

No. 19-1299

IN THE
Supreme Court of the United States

THE CHAMBERLAIN GROUP, INC.,

Petitioner,

v.

TECHTRONIC INDUSTRIES CO., TECHTRONIC INDUSTRIES
NORTH AMERICA, INC., ONE WORLD TECHNOLOGIES, INC.,
OWT INDUSTRIES, INC., RYOBI TECHNOLOGIES, INC.,

Respondents.

**On Petition for a Writ of Certiorari
to the United States Court of Appeals
for the Federal Circuit**

**BRIEF OF HIGH 5 GAMES, LLC,
AS AMICUS CURIAE IN SUPPORT OF
PETITION FOR WRIT OF CERTIORARI**

Jon Fallon
HIGH 5 GAMES, LLC
One World Trade Ctr.
59th Floor
New York, New York 10007

Teague I. Donahey
HOLLAND & HART LLP
808 West Main Street
Suite 1750
Boise, Idaho 83702

Robert C. Ryan
Counsel of Record
HOLLAND & HART LLP
5441 Kietzke Lane
Reno, Nevada 89511
Tel: (775) 327-3042
rcryan@hollandhart.com

Benjamin N. Simler
HOLLAND & HART LLP
555 17th Street, Suite 3200
Denver, Colorado 80202

QUESTION PRESENTED

Petitioner presented the following Question Presented, with which *Amicus* High 5 Games agrees:

Whether the Federal Circuit improperly expanded § 101's narrow implicit exceptions by failing to properly assess Chamberlain's claims "as a whole," where the claims recite an improvement to a machine and leave ample room for other inventors to apply any underlying abstract principles in different ways.

Amicus High 5 Games submits that an additional question presented is:

Whether the Federal Circuit's application of the two step patent ineligibility test improperly failed to, as required by this Court's prior holdings: (i) limit its "step one" analysis to whether the patent claim at issue is directed to a fundamental building block; (ii) determine in its "step two" analysis whether the patent claim added anything inventive to that same building block, which is required by this Court's previously-announced "bright line" test that narrowly limits patent ineligibility to claims that would tend to stifle rather promote innovation and growth of human knowledge in the Sciences and Useful Arts, as required by the Constitution's Patent and Copyright Clause.

TABLE OF CONTENTS

	Page(s)
QUESTION PRESENTED	i
TABLE OF AUTHORITIES	iii
INTEREST OF <i>AMICUS CURIAE</i>	1
SUMMARY OF ARGUMENT	3
ARGUMENT	5
I. The Patent Eligibility Requirements of Section 101 Are Broad in Scope and Any Exclusionary Principles, Including the So-Called “Implicit Exception” for “Abstract Ideas,” Must Be Narrowly Construed	5
II. The Federal Circuit’s Analysis of Patent Eligibility Runs Afoul of This Court’s Section 101 Precedent in Numerous Ways, Reflecting a Fundamental Misconception of Section 101’s Modest Requirements.....	11
A. Contrary to the Federal Circuit’s Reasoning, Step One of This Court’s <i>Alice</i> Framework Asks Only Whether a Patent Claim Viewed as a Whole Is “Directed To” a Fundamental Building Block; It Is Not Concerned With Individual Claim Elements or any Alleged “Advance” Over the Prior Art	11
B. Contrary to the Federal Circuit’s Reasoning, Step Two of This Court’s <i>Alice</i>	

Framework Considers Whether a Claim’s Limitations, Either Individually or in Combination, Limit the Claim to a Particular Inventive Application, Ensuring That a “Building Block” Is Not Preempted.....	15
III. The Current State of Affairs Is Indeed a “Patent Emergency”	18
CONCLUSION.....	25

TABLE OF AUTHORITIES

	Page(s)
<u>CASES</u>	
<i>A.H. Phillips, Inc. v. Walling</i> , 324 U.S. 490 (1945)	8
<i>Alice Corp. v. CLS Bank Int’l</i> , 573 U.S. 208 (2014)	passim
<i>Ass’n for Molecular Pathology v. Myriad Genetics, Inc.</i> , 569 U.S. 576 (2013)	7
<i>Bilski v. Kappos</i> 561 U.S. 593 (2010)	14
<i>Chamberlain Grp., Inc. v. Techtronic Indus. Co.</i> , 935 F.3d 1341 (2019)	passim
<i>CLS Bank Int’l v. Alice Corp.</i> , 717 F.3d 1269 (Fed. Cir. 2013).....	7, 10
<i>Comm’r of Internal Revenue v. Clark</i> , 489 U.S. 726 (1989)	8
<i>Diamond v. Chakrabarty</i> , 447 U.S. 303 (1980)	6, 7, 8, 17
<i>Diamond v. Diehr</i> , 450 U.S. 175 (1981)	7, 17
<i>Funk Bros. Seed Co. v. Kalo Inoculant Co.</i> , 333 U.S. 127 (1948)	16
<i>Graham v. John Deere Co.</i> , 383 U.S. 1 (1966)	5
<i>J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int’l, Inc.</i> , 534 U.S. 124.....	6

