DESIGNING AROUND OBVIOUSNESS: THE IMPLICATIONS OF *LKQ V. GM GLOBAL*

Tyler Kotchman†

TABLE OF CONTENTS

DOI: https://doi.org/10.15779/Z38MS3K42S

† J.D. Candidate, 2026, University of California, Berkeley, School of Law.

I. INTRODUCTION

Design patents not only play a crucial role in safeguarding the unique visual and ornamental features of industrial products, but they can be worth millions and even shape the future of entire industries. A prime example is *Apple v. Samsung*, where Apple's design patents on the iPhone's iconic look were central to a multibillion-dollar lawsuit.[1] This case highlighted the immense financial value of design patents, underscoring their importance in maintaining a company's competitive edge and brand identity in fiercely competitive markets.

In the automotive industry, car manufacturers use design patents as a key tool to safeguard the aesthetic features of their vehicles from third-party suppliers and other manufacturers. However, the utilization of design patent protections also allows car manufacturers to maintain a monopoly over their automotive crash parts, such as bumpers, fenders, and mirrors, which has sparked significant legal and economic debates. Some critics argue that design patent protections allow manufacturers to inflate repair costs and limit

1. Apple, Inc. v. Samsung Elecs. Co., 678 F.3d 1314, 1317–19 (Fed. Cir. 2012).

consumer choice.[2] Proponents of design patents assert that these protections incentivize innovation and ensure high-quality replacements.[3]

LKQ Corp. v. GM Global Technology Operations LLC involved a third-party supplier, LKQ, attempting to invalidate General Motors's design patent so LKQ could continue to sell their third-party parts after losing their license to the design patent.[4] LKQ challenged the obviousness of the design patent, and spurred the Federal Circuit to address the question pending for over a decade and a half: whether the Supreme Court's determination for the standard of obviousness for utility patents applied to design patents.[5] Obviousness is a key requirement for patents that prevents the granting of a patent that lacks apparent innovation.[6] In the context of design patents, which protect the ornamental features of an article rather than its function, the obviousness inquiry asks whether the claimed design would have been obvious to an ordinary designer considering the prior art.[7] Obviousness was extended to design patents through the Patent Act of 1952 under § 103 utilizing the same framework as utility patents.[8] Applying the utility patent framework to design patents has caused confusion about which designs are protectable because there are no written claims in design patents. After § 103 was established, both design and utility patents developed through case law their own rigid but predictable way to determine eligibility based on obviousness.[9] However, the Supreme Court shifted its opinion to disfavor a rigid obviousness test for utility patents. It reemphasized the more relaxed factors that it had established to determine obviousness but did not speak on design patents.[10] Since the Supreme Court's determination on the standard for utility patent obviousness, the design patent community has been unsure if the rigid standard still applies to design patents.[11] In *LKQ*, the Federal Circuit determined that the relaxed factors reemphasized by the Supreme Court applied to design patents and

---

2. *See, e.g.*, *Promoting Automotive Repair, Trade, and Sales (PARTS) Act of 2015: Hearing on H.R. 1057 Before the Subcomm. on Cts., Intell. Prop., & the Internet*, 114th Cong. 16 (2016) [hereinafter *Hearings*] (statement of Jack Gillis, Dir. of Pub. Affs., Consumer Fed'n of Am.) (arguing that the lack of competition for repair parts due to design patent protections allow car companies to charge monopolistic prices).

3. *See, e.g.*, *Hearings*, *supra* note 2, at 8 (statement of Hon. Jerrold Nadler) (arguing that design protections create incentives for automakers to create innovative designs).

4. 102 F.4th 1280, 1287–88 (Fed. Cir. 2024).

5. *See id.* at 1293; KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007).

6. *See* 35 U.S.C. § 103.

7. *Id.*

8. Janice M. Mueller & Daniel Harris Bream, *Overcoming the "Impossible Issue" of Nonobviousness in Design Patents*, 99 KY. L.J. 419, 465 (2011).

9. *LKQ*, 102 F.4th at 1287.

10. *KSR*, 550 U.S. at 427–28.

11. *LKQ*, 102 F.4th at 1287.

eliminated the rigid framework.[12] The consequences of shifting from a rigid to a relaxed framework exposes up to four hundred thousand U.S. design patents to substantial uncertainty.[13]

A uniform standard to determine obviousness for design and utility patents can clean up the law most effectively because it offers a single set of factors to consider for any § 103 obviousness analysis. Still, the uniform standard that *LKQ* established fails to acknowledge the inherent differences between design and utility patents because *LKQ*'s design patent framework erroneously incorporates functional elements into a nonfunctional, or design-focused, analysis. This Note suggests that courts should filter out non-protectable functional elements under this new framework for obviousness before considering the difference between the prior art and the claimed design.[14] Filtering out unprotectable functional elements, similar to how courts apply copyright law, ensures design patents protect what they intend to.

This Note examines the Federal Circuit's reasoning in *LKQ Corp. v. GM Global Technology Operations* and its consequences. Part II provides the legal background and history of design patent obviousness. Part III summarizes *LKQ Corp. v. GM Global Technology Operations*. Part IV analyzes the Federal Circuit's ruling, discusses the potential implications of utilizing the relaxed framework in the nonobviousness determination for design patents, evaluates the Patent Trial and Appeals Board's (PTAB) attempts to implement this ruling, and proposes additional considerations to better protect against functional elements receiving design protection. Part V provides concluding thoughts.

