

IN THE
Supreme Court of the United States

VERSATA DEVELOPMENT GROUP, INC.,
Petitioner,

v.

SAP AMERICA, INC. AND SAP AG,
Respondents,

and

UNDER SECRETARY OF COMMERCE
FOR INTELLECTUAL PROPERTY AND DIRECTOR
OF THE UNITED STATES PATENT
AND TRADEMARK OFFICE,
Respondent-Intervenor.

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

**BRIEF OF BROADBAND iTV, INC. AS *AMICUS*
CURIAE IN SUPPORT OF PETITIONER**

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TABLE OF CONTENTS

	<i>Page</i>
TABLE OF CONTENTS.....	i
TABLE OF CITED AUTHORITIES	iii
INTEREST OF <i>AMICUS CURIAE</i>	1
SUMMARY OF ARGUMENT.....	2
ARGUMENT.....	5
I. THE LOWER COURTS AND PTAB NEED ADDITIONAL GUIDANCE ON HOW TO ANALYZE PATENT- ELIGIBLE SUBJECT MATTER UNDER 35 U.S.C. § 101	5
A. The Lower Courts and PTAB Have Expanded the Scope of the “Abstract Idea” Beyond this Court’s Precedent.....	5
1. <i>Versata</i> Overapplies <i>Alice</i> by Misidentifying “Novel” Methods of Organizing Human Activity as “Abstract Ideas”	10
2. <i>Versata</i> Misconstrues <i>Alice</i> by Equating Overly- Detailed “Abstractions” with “Abstract Ideas”.....	14

Table of Contents

	<i>Page</i>
B. The Lower Courts and PTAB Are Also Improperly Applying Step Two of the <i>Alice</i> Framework	16
1. <i>Versata</i> Improperly Ignores “Inventive” Aspects of the Claimed Invention that Are “Non-Routine” or “Unconventional” Merely Because a Generic Computer Is Used	17
2. <i>Versata</i> Fails to Recognize Technological Improvements that are Effected by the Claims as a Whole, Merely Because a Generic Computer Is Used	19
II. PATENT-ELIGIBILITY OF INVENTIONS IMPLEMENTED BY MODERN TECHNOLOGY IS AN IMPORTANT AND RECURRING ISSUE REQUIRING INPUT FROM THIS COURT	22
A. Post- <i>Alice</i> Decisions Show that Section 101 Is Swallowing Patent Law Despite this Court’s Warnings to the Contrary	22
B. If the Court Does Not Take the Case, Harm Will Continue.....	24
CONCLUSION	26

TABLE OF CITED AUTHORITIES

	<i>Page</i>
Cases	
<i>Alice Corp. v. CLS Bank</i> , 134 S. Ct. 2347 (2014)	<i>passim</i>
<i>Ass'n for Molecular Pathology v.</i> <i>Myriad Genetics</i> , 133 S. Ct. 2107 (2013)	6, 8
<i>Bilski v. Kappos</i> , 561 U.S. 593 (2010)	<i>passim</i>
<i>Broadband iTV, Inc. v. Hawaiian Telecom, Inc.</i> , No. 14-00169 ACK-RLP, 2015 U.S. Dist. LEXIS 131729 (D. Haw. Sept. 29, 2015)	4, 13, 15, 21
<i>Broadband iTV, Inc. v. Oceanic Time Warner Cable</i> , No. 15-00131 ACK-RPL, 2015 U.S. Dist. LEXIS 131726 (D. Haw. Sept. 29, 2015)	4, 13, 15, 21
<i>Cal. Ins. Of Tech. v. Hughes Commc'n.</i> , 59 F. Supp. 3d 974 (C.D. Cal. 2014)	17
<i>Cloud Satchel v. Amazon.com</i> , 76 F. Supp. 3d 553 (D. Del. 2014)	23
<i>CLS Bank Int'l v. Alice Corp. Pty.</i> , 717 F.3d 1269 (Fed. Cir. 2013)	24

Cited Authorities

	<i>Page</i>
<i>Core Wireless Licensing S.a.r.l. v. LG Elecs.</i> , No. 2:14-cv-911-JRG-RSP, 2016 U.S. Dist. LEXIS 35663 (E.D. Tex. Mar. 20, 2016)	23
<i>DDR Holdings v. Hotels.com</i> , 773 F.3d 1245 (Fed. Cir. 2014)	16, 19, 23
<i>Diamond v. Chakrabarty</i> , 447 U.S. 303 (1980)	6, 22
<i>Diamond v. Diehr</i> , 450 U.S. 175 (1981)	<i>passim</i>
<i>Diet Goal Innovations v. Bravo Media</i> , 33 F. Supp. 3d 271 (S.D.N.Y. 2014)	23
<i>Enfish v. Microsoft</i> , 56 F. Supp. 3d 1167 (C.D. Cal. 2014)	24
<i>Fr. Telecom v. Marvell Semiconductor</i> , 39 F. Supp. 3d 1080 (N.D. Cal. 2014)	23
<i>Gottschalk v. Benson</i> , 409 U.S. 63 (1972)	8, 18
<i>Hulu v. iMTX Strategic</i> , No. CBM 2015-00147, Paper 14 (P.T.A.B. Nov. 30, 2015)	23