<i>KSR Int'l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007)	18
<i>Le Roy v. Tatham</i> , 55 U.S. 156 (1853)	9, 16, 17
<i>Mayo Collaborative Servs. v. Prometheus Labs., Inc.</i> , 566 U.S. 66 (2012)	passim
<i>Mazer v. Stein</i> , 347 U.S. 201 (1954)	5
<i>Myers v. United States</i> , 272 U.S. 52 (1926)	9
<i>Neilson v. Harford</i> , 151 Eng. Rep. 1266 (Ex. 1841), <i>reprinted in</i> 1 Webster's Patent Cases 295 (1844).....	16

CONSTITUTIONAL PROVISIONS

U.S. Const. art. 1, § 8, cl. 8	5, 16
--------------------------------------	-------

STATUTES

35 U.S.C. § 101	passim
35 U.S.C. § 102	6
35 U.S.C. § 103	6
35 U.S.C. § 112(a)	6
35 U.S.C. § 112(b)	7
35 U.S.C. § 112(f)	7

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Gene Quinn, <i>Director Iancu worries current state of Section 101 'weakens the robustness of our IP system'</i> , IPWatchdog (May 15, 2018), https://www.ipwatchdog.com/2018/05/15/iancu-part-2/	20
Innovation, https://www.aristocrat.com/innovation (last visited July 8, 2020)	23
James E. Malackowski & David I. Wakefield, <i>Venture Investment Grounded in Intellectual Capital: Taking Patents to the Bank</i> , in <i>From Ideas to Assets: Investing Wisely in Intellectual Property</i> 157–77 (Bruce Berman ed., 2002).....	20
Jeffrey A. Lefstin <i>et al.</i> , <i>Final Report of the Berkeley Center for Law & Technology Section 101 Workshop: Addressing Patent Eligibility Challenges</i> , 33 <i>Berkeley Tech. L.J.</i> 551 (2018)	21
Jeremy Doerre, <i>The Implicit Exception to § 101 for Abstract Ideas Should Be Narrowly Construed</i> , IPWatchdog (Aug. 12, 2018), https://www.ipwatchdog.com/2018/08/12/implicit-exception-101-abstract-ideas-should-be-narrowly-construed/	8

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Scientific Games Patent Notice Pursuant To 35 U.S.C. § 287, https://www.scientificgames.com/patents/ (last visited July 8, 2020)	23
Sherry Knowles & Anthony Prosser, <i>Unconstitutional Application of 35 U.S.C. § 101 by the U.S. Supreme Court</i> , 18 J. Marshall Rev. Intell. Prop. L. 144, 148–53 (2018)	8
The State of Patent Eligibility in America: Part I: Hearing Before the Subcomm. on Intellectual Property of the S. Comm. on the Judiciary, 116 Cong. (June 4, 2019) (statement of Adam Mossoff), https://www.judiciary.senate.gov/imo/media/doc/Mossoff%20Testimony.pdf	19, 21
Stephen Haber, <i>Patents and the Wealth of Nations</i> , 23 Geo. Mason L. Rev. 811 (2016)	20
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U.S. Patent No. 7,224,275	12

5 Writings of Thomas Jefferson (H. Washington
ed. 1871)..... 8

INTEREST OF *AMICUS CURIAE*¹

High 5 Games, LLC, has long been the leading developer of automated wager slot games in the U.S. gaming industry and is now also prominent in providing such games and non-wagering “social” games online internationally. High 5 Games was founded in 1995 by its CEO, Anthony Singer, with just two employees. Today, it employs more than 150 people in five offices internationally and has its headquarters on two floors of the World Trade Center in New York City.

High 5 Games’ main source of revenue has always been from its development and licensing of innovative games for entities around the world, such as IGT, Scientific Games (and its current subsidiaries, WMS Games and Bally Technologies), Aristocrat, SEGA, and many casinos. Without U.S. patents to protect its innovative game technologies for limited times, and the licenses thereby required by these leading game manufacturers, High 5 Games’ core innovations would be cannibalized by others without compensation to High 5 Games for its investments and contributions.

Thus, High 5 Games would not exist without U.S. patents to protect its many useful automated game

¹ 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 for its preparation or submission. Petitioner and Respondents have received timely notice of and consented in writing to the filing of this brief.

innovations during the past 25 years. By the end of 2005, High 5 Games had been awarded at least 18 U.S. patents for its innovative game technology.² Today, it has at least 69 such U.S. patents³ and 16 pending U.S. patent applications. But, due to court and patent examiner misinterpretation of this Court's patent eligibility decisions, obtaining patent protections for High 5 Games' automated inventions has become much more difficult, time consuming (by multiple years each), and expensive. High 5 Games believes it has been seriously harmed and will be more threatened by the lower courts' and administrative bodies' misunderstandings of patent eligibility and misapplication of this Court's precedent, which have worsened with time. High 5 Games also believes that it would not have survived the 1990's had the U.S. patenting atmosphere been then as it is today under the patent-hostile approach reflected by the Federal Circuit's opinion here and in many others on the topic.

