragtime Band*, or any other musical composition, and no one appears to be making that argument today.

For a more recent example, consider a method of playing a digital recording of a movie on some video display. The recording device was once patented and the display was once patented. And the method was once patent eligible as an enabling technology for a new form of entertainment, but can one patent playing *Casablanca* through the same device and display?

In the opinions below and the briefing here, many are making the argument that an instance of software running on a computer is patent eligible because it is either a new machine[4] or a new use of an old machine.[5] But a method directed to a piano player playing *Alexander's Ragtime Band* meets the new-ness requirement in precisely the same way, as does the DVR and video display playing *Casablanca*.

A computing system running an instance of specific software results in a specific sequence of electric charges internal to the computing system.[6] A piano player processing the codes on a specific roll causes

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[4] *See, e.g.*, *CLS Bank International v. Alice Corp. Pty Ltd.*, 717 F.3d 1269, 1302 (Fed. Cir. 2013) (en banc) (Rader, C.J. dissent) ("A special purpose computer, *i.e.*, a new machine, specially designed to implement a process may be sufficient.").

[5] Brief for *Amicus Curiae* Ronald M. Benrey in Support of Neither Party ("Under § 101, a process is eligible subject matter if it is a *new use* of an existing machine, including if that machine is characterized as a 'general purpose computer.'") (hereinafter "Benrey brief").

[6] Brief of *Amicus Curiae* IEEE-USA in Support of Neither Party, p. 9 ("IEEE brief").

specific hammers to hit specific keys. The DVR playing a specific instance of a movie sends specific electric signals to the video monitor, which adjusts the intensity of a specific set of pixels in a specific sequence. A computing system running an instance of specific software, to the extent that the result is different from all previous specific software, is by definition a new use of an old machine. But an *Alexander's Ragtime Band*-playing piano player or a *Casablanca*-playing DVR meets that same definition as well, and neither is patent eligible.

Most programmers are taught given an initial task to write a program that displays the text, "Hello World" on a computer screen. At some point, a student entertained his professor by completing the assignment by displaying "Hello New Jersey." Different electric charges are required. Is it a new use of the computer? Yes, but would a claim to that program be drawn to patentable subject matter?[7]

What the opinions below and all but one of the *amicus* briefs to date have failed to do, however, is move to the second requirement of any patent eligibility category, the requirement of usefulness. One *amicus* brief urged the Court to "reinvigorate the Utility Doctrine of § 101," but then asked the Court to construe "useful" according to "its plain meaning, that is, capable of doing something or being used to do something."[8] That, however, is not

[7] Those who argue that an obviousness analysis would bar patentability miss the point. The student here is not engaged in an act of invention. It is at best an act of expression subject to copyright protection.

[8] Brief of Brian R. Galvin as *Amicus Curiae* in Support of Neither Party, pp. 19-20.

the definition of "useful" as it is used in the IP Clause and has been used in every version of the Patent Act, including the Patent Act of 1952 that created Section 101.

The last time this Court addressed the utility doctrine was in 1966 in *Brenner v. Manson*,[9] but it did not therein resolve a dispute about the definition of "useful." The issue in that case was *when* an advance in the art of chemistry was "useful" to prospective users, essentially taking as a given that chemistry was a useful art. The question to be answered in the instant case involves the *character* of use, not whether the public can use what is claimed and disclosed.

A poet can *use* alliteration, metaphor and onomatopoeia to amuse the reader. A composer can *use* various combinations of instruments to entertain an audience. The audience can *use* the entertainment to escape the stress of a hard day at work. But none of those uses can be characterized as being uses "in" the *useful* arts.

b. "Useful Arts" Are Distinguished From "Other-Than-Useful Arts."

Section 100(b) defines "process" as:

> process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.[10]

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[9] *Brenner v. Manson*, 383 U.S. 519 (1966).
[10] 35 U.S.C. § 100(b).

As explained in more detail in at least one *amicus* brief,[11] the Intellectual Property Clause has a parallel construction, with copyright- and patent-related terms interwoven, such that patents are granted "[t]o promote the Progress of … useful Arts, by securing… for limited Times to … Inventors the exclusive Right to their … Discoveries."[12]

As this Court has explained, the 1952 Patent Act's use of the term "process" did not change the standards for patent eligibility because "[i]n the language of the patent law, [a process] is an art."[13] And to be clear, that "art" must be a "useful Art," and not among the class of other-than-useful arts including, for example, the literary art.