II. LEGAL BACKGROUND

The Federal Circuit's decision in *LKQ Corp.* reconciled how the nonobviousness standard for design patents, as established in § 103, aligns with the Supreme Court's holding in *KSR International Co. v. Teleflex Inc.* Section II.A describes the history of nonobviousness in utility patents and the establishment of the *Graham* factors to guide the courts in their determination. This Section also discusses the Supreme Court's rejection of a more rigid interpretation of § 103 for utility patents in *KSR*. Section II.B outlines the history of design patent nonobviousness and the Federal Circuit's *Rosen-Durling*

12. *Id.* at 1295.

13. Brief of Amicus Curiae Am. Intell. Prop. L. Ass'n in Support of Neither Party, *LKQ*, 102 F.4th 1280 (No. 21-2348), 2023 WL 5748137, at *26 [hereinafter AIPLA Brief].

14. *See LKQ*, 102 F.4th at 1298.

test to guide district courts in their nonobviousness determination for design patents.

A. HISTORY OF OBVIOUSNESS IN UTILITY PATENTS

Congress established an obviousness standard in § 103 for utility and design patents in the Patent Act of 1952.[15] A claimed invention or design is not eligible for a patent unless it is determined to be nonobvious over prior art.[16] However, lawmakers wrote § 103 with utility patents in mind. Section II.A.1 discusses the establishment of the *Graham* factors, which are factual inquiries to guide courts in making nonobviousness determinations. Section II.A.2 discusses the Supreme Court's rejection of the Federal Circuit's Teaching, Suggestion, or Motivation (TSM) test to determine the nonobviousness of design patents.

1. Establishment of the Graham *Factors, 1966*

The Supreme Court established a modern framework for obviousness analysis in *Graham v. John Deere Co.* In this case, the Court established four basic factual inquiries collectively known as the *Graham* factors for courts, the USPTO, and the PTAB to consider in their obviousness analysis.[17] The first factor the courts need to determine is the scope and content of the prior art.[18] There is a two-part test to determine the scope of analogous art for utility patents: "(1) whether the art is from the same field of endeavor as the claimed invention; and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the endeavor is involved."[19] After establishing the scope, the second factor requires courts to determine the differences between the prior art and the claims of the current invention.[20] The third factor evaluates the level of ordinary skill in the pertinent art.[21] The fourth and final factor allows for secondary considerations "to give light to the circumstances surrounding the origin of the subject matter sought to be patented."[22] The Court acknowledged commercial success, long-felt but unsolved needs, and failure of others as some potential secondary considerations.[23] The Court also was careful to note that the new test did not change the overall strictness courts

15. 23 A.L.R. Fed. 326 § 2[a] (1975).
16. 35 U.S.C. § 103.
17. *See generally* Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 1 (1966).
18. *Id.* at 17.
19. *LKQ*, 102 F.4th at 1297.
20. *Graham*, 383 U.S. at 17.
21. *Id.*
22. *Id.*
23. *Id.*

previously applied § 103 and retained the relaxed standard of § 103 to determine obviousness.[24]

2. Introduction and Demise of the Teaching, Suggestion, or Motivation Test

The broad *Graham* factors continued to guide the obviousness analysis until the Federal Circuit sought to answer obviousness questions with more uniformity and consistency due to lower courts' varying interpretations of the flexible *Graham* factors.[25] Courts applying the second *Graham* factor would look at the prior art of a claimed invention, and would combine multiple prior arts to demonstrate each element was independently known and the claimed invention was therefore obvious.[26] However, most new inventions rely upon the building blocks of previous innovations and are combinations of what is already known.[27] To address this, the court began employing a more rigid Teaching, Suggestion, or Motivation test that was still in line with the *Graham* factors but imposed additional requirements to lead to more predictable obviousness determinations.[28] This test added the requirement that a patent claim "is only proved obvious if 'some motivation or suggestion to combine the prior art teachings' can be found in the prior art, the problem's nature, or the knowledge of a person having ordinary skill in the art."[29]

The Federal Circuit's TSM test dominated utility patent's obviousness analysis until the Supreme Court overruled it in the 2007 *KSR International Co. v. Teleflex Inc.* decision.[30] In *KSR*, Teleflex accused KSR of infringing its patent by adding an electric sensor to one of KSR's previously designed accelerator pedals.[31] KSR counterclaimed that Teleflex's patent was invalid under § 103 because it was obvious.[32] The Federal Circuit held that Teleflex's patent was nonobvious because, after applying the TSM test, the prior art would not have led a person of ordinary skill to put a sensor on a pedal like Teleflex did.[33] On writ of certiorari, the Supreme Court held that the TSM test was incompatible with its holding in *Graham* because it "transform[ed] the general principle into a rigid rule that limit[ed] the obviousness inquiry."[34] After overruling the TSM test, the Court determined Teleflex's patent claim was invalid as obvious

24. *Id.* at 19.
25. KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 407 (2007).
26. *Id.* at 418.
27. *Id.* at 418–19.
28. *Id.*
29. *Id.*
30. *Id.* at 427–28.
31. *Id.* at 406.
32. *Id.*
33. *Id.* at 413–14.
34. *Id.* at 419.