² U.S. Patent Nos. 6,960,133, 6,935,947, 6,910,962, 6,857,957, 6,893,342, 6,604,998, 6,604,740, 6,371,851, 6,113,102, 6,093,100, 6,080,064, 5,897,436, 5,882,260, 5,836,586, 5,772,506, 5,755,621, 5,655,773, and 5,580,059.

³ *See supra* note 2, plus U.S. Patent Nos. 10,600,277, 10,255,752, 10,223,861, 10,115,272, 10,109,147, 9,734,655, 9,679,434, 9,558,609, 9,542,808, 9,412,226, 9,262,892, 9,251,667, 9,129,479, 9,022,852, 9,005,006, 8,986,101, 8,974,288, 8,979,633, 8,851,970, 8,753,191, 8,734,223, 8,641,510, 8,851,975, 8,382,574, 8,333,649, 8,292,724, 8,118,657, 8,083,581, 8,052,514, 8,021,224, 7,980,946, 7,789,753, 7,887,407, 7,789,750, 7,887,407, 7,837,553, 7,785,191, 7,758,414, 7,530,894, 7,252,589, 7,749,064, 7,749,072, 7,749,064, 7,744,458, 7,431,647, 7,722,457, 7,357,716, 7,278,914, 7,252,589, 7,192,347, and 7,175,179.

SUMMARY OF ARGUMENT

The Court should grant the petition for *certiorari*. The Federal Circuit’s decision in this case, as do many other Federal Circuit and lower court decisions, failed to recognize the limited and “bright-line” nature of this Court’s holding in *Alice Corporation Pty. Ltd. v. CLS Bank International*, 573 U.S. 208 (2014). In recognition of the broad scope of patent eligibility under 35 U.S.C. § 101 (“Section 101”), *Alice* held that, when a claim is directed to a fundamental “building block” idea—such as the fundamental economic concept of risk hedging—there must be one or more additional features in the claim to ensure that the claim covers an inventive application of that “building block.” *See* 573 U.S. at 217. If no such additional features exist, the claim effectively covers nothing more than the unpatentable “building block” itself. That is not permitted because patenting a “building block” would stifle rather than promote innovation, contrary to the Constitutional purpose of the patent laws. *Id.* In contrast, when a patent claim is directed to an inventive application of a “building block,” it is “useful,” and therefore is eligible for patent protection. *See id.*; 35 U.S.C. § 101.

The Federal Circuit, however, has repeatedly ignored the Court’s reasoning and holdings in *Alice*. Rather than narrowly apply *Alice*’s patent ineligibility framework as directed to achieve its expressed aims, the Federal Circuit has erroneously used *Alice* as the basis to vastly expand those limited recognized implicit exceptions to the broad scope of patent eligibility, adopting a vague and often incomprehensible analysis that has resulted in

invalidation or rejection of legions of statutorily eligible patents and patent applications. This Court's intervention is therefore urgently required to reverse and prevent further harm to the U.S. patent regime and the economic engine it drives.

ARGUMENT

I. **The Patent Eligibility Requirements of Section 101 Are Broad in Scope and Any Exclusionary Principles, Including the So-Called “Implicit Exception” for “Abstract Ideas,” Must Be Narrowly Construed**

The Constitutionally-directed purpose of the U.S. patent system is “[t]o promote the Progress of Science and the useful Arts.” U.S. Const. art. 1, § 8, cl. 8 (the “Patent and Copyright Clause”). “The economic philosophy behind th[is] clause empowering Congress to grant patents ... is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare ...” *Mazer v. Stein*, 347 U.S. 201, 219 (1954).

The clause is both a grant of power and a limitation.... Innovation, advancement, and things which add to the sum of useful knowledge are inherent requisites in a patent system which by constitutional command must “promote the Progress of ... useful Arts.” This is the standard expressed in the Constitution, and it may not be ignored.

Graham v. John Deere Co., 383 U.S. 1, 5–6 (1966).

In fulfilling the “constitutional command” to incentivize “[i]nnovation, advancement, and things which add to the sum of useful knowledge,” *id.* at 6, Congress enacted the Patent Act of 1952, which establishes what is patent eligible in expansive terms. *See* 35 U.S.C. § 101. Section 101 states:

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

On its face, Section 101 defines patent-eligibility extremely broadly. *See Diamond v. Chakrabarty*, 447 U.S. 303, 315 (1980) (“The subject-matter provisions of the patent law have been cast in broad terms to fulfill the constitutional and statutory goal of promoting ‘the Progress of Science and the useful Arts’ with all that means for the social and economic benefits envisioned by Jefferson.”); *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int’l, Inc.*, 534 U.S. 124, 130, 135 (Section 101 is “extremely broad” and is “designed to encompass new and unforeseen inventions”). In short: “Congress intended statutory subject matter to ‘include anything under the sun that is made by man.’” *Chakrabarty*, 447 U.S. at 309 (citations omitted).