Cited Authorities

	<i>Page</i>
<i>Intellectual Ventures I v. Capital One</i> , No. PWG-14-111, 2015 U.S. Dist. LEXIS 116740 (D. Md. Sept. 2, 2015), <i>aff'd</i> , 792 F.3d 1363 (Fed. Cir. 2015).....	13
<i>J.E.M. Ag Supply v. Pioneer Hi-Bred Int’l.</i> , 534 U.S. 124 (2001).....	6
<i>Jericho Sys. v. Axiomatic</i> , No. 3:14-CV-2281-K, 2015 U.S. Dist. LEXIS 60421 (N.D. Tex. May 7, 2015)	23
<i>Le Roy v. Tatham</i> , 63 U.S. 132 (1859).....	7
<i>Mayo Collaborative Servs. v. Prometheus Labs.</i> , 132 S. Ct. 1289 (2012).....	<i>passim</i>
<i>McRO v. Sega of America</i> , No. 2:12-cv-10327-GW(FFMx), 2014 U.S. Dist. LEXIS 135267 (C.D. Cal. Sept. 22, 2014)	23
<i>Messaging Gateway Solutions v. Amdocs</i> , No. 1-14-cv-00732, 2015 U.S. Dist. LEXIS 49408 (D. Del. Apr. 15, 2015).....	23
<i>Network Congestion Sols. v. U.S. Cellular</i> , Nos. 14-903-SLR, -904-SLR, 2016 U.S. Dist. LEXIS 36884 (D. Del. Mar. 22, 2016).....	23

Cited Authorities

	<i>Page</i>
<i>O2 Media v. Narrative Sci.</i> , No. 15 C 05129, 2016 U.S. Dist. LEXIS 23320 (N.D. Ill. Feb. 25, 2016)	13
<i>OIP Techs. v. Amazon.com</i> , 788 F.3d 1359 (Fed. Cir. 2015)	23
<i>Parker v. Flook</i> , 437 U.S. 584 (1978).....	8
<i>Prism Techs. v. T-Mobile USA</i> , No. 8:12-cv-00124, 2015 U.S. Dist. LEXIS 144537 (D. Neb. Sept. 22, 2015)	23
<i>Sri Int’l v. Cisco Sys.</i> , No. 13-1534-SLR, 2016 U.S. Dist. LEXIS 48092 (D. Del. Apr. 11, 2016).....	3
<i>Trading Techs. Int’l v. CQG</i> , No. 05-cv-4811, 2015 U.S. Dist. LEXIS 22039 (N.D. Ill. Feb. 24, 2015)	23
<i>Ultramercial v. Hulu</i> , 772 F.3d 709 (Fed. Cir. 2014).....	12
<i>Versata Dev. Grp. v. SAP Am.</i> , 793 F.3d 1306 (Fed. Cir. 2015)	<i>passim</i>
<i>Versata Software v. SAP Am.</i> , 717 F.3d 1255 (Fed. Cir. 2013).....	11, 12, 14

Cited Authorities

	<i>Page</i>
<i>Warner-Jenkinson v. Hilton Davis Chem.</i> , 520 U.S. 17 (1997)	20

Rules

Sup. Ct. R. 37.6	1
------------------------	---

Statutes

35 U.S.C. § 101	<i>passim</i>
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Other Authorities

Joan Farre-Mensa <i>et al.</i> , <i>The Bright Side of Patents</i> , USPTO Economic Working Paper No. 2015-5 (Jan. 26, 2016)	25
--	----

Kelly Knaub, <i>Patent Holder Asks Fed. Circ. to Clarify Alice in Netflix Case</i> , Law360 (Dec. 22, 2015, 11:41 PM)	
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Kelly Mackin, <i>Federal Circuit Guidance Is Needed Because District Courts Are Misapplying Alice</i> , IP Watchdog (April 7, 2016)	3-4
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INTEREST OF *AMICUS CURIAE*

Amicus Curiae Broadband iTV, Inc. (“BBiTV”) respectfully submits this *amicus curiae* brief in support of the Petition for a Writ of Certiorari by Versata Development Group, Inc.¹

BBiTV is a former practicing entity and patent holder in the field of delivering video-on-demand content via cable television communication services. BBiTV has continued to enhance its technology by investing in ventures within its field and that commercially implement its inventions. Thus, BBiTV maintains a substantial interest and investment in the fruits of its research and development in the form of its patent portfolio.

The current state of the law on patent-eligibility under 35 U.S.C. § 101 reflects confusion among district courts and the Patent Trial and Appeal Board (“PTAB”) that is causing harm to patent owners, inventors, and the marketplace. Thus, BBiTV believes it is important for *this* Court to clarify the law with respect to patent-eligibility of computer-implemented inventions under 35 U.S.C. § 101.

1. Petitioner and Respondents consented to the filing of this *amicus curiae* brief on April 4, 2016 and April 6, 2016. Pursuant to Sup. Ct. R. 37.6, no counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of this brief. No person other than Amicus Curiae made a monetary contribution to its preparation or submission.

SUMMARY OF ARGUMENT

The decisions below reflect confusion among lower courts and the PTAB as to what constitutes patent-eligible subject matter under 35 U.S.C. § 101. This confusion has persisted throughout the development of the patent-eligibility jurisprudence since this Court’s decision in *Bilski v. Kappos*, 561 U.S. 593 (2010) and, more recently, since this Court’s decision in *Alice Corp. v. CLS Bank*, 134 S. Ct. 2347 (2014).

The Federal Circuit’s decision below (*Versata*²) exemplifies the alarming trend of the PTAB and lower courts misapplying *Alice* in determining what constitutes an “abstract idea” versus what is sufficient to demonstrate that a claim is directed to a practical application of an abstract idea rather than merely the abstract idea itself.

Versata is simply one decision among many in which the PTAB or lower courts erred in defining the alleged abstract ideas by:

- (1) improperly including “novel” business practices or methods of organizing human activities; and
- (2) including detail well beyond the level of detail envisioned by *Alice* or *Bilski*.

This Court’s precedent has never sanctioned such a broad scope for the judicially-created exception to patent-eligible subject matter under Section 101.