because combining an available sensor to a pedal was not an inventive step.[35] A person of ordinary skill in the relevant art was capable of, and the benefit of doing so was obvious.[36]

The Supreme Court clearly refuted the rigid TSM test for obviousness in utility patents in *KSR*. The Court expressed concern about granting a patent based on the combination of the prior art, which is the principal reason for declining patents for obvious inventions.[37] A rigid test like TSM allowed for a patent to be granted by combining two prior art references, a pedal and an electric sensor. With the TSM test, the courts and patent examiner focused on the problem the patentee was trying to solve and limited the scope of their obvious analysis to elements of prior art designed to solve the same problem.[38] However, an obviousness analysis is not limited to the prior art of the same problem.[39] A person of ordinary skill would be able to fit the teachings of multiple patents together to solve a different problem and, therefore, required the Court to step in to prevent similar occurrences.[40] In its decision, the Court did not address whether the obviousness holding presented in *KSR* extended to design patents.[41]

B. ORIGIN AND HISTORY OF OBVIOUSNESS IN DESIGN PATENTS

Since the creation of design patents in 1842, courts have struggled to apply the utility patent framework seamlessly to design patent protections, particularly after the concept of nonobviousness was introduced in the Patent Act of 1952. This led to the creation of the *Rosen-Durling* test by the Federal Circuit. Section II.B.1 examines early cases from the Supreme Court and the Court of Customs and Patent Appeals (C.C.P.A.) that laid the groundwork for the court's decisions in *Rosen* and *Durling*. Section II.B.2 discusses the court's decisions on design patent obviousness in *Rosen* and *Durling* and the creation of the two-part test to determine nonobviousness in design patents. Section II.B.3 discusses the Federal Circuit's application of applying the *Rosen-Durling* test to assess the nonobviousness of a design patent.

1. Development of Obviousness in Design Patents prior to Rosen-Durling

As industrial design emerged in America, Congress sought to protect these designs with the first design patent statute in 1842, utilizing the framework of

35. *Id.* at 424.
36. *Id.*
37. *Id.* at 415–16.
38. *Id.* at 420.
39. *Id.*
40. *Id.* at 420–21.
41. *See generally id.*

the already-created utility patents.[42] More than a century later, the passage of the Patent Act of 1952 introduced the nonobviousness requirement of § 103 into design patentability.[43] However, the drafters of the 1952 Act did not envision that design patents would require a standard for nonobviousness to determine eligibility and intentionally set aside the "problem" of designs for later attention.[44] Because this issue was never addressed by Congress, it was left to the courts to best interpret how § 103 applied to design protections.

The following Sections discuss how courts historically have interpreted design patent protections and how they apply § 103 to design protections. Section II.1.a discusses a landmark Supreme Court case about the combination of prior art. Section II.1.b discusses the C.C.P.A. and its decisions on design patent obviousness prior to the establishment of the *Rosen-Durling* Test, the standard that *LKQ* overturned.

a) Supreme Court on Design Patentability: *Smith v. Whitman Saddle Co.* (1893)

The Supreme Court addressed the patentability of designs in *Smith v. Whitman Saddle Co.*[45] in the late nineteenth century, prior to the establishment of an obviousness standard in patents.[46] In *Whitman Saddle Co.*, the Supreme Court focused on the skill involved in making the product embodying the design, stating "[n]othing more was done in this instance [. . .] than to put the two halves of these saddles together in the exercise of the ordinary skill of workmen of the trade, and in the way and manner ordinarily done."[47] In *Whitman Saddle Co.*, the Supreme Court focused on a design's patentability from a saddler's perspective and not just as an unskilled or ordinary observer.[48] The required viewpoint perspective of a workman in the trade established in *Whitman Saddle Co.* carried over to the modern § 103 standard of obviousness, "a person having ordinary skill in the art to which the claimed invention

42. *See* Jason J. Du Mont & Mark D. Janis, *The Origins of American Design Patent Protection*, 88 IND. L.J. 837, 843 (2013).

43. Mueller & Bream, *supra* note 8, at 465–66.

44. *The Industrial Innovation and Technology Act: Hearing on S. 791 Before the Subcomm. on Patents, Copyrights & Trademarks of the S. Comm. on the Judiciary*, 100th Cong. 8 (1987) (statement of Hon. Giles S. Rich, Fed. Cir.) ("[W]hen we wrote the 1952 Patent Act, protection of designs was known to be a somewhat difficult problem. The [1952] Patent Act was primarily a codification, and we deliberately laid aside the whole problem of design legislation to be taken up at a later date.").

45. Smith v. Whitman Saddle Co., 148 U.S. 674 (1893).

46. *See id.*

47. *Id.* at 681.