Importantly, the threshold question of patent subject matter *eligibility* under Section 101 is different than the separate question of whether a claimed invention will ultimately be *patentable*. *See* 35 U.S.C. § 101 (making patentability “subject to the conditions and requirements of this title”). Once subject matter *eligibility* is established, *patentability* is determined by other provisions of the Patent Laws such as, for example: (i) 35 U.S.C. § 102 (novelty); (ii) 35 U.S.C. § 103 (nonobviousness); (iii) 35 U.S.C. § 112(a) (adequate written description of the invention in the patent specification and enablement

of the invention); (iv) 35 U.S.C. § 112(b) (adequate claims); and (v) 35 U.S.C. § 112(f) (for claims drafted in functional terms, adequate description of structure in the patent specification). Thus, while a patent subject matter eligibility finding under Section 101 opens the door, “those that gain entry still must surmount various substantive and procedural hurdles that stand between patent eligibility and a valid patent.” *CLS Bank Int’l v. Alice Corp.*, 717 F.3d 1269, 1276 (Fed. Cir. 2013) (Lourie, J., concurring), citing *Diamond v. Diehr*, 450 U.S. 175, 191 (1981).

While Section 101 is extremely broad in scope, courts necessarily have grappled with issues at the statute’s peripheral bounds. This Court has determined, as a matter of principle, that “[l]aws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice*, 573 U.S. at 216 (quoting *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)). But the Court necessarily applies these exceptions narrowly and with caution. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012) (“too broad an interpretation of this exclusionary principle [under § 101] could eviscerate patent law”); *Alice*, 573 U.S. at 217 (“we tread carefully in construing this exclusionary principle lest it swallow all of patent law”).

Indeed, a strict and narrow application of these exceptions to patent eligibility is mandated by this Court’s jurisprudence, by the Constitution, and by the Patent Act. Given the “general statement of policy” underlying Section 101—namely that “anything under the sun that is made by man” is patentable, *Chakrabarty*, 447 U.S. at 309—the courts are to “read

[any] exception[s] narrowly in order to preserve the primary operation of the provision.” *Comm’r of Internal Revenue v. Clark*, 489 U.S. 726, 739 (1989); see also Jeremy Doerre, *The Implicit Exception to § 101 for Abstract Ideas Should Be Narrowly Construed*, IPWatchdog (Aug. 12, 2018), <https://www.ipwatchdog.com/2018/08/12/implicit-exception-101-abstract-ideas-should-be-narrowly-construed/> (“[T]he implicit statutory exception for abstract ideas should be construed ‘narrowly in order to preserve the primary operation of the provision,’ as to do otherwise would risk ‘frustrat[ing] the announced will of the people.” (quoting *Clark*, 489 U.S. at 739 & *A.H. Phillips, Inc. v. Walling*, 324 U.S. 490, 493 (1945))).

The broad scope of subject matter eligibility, and the narrowness of its exceptions, traces to the Framers themselves, who urged that “ingenuity should receive a liberal encouragement.” *Chakrabarty*, 447 U.S. at 308–09 (quoting 5 Writings of Thomas Jefferson 75–76 (H. Washington ed. 1871)). See also *id.* (“The Patent Act of 1793, authored by Thomas Jefferson, defined statutory subject matter as ‘any new and useful art, machine, manufacture, or composition of matter or any new or useful improvement [thereof].’ ... Subsequent patent statutes ... employed this same broad language. In 1952, ... Congress largely left Jefferson’s language intact.” (insertion in original) (internal citations omitted)); Sherry Knowles & Anthony Prosser, *Unconstitutional Application of 35 U.S.C. § 101 by the U.S. Supreme Court*, 18 J. Marshall Rev. Intell. Prop. L. 144, 148–53 (2018) (tracing patent eligibility statutes and related legislative history from the

Patent Act of 1790 through 2011). “This Court has repeatedly laid down the principle that a contemporaneous legislative exposition of the Constitution when the founders of our Government and framers of our Constitution were actively participating in public affairs, acquiesced in for a long term of years, fixes the construction to be given its provisions.” *Myers v. United States*, 272 U.S. 52, 175 (1926) (collecting cases).

Patent claims that on their face claim only an “abstract idea” without more have long been patent ineligible. *See, e.g., Le Roy v. Tatham*, 55 U.S. 156, 175 (1853) (“A principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.”). In *Alice*, however, this Court addressed a patent that, on its face, claimed more than a mere abstract “principle”; there, the patent claimed a “computer-implemented scheme for mitigating ‘settlement risk.’” *Alice*, 573 U.S. at 212. The Court confirmed that the “abstract idea” exception underlying Section 101 is narrow and articulated a two-step analysis for determining whether such a claim is patent eligible under Section 101. *Id.* at 217–18. “[T]he concern that [drove]” the Section 101 eligibility analysis for the claims in issue in *Alice* was that a patent holder should not be permitted to “[m]onopoliz[e]” the “basic tools of scientific and technological work” and the fundamental “building blocks of human ingenuity.” *Id.* at 216 (internal quotations and citations omitted). Accordingly, the Court instructed that such claim is “directed to” a patent-ineligible concept when it recites one of those “building blocks”—such as “risk

hedging,” which is a “fundamental economic practice”—in a way that potentially places the “building block” at risk of preemption. *See id.* at 217, 219–20. If, however, the claim is not directed to such a fundamental building block, the inquiry under *Alice* is over. *Id.* at 216–17.

