#### IN THE

## Supreme Court of the United States

#### KSR INTERNATIONAL CO.,

Petitioner,

-against-

TELEFLEX INC. and TECHNOLOGY HOLDING CO.,

Respondents.

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

## REPLY BRIEF FOR PETITIONER

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After misstating the Question Presented, the Respondents (i) misstate the District Court's holding, (ii) misstate the factual record of this case, (iii) misstate the arguments of the Solicitor General, (iv) misstate this Court's test of the validity of combination patents, and (v) misstate the judgment relief that can and should be granted to Petitioner in this case. Each of these five points deserves brief initial attention.

First, contrary to Respondents' assertion, it is not true that "the district court held the patent invalid." Resp. Br. at 1 (emphasis added). As Petitioner has emphasized (Pet. Br. at 9 & n.8), the District Court held only that claim 4 of the Engelgau patent is invalid. Reversal of the judgment below would leave intact unasserted claims 1-3 of the Engelgau patent, which describe the alleged invention more specifically than does claim 4.

Second, Respondents' statement of the case is filled with non-record references to "design challenges" that supposedly were faced by Mr. Engelgau. Resp. Br. at 3-4. Besides being improperly presented here for the first time, these non-record references are wholly irrelevant to the validity of claim 4 of the Engelgau patent, whose broad language is in no way limited to adjustable pedal assemblies that provide for any particular "feel," that meet any particular "tolerance," or that fit into any particular vehicle whose "footwell space" is "unusually restricted." *Id*.

Third, the Solicitor General and the PTO have told this Court that claim 4 of the Engelgau patent is invalid and should never have been allowed by the PTO, based on exactly the same theory and combination of references that Petitioner has relied on in this case from the beginning. See SG Br. at 27-29 & n.15 ("Petitioner has supplied an animation that helpfully illustrates that point."). A copy of the animation cited in the Solicitor General's Brief is attached as Appendix A to this Reply Brief. Respondents' assertion that the

Solicitor General has purportedly advanced some "new theory of obviousness" (Resp. Br. at 13, 48, 50) is simply wrong.

Fourth, Respondents misstate and mischaracterize Petitioner's position as supposedly advocating "a very restrictive 'synergy' standard." Resp. Br. at 12. In fact, throughout this litigation. Petitioner has cited and relied on this Court's "test of the validity of combination patents." Sakraida v. Ag Pro, Inc., 425 U.S. 273, 282 (1976) (quoting Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 60 (1969)). See, e.g., Pet. Br. at 43. That "test." sometimes referred to as an "aggregation" rule, is grounded in numerous precedents of this Court spanning more than a century. See Pet. Br. at 4-5, 20-23 & n.17. In Anderson's-Black Rock, the very question presented was whether "the holding on the matter of aggregations in patents in Lincoln Engineering Co. v. Stewart-Warner Corp., 303 U.S. 545, is still the law." The answer was an emphatic "yes." See Anderson's-Black Rock, 396 U.S. at 60-61. Prior to the grant of certiorari in this case, it was widely recognized that the Federal Circuit, "[i]n its early decisions, essentially repudiated the holdings of Anderson's-Black Rock and Sakraida." Martin J. Adelman, et al., CASES & MATERIALS ON PATENT LAW 345 (2d ed. 2003). (This leading patent law casebook is co-authored by Judge Randall R. Rader who currently sits on the Federal Circuit.) Even now Respondents do not attempt to defend the validity of claim 4 of the Engelgau patent under this Court's "test of the validity of combination patents," Sakraida, 425 U.S. at 282 (quoting Anderson's-Black Rock, 396 U.S. at 60), presumably because the claim is so clearly invalid under that test.

Fifth, Respondents falsely state that Petitioner supposedly "has chosen not to challenge the court of appeals' evaluation of the summary judgment record in this case." Resp. Br. at 46. In fact, Petitioner's opening brief to this Court expressly argued that "[u]nder this Court's precedents, the District Court's award of summary judgment was clearly correct" (Pet. Br. at 16-17), and that the contrary judgment of the Federal Circuit below "should be

<sup>&</sup>lt;sup>1</sup> The Solicitor General supported a grant of *certiorari* in this case in part because Respondents' opposition to summary judgment "did not dispute the core factual record relevant to this Court's review of the court of appeals' test." SG Br. at 19 (Petition Stage, filed May 2006).

<sup>&</sup>lt;sup>2</sup> Petition for a Writ of Certiorari to the United States Court of Appeals for the Fourth Circuit in Case No. 45 (filed Feb. 4, 1969) at 2.

reversed." (Id. at 17, 50.) Further, this Court "reviews judgments, not opinions." Chevron, U.S.A., Inc. v. Natural Res. Def. Council, 467 U.S. 837, 842 (1984). Under first principles of appellate procedure, to decide this case, the Court "must determine whether the Court of Appeals' legal error resulted in an erroneous judgment." Id. (emphasis added). This point is plainly reflected throughout Petitioner's briefs, beginning with the very first sentence in the Petition for Certiorari, which requested a "writ of certiorari to review the judgment of [the Court of Appeals] entered in this action." Pet. for Cert. at 1 (emphasis added).