48. *See id.*

pertains."[49] The Court had not provided further guidance on design patentability since.

b) The Court of Customs and Patent Appeals on Nonobviousness

The C.C.P.A. began to restrict the prior art that could be used while conducting an obviousness analysis of a design. From 1929 until the establishment of the Federal Circuit in 1982, the C.C.P.A. had jurisdiction over direct appeals from the patent office.[50] The court in *In re Jennings* held that when determining the patentability of a design, the design must be viewed as a whole and compared to something in existence that could be created by combining features of different pieces of prior art.[51] This case demonstrates the restriction the court begins to place on prior art by only allowing the current design to be compared to something in existence, and goes against the determination in *Whitman Saddle Co.*.[52] The Court in *Whitman Saddle Co.* determined that the combination of two different saddles, although not currently in existence, would be obvious to a workman in the trade.[53]

However, the court in *In re Glavas*, clarified its position by allowing the combination of analogous art if the art "are so related that the appearance of certain ornamental features in one would suggest the application of those features to the other."[54] This decision aligns with *Whitman Saddle Co.* by allowing the combination of ornamental features in prior art if they are so related.[55] But *Glavas* left open the question of what prior art would be so related that it would suggest the application of the features in the other.[56]

2. The Federal Circuit's Establishment of the Two-Part Rosen-Durling *Test*

Two notable cases, *In re Rosen* and *Durling v. Spectrum Furniture Co.*, continued to shape the legal framework for determining obviousness.[57] In *Rosen*, the court established a stringent requirement for evaluating design patent obviousness, mandating that a primary reference must be "basically the same" as the claimed design.[58] The rule significantly narrowed the scope of prior art that could be considered in the obviousness analysis, thereby

49. *See id.*; 35 U.S.C. § 103.
50. Mueller & Bream, *supra* note 8, at 469–70.
51. 182 F.2d 207, 208 (C.C.P.A. 1950).
52. *See id.*; *Whitman Saddle Co.*, 148 U.S. at 681.
53. *Whitman Saddle Co.*, 148 U.S. at 681.
54. 230 F.2d 447, 450 (C.C.P.A. 1956).
55. *See Whitman Saddle Co.*, 148 U.S. at 681–82.
56. *See Glavas*, 230 F.2d at 450.
57. *In re* Rosen, 673 F.2d 388, 389–90 (C.C.P.A. 1982); Durling v. Spectrum Furniture Co., 101 F.3d 100, 102 (Fed. Cir. 1996).
58. *Rosen*, 673 F.2d at 391.

providing broader protection for design patents.[59] The Federal Circuit in *Durling* further expanded the framework by introducing a two-part test: first, a primary reference must be identified, or the analysis ends, and second, secondary references must be so closely related that their ornamental features suggest applying them to the primary reference.[60] Together, these decisions set the stage for the legal landscape regarding design patent obviousness until the 2024 *LKQ* decision, which marked a pivotal shift in the standard.

a) *In re Rosen*: Requirement of a Primary Reference That is "Basically the Same"

The C.C.P.A. attempted to define the lines of what prior art could be considered in determining the obviousness of a design in *In re Rosen*.[61] In *In re Rosen*, a patent examiner rejected a claimed design for a coffee table because the combination of prior art references would have been obvious to a person of ordinary skill in the art (Figure 1).[62] On appeal, the court reversed the patent office decision because there was not a single reference that was the same as the claimed design to support a holding of nonobvious.[63] The court turned to its prior holding in *In re Jennings*, where it held, "[i]n considering patentability of a proposed design the appearance of the design must be viewed as a whole [. . .] and compared with something in existence—not with something that might be brought into existence by selecting individual features from prior art and combining them."[64] The court rejected the petitioner's "regrouping" of furniture elements and imposed a requirement for a primary reference that was currently in existence (Figure 2).[65] The court's holding required the design characteristics of the primary reference to be "basically the same" as the claimed design.[66] If no primary reference could be provided, then the obviousness inquiry ended without further consideration.[67] This primary reference is commonly referred to as the Rosen reference in § 103 obviousness cases.[68]

59. *See id.*
60. *Durling*, 101 F.3d at 103.
61. *Rosen*, 673 F.2d at 390–91.
62. *Id.* at 389–90.
63. *Id.* at 390–91.
64. *Id.* at 391 (quoting *In re* Jennings, 182 F.2d 207, 208 (C.C.P.A. 1950)).
65. *Id.*
66. *Id.*
67. *See id.*
68. LKQ Corp. v. GM Glob. Tech. Operations LLC, 102 F.4th 1280, 1289 (Fed. Cir. 2024).

Figure 1: The Claimed Design of the Coffee Table

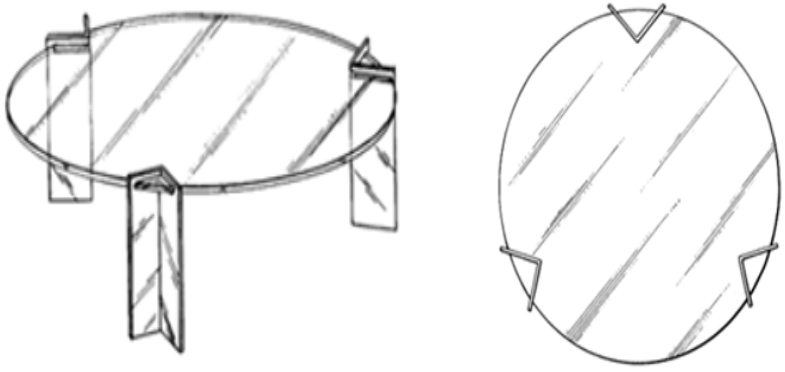
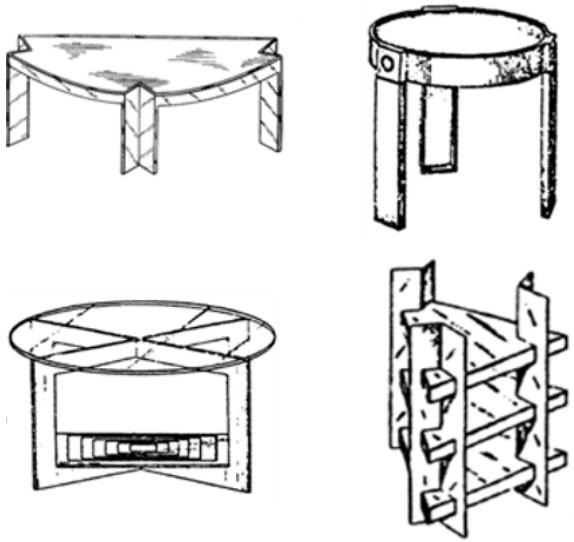