This brief has so far identified as other-than-useful arts only those arts amenable to copyright protection. But that is not the extent of other-than-useful arts.

In 1828, Noah Webster defined "art" in a way that clearly distinguishes the use intended in the then-existing Patent Act:

> [A] system of rules, serving to facilitate the performance of certain actions; opposed to *science*, or to speculative principles; as divided into *useful* or *mechanic*, and *liberal* or *polite*. The mechanic arts are those in which the

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[11] Brief for International Association for the Protection of Intellectual Property (Association Internationale Pour La Protection De La Propriete Intellectuelle) in Support of Neither Party, pp. 3-4.

[12] U.S. Const., art I., § 8, cl. 8.

[13] *Diamond v. Diehr*, 450 U.S. 175, 182-84 (1981).

> hands and body are more concerned than the mind; as in making clothes, and utensils. These arts are called *trades*. The liberal or polite arts are those in which the mind or imagination is chiefly concerned; as poetry, music and painting.[14]

Therefore, with regard to patentability specifically, the importance of the word "useful" is to enable patentability for processes and methods, as systems of rules, but only with respect to their contribution to a patentable "trade." A "new and useful art" should then be read to mean either (a) an invented system of new rules applying to an existing trade, or (b) a system of rules specifying a new trade.

Webster further defined a "trade" as being "distinguished from the liberal arts and learned professions, and from agriculture. Thus we speak of the trade of a smith, of a carpenter or mason. But we never say, the trade of a farmer or of a lawyer or physician." An historian in 1952 also contended that arts as applied to trades were distinguished from "the arts of teaching, politics, war, business, and many others."[15]

Two different lists of trades that existed at the time Webster's definition was put forward identified 87

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[14] Noah Webster, AMERICAN DICTIONARY OF THE ENGLISH LANGUAGE (1828) (available in searchable form at http://webstersdictionary1828.com/) (hereinafter Webster) (emphasis in the original). There were no earlier dictionaries that could tie the definition to the founders' intent more definitively.

[15] Robert I. Coulter, *The Field of the Statutory Useful Arts*, 34 J. Pat. Off. Soc'y 487, 494 (1952).

unique trades.[16] Occupations known to be in existence at the time but not on the list (i.e., not recognized trades) include accountant, doctor (or any healthcare worker other than apothecary), politician, soldier, manager, banker and lender.[17]

Usefulness should be construed in light of these explanations of "useful Art" at the time the phrase was created. In general, a way of "doing business" was not considered useful under this construction. Definitions of "doing business" may vary, but definitions of banking are far less controversial, and definitions of financial contract management even less so. One struggles to see that any of them would be considered a useful art at the time. If they were not useful at the time, can they possibly have become useful now?

The remaining question, then, is whether the use of computing systems can turn an other-than-useful art into a useful one.

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[16] THE BOOK OF TRADES; OR, FAMILIAR DESCRIPTIONS OF THE MOST USEFUL TRADES, MANUFACTURES, AND ARTS PRACTISED IN ENGLAND: AND THE MANNER IN WHICH THE WORKMEN PERFORM THEIR VARIOUS EMPLOYMENTS (A. K. Newman 1829), *available at* http://digital.library.wisc.edu/1711.dl/DLDecArts.BkTrades; JACOB JOHNSON, THE BOOK OF TRADES, OR LIBRARY OF THE USEFUL ARTS, PARTS I, II, AND III (Whitehall 1800-1807).

[17] There is no question that there were advancements in at least some of these fields in the eighteenth century. For example, methods for cost accounting were apparently developed throughout this period. *See e.g.*, M. J. Mepham, *The Eighteenth-Century Origins of Cost Accounting*, Abacus 24 (1) (1988).

c. The Court Should Not Challenge A Construction That The Claims At Issue Here Use A Patent Eligible Computing System.

As a threshold concern, the Court should avoid claim construction issues that will only delay providing meaningful jurisprudence on which the computing industry can rely.

First, the Court should take as given that the types of claims the Court must rule on here are construed as requiring the use of a physical computing system. Alice Corp. has no claim for patent infringement against CLS Bank International unless the latter has implemented the claimed methods and systems through a computing system.