It should not escape the Court's attention what the Respondents are trying to do in this Court. By filling their Brief with non-record references and attempting, for the first time, to question a detail of Petitioner's animation evidence that was totally undisputed below. Respondents seek to avoid application of this Court's long-standing precedents to the existing record, which would inevitably lead to outright reversal of the Federal Circuit's judgment and reinstatement of the District Court's grant of summary judgment. If the outcome of this case were a remand, even a remand with a disapproval of the reasoning of the decision below, the message to business would be clear: even where the Solicitor General and PTO have explicitly told this Court, in a 4-year-old litigation, that a patent claim is invalid and was issued in error, a patentee can still prevent summary adjudication of the ultimate legal question of patent validity. Such a result would signal that the process for determining the validity of patent claims in the United States is as highly unpredictable, expensive, and uncertain as ever, and that the holder of even the most dubious of patent claims can effectively threaten to inflict the cost of many years of expensive litigation with uncertain prospects.

As important as are legal tests for determining ultimate questions of patent validity, the holdings of this Court applying substantive patent legal standards are of even greater importance to litigants and other participants in the U.S. patent system. Precedents and analogies in patent law are as important as in any other area of the law. A holding that particular claimed subject matter does not constitute "non-obvious subject matter" under § 103 gives meaning to the statutory concept in a way that no mere verbal formula can.

"[T]he ultimate question of patent validity is one of law." Graham v. John Deere Co., 383 U.S. 1, 17 (1966). Where, as in this case, a defense of invalidity under § 103(a) rests on an established set of historical facts, specifically, (i) admitted prior art whose contents are undisputed (Pet. Br. at 12), (ii) a stipulated level of skill in the pertinent art (id.), and (iii) an undisputed, given quantum of difference between an asserted patent claim and undisputed prior art of record (id. at 12-13), a court can and should decide the ultimate question of patent validity as a matter of law, as the District Court did here, and as this Court has done on numerous prior occasions. See Pet. Br. at 2-3 & n.1, 4-5 & n.4, 17-27 & nn.14-18, 39 & nn.30-31.

On the record of this case, claim 4 of the Engelgau patent is clearly invalid under § 103(a); the Solicitor General and PTO are both correct in so advising this Court (SG Br. at 27-30); and this Court should so hold as a matter of law. The judgment of the Federal Circuit should be reversed.

Part I below addresses Respondents' various indirections and misstatements of the record. Part II discusses the proper legal analysis.

# I. THE PROPER REFERENT FOR ANALYSIS IS CLAIM 4 OF THE ENGELGAU PATENT, WHICH DESCRIBES AN ASANO PEDAL COMBINED WITH AN OFF-THESHELF ELECTRONIC PEDAL POSITION SENSOR.

Section 103(a) calls for analysis of "the differences between the subject matter sought to be patented and the prior art." (Emphasis added.) This Court has "frequently held that it is the claim which measures the grant to the patentee." Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 336 U.S. 271, 277 (1949)<sup>3</sup>; accord Markman v. Westview Instruments, Inc., 517 U.S. 370, 373 (1996) ("The claim 'define[s] the scope of a patent grant.") (quoting 3 E. Lipscomb, Walker on Patents § 11:1, at 280 (3d ed. 1985)); Aro

<sup>&</sup>lt;sup>3</sup> The word "grant" is a term of art in patent law, and refers to the "grant to the patentee" provided for by 35 U.S.C. § 154(a)(1).

Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 339 (1961) ("[T]he claims made in the patent are the sole measure of the grant.").

"While the cases more often have dealt with efforts to resort to specifications to expand claims, it is clear that the latter fail equally to perform their function as a measure of the grant when they overclaim the invention." *Graver*, 336 U.S. at 277. "When they do so to the point of invalidity and are free from ambiguity which might justify resort to the specifications, . . . they are not to be saved because the latter are less inclusive." *Id*.

Throughout this litigation, Respondents have contended that claim 4 of the Engelgau patent encompasses any and every vehicle control pedal apparatus that falls within the "ordinary and customary meaning" of the claim's words. (C.A. App. 504.) For purposes of Petitioner's motion for summary judgment of invalidity, both lower courts accepted and applied Respondents' own characterization of the scope of claim 4 of the Engelgau patent. (Pet. App. 9a; Pet. App. 38a.)

The referent for validity analysis in this case is thus not "the patent" (Resp. Br. at 1), or the "[t]wo illustrations of Engelgau" cited by Respondents (id. at 5), or "the design feature of Engelgau" (id. at 7), or "the Engelgau invention" (id. at 44), as erroneously asserted by Respondents. Rather, for purposes of § 103(a), "the subject matter sought to be patented" is all of the subject matter that falls within "the plain, ordinary, and undisputed language of claim 4" of the Engelgau patent (Pet. App. 38a). Cf. Graver, 336 U.S. at 276-77 (reversing and holding patent claims invalid, where claims "were too broad and comprehended more than the invention").

Unlike the "illustrations of Engelgau" cited by Respondents (Resp. Br. at 5), claim 4 of the Engelgau patent describes the alleged invention in only the most general and abstract of terms. The claim recites: (i) "a support (18) adapted to be mounted to a vehicle structure (20)"; (ii) "an adjustable pedal assembly (22) having a pedal arm (14) moveable in fore and aft directions with respect to said support (18)"; (iii) "a pivot (24) for pivotally supporting said adjustable pedal assembly (22)"; and (iv) "an electronic control (28)

attached to said support (18) for controlling a vehicle system." (JSA8 at col. 6, lines 18-28.)