If a claim is directed to a fundamental “building block,” then the inquiry proceeds to step two. *Id.* In this second step, the analysis considers the claim elements, both individually and as an ordered combination, to determine whether there is a separate “inventive concept” sufficient to “transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo*, 566 U.S. at 79). In *Alice*, the Court found that the claims did nothing more than recite the abstract building block idea of risk hedging and state “apply it” using an “unspecified” and “wholly generic computer implementation,” with computers that are now “ubiquit[ous].” *Alice*, 573 U.S. at 223, 224, 226. The claims lacked “*any* express language to define the computer’s participation.” *Id.* at 225 (quoting *CLS Bank*, 717 F.3d at 1286 (Lourie, J., concurring) (emphasis in original)). For these reasons, the claims in *Alice* were held patent ineligible.

Taken together, the two steps described in *Alice* are intended to provide a “bright-line” analysis that is an “easily administered proxy for the underlying ‘building block’ concern.” *Mayo*, 566 U.S. at 89.

- II. The Federal Circuit’s Analysis of Patent Eligibility Runs Afoul of This Court’s Section 101 Precedent in Numerous Ways, Reflecting a Fundamental Misconception of Section 101’s Modest Requirements**
- A. Contrary to the Federal Circuit’s Reasoning, Step One of This Court’s *Alice* Framework Asks Only Whether a Patent Claim Viewed as a Whole Is “Directed To” a Fundamental Building Block; It Is Not Concerned With Individual Claim Elements or any Alleged “Advance” Over the Prior Art**

The representative patent claim at issue in the present case reads as follows:

1. A movable barrier operator comprising:

a controller having a plurality of potential operational status conditions defined, at least in part, by a plurality of operating states;

a movable barrier interface that is operably coupled to the controller;

a wireless status condition data transmitter that is operably coupled to the controller, wherein the wireless status condition data transmitter transmits a status condition signal that:

corresponds to a present operational status condition defined, at least in part, by at least

two operating states from the plurality of operating states; and

comprises an identifier that is at least relatively unique to the movable barrier operator, such that the status condition signal substantially uniquely identifies the movable barrier operator.

Chamberlain Grp., Inc. v. Techtronic Indus. Co., 935 F.3d 1341, 1345 (2019) (quoting U.S. Patent No. 7,224,275 at claim 1).

The Federal Circuit began its analysis of this claim with the understanding that *Alice* step one requires a court to “look at the focus of the claimed advance over the prior art.” *Id.* at 1346. The court then purported to determine, based solely on statements contained in the specification, that the only “advance” over the prior art was “[w]irelessly communicating status information.” *Id.* The court then determined that the claim was “directed to” the “broad concept of communicating information wirelessly,” which the court deemed an “abstract idea.” *Id.* This analysis departs from Section 101’s broad scope and turns this Court’s precedent on its head.

Alice step one provides a critical initial filter ensuring that only claims “directed to” fundamental “building blocks” would be subjected to the more probing step two analysis. *See Alice*, 573 U.S. at 217. It is a limitation on, not an expansion of, the narrow exceptions to Section 101’s applicability. Here, however, the Federal Circuit’s step one analysis did not even address whether a fundamental “building

block” is present in the claims, nor did it consider whether the claims at issue are otherwise directed to a narrow idea class that would “tend to impede innovation more than would tend to promote it.” *Id.* at 216. Instead, the Federal Circuit interpreted step one as requiring a court to search a claim in order to find something somewhere that is arguably an “abstract idea” in an unrestricted sense. *See Chamberlain*, 935 F.3d at 1346–48. This has the perverse result of ensuring that almost any claim can satisfy step one if that is the desired outcome.

The correct analysis, as expressly applied in *Alice*, is to determine whether the claims are “are directed to” (or “drawn to”) a fundamental “building block.” *See Alice*, 573 U.S. at 216–17; *see also Mayo*, 566 U.S. at 89 (describing two-step analysis as providing a “bright-line ... proxy for the underlying ‘building block’ concern.”). If it is not, then there is no need to proceed any further with step two of the *Alice* analysis because there is no risk of “building block” preemption. Although the Federal Circuit in this case purported to follow the reasoning and holdings of *Alice*, it did not mention or apply this critical filter from *Alice* step one. *See Chamberlain*, 935 F.3d at 1346–48.

Instead, the Federal Circuit only held that “the broad concept of communicating information wirelessly, without more, is an abstract idea.” *Id.* at 1347. This holding was problematic on several levels.

First, it was inconsistent with the Federal Circuit’s prior determination that “claim 1 is directed to wirelessly communicating *status information about a*

system.” *Id.* at 1346 (emphasis added). Thus, the Federal Circuit decision modified (and broadened) its characterization of the identified “abstract idea” as it went along. Under no stretch of the imagination could “wirelessly communicating status information about a system,” much less the claimed “movable barrier operator,” be construed to be an abstract idea rather than a physical process and apparatus, respectively, or the kind of fundamental “building block” idea that concerned the Court in *Alice* and was also at issue in *Bilski v. Kappos*, 561 U.S. 593 (2010). *Alice*, 573 U.S. at 219–21.