Figure 2: The Four Claimed Prior Arts with Elements of the Claimed Design



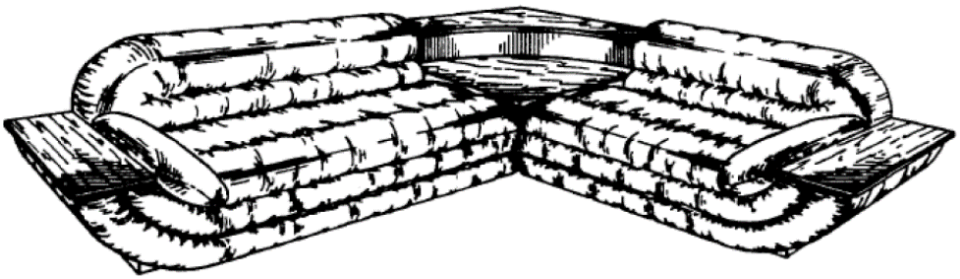
In re Rosen introduced a very rigid requirement to the obviousness analysis of design patents. Requiring a primary reference that is "basically the same" as the claimed design severely limited the prior art available to invalidate a patent and allowed designers to freely combine elements from previous designs as long as there is no prior art that could be considered "basically the same."[69]

69. *See id.*

b) *Durling v. Spectrum Furniture Co.*: Determining the Scope of Secondary References

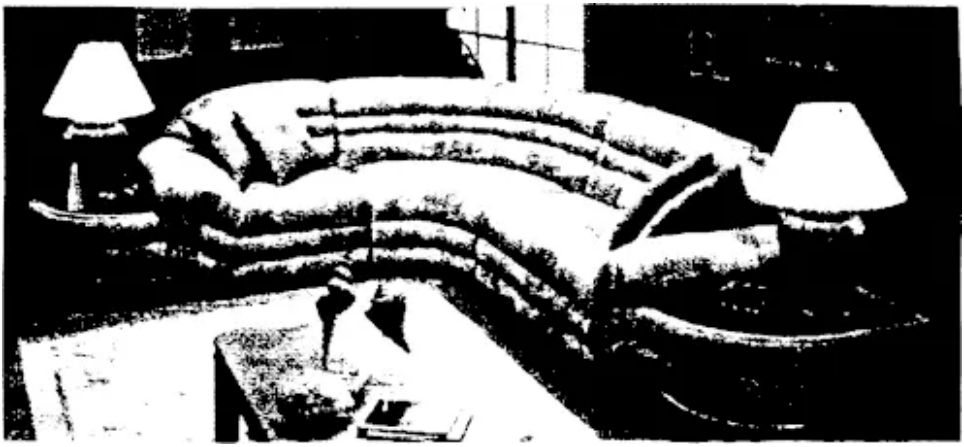
The Federal Circuit addressed the permissible scope of prior art that may supplement a *Rosen* Reference in *Durling v. Spectrum Furniture Co.*[70] In this case, Durling sued Spectrum for infringing on their design patent for a sofa.[71] Spectrum defended itself by arguing that Durling's design patent was not eligible because it was obvious.[72] The district court relied on Durling's concession that a different sofa manufactured by Schweiger Furniture Industries Inc. was the closest prior art for the primary reference and found that the differences between the Durling sofa and the Schweiger sofa were insignificant (Figures 3 and 4).[73] In addition to a secondary consideration of the lack of commercial success of Durling's sofa, the district court found Durling's design patent invalid for obviousness.[74]

Figure 3: Claimed Design: Durling's Sofa



70. Durling v. Spectrum Furniture Co., 101 F.3d 100, 103 (Fed. Cir. 1996).
71. *Id.* at 101–02.
72. *Id.* at 102.
73. *Id.*
74. *Id.*

Figure 4: Prior Art: Schweiger's Sofa



On appeal, however, the Federal Circuit did not agree that the differences between the two sofas were insignificant.[75] The Federal Circuit stated a two-part test to determine obviousness. The first part confirmed the decision in *Rosen*, requiring a single prior art reference currently in existence with basically the same design characteristics as the claimed design.[76] For the second part of the test, the court held that once a primary reference was found, secondary references must be "so related [to the primary reference] that the appearance of certain ornamental features in one would suggest the application of those features to the other."[77]

The court then applied its two-factor test to the facts before it. The Federal Circuit found that the district court improperly interpreted Durling's design claims as more general abstract design concepts rather than looking at the actual overall appearance.[78] The court found no prior art that would create basically the same overall impression as the claimed Durling design, and therefore it was improper to invalidate the design patent on the grounds of obviousness.[79]