The Engelgau patent explicitly states that the recited "adjustable pedal assembly 22" may "be any of various adjustable pedal assemblies known in the art" (Pet. Br. at 9; JSA6, col. 2, lines 55-56; emphasis added). The Engelgau patent further states that the recited "electronic control (28)" can be "any of various electronic throttle control mechanisms known in the art" (Pet. Br. at 9; JSA6 col. 3, lines 22-24; emphasis added).

In other words, as both lower courts held, claim 4 of the Engelgau patent is so broadly and abstractly worded as to describe (i) the exact type of "adjustable pedal assembly" that is disclosed in Figure 5 of U.S. Patent No. 5,010,782 to Asano entitled "Position Adjustable Pedal Assembly" ("Asano"; see JSA219-232), combined with (ii) an off-the-shelf, modular electronic pedal position sensor (JA88a-90a at ¶¶ 12-19; JSA63-71), including a CTS 503 Series sensor that was specifically designed (a) to engage the rotating pivot shaft of any gas pedal (JA87a, 90a at ¶¶ 10, 19), and (b) to be mounted to whatever support structure carried the gas pedal pivot shaft (JA88a at ¶¶ 12-13; JA89a-91a at ¶¶ 15-21).

Respondents' opposition to summary judgment did not controvert Petitioner's affidavit evidence, given by a witness having extensive experience in the field of automotive pedal design (JA85a-86a), that "[c]onventional, off-the-shelf position sensors that were on sale in the United States as of November 20, 1996...could have been fitted to the pivot (54) and support bracket (50) disclosed in Figure 5 of the Asano '782 Patent without materially altering the '782 Patent pedal, in exactly the same way as the position sensor incorporated in the 1994 GM ETC Pedal is attached to the pivot shaft and support bracket in that pedal assembly" (JA96a ¶ 36).

<sup>&</sup>lt;sup>4</sup> See Pet. App. 9a (Asano "disclosed all of the structural limitations of claim 4 with the exception of the electronic control"); Pet. App. 40a ("[T]he Court finds that Asano teaches every limitation contained in claim 4, with the exception of the limitation referring to an electronic pedal position sensor.").

Respondents also did not—and even now do not—dispute that long prior to the date when Mr. Engelgau made his alleged invention (Pet. Br. at 8), it was a "standard technique" to couple a pedal position sensor to a rotatable pedal pivot shaft (JA91a ¶ 21). During the prosecution of the Engelgau patent, the PTO took the position that the idea of attaching a pedal position sensor to the support bracket of an accelerator pedal was "old and well known in the art" and could not be a basis for patenting an adjustable pedal assembly (JSA131, quoted in Pet. App. 45a). Respondents acquiesced in the PTO's position. Pet. App. 45a.

In support of its motion for summary judgment, Petitioner submitted two expert declarations (JA84a-99a, JA101a-114a) and computer animation evidence (JA97a ¶ 41, JA103a-104a ¶¶ 4-6, JSA81; see Appendix A hereto) demonstrating how claim 4 of the Engelgau patent was so broadly and abstractly worded as to describe subject matter that was technologically trivial: an Asano pedal adapted to work in a modern vehicle having an electronic throttle control, the adaptation consisting of attaching a CTS 503 Series pedal position sensor to an Asano pedal support bracket and coupling the sensor to a slightly lengthened Asano pedal pivot 54 (shown in green in Appendix A), in exactly the same way as such a sensor had been attached to a 1994 GM ETC pedal support bracket and coupled with that pedal's pivot. The accuracy of Petitioner's experts' description of the combination of an Asano pedal and a CTS 503 Series pedal position sensor, including as depicted in the computer animation, was not disputed by Respondents in either of the lower courts.

Represented by new counsel in this Court, Respondents assert for the first time that the modified Asano pedal depicted in Petitioner's animation "cannot work" because the "pivot 54" disclosed in Figure 5 of the Asano patent supposedly "does not rotate with depression of the pedal" and so, supposedly, "cannot be used to actuate" the depicted electronic control. Resp. Br. 6 at n.5, 48-49 n.17. Respondents' new argument is procedurally defaulted, without support in the record, and wrong.

Procedurally, if Respondents had wished to contend in the District Court that the "pivot 54" disclosed in the Asano patent had to be a non-rotatable, "stationary structure" (Resp. Br. at 48-49

n.17), Respondents could have avoided summary judgment on that basis only by means of an evidentiary submission that met the standard of Federal Rule of Civil Procedure 56(e). They did not do so. Not one of the three declarations submitted by Respondents in opposition to summary judgment (JSA141-143, JSA204-207, JSA208-210) so much as mentioned the "pivot 54" disclosed in the Asano patent. Still less did Respondents' opposition to summary judgment include evidence that a person "with an undergraduate degree in mechanical engineering or an equivalent amount of industry experience who has familiarity with pedal control systems for vehicles" (Pet. App. 36a)<sup>5</sup> would have interpreted the Asano patent disclosure as requiring that the disclosed "pivot 54" be a nonrotatable, "stationary structure" (Resp. Br. at 49 n.17). The absence of such evidence is hardly surprising, since on its face, the Asano patent broadly characterizes the disclosed adjustable pedal assembly as comprising "a lever" (e.g., lever 52) that is connected to "a stationary bracket" (e.g., bracket 50) for "pivotal movement relative to said stationary bracket about a first pivot axis" (e.g., the axis of pivot 54; see JSA231 at col. 9, lines 55-57; emphasis added). A pivot shaft can of course rotate about its own axis.