2. *Versata Dev. Grp. v. SAP Am.*, 793 F.3d 1306 (Fed. Cir. 2015) (App. 1a-73a).

Versata also evidences the growing and erroneous trend among lower courts in the misapplication of step two of the *Alice* framework. *Versata* erred by:

- (1) ignoring “inventive” aspects of the claimed invention that are “non-routine” merely because a generic computer was involved; and
- (2) ignoring technological improvements that are effected by the claims as a whole merely because a generic computer was involved.

While *Alice* made clear that “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention,” it is equally clear that the use of a generic computer does not automatically make a claim patent-ineligible. *See Alice*, 134 S. Ct. at 2358. Thus, these inventive and technological elements cannot be ignored merely because they are part of a computer-implemented invention.

However, lower courts are confused about the state of the law of patent-eligibility under Section 101, which has resulted in the pervasive invalidation of patents involving computer-implemented inventions. *See, e.g., Sri Int’l v. Cisco Sys.*, No. 13-1534-SLR, 2016 U.S. Dist. LEXIS 48092, at *13–14 (D. Del. Apr. 11, 2016) (“Given the evolving state of the law, the § 101 analysis should be, and is, a difficult exercise. At their broadest, the various decisions of the Federal Circuit would likely ring the death-knell for patent protection of computer-implemented inventions, a result not clearly mandated (at least not yet).”); Kelly Mackin, *Federal Circuit Guidance Is Needed Because District Courts Are Misapplying Alice*, IP Watchdog (Apr. 7,

2016), www.ipwatchdog.com/2016/04/07/district-courts-misapplying-alice/; Kelly Knaub, *Patent Holder Asks Fed. Circ. to Clarify Alice in Netflix Case*, Law360 (Dec. 22, 2015, 11:41 PM), www.law360.com/articles/740682/patent-holder-asks-fed-circ-to-clarify-alice-in-netflix-case.

Versata's misapplication of *Alice* itself has since been relied on by many district courts, including in two separate, but related decisions involving BBiTV, in *Broadband iTV v. Oceanic Time Warner Cable* (“BBiTV-TWC”) and *Broadband iTV v. Hawaiian Telecom* (“BBiTV-HT”). These decisions relied on *Versata* as an example of a case in which “the broad concept of using organizational and product group hierarchies to determine prices for products and customers is an abstract idea, even where it is implemented using computers.” *BBiTV-TWC*, No. 15-00131 ACK-RLP, 2015 U.S. Dist. LEXIS 131726, at *20 (D. Haw. Sept. 29, 2015); *BBiTV-HT*, No. 14-00169 ACK-RLP, 2015 U.S. Dist. LEXIS 131729, at *17 (D. Haw. Sept. 29, 2015).

This alarming trend of misapplying *Alice's* guidance has allowed the judicial exception to patent-eligibility to “swallow all of patent law.” *Alice*, 134 S. Ct. at 2354; *see also Mayo Collaborative Servs. v. Prometheus Labs.*, 132 S. Ct. 1289, 1293 (2012) (too broad an interpretation “could eviscerate patent law”). Since *Alice*, more than 100 patents and thousands of claims have been declared invalid under 35 U.S.C. § 101 by the lower courts or PTAB using an overly broad interpretation of *Alice*. Thus, it is important for this Court to take up the issue of patent-eligibility once again and right the course.

ARGUMENT**I. THE LOWER COURTS AND PTAB NEED ADDITIONAL GUIDANCE ON HOW TO ANALYZE PATENT-ELIGIBLE SUBJECT MATTER UNDER 35 U.S.C. § 101****A. The Lower Courts and PTAB Have Expanded the Scope of the “Abstract Idea” Beyond this Court’s Precedent**

A fundamental problem evidenced by *Versata*, and permeating through many lower court decisions, is a failure to appreciate what exactly constitutes an “abstract idea.” Specifically, these decisions have labeled as “abstract ideas” inventive concepts that go far beyond the bounds of that category as previously envisioned or dictated by this Court.

The Patent Act clearly defines patent-eligible subject matter:

Whoever invents or discovers any new or useful process, machine, manufacture or composition of matter, or any new or useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

35 U.S.C. § 101.

As this Court has repeatedly recognized, this statutory language is very broad. “In choosing such expansive terms modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would

be given wide scope.” *Bilski*, 561 U.S. at 601 (quoting *Diamond v. Chakrabarty*, 447 U.S. 303, 308 (1980); see also *J.E.M. Ag Supply v. Pioneer Hi-Bred Int’l.*, 534 U.S. 124, 130 (2001) (“ . . . the language of § 101 is extremely broad.”) (citation omitted); *Chakrabarty*, 447 U.S. at 308 (“The relevant legislative history also supports a broad construction”).

Nevertheless, this Court’s precedent provides three judicially-created exceptions to Section 101’s broad patent-eligibility principles: “laws of nature, physical phenomena, and abstract ideas.” *Bilski*, 561 U.S. at 601; *Chakrabarty*, 447 U.S. at 309; *Mayo*, 132 S. Ct. at 1293; *Ass’n for Molecular Pathology v. Myriad Genetics*, 133 S. Ct. 2107, 2116 (2013); *Alice*, 134 S. Ct. at 2354.

Of course, as judicially-created exceptions, this Court has repeatedly recognized they should be narrowly applied. *Alice* expressly made this point:

[W]e tread carefully in construing this exclusionary principle lest it swallow all of patent law.

134 S. Ct. at 2354. At some level, “all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Id.* “Thus, an invention is not rendered ineligible for patent simply because it involves an abstract concept.” *Id.*; see also, e.g., *Myriad*, 133 S. Ct. at 2116; *Mayo*, 132 S. Ct. at 1293.