The Federal Circuit criticized the district court for looking at Durling's claimed design too broadly by just describing the claimed design as a sectional sofa with end tables.[80] The Federal Circuit pointed out all the differences between Durling's design and the Schweiger sofa and noted that the significant

75. *Id.* at 103.
76. *Id.*
77. *Id.* at 103 (internal citations omitted).
78. *Id.*
79. *Id.* at 104.
80. *Id.*

differences could not create basically the same visual impression.[81] *Durling* further confirmed the high threshold for a primary reference established by *Rosen* and further established that any secondary reference must be "'so related' to the primary reference that the appearance of certain ornamental features in one would suggest the application of those features to the other."[82] The *Rosen-Durling* test in the Federal Circuit guided all obviousness analyses for design patents from the *Durling* decision in 1996 until it was overturned in *LKQ* in 2024.[83] The high threshold requirement of a *Rosen* reference made it extremely difficult to invalidate patents on obviousness grounds because of the difficulty in finding a primary reference that is "basically the same."[84]

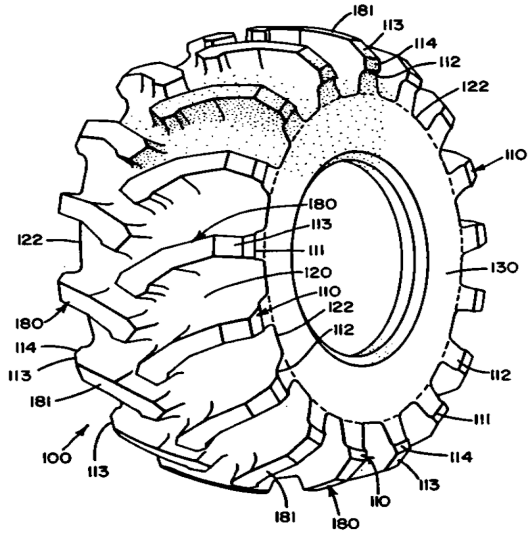
3. Court Opinion Under the Rosen-Durling *Test*

Titan Tire Corp. v. Case New Holland, Inc. provides an example of the Federal Circuit applying the *Rosen-Durling* test.[85] In this case, Titan Tire filed a motion for a preliminary injunction to prohibit Case New Holland from selling its allegedly infringing tires.[86] However, the trial court found that Case New Holland was likely to succeed on its invalidity claim (obviousness) against Titan Tire's design (Figure 5) and did not grant the injunction.[87] In applying the first part of the *Rosen-Durling* test, the Federal Circuit confirmed the trial court's finding that the primary reference, Ram Maxi-Trac tires (Figure 6), had design characteristics that are basically the same as Titan Tire's patented design.[88] Moving to the second part of the *Rosen-Durling* test, the Federal Circuit again confirmed the trial court's finding that secondary references, which had the hexagonal lug heads that the primary reference was missing, could be combined to create the same overall appearance as Titan Tire's claimed design.[89] The court found that both parts of the *Rosen-Durling* test were satisfied. It upheld the trial court's denial of the motion because of the likelihood that the design patent would be found invalid as obvious.[90]

81. *Id.*
82. *Id.* (cleaned up).
83. *See* LKQ Corp. v. GM Glob. Tech. Operations LLC, 102 F.4th 1280, 1287 (Fed. Cir. 2024).
84. *See Durling*, 101 F.3d at 103.
85. Titan Tire Corp. v. Case New Holland, Inc., 566 F.3d 1372, 1383 (Fed. Cir. 2009).
86. *Id.* at 1375.
87. *Id.* at 1385.
88. *Id.* at 1381.
89. *Id.* at 1383.
90. *Id.* at 1385.

Figure 5: Titan Tire's Claimed Design

Figure 6: Primary Reference Ram Maxi-Trac Tires



In this case, the Federal Circuit explicitly chose not to address whether the recently decided Supreme Court case *KSR International Co. v. Teleflex, Inc.* applied to design patents.[91] The court did note that it was not clear whether the Supreme Court meant to exclude design patents from the reach of *KSR*, but since the trial court's decision did not rely on *KSR*, the Federal Circuit chose not to address it.[92] It would take until *LKQ*, fifteen years later, for the court to revisit if *KSR* applied to design patents.

III. *LKQ CORPORATION V. GM GLOBAL TECHNOLOGY OPERATIONS*

In *LKQ Corporation v. GM Global Technology Operations*, the Federal Circuit sitting en banc overruled the *Rosen-Durling* test for determining obviousness in design patents. The en banc panel concluded that the rigid requirements of the *Rosen-Durling* test were inconsistent with the flexible standard of § 103 and prior Supreme Court decisions, including *KSR* and *Whitman Saddle Co.*[93] The court set forth a new framework for design patent obviousness analysis that utilizes the *Graham* factors from utility patents. Section III.A gives the background on LKQ's obviousness claim and summarizes the PTAB and Federal Circuit's decisions. Section III.B discusses the en banc panel's decision and reasoning and discusses how the court applied the *Graham* factors to design patents. It also discusses the remaining open questions after applying the *Graham* factors to design patents, including the scope of analogous art and secondary considerations. Section III.C discusses the USPTO's current guidance to examiners for design patent obviousness determinations and how the guidance addressed the remaining open questions.