Second, the Court should not construe a computing system as a single machine, such that ephemeral communications among components become relevant to the patent eligibility question. A computer is patent eligible as a "virtual" machine, a collection of components that may or may not be encased within the same device. For example, information storage may be internal or external without affecting the patent eligible status of the computer. While references abound in the opinions below and in the briefing to date to a "general purpose computer," it is best to refer simply to a computing system with componentry that is not otherwise patentable in and of itself[18] that is unaltered except insofar as running a specific instance of software causes specific sequences of electrical charges to occur.

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[18] The term "off-the-shelf" can be a surrogate, and interpreted as either covered by an existing patent or in the public domain.

As a consequence of the preceding, the Court should heed the many statements in the briefing claiming a parallel between a particular type of advance in the art of computing enabled through either software or hardware with equivalent result.[19] A computing system is not useful – in any sense, let alone the constitutional sense – unless it is performing an act of processing instructions. Where those instructions are stored within the computing system is irrelevant to patent eligibility. Claims such as those at issue here are directed to processing the logic defined by a software program, and that logic could just as easily be "hard-coded" on "non-reconfigurable hardware" representing one component of the computing system, as placed in purportedly "temporary" random-access memory – another component of the computing system – which, because the best implementation of the system will process that same logic non-stop, is essentially just as permanent.

d. Computing Systems Enable Advances In Arts Both Useful And Other-Than-Useful.

Eliminating these concerns about whether one type of claim recitation should be patent eligible, while another – arguably to the same invention – is not, reduces the determinative question to distinguishing inventions claiming advances where the use of a computing system is a limitation. There are at least four types of claims that can be distinguished as to the art advanced.

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[19] *See, e.g.*, Brief of *Amicus Curiae* Dale R. Cook, pro se, in Support of Petitioner, on the "false dichotomy" of hardware versus software implementation (throughout).

First, there are advances directed to the art of computing itself.[20] That is, one can use the logic processing capabilities of the computing system to advance a computing system's beneficial characteristics. One *amicus* brief identified advances in digital hardware attending to such characteristics as increased speed, lowered costs, greater miniaturization and/or lower power consumption.[21] But as noted above, software implementations may be equally effective in making such advances. Specific instances of a computing system running specific logic can increase speed and lower power consumption, at least, and one can imagine lowered-cost arguments as well. In addition, advances in the art of computing can be in the addition of capabilities that prior computing systems could not offer to computer programmers. That is, if the persons of skill in the art of computing comprise both hardware and software engineers, tools that make those persons more capable should be patent eligible as well. It is not unusual in the least for such tools to be enabled by a general computing system running newly created software.[22] Thus, claims directed to

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[20] Of course, computing was not a recognizable trade in the eighteenth century. This brief assumes that there is no doubt that computing became a useful art at some point. The question of when the patent system should declare a new art to be added to the list of useful arts is not at issue in this case. However, the definitions provided in Section I.b supra offer a reasonable framework should the Court face such a question in the future.

[21] IEEE-USA brief, pp. 15-17.

[22] On its face, the invention at issue in *Gottschalk v. Benson*, 409 U.S. 63 (1972), was directed to an enabling capability of computing systems that did not previously exist. That suggests that the case was at least improperly decided under the argument herein, but see note 30 below for an alternative view.

advances in the art of computing itself meet the requirement of usefulness.

Second, the art of computing created other arts that did not exist prior to and would not exist without computing, what may be called computer ancillary arts. The field of robotics clearly encompasses special versions of computing systems and so is an easy example of a computer ancillary art. An advance in robotics by implementing specific logic processing is useful. Difficult questions arise in other computer ancillary arts in other fields, though, such as the field of artificial intelligence. Such AI applications as expert systems, facial recognition and natural language translation essentially seek results to match long recognized other-than-useful (i.e., mental) actions that humans do all the time. While this case does not present such difficult questions,[23] one can differentiate the AI applications as computer ancillary arts on one of two grounds. First, they may be intended to add capabilities to the machines on which they are processed. Humans do not need help in facial recognition; machines searching a crowd for a particular person do. Second, they typically are claimed as enabling technology versus instances of