Thus, this Court has long distinguished between claims directed to an “abstract idea” (or one of the other patent-ineligible fundamental principles) and *a practical*

application of an abstract idea, which is patent-eligible. As *Bilski* explained, “an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” 561 U.S. at 611 (quoting *Diamond v. Diehr*, 450 U.S. 175, 187 (1981)); see also *Le Roy v. Tatham*, 63 U.S. 132, 137 (1859) (“There can be no patent for a principle; but for a principle so far embodied and connected with corporeal substances as to be in a condition to act and to produce effects in any trade, mystery, or manual occupation, there may be a patent.”) (citation omitted).

This key principle—that ***a patent claim may be directed to a practical application of a fundamental principle***—was expressly reaffirmed by this Court in *Mayo*, 132 S. Ct. at 1293–94, and *Alice*, 134 S. Ct. at 2355.

In performing the “abstract idea” analysis, the claims must be read as a whole, and not dissected. *Diehr* instructs,

It is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis. This is particularly true in a process claim because a new combination of steps may be patentable even though all the constituents of the combination were well known and in common use before the combination was made.

450 U.S. at 188. This point was reiterated, when *Alice* required the claims to be considered as an “ordered combination.” 134 S. Ct. at 2355.

The ultimate inquiry is whether the claim *preempts* an abstract idea. *Alice*, 134 S. Ct. at 2354 (“We have described the concern that drives this exclusionary principle as one of pre-emption.”) (citing *Bilski*, 561 U.S. at 611-12 (upholding the patent “would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea”)); *see also Myriad*, 133 S. Ct. at 2116; *Mayo*, 132 S. Ct. at 1301 (“repeatedly emphasized this . . . concern that patent law not inhibit further discovery by improperly tying up the future use of” abstract ideas).

In reviewing the history of patent-eligibility, *Alice* recognized that, prior to *Bilski*, the “abstract idea” exception had only been applied to “mathematical formulas.” *Alice*, 134 S. Ct. at 2356.

For example, the patent claims in *Gottschalk v. Benson* involved an algorithm for converting binary-coded decimal numerals into pure binary code, and were patent-ineligible as they “would wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself.” 409 U.S. 63, 72 (1972); *see also Alice*, 134 S. Ct. at 2355; *Bilski*, 561 U.S. at 610.

Likewise, in *Parker v. Flook*, the claimed “procedure for monitoring the conditions during the catalytic conversion process” was not patentable as the “application’s only innovation was reliance on a mathematical algorithm.” *Bilski*, 561 U.S. at 610 (citing *Flook*, 437 U.S. 584, 585-86 (1978)); *see also Alice*, 134 S. Ct. at 2355.

By contrast, in *Diehr*, a computer-implemented process for curing rubber was patent-eligible because it

was not “an attempt to patent a mathematical formula” since the additional steps of the claimed method transformed the process into an inventive application of the formula. *Diehr*, 450 U.S. at 191–93; *see also Alice*, 134 S. Ct. at 2358; *Bilski*, 561 U.S. at 611.

Thus, prior to *Bilski*, the three judicial exceptions—laws of nature, natural phenomena, and abstract ideas (i.e., mathematical formulas)—were preexisting fundamental truths that exist in principle apart from any human action. *See Bilski*, 561 U.S. at 619–20 (Stevens, J., concurring); *cf. Alice*, 134 S. Ct. at 2356. In essence, these fundamental truths were treated the same.

However, *Bilski* did not rely on the fact that the concept of “hedging risk” could be reduced to a “mathematical formula” in classifying it as an abstract idea. Instead, *Bilski* also found the concept of “hedging risk” to be an “abstract idea” because it was “a fundamental economic practice long prevalent in our system of commerce.” *Bilski*, 561 U.S. at 611.

Alice explored the bounds of an abstract idea even further. It recognized that “hedging risk” could have been found an abstract idea in *Bilski* on the alternative basis that hedging risk could be reduced to a “mathematical formula,” but instead expressly relied on the fact that hedging risk was an “abstract idea” because it was “a fundamental economic practice.” *Alice*, 134 S. Ct. at 2356–57. It did so because the abstract idea in *Alice*—“intermediated settlement”—was easily identifiable as a similar “fundamental economic practice long prevalent in our system of commerce.” *Id.* at 2356. *Alice* supported the “fundamental,” “long prevalent,” and “longstanding”

nature of the practice of intermediated settlement by, *inter alia*, citing to publications from 1896 and textbooks to demonstrate how well-known and deep-rooted an economic concept it was. *Id.*; see also *Bilski*, 561 U.S. at 611. Because intermediated settlement was so similar in kind to the “long prevalent” concept of hedging risk in *Bilski*, *Alice* stopped the analysis there, and did not feel a need to “labor to delimit the precise contours of the ‘abstract ideas’ category.” *Id.* at 2357. Thus, in contrast to *Versata*, this Court expressly declined to expand the “abstract ideas” category beyond mathematical formulas and “fundamental economic practice[s] long prevalent in our system of commerce.”

1. ***Versata* Overapplies *Alice* by Misidentifying “Novel” Methods of Organizing Human Activity as “Abstract Ideas”**

While *Alice* chose not to provide any guidance on how to identify an “abstract idea,” it certainly did not authorize the vast expansion of the category seen in lower court decisions over the past year and a half. The alleged abstract idea in *Versata*—“determining a price, using organizational and product group hierarchies”—is one example of such expansion, as it is a “novel” concept that does not fall under the category of “abstract ideas.”