Similarly unsupported are Respondents' assertions, made for the first time in this Court, that the Asano "Pivot 54" purportedly "suffers" in some unexplained way from a "constant ratio problem" (Resp. Br. at 49), so that deploying a pedal position sensor as depicted in Appendix A hereto would somehow result in "distorted" "information" being "transmitted through that pivot" (id. at 48-49). Besides lacking a shred of record support and being improperly raised for the first time in this Court, these pseudo-expert assertions do not even make sense. The Federal Circuit noted that "constant ratio" is a concept related to "the force required to depress the pedal" (Pet. App. 13a n.3), not anything associated with information

<sup>&</sup>lt;sup>5</sup> "In making the determination of 'obviousness,' it is important to remember that the criterion is measured not in terms of what would be obvious to a layman, but rather what would be obvious to one 'reasonably skilled in [the applicable] art." Dann v. Johnston, 425 U.S. 219, 229 (1976) (quoting Graham v. John Deere Co., 383 U.S. 1, 37 (1966)).

conveyed by depressing a pedal. Respondents' bare assertion to the contrary, made for the first time in a Brief to this Court, is simply no basis on which summary judgment can properly be withheld or delayed in this 4-year-old case. *See* Fed. R. Civ. P. 56(c), (e).

# II. CLAIM 4 OF THE ENGELGAU PATENT IS INVALID AS A MATTER OF LAW.

As the Solicitor General and the PTO have both correctly stated, claim 4 of the Engelgau patent is so broadly worded as to describe "nothing more than a combination of previously known components that 'simply arranges old elements with each performing the same function that it had been known to perform." SG Br. at 28 (quoting Sakraida v. Ag Pro, Inc., 425 U.S. 273, 282 (1976)). Under a long and unbroken line of this Court's precedents (see Pet. Br. at 20-23 & n.17), such a combination inherently lacks "that degree of skill and ingenuity which constitute essential elements of every invention." Sakraida, 425 U.S. at 279 (quoting Hotchkiss v. Greenwood, 52 U.S. (11 How.) 248, 267 (1851)). See also Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 63 (1969) ("more than that is needed for invention").

The long-established "test of the validity of combination patents," Sakraida, 425 U.S. at 282 (quoting Anderson's-Black Rock, 396 U.S. at 60), has been applied by this Court to determine the validity of patent claims in numerous cases (see Pet. Br. at 4-5 & n.4, 20-23 & n.17), and also prevails in Europe (id. at 50 n.38). The test embodies a practical judgment, grounded in extensive experience, that as a matter of law, the statutory "person having ordinary skill in the art" (35 U.S.C. § 103(a)) is deemed capable of assembling or rearranging "old elements with each performing the same function it had been known to perform," Sakraida, 425 U.S. at 282, and knows what a "mere aggregation" of pre-existing components will comprise, Lincoln Eng'g Co. v. Stewart-Warner Corp., 303 U.S. 545, 549 (1938).

Respondents presented no evidence below, and even now make no argument, that as of the claimed invention date of February 14, 1998, adapting an Asano pedal to actuate an electronic throttle control, as illustrated in Appendix A hereto, was a problem whose solution would have required more than "ordinary skill in the art."

35 U.S.C. § 103(a). Instead, Respondents contend that claim 4 of the Engelgau patent may define a patentable "invention" no matter how little skill might have been required to make subject matter falling within the terms of that claim.

The key to understanding Respondents' argument is the radical, unstated premise on which it is based: that § 103 purportedly does not state a "condition for patentability" that a patent applicant must satisfy before a patent can properly be granted, but rather purportedly states a condition for challenges to patentability that the PTO or an accused infringer must satisfy before a claim to patent protection can properly be denied. See Pet. Br. at 17, 40-42. This upside down view of § 103(a) is openly acknowledged in the Brief of the American Intellectual Property Law Association (AIPLA), which the Respondents describe as "a professional organization with a genuine interest in the application of a balanced standard." Resp. Br. at 10.6 AIPLA asserts that Sections 101 and 102 of the Patent Act purportedly "presume entitlement to a patent" and. purportedly, "Section 103 functions only to limit this entitlement." AIPLA Br. at 7 n.10 (emphasis added). Under this view of § 103(a), a patent applicant is supposedly entitled to patent any claimed "invention" that is "new and useful" (35 U.S.C. § 101) and "is not identically disclosed or described as set forth in section 102" (35 U.S.C. § 103(a)), unless the PTO or an accused infringer can satisfy the Federal Circuit teaching-suggestion-motivation test.<sup>7</sup>

<sup>&</sup>lt;sup>5</sup> It is by no means clear why patent bar groups would have a systematic interest in a "balanced" standard of patentability, in view of the enormous fees that litigation of invalid patent claims can generate. See Pet Br. at 35 & n.25.

In fact, contrary to Respondents' and its amici's suggestion, patent protection in the United States is limited by statute to subject matter that constitutes an "invention or discovery," 35 U.S.C. § 100(a); a patent applicant must swear to a belief that he or she is an "inventor," id. § 115; and the PTO must examine any "alleged new invention" (id. § 131) to determine if it meets "the conditions and requirements of this title," id. § 101, one of which is "the § 103 condition." Graham, 383 U.S. at 17.