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[23] *See* Benrey brief for a disavowal of the "legal principle that a general purpose computer operating under program control to execute a given calculation performs essentially the same mental steps that a human would," as argued to be established in *Benson*. That disavowal should carry over to the field of artificial intelligence, which is not based on mimicking human thought but rather making judgments that a human would make. The Federal Circuit recently addressed such an invention in *Smartgene, Inc. v. Advanced Biological Labs., SA*, and, under this brief's standards, made the mistake of making the parallel to human thought.

use.[24] For example, the first inventor of a "rules engine" enabling the development of expert systems created a computer ancillary art that was meant to replicate but not necessarily mimic humans' thought processes when diagnosing a problem.[25]

The claims at issue here, however, are not directed to the art of computing itself. The speed, cost, size and power characteristics of the computing system are not affected by processing the logic claimed here, nor are any new tools provided to persons of skill in the art of computing. These claims are instances of use of a general computing system processing specific logic directed to another art. The claims are also not directed to arts ancillary to computing. They do not enable transactions that do not already take place; they take transactions that already take place and improve them. If these claims are advances in

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[24] The author is wary that labels such as "enabling" and "instance" may more closely track jargon than law. Alternative constructions are distinctions of "form" or "structure" compared to "content" or "substance." However, it must be noted that the distinction between "abstract" and "application" confuses the programming community, since *all* software programs are applications of one type or another.

[25] *Smartgene* presents another difficult question not at issue here: If the first expert system was enabled as an auto mechanic's expert system, how does one analyze a subsequent instance, as in that case, of a medical expert system? Since that is a question of an invention of an instance within a useful art, it would seem that Section 101 is met but that obviousness concerns, under 35 U.S.C. § 103, arise: Was the rules engine unaltered or did it have to be improved to deal with medical knowledge? Are the parallels between auto problem diagnosis and medical diagnosis so similar that an expert system designer – the person of skill in *this* art, not the doctor – would use the same construct but only with different content?

another art, the next question is whether that art is useful or not.

To be clear, even claims not directed to the art of computing itself can be directed to another useful art. This Court held in *Diamond v. Diehr* that a computer-implemented invention directed to the art of curing rubber was patent eligible.[26] Thus, the third distinguished type of claim to use of a computing system is the more typical example of a new use of an old machine, where the new use is in a separate art and that art is useful.

The fourth type of claim is then obviously one directed to another art that is an other-than-useful art. Logic processing that searches a dictionary of words to suggest alternatives for alliteration might enable more pleasing poetry, but it is not *useful*. Logic processing that allows a user to fill in tax return information is, for many, of great use compared to manually completing Form 1040, but that it is not a *useful* use per the statutory requirement.

e. Alice's Method Claims Are Directed To An Other-Than-Useful Art.

Representative Claim 33 of U.S. Patent No. 5,970,479 is drawn to: "A method of exchanging

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[26] *Diehr*, 450 U.S. 175. Curing rubber – vulcanization – was a later-than-eighteenth-century invention and so had to become recognized as a useful art at some point. Again, this brief makes no specific argument on how the Court should address the issue presented when a patentee or patent applicant claims to have invented a new useful art, but it also does not doubt that vulcanization is one such art.

obligations as between parties ….” By its preamble, the claim is disclosing to the world the art it claims to advance.

As stated previously, claim drafting should not determine this case, but additional intrinsic evidence of the art advance is apparent. The abstract identifies “[m]ethods and apparatus which deal with the management of risk.” Further, the Patent and Trademark Office’s assigned class 705 is titled “Data Processing: Financial, Business Practice, Management, or Cost/Price Determination, and defined as

> … the generic class for apparatus and corresponding methods for performing data processing operations, in which there is a significant change in the data or for performing calculation operations wherein the apparatus or method is uniquely designed for or utilized in the practice, administration, or management of an enterprise, or in the processing of financial data.

All aspects of the USPTO’s definition beg the question presented here, but they make clear that the relevant arts are either “the practice, administration, or management of an enterprise” or “the processing of financial data.” The former were specifically excluded from the useful arts in 1790. The latter does not help as a basis for establishing patent eligibility. All computing systems process

data. Why would "financial data" reserve a special dispensation?[27]

At their broadest, Alice's method claims are directed to the art of banking, which by all indications appears to have been excluded from the original definition of "useful arts." Narrowing them to "escrow accounts," "intermediated settlement" or any other subset of devices used by banking (or insurance, for that matter) interests does not serve Alice's argument any better.