As discussed, when *Alice* and *Bilski* expanded the “abstract idea” exception beyond “preexisting truths,” such as mathematical formulas, this Court relied on the fact that “hedging risk” and “intermediated settlement” were “fundamental” and “long prevalent in our system of commerce,” and even supported those findings with references. See *Alice*, 134 S. Ct. at 2356; *Bilski*, 561 U.S.

at 611. Yet, *Versata* (and other lower court decisions) expands the holdings in *Alice* and *Bilski* to include “just discovered” methods of organizing human activity within the category of the judicially created “abstract idea” exception. This holding goes beyond the holdings or rationale of prior Supreme Court precedent, including *Alice* and *Bilski*, and should be rejected.

Here, despite the fact that the Federal Circuit had previously recognized in a prior appeal that the commercial embodiment of the patent-in-suit “received praise as a ‘breakthrough’ that was ‘very innovative,’” (*Versata Software v. SAP Am.*, 717 F.3d 1255, 1259 (Fed. Cir. 2013), *cert. denied*, 134 S. Ct. 1013 (2014)) it nonetheless held that “[u]sing organizational and product group hierarchies to determine a price is an abstract idea that has no particular concrete or tangible form or application.” App. 52a. This is error.

This rationale does not apply to newly discovered methods of organizing human activity or business practices not already known. Significantly, this Court has never applied such reasoning to find “novel” business practices or methods of organizing human activities to be “abstract ideas.” Instead, this Court has relied on the fact that “hedging risk” and “intermediated settlement” were “fundamental,” “long prevalent,” and “longstanding” when classifying them as “abstract ideas”:

The concept of risk hedging we identified as an abstract idea in [*Bilski*] cannot be described as . . . a truth about the natural world that has always existed Instead, the Court grounded its conclusion that all of the claims at

issue were abstract ideas in the understanding that risk hedging was a fundamental economic practice.

Alice, 134 S. Ct. at 2356–57 (internal quotations omitted).

In *Ultramercial v. Hulu*, the Federal Circuit expressed that the novelty of the alleged abstract idea does not preclude its status as a judicially excluded “abstract idea.” 772 F.3d 709, 715 (Fed. Cir. 2014), *cert. denied*, 135 S. Ct. 2907 (2015). BBiTV respectfully submits that such a position deviates from this Court’s distinction between “preexisting truths”—which cannot be novel, only newly discovered—and “methods of organizing human activity”—that must be “fundamental” and “long prevalent.” Certiorari is necessary to address this ongoing deviation by the Federal Circuit from this Court’s precedent.

The alleged “abstract idea of determining a price, using organizational and product group hierarchies” identified by *Versata* is neither a “manifestation of nature” nor a “fundamental,” “long prevalent,” or “longstanding” economic practice, and thus cannot be included within the judicially-created “abstract idea” category. In other words, if the method of “determining a price, using organizational and product group hierarchies” was “wholly novel at the time,” it would not fall into the *Alice/Bilski* new category of abstract ideas that are “fundamental” and “long prevalent.” As the Federal Circuit recognized, the invention, a “hierarchical pricing engine,” “used less data than the prior art systems and offered dramatic improvements in performance.” *Versata Software*, 717 F.3d at 1258–59. Thus, BBiTV respectfully submits that

the identification of the alleged “abstract idea” by *Versata*, without regard to its novelty at the time of the invention, was error under an *Alice* framework.

The errors made below should be reversed, as they have already polluted other decisions. For example, the United States District Court for the District of Hawaii relied on the *Versata* decision to find something akin to “using the same hierarchical ordering based on metadata to facilitate the display and locating of video content”—which the court expressly recognized to be a novel concept—to be directed to an abstract idea by comparing it to, *inter alia*, “the broad concept of using organizational and product group hierarchies to determine prices for products and customers” found to be an abstract idea in *Versata*. *BBiTV-TWC*, 2015 U.S. Dist. LEXIS 131726, at *20; *BBiTV-HT*, 2015 U.S. Dist. LEXIS 131729, at *16³ This interpretation of the “abstract idea” category drastically expands the exclusionary principle beyond this Court’s precedent, rather than “tread[ing] carefully” as directed by *Alice*. 134 S. Ct. at 2354.

3. See also, e.g., *Intellectual Ventures I v. Capital One*, No. PWG-14-111, 2015 U.S. Dist. LEXIS 116740, at *20–22 (D. Md. Sept. 2, 2015) (using *Versata* as supporting authority to find patent “directed to the abstract idea of organizing, displaying, and manipulating data related to business documents”), *aff’d*, 792 F.3d 1363,1368 (Fed. Cir. 2015) (also citing *Versata* as supporting precedent); *O2 Media v. Narrative Sci.*, No. 15 C 05129, 2016 U.S. Dist. LEXIS 23320, at *20–21 (N.D. Ill. Feb. 25, 2016) (citing *Versata* in discussion finding patents directed to the abstract idea of “identifying, organizing, and presenting information”).

2. *Versata* Misconstrues *Alice* by Equating Overly-Detailed “Abstractions” with “Abstract Ideas”

Versata also improperly used abstractions of the claims to define the alleged “abstract idea,” thus improperly including substantially more detail into the alleged “abstract idea” than allowed for by this Court’s precedent. However, this overly-detailed alleged “abstract idea” runs afoul this Court’s warning that courts should “tread carefully in construing this exclusionary principle lest it swallow all of patent law.” *Alice*, 134 S. Ct. at 2354; *Mayo*, 132 S. Ct. at 1293. After all, “[a]t some level, ‘all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.’” *Alice*, 134 S. Ct. at 2354 (quoting *Mayo*, 132 S. Ct. at 1293); see also *Diehr*, 450 U.S. at 189 n.12 (“all inventions can be reduced to underlying principles of nature”).