A. BACKGROUND ON LKQ'S OBVIOUSNESS CLAIM AND THE PTAB'S AND FEDERAL CIRCUIT'S DECISION

LKQ Corporation and Keystone Automotive (collectively, LKQ) filed a petition for an *inter partes* review against GM Global Technology Operations, Inc. (GM) for a design patent on a "vehicle's front fender."[94] LKQ asserted that the challenged claim was unpatentable under 35 U.S.C. § 103 based on the previous fender alone or as modified by a promotional brochure depicting the design of the front fender on the 2010 Hyundai Tucson (Figure 7).[95] Looking

91. *Id.* at 1384–85.
92. *Id.*
93. LKQ Corp. v. GM Glob. Tech. Operations LLC, 102 F.4th 1280, 1294 (Fed. Cir. 2024).
94. *Id.* at 1288.
95. *Id.*

at LKQ's obviousness claim, the PTAB applied the long-standing *Rosen-Durling* test and found that LKQ had failed to identify a *Rosen* reference that was "basically the same."[96] Since there was no *Rosen* reference, the PTAB ended its obviousness analysis, finding that GM's design patent would not have been obvious.[97]

Figure 7: GM's Claimed Design and LKQ's Proposed Prior Art

'625 PATENT CLAIMED DESIGN	*LIAN PRIMARY REFERENCE*	*TUCSON SECONDARY REFERENCE*
		

LKQ appealed this decision, contending that the Supreme Court had implicitly overruled the *Rosen-Durling* test in their *KSR* decision.[98] As a panel, the Federal Circuit could not overrule *Rosen* or *Durling*; the court needed to hear the case en banc to overrule its precedent.[99] So, the court was bound to apply the existing law, and it was unclear if the Supreme Court overruled the *Rosen-Durling* test for design patents in *KSR*.[100]

96. *Id.* at 1289.

97. *Id.*

98. LKQ Corp. v. GM Glob. Tech. Operations LLC, No. 2021-2348, 2023 WL 328228, at *2 (Fed. Cir. Jan. 20, 2023), *reh'g en banc granted*, *opinion vacated*, 71 F.4th 1383 (Fed. Cir. 2023), and *on reh'g en banc*, 102 F.4th 1280 (Fed. Cir. 2024).

99. *See LKQ*, 102 F.4th at 1290; *see also* Deckers Corp. v. United States, 752 F.3d 949, 965 (Fed. Cir. 2016) (explaining panels are "bound by prior panel decisions until they are overruled by the court en banc or the Supreme Court").

100. *LKQ*, 102 F.4th at 1290; *see also Deckers Corp.*, 752 F.3d at 965 (explaining panels are "bound by prior panel decisions until they are overruled by the court en banc or the Supreme Court").

B. EN BANC PANEL'S DECISION, REASONING, AND UTILIZATION OF THE *GRAHAM* FACTORS FOR DETERMINING OBVIOUSNESS IN DESIGN PATENTS

To answer whether *KSR* overruled *Rosen* or *Durling*, the Federal Circuit vacated the panel opinion and granted a hearing en banc.[101] The en banc panel determined that the § 103 statute for obviousness along with the Supreme Court's precedents in *Whitman Saddle Co.*, *Graham*, and *KSR*, all suggested a more flexible approach than the current *Rosen-Durling* test.[102] First, the en banc panel turned to the language of § 103 and determined that it set forth an expansive and flexible approach for assessing obviousness.[103] *Rosen*'s rigid requirement limiting a primary reference to designs that are "basically the same" as the claimed design—and abruptly ending the obvious analysis if one could not be identified—was at direct odds with the broad and flexible standard in § 103.[104]

Next, the panel found that *Rosen*'s "basically the same" requirement was at odds with the Supreme Court's analysis in *Whitman Saddle Co.* The panel noted that in *Whitman Saddle Co.*, the Court did not ask if the prior art was "basically the same."[105] Instead, the Court acknowledged that the claimed design combined the front and the rear of two prior arts, which was a customary combination for saddlers to make.[106] The panel held that *Whitman Saddle Co.* opposed *Rosen*'s "one-size-fits all approach" because finding a single reference that discloses nearly every aspect of the claimed design would not fit all obviousness scenarios.[107] The *Rosen* requirement would not find it obvious to combine two ends of a saddle even though it is a common and customary practice for saddlers.[108]

Additionally, the panel found that the strict *Rosen* reference requirement conflicted with the Supreme Court's guidance in *KSR*. The Supreme Court explained that "[w]hen a court transforms [a] general principle into a rigid rule that limits the obviousness inquiry . . . it errs."[109] The Court in *KSR* emphasized the "expansive and flexible approach" outlined in § 103 and *Graham* and reiterated the need for caution in granting a patent based on the combination

101. *LKQ*, 102 F.4th at 1290.
102. *Id.* at 1293.
103. *Id.* at 1294.
104. *Id.*
105. *Id.*
106. *Id.*
107. *Id.*
108. *See* Smith v. Whitman Saddle Co., 148 U.S. 674, 681 (1893).
109. KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 419 (2007).

of elements in the prior art.[110] The panel noted that the flexible approach the Court emphasized, in addition to the need for caution in granting a patent that claims an obvious combination of elements, is directly at odds with the rigid requirement for a *Rosen* reference.[111]