To be sure, prior "advances" in other technologies improved the art of financial contract management risk, and there is no evidence of any patent being granted for prior developments. The invention of the telephone undoubtedly decreased the risk for contract default by allowing the intermediary to conduct business by communicating with the parties over long distances. Telegraph, telex and facsimile offered additional advantages in their time. Computerization differs from those prior technologies only in further removing a human's

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[27] The author acknowledges the argument that financial data, in fact, do deserve special consideration, such as in Brief of *Amicus Curiae* Regulatory Datacorp, Inc. in support of Neither Party in *In re Bilski*, No. 2007-1130 (Fed. Cir. April 7, 2008) ("Economists themselves now view their field as constituting a 'mathematical science' with closer affinity to physics and engineering than to liberal arts like English literature."). Of course, *some* banking community stakeholders such as Alice Corp. would want banking added to the list of useful arts in the same way *some* economists might want financial data added to that list. The interests of some participants in an other-than-useful art, when other interests in the same field – CLS and, presumably, other amici supporting its position – believe the opposite, should be resolved in Congress, if at all.

effort, and one potential for error (though adding potential for a different kind of error), from the transaction. If that is the basis for turning an other-than-useful art into a useful art, then mathematics is now a useful art. That cannot be a reasonable conclusion under the plain language of the IP Clause.

The method claims at issue here use a computing system to make an advance in an other-than-useful art. They are not patent eligible under Section 101.

II. System Claims Are Patent Eligible When Dedicated To Operation In A Useful Art, Which Alice's Claims Are Not.

a. A System Claim Cannot Become Patent Eligible By Using A Useful Machine With An Other-Than-Useful Effect.

A washboard is (or at least at one point was) a useful device for cleaning laundry and a jug is a useful device for containing liquids. Spoons are useful for eating soup. Did the first jug band deserve a patent for using the washboard, jug or spoons to make music?

The patent community could have avoided the snarky question posed by the uninitiated of how the Patent and Trademark Office could have granted a patent on using a laser pointer to exercise a cat[28] by simply acknowledging that one cannot receive a patent on an existing machine – or article of

[28] U.S. Patent No. 5,443,036.

manufacture – for a new use in the other-than-useful arts.

b. System And Method Claims Rise And Fall Together Under The Circumstance Where The Only Change To The System Is In The Logic Processed.

But one can imagine a modification to a washboard, jug or spoons that makes them useful only for playing music and not for their established (previously patented or in the prior art) uses. It is conceivable that such an inventor could make a claim for patent eligibility of such an advance in musical instruments, but again that is not at issue here.

Circumstances under which a system claim will be patent eligible and a method claim not patent eligible may exist, but as applied to the use of computing resources, we must again consider whether the logic processing of a specific instance of computing resources is such an example.

Claim 26 of Alice's U.S. Patent No. 7,725,375 patent claims, "A data processing system to enable the exchange of an obligation between parties …." Clearly, it is a claim to a generic computing system implementing the method that was determined to be patent ineligible.

Proponents of the patent eligibility of any claim using new software logic use the interchangeability of software and hardware as a justification, but as noted above, that simply "moves" the question from

one component of the computing system to another. Thus, the argument cuts both ways. If the logic is directed to an advance in an other-than-useful art, the fact that hardware is part of the logic processing does not change the patent eligibility question. A computing system unaltered except insofar as running a specific instance of software is no different from a washboard, a jug or spoons.

In such circumstances, the two types of claims will either rise together or fall together. The circumstance exists here; Alice's system claims fall as their method claims did.

III. Usefulness And Abstractness Cover Much Of The Same Ground.

The Court cannot help but be cognizant of the frustration expressed in the opinions below and in the briefing with a standard based on defining the "abstract idea" exception to the statutory category of patents for processes. The standard requires a distinction between an idea and an application of that idea, and the dividing line is without question elusive if not impossible.

But as noted above, Webster distinguished other-than-useful arts as "those in which the mind or imagination is chiefly concerned," which comes reasonably close to the concern over prohibiting patents on an abstract idea. Further reliance on the definitional distinctions between useful and other-than-useful arts, then, can at the very least provide a more workable standard, if not as a complete replacement then at least as a surrogate in specific circumstances: If an invention today is claiming an

advance in an art that is other-than-useful, it is not patent eligible as an art (method), and if it is implemented through an unaltered computing system, is not patent eligible as a machine.