Second, to the extent the Federal Circuit’s finding might be construed as an implicit finding that “communicating information wirelessly” is a fundamental “building block,” any such finding would have rendered its step two analysis illogical. Under step two, to find the claim patent ineligible under Section 101, the Federal Circuit would have had to have found that the claims are nothing more than a “drafting effort designed to monopolize” a building block, *Alice*, 573 U.S. at 221—*i.e.*, in this case the physical process, not merely an idea, of “communicating information wirelessly.” But the claims on their face obviously do not threaten, even remotely, to preempt “communicating information wirelessly” or “wirelessly communicating status information about a system”). The patent claims at issue are directed only to a “movable barrier operator” (*i.e.*, a garage door or gate opener) with multiple specified hardware elements and capabilities.

B. Contrary to the Federal Circuit’s Reasoning, Step Two of This Court’s *Alice* Framework Considers Whether a Claim’s Limitations, Either Individually or in Combination, Limit the Claim to a Particular Inventive Application, Ensuring That a “Building Block” Is Not Preempted

At step two, the Federal Circuit purported to conduct the search for an “inventive concept.” *Chamberlain*, 935 F.3d at 1348–49. In so doing, the court found that the claims were patent ineligible using the following reasoning: (1) “wireless transmission is the only aspect of the claims that CGI points to as allegedly inventive over the prior art”; (2) “transmitting information wirelessly was conventional at the time the patent was filed and could be performed with off-the-shelf technology”; and in any event (3) “[w]ireless communication cannot be an inventive concept here, because it is the abstract idea that the claims are directed to.” *Id.* at 1349. This analysis is contrary to this Court’s directives and threatens the existence of every issued patent.

First and foremost, the step two search for an “inventive concept” is merely a search for something in the claim transforming what otherwise would be a claim encompassing a fundamental “building block” into “an *inventive application*” of the idea. *Alice*, 573 U.S. at 223 (emphasis added) (quoting *Mayo*, 566 U.S. at 81). The question is: is the claim a mere “drafting effort designed to monopolize” or preempt every way of using a fundamental “building block,” thereby stifling rather than stimulating innovation contrary

to the Constitution's Patent and Copyright Clause? *Alice*, 573 U.S. at 216. Put another way, does the claim recite a fundamental "building block" and, in practical effect, merely state "apply it"? *Id.* at 221. Or is there something more?

A search for an inventive concept is thus a search for "additional features," *id.* at 221, beyond the "building block" itself that "limit the claim to a particular application." *Mayo*, 566 U.S. at 81. And all that is required to satisfy step two is something more than the mere directive to use "conventional steps, specified at a high level of generality," such as "apply [the building block] with a computer," preempting the building block without meaningful limitation. *Alice*, 573 U.S. at 222–23; compare *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 133 (1948) (Frankfurter, J., concurring) ("[T]he application of the law of nature to a new and useful end' may readily validate" a claim's patent eligibility."); *Le Roy*, 55 U.S. at 175 ("[T]he invention is not in discovering the [fundamental truths], but in applying them to useful objects[w]hether the machinery used be novel, or consist of a new combination of parts known."); *Neilson v. Harford*, 151 Eng. Rep. 1266, 1273 (Ex. 1841), *reprinted in* 1 Webster's Patent Cases 295, 371 (1844) ("[A]fter full consideration, we think that the plaintiff does not merely claim a principle, but a machine embodying a principle, and a very valuable one."). Thus, step two, like step one, is limited in purpose and applied consistently with the Constitution's Patent and Copyright Clause and the expansive scope of Section 101, which directs that "statutory subject matter [is intended] to 'include

anything under the sun that is made by man.” *Chakrabarty*, 447 U.S. at 309 (citations omitted).

Here, however, the Federal Circuit interpreted this Court’s use of the term “inventive concept” in step two as an invitation to focus its attention on the one allegedly novel element of the claim. *Chamberlain*, 935 F.3d at 1349. This was error as well. To determine whether there is the requisite “inventive concept” at step two, the Federal Circuit was required to have considered *all* of the elements of the claim, both individually *and* as an ordered combination. *Alice*, 573 U.S. at 217. This Court has instructed that “[i]t is inappropriate” for purposes of a patent-eligibility inquiry “to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis.” *Diehr*, 450 U.S. at 188. This is because “a new combination ... may be patentable even though all of the constituents of the combination were well known and in common use before the combination was made.” *Id.*; *see also Le Roy*, 55 U.S. at 175 (“A patent will be good, though the subject of the patent consists in the discovery of a great, general, and most comprehensive principle in science or law of nature, if that principle is ... applied to any special purpose, so as thereby to effectuate a practical result and benefit not previously attained.” (quotation marks and citation omitted)).

Yet the Federal Circuit did exactly what this Court instructed should not be done: it dissected the claims into old (“conventional”) and new (“inventive”) elements and then concentrated exclusively on the “aspect of the claim[] that ... [is] allegedly inventive over the prior art”—“wireless transmission”—while

ignoring the many other elements present in the claim providing a new garage door opener, sensing, and wireless information communication system. *Chamberlain*, 935 F.3d at 1349.