Rather than heed these warnings, *Versata* erred in adopting overly-detailed abstractions of the claims instead of “fundamental,” “long prevalent” and broadly-phrased “methods of organizing human activity” to which the claims purportedly relate. In particular, *Versata* did not simply identify the claims as pertaining to the abstract idea of “determining price,” but instead identified the claims as “directed to the abstract idea of determining a price, using organizational and product group hierarchies.” App. 52a. While “determining price” may be a “fundamental” and “long prevalent” principle, there is no evidence that “determining price, **using organizational and product group hierarchies**” was prevalent prior to the invention. To the contrary, the record reflects that *Versata*’s software was a “breakthrough” that was “very innovative.” 717 F.3d at 1259 (citing J.A. 1304).

The additional detail in *Versata*'s alleged abstract idea also interferes with the two-step patent-eligibility analysis defined in *Alice* and *Mayo*, by allowing for the novel and inventive aspects of the claimed invention to be included in the alleged "abstract idea." When applying step two, the "sufficient additional limitations to transform the nature of any claim into a patent-eligible application of an abstract idea" were not recognized by the Court since they were "inherent" in the Court's improperly defined "abstract idea of determining a price **using organization and product group hierarchies.**" App. 52a. This type of analysis is clearly contrary to the approach outlined in *Alice*, and risks "swallowing" all of patent law.

Likewise, the district court in *BBiTV-HT* and *BBiTV-TWC* erroneously identified something akin to "using the same hierarchical ordering based on metadata to facilitate the display and locating of video content" as an "abstract idea." See *BBiTV-HT*, 2015 U.S. Dist. LEXIS 131729, at *19; *BBiTV-TWC*, 2015 U.S. Dist. LEXIS 131726, at *22.

But defining an alleged "abstract idea" with so much detail (and novel elements) disregards this Court's careful consideration of the scope of this judicially created category of patent-ineligible subject matter. By erroneously including the "novel" aspects, instead of merely the "long standing" aspects into the alleged "abstract idea," the courts removed the aspects of the claim that in step two of the *Alice* analysis would be properly considered as "something more."

If *Versata* or *BBiTV-HT* and *BBiTV-TWC* had recognized the relevant abstract idea to be "determining price" or "delivery of video on demand content" (which

would correspond in level of abstraction to “hedging risk” and “intermediated settlement”), then the inventive abstractions identified by these courts would, by definition, show that the claims were not directed to those broad abstract ideas under step one, and/or would be enough to supply an inventive concept under step two of the *Alice* framework. Cf. *DDR Holdings v. Hotels.com*, 773 F.3d 1245, 1257-59 (Fed. Cir. 2014).

Using overly-detailed “abstract ideas” is not right, not dictated by *Alice*, *Mayo*, *Bilski*, or any other Supreme Court precedent, and is contrary to this Court’s repeated admonition not to allow the judicially created abstract idea exception to statutory patent-eligibility analysis “swallow all of patent law.”

B. The Lower Courts and PTAB Are Also Improperly Applying Step Two of the *Alice* Framework

Alice provided the following two-part framework for determining patent-eligible subject matter under Section 101, as first articulated in *Mayo*:

- (1) Are the claims at issue directed to a patent-ineligible concept?
- (2) If so, what else is there that transforms the abstract idea into a patent-eligible application?

Alice, 134 S. Ct. at 2355 (citing *Mayo*, 132 S. Ct. at 1289).

Versata also improperly applied the second step of the *Alice* framework, in at least two significant ways, as discussed herein.

For step two, *Alice* found the “mere recitation of a generic computer” could not “transform a patent-ineligible abstract idea into a patent-eligible invention.” *Id.* at 2358. *Alice* looked at each of the claim elements separately to reach the conclusion that the “function performed by the computer at each step of the process is ‘purely conventional.’” *Id.* at 2359. This Court then went further and analyzed the claim *as a whole*, reaching the conclusion that when considered “‘as an ordered combination,’ the computer components of petitioner’s method ‘add nothing.’” *Id.*

Here, again, while *Alice* provides some guidance on what is *not* “enough,” it provides little guidance on what *is* sufficient to transform an abstract idea into a patent-eligible application. As one district court noted, “*Alice* failed to answer this: when, if ever, do computer patents survive § 101?” *Cal. Ins. Of Tech. v. Hughes Commc’n.*, 59 F. Supp. 3d 974, 980 (C.D. Cal. 2014).

The lower courts’ constructions of *Alice* have failed to establish a reliable dividing line between claims that are directed to abstract ideas versus practical applications of such ideas and have improperly narrowed the scope of patent-eligibility beyond the limits set forth by this Court.

- 1. *Versata* Improperly Ignores “Inventive” Aspects of the Claimed Invention that Are “Non-Routine” or “Unconventional” Merely Because a Generic Computer Is Used**

Lower courts and the PTAB, including *Versata*, have erred in step two of the analysis by erroneously ignoring

“inventive” aspects of the claimed invention, that are not “routine or conventional,” and to invalidate these patent claims merely because those inventive aspects use a computer. This is error.

For example, in addressing step two in *Versata*, the Federal Circuit considered such inventive aspects of “arranging a hierarchy of organizational and product groups” and “eliminating less restrictive pricing information,” but ultimately determined that the claims lacked “sufficient additional limitations to transform the nature of any claim into a patent-eligible application of an abstract idea.” App. 52a-53a. This was because “the function performed by the computer at each step is purely conventional.” *Id.* Further, when considered as an ordered combination, the Federal Circuit found the claims did not pass step two since the unconventional “organizational and product group hierarchies” were performed by a generic computer. *Id.* This is error.