The so-called "teaching-suggestion-motivation test" (Pet. App. 8a) is predicated upon, and enforces, the "entitlement" interpretation of § 103(a) that the Federal Circuit adopted shortly after its creation in 1982. See Pet. Br. at 28-29. As a "test" of whether the PTO or a court can properly deny a supposed "entitlement" to patent protection, the so-called "teaching-suggestion-motivation test" purports to force the issuance and upholding of patent claims based on an applicant's subjective statement of belief that he or she was "the original and first inventor of the process, machine, manufacture, or composition of matter, or improvement thereof, for which he [or she] solicits a patent," 35 U.S.C. § 115, no matter how uninformed or baseless such a stated subjective belief might be.8

Hence in this case, Respondents argue that claim 4 of the Engelgau patent supposedly cannot be held invalid under § 103(a), no matter how trivial might be the differences between the prior art and the subject matter described by claim 4 of the Engelgau patent, unless Petitioner can satisfy the Federal Circuit "teaching-suggestion-motivation test" (Pet. App. 8a) with respect to the subjectively defined "problem" that Mr. Engelgau identified in his patent application (Pet. App. 4a, 12a-13a). Respondents' argument to this Court well illustrates how the Federal Circuit "motivation" inquiry stands in irreconcilable conflict with the objective, skill-based analysis of claimed subject matter that § 103(a) and this Court's precedents require.

# A. "Non-Obviousness" Under Section 103(a) Is a Function of Skill and Ingenuity, Not Absence of "Motivation"

The statutory concept of "non-obvious subject matter" refers to subject matter that exhibits "that degree of skill and ingenuity which constitute essential elements of every invention." Sakraida v. Ag Pro, Inc., 425 U.S. 273, 279 (1976) (quoting Hotchkiss v. Greenwood, 52 U.S. (11 How.) 248, 267 (1851)). See also Dann v. Johnston, 425 U.S. 219, 225 (1976) ("As a judicial test, 'invention'—i.e., 'an exercise of the inventive faculty,' McClain v. Ortmayer, 141 U.S. 419, 427 (1891)—has long been regarded as an absolute prerequisite to patentability"); Anderson's-Black Rock, Inc. v. Pavement Salvage Co., 396 U.S. 57, 63 (1969) ("more than that is needed for invention"). The degree of skill needed to solve an objectively defined problem, on the absence of motivation to make

Respondents' and their amici's characterization of Federal Circuit precedent as providing an "objective" standard for evaluating patent validity (Resp. Br. at 39) is wildly inaccurate. First, as noted above, the "teaching-suggestion-motivation test" presupposes that an applicant's purely subjective, uninformed belief is sufficient to establish that claimed subject matter constitutes "non-obvious subject matter." 35 U.S.C. § 103(a). Only challenges to the validity of patent claims are made subject to the so-called "objective rules" cited by Respondents (Resp. Br. at 39). Second, as described infra, the "teaching-suggestion-motivation test" presupposes that a patent applicant's purely subjective perception of the "problem" that he or she faced when making an alleged invention purportedly operates to limit a court's authority to declare patent claims invalid under § 103(a). Third, the "teaching-suggestion-motivation test" purports to strip courts of their traditional role in determining "the ultimate question of patent validity," Graham, 383 U.S. at 17, and to convert that legal question into a purported "fact" question for determination by lay juries. See Pet. Br. at 5-6, 34-38. Finally, since certiorari was granted in this case, the Federal Circuit has taken to saying that "[o]ur suggestion test is in actuality quite flexible," Dystar Textilfarben, GmbH v. C.H. Patrick Co., 464 F.3d 1356, 1357 (Fed. Cir. 2006), and "implicit motivation to combine" may exist in numerous and diverse "situations," id. at 1368. It would be difficult to imagine a "fact" less susceptible to "objective" determination than the outcome of a swearing contest among experts over the existence or non-existence of "implicit" "motivations" that a hypothetical person might have had in the context of a fictional contrived, subjectively defined problem-solving exercise.

The relevant "problem" for purposes of validity analysis under § 103(a) is defined objectively by reference to "the prior art" and "the subject matter sought to be patented," not by reference to the "problem" a given applicant might have subjectively perceived that he or she faced at the time an alleged invention was made. A patent applicant may not be aware of the closest prior art, or may describe an alleged invention using claim words that are so broad as to leave little or no difference between the claimed subject matter and the prior art.

particular claimed subject matter, has been the benchmark of patent validity analysis in this Court for more than 150 years. <sup>10</sup>

Contrary to Respondents' suggestion, the legal standard set forth in *Hotchkiss* was not "rejected" (Resp. Br. at 33), but to the contrary was *codified* by § 103. *Graham*, 383 U.S. at 17. *See* Pet. Br. at 3. Respondents' and their amici's heavy reliance on a practitioner article written by the late Federal Circuit Judge Rich (Resp. Br. at 16, 32, 33, 41), in which the author argues that § 103(a) purportedly abrogated the entire body of this Court's pre-1952 precedents applying *Hotchkiss*, is very misplaced: the radical views expressed in that article were presented to this Court in *Graham*, and were emphatically *rejected* by this Court in *Graham*. 383 U.S. at 16-19.