III. The Current State of Affairs Is Indeed a “Patent Emergency”

Although the Federal Circuit’s opinion in this case is not the first time its Section 101 decisions have caused confusion and concern in the legal community, the decision in *Chamberlain*, focusing on only one aspect of much narrower claims, breaks new ground and, as the Petitioner in this case has stated, represents a true “patent emergency.” Pet. at 1.

The Federal Circuit’s analysis here not only departs from this Court’s precedent, it literally puts every patent claim at risk. “At some level, ‘all inventions ... embody, use, reflect, rest upon, or apply ... abstract ideas.’” *Alice*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 71). And “inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418–19 (2007). If, as the Federal Circuit held in *Chamberlain*, all that is required to find a claim ineligible under Section 101 is (1) the existence of one claim element that can be characterized as somehow “abstract,” and (2) a finding that the other claim elements should be ignored because each independently was known in the art and could thus be described as “conventional,” then patent claims directed to new, useful, and nonobvious combinations

of prior art elements often would not have a separate “inventive concept” and survive an eligibility analysis.

This is not mere hyperbole. Even before *Chamberlain*, the Federal Circuit’s rate of invalidating patent claims challenged on Section 101 grounds was 87.5% from July 2014 through June 2018, and the lower courts and other agencies and tribunals bound to follow the Federal Circuit’s lead have followed suit, with “examination units at the USPTO for inventions in e-commerce, business cryptology, and healthcare who were rejecting applications on the basis of the *Alice-Mayo* framework at rates *well over 80%* or *over 90%* in 2017 and in the first quarter of 2018.” The State of Patent Eligibility in America: Part I: Hearing Before the Subcomm. on Intellectual Property of the S. Comm. on the Judiciary, 116 Cong. (June 4, 2019) (statement of Adam Mossof), <https://www.judiciary.senate.gov/imo/media/doc/Mossoff%20Testimony.pdf> at 4–7 (emphasis added). Such statistics are alarming to say the least.

Given this devastating reality, and given the Federal Circuit’s now even more tortured eligibility analysis in *Chamberlain*, a course correction has become critical for the nation at large. Historically, the robustness of America’s patent system has been at the heart of her economic and military prowess, driving advances in technology and scholarship across industries. *See, e.g.*, B. Zorina Khan, *Democratization of Invention: Patents & Copyrights in Am. Econ. Dev. 1790–1920* (Cambridge Univ. Press 2005) (detailing the key role that reliable and effective property rights in patents have served in spurring markets and

economic growth in the U.S.); Stephen Haber, *Patents and the Wealth of Nations*, 23 Geo. Mason L. Rev. 811 (2016) (surveying historical evidence and economic studies confirming that patents are a key factor in successful innovation economies).

As USPTO Director Iancu has recounted:

[I]n order to incentivize American innovation whether it's artificial intelligence, DNA processing, or anything else we need to have a robust predictable reliable intellectual property system... I do worry that the current state of Section 101 in patentable subject matter weakens the robustness of our IP system ... And if industry cannot predict in a relatively reliable way whether their investments will be protected ... that will result in less investment, less growth, fewer jobs created ...

Gene Quinn, *Director Iancu worries current state of Section 101 'weakens the robustness of our IP system'*, IPWatchdog (May 15, 2018), <https://www.ipwatchdog.com/2018/05/15/iancu-part-2/>.

Indeed, investment decisions, business valuations, and research and development—especially for startup ventures and in areas of emerging technology—are often staked on the promise of the patent system's limited exclusion rights given in exchange for innovative contributions to society writ large. *See, e.g., id.; see also* James E. Malackowski & David I. Wakefield, *Venture Investment Grounded in Intellectual Capital: Taking Patents to the Bank, in From Ideas to Assets: Investing Wisely in Intellectual*

Property 157–77 (Bruce Berman ed., 2002) (innovators often are undercapitalized, but their patents can serve as collateral for investors, allowing both the innovator and investor to hedge against total failure).

In light of the Federal Circuit’s inconsistent, broad, and patent-hostile application of Section 101 ineligibility analysis, it is unsurprising that existing investments across all industries are seen as threatened while incentives to invest in further innovation have eroded. *See, e.g.*, Jeffrey A. Lefstin *et al.*, *Final Report of the Berkeley Center for Law & Technology Section 101 Workshop: Addressing Patent Eligibility Challenges*, 33 Berkeley Tech. L.J. 551, 581–91 (2018). Particularly as applied by the Federal Circuit:

The *Alice-Mayo* framework has created a tremendous amount of uncertainty ... [and] has had a negative impact on both inventors and the companies working in the innovation industries that invest millions of dollars in creating the new products and services that drive economic growth, job creation and higher standards of living. [This] is undermining the longstanding competitive advantage by the U.S. in the world in securing reliable and effective patent rights.... China and European countries are now the ones forging ahead and securing reliable and effective patents in innovation that the U.S. no longer protects