There may be instances where a patent claim is directed to a useful art but the Court still wishes to invoke the abstract idea exception. The question of when a new art proposes to be added to the list of useful arts presents one such case: The inventor may have invented something that should be added to the list but must be careful not to claim the invention as an idea as opposed to its application.[29] Within a useful art, an advance may be claimed so broadly as to be directed to an abstract idea as well.[30]

However, with the claims here making an advance in an other-than-useful art, neither circumstance is presented.

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[29] *See, e.g.*, the Court's decision that claim 8 at issue in *O'Reilly v. Morse*, 56 U.S. (15 How.) 62 (1853), also known as *The Telegraph Patent Case*, was not patent eligible while other claims of the patent were. Though the 1952 Patent Act may have moved this question to one of enablement under 35 U.S.C. § 112(a), this brief makes no argument either way.

[30] *Benson* conceivably rests on this argument. *See, e.g.*, Brief of *Amici Curiae* Professor Lee Hollaar and Peter K. Trzyna In Support Of Neither Party, pp. 18-21 (disputing whether Benson was claiming a computing system operation at all). This brief makes no judgment on that argument but offers an alternative example. Programmers use a programming language to represent the required logic and a new programming language would conceivably represent a useful tool. Abstractness may be invoked to prevent a patent claim to the structure of the language itself while allowing patent eligibility to a claim to a compiler used to translate code written in that language into object code.

There is thus no need for the Court to resort to a distinction based on abstraction here. Should the Court conclude that the claims here are more closely associated with ideas and the mental aspects of business transactions than practical applications, the useful art categorization of computer-related patent claims offers a brighter line and recognizes the same distinction.

IV. Putting Software On A Computer-Readable Medium Is Never Patent Eligible.

The third type of claim at issue in this case is the so-called *Beauregard* claim. In *In re Beauregard*, the Federal Circuit held that a computer program was patent eligible subject matter when claimed in terms of an article of manufacture as contained on a computer-readable medium (CRM) such as a floppy disk.[31] In the context of the discussion above, this would at first glance appear to be eligible or ineligible for patenting along the same analysis – whether the computer program in question is dedicated to a useful art or not. But that distinction is not necessary for CRM-based claims.

The logic-processing distinction noted above is irrelevant to the CRM claim because the claim does not involve processing. The program that resides on the CRM – whether in source, object or executable form – is not useful until it is processed by a computing system. Prior to that point, it is an instance of logic and no different from an instance of music on a compact disk or an instance of a movie on

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[31] *In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995).

digital video disk. The CD and DVD are protectable under copyright law. Software on a CRM should, at best, be protectable under copyright as well.

It must be noted that compact disk player cleaning kits are available that include a CD whose purpose is useful – directed to maintaining the CD player. Such a cleaning kit would be patent eligible as directed to improving the performance of the player. It thus may be argued that a computer program on a CRM that is directed to computing-art advancements should be treated equally.

However, the cleaning kit is not an instance of music, and it does not clean the CD player by processing an instance of music. It "processes" a liquid that cleans the CD player lens. Its usefulness is not driven by content that is arguably not patent eligible.

CONCLUSION

Use of a generic computing system to process an instance of logic – as encoded by a software program – may be eligible for patenting under 35 U.S.C. § 101 in three circumstances: When the logic advances the art of computing, when it is directed to an ancillary art of computing or when it is directed to an advance in a useful art. The software programming community is capable of significant advances in all these areas, and such advances are the kind the IP Clause was meant to encourage. Programmers responsible for such advances should thus be rewarded with grants of patents where appropriate.

However, the claims at issue here use a generic computing system to process an instance of logic directed to an advance in an other-than-useful art. Other-than-useful arts can be identified by the distinction made between the two at the time the IP Clause was created and for which there is no evidence of a change in 220 years.

There are difficult questions to address as to identifying when a previously unknown advance can be said to be a new useful art, and whether a specific art can be identified as ancillary to the art of computing or merely a computational replacement for human thought, but the instant case presents none of those difficult questions.

The Court should hold that all claims at issue in this case do not meet the usefulness requirement of Section 101.

Respectfully submitted,

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