In Graham itself and in all of this Court's post-Graham decisions, the Court has cited and applied Hotchkiss and other precodification precedents (Pet. Br. at 20 n.16), and has reiterated that the "standard" of the Hotchkiss case "was enacted in 1952... in 35 U.S.C. § 103." Sakraida, 425 U.S. at 279. Any possible doubt as to the continuing vitality, post-codification, of the test of validity of combination patents was resolved in Anderson's-Black Rock, wherein this Court granted certiorari for the very purpose of deciding whether "the holding on the matter of aggregations in patents in Lincoln Engineering Co. v. Stewart-Warner Corp., 303 U.S. 545, is still the law." The answer was "yes." Anderson's-Black Rock, 396 U.S. at 60-61.

Respondents acknowledge (Resp. Br. at 14) that the so-called "teaching-suggestion-motivation test" originates not in any decision of this Court, but in decisions of the former Court of Customs and Patent Appeals ("CCPA") that long antedated this Court's *Graham* decision. Back when PTO decisions were subject to review by the CCPA, this Court "observed a notorious difference between the standards applied by the Patent Office and by the courts." *Graham*, 383 U.S. at 18. Yet as one of its first official acts in 1982, the Federal Circuit bound itself to follow the entire body of CCPA case law<sup>13</sup> and repudiated this Court's precedents applying "the test of

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however, exactly how this court interpreted § 103 in *Graham*. See 383 U.S. at 17 ("[T]he section was intended merely as a codification of judicial precedents embracing the *Hotchkiss* condition."). Graham's holding that § 103 did not change "the general level of innovation necessary to sustain patentability," Graham, 383 U.S. at 4, but merely codified "judicial precedents embracing the *Hotchkiss* condition," id. at 17, was a view shared by the overwhelming majority of the Courts of Appeals at the time. See Efforts to Establish a Statutory Standard of Invention, Study No. 7, Subcommittee on Patents, Trademarks, and Copyrights, 85th Cong., 1st Sess. (Committee Print, 1958), cited in Graham, 383 U.S. at 17 n.9.

<sup>&</sup>lt;sup>10</sup> E.g., Graham v. John Deere Co., 383 U.S. 1, 24-25 (1966) (in view of prior art, ordinarily skilled person would have immediately seen claimed subject matter as means of achieving desired "free-flexing" objective; patent claims held invalid); United States v. Adams, 383 U.S. 39, 42-52 (1966) (in view of prior art, ordinarily skilled person would not have seen claimed subject matter as means of achieving desired water-activated constant-voltage battery; patent claims held valid); Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327, 333-35 (1945) (in view of prior art, ordinarily skilled person would have been capable of devising claimed ink composition as means of achieving desired drying properties; patent claims held invalid); Goodyear Tire & Rubber Co. v. Ray-O-Vac Co., 321 U.S. 275, 279 (1944) (in view of prior art and secondary considerations. ordinarily skilled person would not have seen claimed subject matter as means of achieving desired leak proof battery; patent claims held valid); Essex Razor Blade Corp. v. Gillette Safety Razor Co., 299 U.S. 94, 98 (1936) (in view of prior art, claimed non-circular opening in razor blade was a "choice . . . between alternative means obvious to any mechanic"; patent claims held invalid).

<sup>&</sup>lt;sup>11</sup> Appendix A to the Brief Amicus Curiae of E. Ernest Goldstein, *Graham v. John Deere Co.*, 383 U.S. 1 (1966), was a copy of a speech by the late Judge Rich entitled "The Vague Concept of 'Invention' as Replaced by Sec. 103 of the 1952 Patent Act." On page 17a of that Appendix, Judge Rich criticized lawyers who had "persuaded a number of courts that it [§ 103] made no change whatever but was 'mere codification." That was,

Petition for a Writ of Certiorari to the United States Court of Appeals for the Fourth Circuit in Case No. 45 (filed Feb. 4, 1969) at 2.

<sup>&</sup>lt;sup>13</sup> South Corp. v. United States, 690 F.2d 1368, 1369 (Fed. Cir. 1982) (en banc) ("[T]he holdings of our predecessor courts, the United States Court

validity of combination patents." Sakraida, 425 U.S. at 282 (quoting Anderson's-Black Rock, 396 U.S. at 60). See Stratoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 1539 (Fed. Cir. 1983) ("Reference to 'combination' patents is, moreover, meaningless.") (emphasis added). See also Pet. Br. at 5, 27-28. Notably, the Stratoflex panel cited the very same practitioner article by the late Judge Rich on which Respondents and their amici rely so heavily in this case. 713 F.2d at 1539 n.6.

The first years of the Federal Circuit coincided with a spectacular increase in the percentage of patents held valid in federal court litigation<sup>14</sup> as the Federal Circuit, "[i]n its early decisions, essentially repudiated the holdings of Anderson's-Black Rock and Sakraida." Martin J. Adelman, et al., CASES & MATERIALS ON PATENT LAW 345 (2d ed. 2003). Contrary to Respondents' suggestion (Resp. Br. at 14-15), no well-counseled

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of Claims and the United States Court of Customs and Patent Appeals, announced by those courts before the close of business September 30, 1982, shall be binding as precedent in this court").