Mossof, *supra*, at 2; *see also* Steve Brachman, *America’s largest tech firms acknowledge plenty of*

issues with the current U.S. patent system, IPWatchdog (May 24, 2017), <https://www.ipwatchdog.com/2017/05/24/americas-largest-tech-firms-issues-u-s-patent-system/> (“This uncertainty ... is underscored by the 2017 U.S. Chamber of Commerce Global IP Index report, in which the United States took 10th place in terms of patents, related rights and limitations In each of the previous four editions of this report, the United States always took the top ranking ...”). The last time that the United States faced such a crisis of uncertainty around the law of patent eligibility, “[t]he resulting cut-off of venture financing forced many technology start-ups into bankruptcy. Their patents were scooped up at bargain prices by patent assertion entities, resulting in a flood of patent assertions.” Peter S. Menell & Jeffrey A. Lefstin, *Reforming Patent Eligibility: Supplementary Statement of Professors Jeffrey A. Lefstin and Peter S. Menell*, U.C. Hastings L. Res. Paper No. 336 (June 4, 2019), at 4–5, available at <https://ssrn.com/abstract=3399499>.

High 5 Games and others in today’s software and game industries are directly threatened by the Federal Circuit’s alarming expansion of this Court’s Section 101 jurisprudence. High 5 Games relies upon the patent system to protect its proprietary technologies, license others, and attract and support investment. Only through a strong patent system that protects High 5 Game’s innovations can it continue to invest in new technologies and employ its over 150 employees and more through further innovation and growth of its business.

More specifically, High 5 Game's business and the patents for which it correspondingly applies are largely directed to automated games and game technology. Indeed, the patentability of automated games and game technology is of critical importance throughout the gaming industry. For example:

- As explained above, High 5 Games holds at least 69 U.S. patents and 16 pending U.S. patent applications for automated games and gaming technology, *see* notes 2 & 3, *supra*;
- High 5 licensee and competitor IGT holds thousands of patents for games and gaming technology, *see* Brief of *Amicus Curiae* IGT, at 1, *Trading Techs. Int'l, Inc. v. IBG, LLC*, No. 19-353 (2019), *cert. denied*, 140 S. Ct. 954 (2020);
- High 5 licensee and competitor Scientific Games holds approximately 150 patents for games and gaming technology, *see* Scientific Games Patent Notice Pursuant To 35 U.S.C. § 287, <https://www.scientificgames.com/patents/> (last visited July 8, 2020);
- High 5 licensee and competitor Aristocrat Technologies Australia Pty Ltd holds over 1,200 patents for games and gaming technology, *see* Innovation, <https://www.aristocrat.com/innovation> (last visited July 8, 2020).

All of this patenting activity demonstrates how the modern gaming industry has become computer and software-centric, as is also true for the telecom, data center, air traffic control, security, and myriad other industries and major aspects of myriad others. In addition, games in the gaming industry are most

commonly provided in conjunction other substantial automated systems, such as those providing central system control and monitoring of games, monetary control and auditing, player tracking and rewards systems, and online game delivery systems and apps.

Accordingly, the Federal Circuit's misunderstanding and improper expansion and broad application of Section 101's narrow "exceptions" has caused and threatens to further cause significant harm to High 5 Games and U.S. industries generally. Absent this Court's intervention, the same erroneous reasoning will almost certainly be employed again against patent claims involving automation and other technologies and useful arts that do not threaten to monopolize any building blocks. Unfortunately, given the Federal Circuit's alarming and continued expansive departure from this Court's precedent and Congress's intent, only this Court can correct the course, before more damage is done to innovation and the expansion of human knowledge in the sciences and useful arts.

CONCLUSION

The unbridled analytical framework of the decision below is disastrous for the future of this country's innovation economy. The decision fundamentally ignores the Constitution's directive and Congress's and the Framers' expressed intent in enacting laws embracing a policy of expansive subject matter eligibility. It ignores this Court's oft-repeated interpretations and warnings that exceptions to subject matter eligibility must be narrowly and strictly construed to promote the "Progress of Science and the Useful Arts."

To that end and for all the reasons set forth above and in the Petition, Amicus High 5 Games requests that the Court grant the Petition and reverse the Federal Circuit's decision including because (i) the two step ineligibility test applied in *Alice* requires that the claim in issue must be directed to a building block idea and not add anything further inventive so that as a practical matter the claim preempts the building block and (ii) the claimed garage door opener, sensor, and wireless communications system neither recites such a building block idea nor comes remotely close to preempting a building block idea. As many courts, administrative bodies, and other tribunals throughout the nation are bound to follow the Federal Circuit's lead, this Court should now step in to correct the Federal Circuit's miscomprehension and misapplication of this Court's seriously consequential precedent.

Respectfully submitted,



Robert C. Ryan
Counsel of Record
HOLLAND & HART LLP
5441 Kietzke Lane
Reno, Nevada 89511
Tel: (775) 327-3042
rcryan@hollandhart.com

Jon Fallon
HIGH 5 GAMES, LLC
One World Trade Ctr.
59th Floor
New York, New York
10007

Teague I. Donahey
HOLLAND & HART LLP
808 West Main Street
Suite 1750
Boise, Idaho 83702

Benjamin N. Simler
HOLLAND & HART LLP
555 17th Street, Suite 3200
Denver, Colorado 80202

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