While *Alice* does stand for the proposition that “the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention,” this means that use of a generic computer itself does not confer patentability; however, use of a computer does not destroy patent-eligibility. *See Alice*, 134 S. Ct. at 2358. *Alice* mandates that the additional elements, even if added by the computer, are relevant and must be considered both separately and as an ordered combination, in step two. *Id.* at 2355. These computer limitations may add the inventive concept required for patent-eligibility. *Cf. id.* at 2357–58 (comparing *Benson*, in which “the computer implementation did not supply the necessary inventive concept,” with *Diehr*, in which the “additional

steps” that included making calculations on a computer did supply the required inventiveness); *DDR*, 773 F.3d at 1258 (finding claims-at-issue patent-eligible because they were directed to a novel solution, using a potentially “well-known” concept, to solve a technology-driven problem).

2. *Versata* Fails to Recognize Technological Improvements that are Effected by the Claims as a Whole, Merely Because a Generic Computer Is Used

Relatedly, *Versata* and others failed to follow this Court’s guidance that all of the additional elements of each claim be considered both individually and “as an ordered combination” to determine whether the additional elements “transform the nature of the claim” into a patent-eligible application. *Alice*, 134 S. Ct. at 2355. Indeed, *Diehr*’s discussion regarding the relationship between novelty under section 102 and patent-eligibility under section 101 was driven by the doctrine that all claim elements must be evaluated as a whole. *Diehr* rejected petitioner’s arguments that if all of the additional elements of the claims-at-issue were old, and the abstract idea must be assumed to be in the prior art, that the claims could not be inventive. *Diehr* explained, under well-established precedent relating to process claims, that:

In determining the eligibility of respondents’ claimed process for patent protection under § 101, their claims must be considered as a whole. It is inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis. This is particularly true in a process claim because

a new combination of steps in a process may be patentable even though all the constituents of the combination were well known and in common use before the combination was made.

450 U.S. at 188.

Thus, “[t]he fact that one or more of the steps in [the claimed] process may not, in isolation, be novel or independently eligible for patent protection [was] irrelevant to the question of whether the claims as a whole recite subject matter eligible for patent protection under § 101.” *Id.* at 193 n.15. Of course, this Court has adhered to this claim-centric rule for patent-eligibility, and continued to do so in *Alice*. See *Alice*, 134 S. Ct. at 2355 n.3 (“patent claims ‘must be considered as a whole’”) (quoting *Diehr*, 450 U.S. at 188); *Mayo*, 132 S. Ct. at 1294 (precedent of this Court “insist[s]” that a claim directed to a natural law “also contain other elements or a combination of elements . . . sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law itself.”); cf. *Warner-Jenkinson v. Hilton Davis Chem.*, 520 U.S. 17, 29 (1997) (“Each element contained in a patent claim is deemed material to defining the scope of the patented invention.”).

By contrast, in *Versata*, the Federal Circuit barely paid lip service to the claims “as an ordered combination” in applying step two of the analysis. Rather than analyzing the patent claims “as a whole,” *Versata* made the conclusory statements that “the components of each claim add nothing that is not already present when the steps are considered separately. Viewed as a whole, the claims simply recite the concept of price determination

by using organizational and product group hierarchies as performed by a generic computer.” App. 53a. Unlike in *Alice* and *Mayo*, *Versata* simply failed to evaluate all of the additional novel and unconventional elements of each claim “as an ordered combination.” In doing so, *Versata* ignored the technical improvements advanced by the claims as a whole. This is error.

This error of stripping elements out of the claim in an *Alice* analysis is far too widespread among the lower courts. In *BBiTV-TWC* and *BBiTV-HT*, the district court’s failure to even reproduce the detailed claim at any point in the opinion exemplifies the tendency among many lower courts to neglect to meaningfully consider all of the limitations of the claims. In *BBiTV-TWC* and *BBiTV-HT*, instead of including the full claims in the opinions, the district court resorted only to “summar[ies],” which the court itself recognized did not “capture all of the precise terms used in the patent itself.” See *BBiTV-HT*, 2015 U.S. Dist. LEXIS 131729, at *15-16, n.12; *BBiTV-TWC*, 2015 U.S. Dist. LEXIS 131726, at *19-20, n.15. Thus, the court could not have considered all of the additional elements of the claim, both separately and as an ordered combination, as dictated by *Alice*.

II. PATENT-ELIGIBILITY OF INVENTIONS IMPLEMENTED BY MODERN TECHNOLOGY IS AN IMPORTANT AND RECURRING ISSUE REQUIRING INPUT FROM THIS COURT

A. Post-*Alice* Decisions Show that Section 101 Is Swallowing Patent Law Despite this Court's Warnings to the Contrary

Since *Bilski*, this Court has repeatedly affirmed that a method or process is not unpatentable simply because it contains an abstract idea, law of nature, or a mathematical algorithm. *See Mayo*, 132 S. Ct. at 1293–94; *Alice*, 134 S. Ct. at 2354 (“an invention is not rendered ineligible for patent simply because it involves an abstract concept.”).

Despite these admonitions, many lower courts and the PTAB, have read the recent guidance in *Alice* as de facto eliminating “business method” patents and effectively banning computer-implemented inventions from the patent system. This is in direct contravention to this Court’s holding that “***courts ‘should not read into the patent laws limitations and conditions which the legislature has not expressed.’***” *Chakrabarty*, 447 U.S. at 308 (emphasis added; citation omitted). It also contradicts *Bilski’s* proclamation that “[a] conclusion that business methods are not patentable in any circumstances would render [federal statute] § 273 meaningless.” 561 U.S. at 607–08. If such were intended, why did this Court in *Alice* bother including step two in its framework? The Court could have stopped once it identified the claim as relating to “an economic practice long prevalent in our system of commerce.” Significantly, it did not.