<sup>14</sup> See William M. Landes & Richard A. Posner, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 338 (Harvard 2003) (noting that, "in the first five years of the new court the percentage of cases in which the validity of a challenged patent was upheld increased enormously over the pre-Federal Circuit era," going from 35 percent to "a weighted average of 67 percent for the first ten years of the Federal Circuit"). Respondents' citation of purported statistics concerning recent Federal Circuit outcomes (Resp. Br. at 29-30, 43) is wholly non-probative. It is well known that in a static legal context, litigated outcomes will tend toward a 50 percent success rate as litigants choose to bring, settle, or not bring cases with knowledge of the legal standards that will probably be applied. See G. Priest & B. Klein, The Selection of Disputes for Litigation, 13 J. Legal Stud. 1 (1984). Where statistical success rates deviate from the 50 percent benchmark, the deviation is probative of differential incentives to litigate but does not necessarily convey any information about the stringency of the law. Thus, for example, federal prosecutors' traditionally high rates of success do not necessarily indicate that the law is biased against criminal defendants.

participant in the United States patent system could reasonably rely on one lower court's inappropriate and widely recognized rejection of this Court's precedents. See Pet Br. at 30-32 (citing authorities).

Further, as the present case exemplifies, patents typically include multiple claims characterizing disclosed subject matter with varying degrees of specificity. The invalidity of a claim that leaves too little difference between its scope and prior art has no necessary impact on the validity of other, narrower claims made in the same patent. See 35 U.S.C. § 282. Respondents' suggestion that reaffirmation of this Court's patent precedents would be "exceptionally disruptive" (Resp. Br. at 14; emphasis in original), and even "earth-shattering" (id. at 15), is belied by the facts of this very case: reversal of the Federal Circuit's judgment in this case would leave intact three of the four claims made in the Engelgau patent plus the additional eighteen (18) claims that Respondents made in the "parent" of the Engelgau patent, U.S. Patent No. 6,109,241 (see JSA1, line 63), each of which claims describes the same alleged "invention" with varying degrees of specificity.

The facts of this case also expose the deeply flawed nature of the "teaching-suggestion-motivation test." Respondents concede (Resp. Br. at 2) that the Asano patent is part of "the prior art" (35) U.S.C. § 103(a)) to the Engelgau patent. Yet in the next breath, Respondents contend that in order to base an invalidity challenge on the Asano patent, Petitioner supposedly had to present "clear and convincing evidence" (Pet. App. 5a, 14a n.4) that a hypothetical "person having ordinary skill in the art" (35 U.S.C. § 103(a)). "faced with the problem confronted by Engelgau" (Resp. Br. at 45-46 n.15), "would have selected the Asano pedal from the prior art" (Resp. Br. at 8; emphasis added) and thus "would have wanted to place an electronic throttle control on the support structure of the Asano device" (id. at 45; emphasis added). Respondents assert that "Asano is a large and cumbersome pedal system, and there was no reason a pedal designer would turn to it" (id. at 13). See also id. at 45 ("[N]o designer would use Asano to solve the problem that faced Engelgau.") Therefore, the theory goes, Respondents can properly patent the combination of Asano and a pedal position sensor.

As thus illustrated by Respondents' own argument to this Court, the Federal Circuit "teaching-suggestion-motivation test" (Pet. App. 8a) purports to make a contestable issue of "fact," and subject to jury trial (Pet. Br. at 17 n.13, 35-38), the question whether an admitted prior art reference can be used as the *starting point* in an invalidity analysis under § 103(a). It would be difficult to imagine a greater source of legal uncertainty and instability: a circular, judge-made "test" that purports to make the *premise* of a patent validity inquiry dependent on the inquiry's *outcome*.

Contrary to Respondents' argument, § 103(a) requires that the patentability of claimed subject matter be assessed against "the prior art," not merely against that portion of the prior art that a lay jury might be convinced, in litigation, a hypothetical "person having ordinary skill in the art," tasked with solving a particular applicant's "problem," might have been "motivated" to "turn to" within the field of an alleged invention (Resp. Br. at 13-14). The subjective perceptions and constraints that Mr. Engelgau allegedly faced when making his alleged "invention" (e.g., "the heating duct on the F350," Resp. Br. at 4) simply do not limit "the prior art" against which the validity of claim 4 of the Engelgau patent must be measured, and are no measure of the degree of skill that was needed to make at least some subject matter that falls within the broad language of that claim.

Evidence of "motivation" may, in an appropriate case, be circumstantial evidence of the degree of skill that was required to conceive of particular claimed subject matter. For example, the existence of "motivation" to make claimed subject matter, coupled with a failure of other skilled artisans to make claimed subject matter over a significant period of time, may "give light to the circumstances surrounding the origin of the subject matter sought to be patented," *Graham*, 383 U.S. at 17-18, and so may, "in a close case, tip the scales in favor of patentability." *Goodyear Tire & Rubber Co. v. Ray-O-Vac Co.*, 321 U.S. 275, 279 (1944). *See Pet.* Br. at 39. But in this case, Respondents presented no evidence of "long-felt need or failure of others" to make subject matter falling within the scope of claim 4 of the Engelgau patent. Pet. App. 48a.

This Court's precedents also make clear that what Respondents criticize as so-called "inappropriate hindsight analysis" (Resp. Br. at 12), is not a "proposal" of Petitioner (id.), but is instead the long-established law of the United States. For example, in St. Germain v.

Brunswick, 135 U.S. 227 (1890), the Court invalidated a patent claim drawn to a revolving billiard cue rack. After noting that revolving tables and casters had been used in other applications, the Court held (id. at 231; emphasis added):

We think that competent knowledge and skill in his calling on the part of an intelligent mechanic would have enabled him, on request, to construct the revolving billiard cue-rack in question, without calling the inventive faculty into play.