While some courts have heeded this Court’s admonition that *Alice* does not lead to the conclusion that all computer-implemented claims are directed to abstract ideas,⁴ unfortunately, many others have not followed this guidance, indiscriminately killing computer-implemented patents by ignoring the computer elements in the claims as irrelevant.⁵ As one district court observed, although “intervening precedent [since *Benson* and *Flook*] and Congressional action have demonstrated that software is

4. See, e.g., *DDR*, 773 F.3d at 1255–59; *Core Wireless Licensing S.a.r.l. v. LG Elecs.*, No. 2:14-cv-911-JRG-RSP, 2016 U.S. Dist. LEXIS 35663 (E.D. Tex. Mar. 20, 2016); *Network Congestion Sols. v. U.S. Cellular*, Nos. 14-903-SLR, -904-SLR, 2016 U.S. Dist. LEXIS 36884, at *23–25 (D. Del. Mar. 22, 2016); *Hulu v. iMTX Strategic*, No. CBM2015-00147, Paper 14 at 13–14 (P.T.A.B. Nov. 30, 2015); *Prism Techs. v. T-Mobile USA*, No. 8:12-cv-00124, 2015 U.S. Dist. LEXIS 144537, *9–10 (D. Neb. Sept. 22, 2015); *McRO v. Sega of America*, No. 2:12-cv-10327-GW(FFMx), 2014 U.S. Dist. LEXIS 135267, at *19 (C.D. Cal. Sept. 22, 2014) (“We must be wary of facile arguments that a patent preempts all applications of an idea.”); *Fr. Telecom v. Marvell Semiconductor*, 39 F.Supp.3d 1080, 1094–98 (N.D. Cal. 2014); *Messaging Gateway Solutions v. Amdocs*, No. 1-14-cv-00732, 2015 U.S. Dist. LEXIS 49408, at *14–17 (D. Del. Apr. 15, 2015); *Trading Techs. Int’l v. CQG*, No. 05-cv-4811, 2015 U.S. Dist. LEXIS 22039, at *13–16 (N.D. Ill. Feb. 24, 2015).

5. See, e.g., *OIP Techs. v. Amazon.com*, 788 F.3d 1359, 1362–1363 (Fed. Cir. 2015), *cert. denied*, 136 S. Ct. 701 (2015); *Jericho Sys. v. Axiomatic*, No. 3:14-CV-2281-K, 2015 U.S. Dist. LEXIS 60421, at *13–17 (N.D. Tex. May 7, 2015), *aff’d*, No. 2015-1656, 2016 U.S. App. LEXIS 5341 (Fed. Cir. Mar. 14, 2016); *Cloud Satchel v. Amazon.com*, 76 F. Supp. 3d 553, 561–65 (D. Del. 2014), *aff’d*, Nos. 2015-1261, 2015-1262, 2015 U.S. App. LEXIS 22673 (Fed. Cir. Dec. 17, 2015); *Diet Goal Innovations v. Bravo Media*, 33 F. Supp. 3d 271, 285 (S.D.N.Y. 2014), *aff’d*, No. 2014-1631, 2015 U.S. App. LEXIS 5612 (Fed. Cir. Apr. 8, 2015).

patentable,” “[t]he aftermath of *Alice* tells a different but misleading story about software patentability.” *Enfish v. Microsoft*, 56 F. Supp. 3d 1167, 1172 (C.D. Cal. 2014).

BBiTV agrees with Petitioner and respectfully submits that further clarification is needed to eliminate the pervading confusion as to what constitutes an abstract idea under the Patent Act and Supreme Court jurisprudence.

B. If the Court Does Not Take the Case, Harm Will Continue

It is critical that this Court clarify the guidelines for determining whether computer-implemented claims reciting novel steps constitute abstract ideas. Without such clarification, many lower courts may continue to perceive *Alice* as a *per se* rule against computer-implemented business method patents.

The post-*Alice* environment for computer-implemented inventions is harmful to the U.S. economy and the patent system as a whole. Judge Moore warned in her dissent in *Alice* at the Federal Circuit that the recent jurisprudence was in danger of “decimat[ing] the electronics and software industries” as well as other industries that are built on computer-implemented patent claims. *CLS Bank Int’l v. Alice Corp. Pty.*, 717 F.3d 1269, 1313 n.1 (Fed. Cir. 2013) (Moore, J., dissenting). Unfortunately, her prophecy is coming true.

The importance of computer-implemented inventions to the U.S. economy extends far beyond the importance of the American computer industry alone. Computer-

implemented inventions are critical to the productivity of all sectors of the U.S. economy. Computers power our modern service economy as surely as steam and then internal combustion engines powered the manufacturing sector that drove our economic prosperity in the nineteenth and twentieth centuries. Moreover, computers are now the platforms on which many inventions are built. Thus, computer-implemented inventions must remain patent-eligible as surely as their counterparts in manufacturing enjoyed such protection. Joan Farre-Mensa et al., *The Bright Side of Patents*, USPTO Economic Working Paper No. 2015-5, 31 (Jan. 26, 2016), available at <http://ssrn.com/abstract=2704028> (“patents convey substantial economic benefits on startups . . . [that] are particularly important in the IT sector—an industry in which skepticism towards the beneficial role of patents appears to be particularly intense”).

CONCLUSION

For the reasons set forth herein, BBiTV respectfully urges the Court to grant Versata's Petition and clarify the bounds of patent-eligibility for computer-implemented inventions.

Respectfully submitted,

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