So here, based on the undisputed evidence of record, a person having ordinary skill in the art of the Engelgau patent, if requested to adapt an Asano pedal to actuate an electronic throttle control, clearly would have been capable of doing so "without calling the inventive faculty into play." *Id.* Whether such a person would have had hypothetical "motivation" to modify an Asano pedal (e.g., because his or her employer owned the Asano pedal design and bid on a particular vehicle program) is wholly extraneous and irrelevant to the skill-based patent validity analysis that § 103(a) and this Court's precedents require.

The preemptive effect of admitted prior art is an aspect of "the ultimate question of patent validity" which is "one of law," *Graham*, 383 U.S. at 17, and properly resolvable on a motion for summary judgment. Respondents' "motivation" argument concerning the Asano patent is just that, a legal argument about the preemptive effect of an admitted prior art reference. It raises no "genuine issue as to any material fact." Fed. R. Civ. P. 56(c).

# B. Invalidity Under Section 103(a) May Be Proven by a Preponderance of the Evidence

Petitioner agrees with the Solicitor General (SG Br. at 27 n.13) that the undisputed evidence of record establishes the invalidity of claim 4 of the Engelgau patent as a matter of law, irrespective of what substantive evidentiary burden is applied in this case. Nevertheless, since Respondents have relied so heavily on the substantive evidentiary burden that purportedly applies to this case (Resp. Br. at 7, 13, 42, 45, 46-47 n.16, 48), that issue is discussed briefly here.

35 U.S.C. § 282 provides in part: "The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity." The statute says nothing whatever about "clear and convincing evidence." In numerous cases (e.g., Pet. Br. at 3-5 & n.1, 18-27 & nn.14-17, 39 & n.19), this Court has determined the merits of patent invalidity defenses without subjecting such defenses to a "clear and convincing evidence" burden of proof.

Prior to the creation of the Federal Circuit, regional Circuits had held, following this Court's precedents, that in the "usual" patent case, "a preponderance of the evidence is sufficient to establish invalidity." Dickstein v. Seventy Corp., 522 F.2d 1294, 1297 (6th Cir. 1975); accord Rains v. Niaqua, Inc., 406 F.2d 275, 278 (2d Cir. 1969) ("[I]n the usual case a preponderance of the evidence determines the issue"). The contrary position of the Federal Circuit below (Pet. App. at 5a, 14a n.4) traces to dicta in a 1983 Federal Circuit panel decision that gave no reasoning and cited no authority whatsoever (Pet Br. at 10 n.10).

Respondents cite Radio Corp. of America v. Radio Engineering Laboratories, Inc., 293 U.S. 1 (1934), for the broad proposition that "the clear and convincing evidence standard is well founded because the expert patent examiner has considered the question and deemed the invention non-obvious" (Resp. Br. at 46 n.16). In fact, Radio Corp. involved an attempt to re-litigate an issue of inventorship that had previously been determined in a contested adversarial proceeding among the rival claimants. 293 U.S. at 3-6. Such a situation could not be further removed from a case like the present one, where the asserted patent was procured ex parte and the facts relied upon to establish invalidity (e.g., the disclosure of the Asano patent) were never the subject of any prior administrative or judicial consideration.

Issued patent claims are "presumed valid." 35 U.S.C. § 282. But this presumption has nothing to do with substantive evidentiary burdens and cannot reasonably be read as calling for a blanket imposition of a "clear and convincing evidence" burden of proof with respect to any and all historical facts that might be presented in support of any and every defense of invalidity under 35 U.S.C. § 282(2). See U.S. Federal Trade Comm'n, To Promote Innovation:

The Proper Balance of Competition & Patent & Policy, chap. 5, at 28 (2003) ("[T]here is no persuasive reason why the level of that burden should be clear and convincing evidence."). 15

"Because the preponderance of the evidence standard results in a roughly equal allocation of the risk of error between litigants, we presume that this standard is applicable in civil actions between private litigants unless 'particularly important individual interests or rights are at stake." Grogan v. Garner, 498 U.S. 279, 286 (1991) (quoting Herman & MacLean v. Huddleston, 459 U.S. 375, 389 (1983)).

Congress clearly knows how to specify a "clear and convincing evidence" burden of proof when that is its intention. See, e.g., 35 U.S.C. § 273(b)(4) ("A person asserting the defense under this section shall have the burden of establishing the defense by clear and convincing evidence."). It clearly did not do so in 35 U.S.C. § 282. Cf. KP Permanent Make-Up, Inc. v. Lasting Impression I, Inc., 543 U.S. 111, 118 (2004) (where Congress uses language in one section of a statute but not in another, the omission is presumed to be intentional).

#### **CONCLUSION**

For the reasons set forth above and in Petitioner's Opening Brief, the Court should reverse the judgment of the Federal Circuit.

<sup>15</sup> Contrary to Respondents' suggestion (Resp. Br. at 46-47 n.16) the burden of proof applicable to historical facts—the probability that a fact is true—is an entirely distinct concept from the probability that a legal conclusion (e.g., patent invalidity) follows from established historical facts. Questions of law are argued, not "proved." Thus, regardless of whether the invalidity of claim 4 of the Engelgau patent follows more directly from the disclosure of the Asano patent than from the "Rixon '183 system" cited by Respondents (id.), the burden of proving historical facts in a patent case should not depart from the usual preponderance of the evidence standard in the absence of an explicit legislative command, as exists for example in 35 U.S.C. § 273(b)(4) and various other federal statutes.

#### Respectfully submitted,

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