Next, considering the second part of the *Rosen-Durling* test, the en banc panel found that the "so related" requirement added a restriction that was at odds with the broad standard for prior art in § 103.[112] Section 103 required comparing the claimed design to the prior art to determine if the claimed design as a whole would have been obvious to a person having ordinary skill in the relevant field.[113] The panel held that nothing in the statute would indicate that the secondary prior art references must be "so related" to the primary that it creates its own motivation to combine them.[114]

Additionally, the panel found the "so related" requirement too rigid and analogous to the rigid application of the TSM test that the Supreme Court rejected in *KSR*.[115] The panel also found the second part of the test inconsistent with the Supreme Court's decision in *Whitman Saddle Co.* In *Whitman Saddle Co.*, the Court relied on the knowledge and practice of a saddler or ordinary workman in the trade, determining that putting two halves of saddles together was an exercise of ordinary skill and in the way and manner customarily done.[116] The Court did not rely on a "so related" requirement to combine prior art references but instead on the knowledge of a person of ordinary skill in the relevant field, consistent with the framework the Court laid out in *Graham*.[117]

To replace the *Rosen-Durling* test, the panel turned to the *Graham* factors, finding that obviousness for design patents should be determined on factual criteria similar to tests developed for reviewing the validity of a utility patent under § 103.[118] Applying the *Graham* factors in a design patent context, the panel held that the fact finder should consider the "scope and content of the prior art" that is within the knowledge of an ordinary designer in the field of design.[119]

As in *Graham*, to reign in the scope of prior art and prevent hindsight after dismissing the "so related" requirement, the panel applied the analogous art

110. *Id.* at 415.
111. *LKQ*, 102 F.4th at 1294.
112. *Id.* at 1294–95.
113. 35 U.S.C. § 103.
114. *LKQ*, 102 F.4th at 1295.
115. *Id.*
116. Smith v. Whitman Saddle Co., 148 U.S. 674, 681 (1893).
117. *LKQ*, 102 F.4th at 1295.
118. *Id.*
119. *Id.* at 1295–96.

requirement to the obviousness of design patents.[120] As stated previously, there is a two-part test to determine the scope of analogous art for utility patents: "(1) whether the art is from the same field of endeavor as the claimed invention; and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the endeavor is involved."[121] The panel applied the first part of the test to design patents, straightforwardly stating that "analogous art for a design patent includes art from the same field of endeavor as the article of manufacture of the claimed design."[122] The panel acknowledged that the second part of the test does not apply directly to design patents since they do not articulate a particular problem involving the inventor or designer.[123] Although the second part of the test would not apply to design patents, the panel declined to define the full contours of the analogous art test. It left the question to be addressed on a case-by-case basis and for future cases to develop a standard.[124]

Applying the second *Graham* factor to design patents, a court must assess the differences between the visual appearances of the claimed design and the prior art designs from the perspective of the ordinary designer in the field of the article of manufacture.[125] The panel likened this factor to design patent infringement, where the visual appearance of the claimed design is compared to that of the allegedly infringing design—but, instead of comparing the claimed design to an infringing design, it is compared to prior art designs.[126]

The panel interpreted the third *Graham* factor in the design patent context as assessing the obviousness of a design from the viewpoint of an ordinary designer in the related field of the design.[127]

For the final *Graham* factor, the panel acknowledged the requirement to assess secondary considerations when evidence of considerations is

120. *Id.* at 1296.

121. *Id.* at 1297.

122. *Id.*

123. *Id.*

124. *Id.* at 1297–98.

125. *Id.* at 1298; *see* Apple, Inc. v. Samsung Elecs. Co., 678 F.3d 1314, 1329 (Fed. Cir. 2012) (characterizing obviousness as whether "one of ordinary skill would have combined teachings of the prior art to create the same overall visual appearance as the claimed design" (quoting Titan Tire Corp. v. Case New Holland, Inc., 566 F.3d 1372, 1381 (Fed. Cir. 2009))).

126. *LKQ*, 102 F.4th at 1298; *see* Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665, 676 (focusing on the "overall appearance of the design" in assessing design patent infringement).

127. *LKQ*, 102 F.4th at 1298–99; *In re* Nalbandian, 661 F.2d 1214, 1216 (C.C.P.A. 1981) (holding that "[i]n design cases we will consider the fictitious person identified in § 103 as 'one of ordinary skill in the art' to be the designer of ordinary capability who designs articles of the type presented in the application," which is consistent with the third Graham factor).

presented.[128] Prior cases involving secondary considerations confirmed that at least commercial success, industry praise, and copying could be used to indicate the nonobviousness of design patents.[129] The panel left it to future cases to decide if other considerations, such as a long-felt but unsolved need, failure of others, or any other potential secondary considerations apply in the design patent context.[130]

C. OPEN QUESTIONS AFTER *LKQ* AND THE USPTO'S GUIDANCE TO EXAMINERS

Although the en banc panel walked through how the *Graham* factors would apply in the design patent space, it still acknowledged that there were some open questions, including the scope of the prior art that should be considered and any additional secondary considerations, to be answered on a case-to-case basis.[131] After the Federal Circuit's decision in *LKQ*, the USPTO released a memo with updated guidance and examination instructions for determining the obviousness of design patent claims.[132] The guidance does not bind the courts and is used to assist examiners in the obviousness analysis.[133] The updated guidance addressed but did not answer the remaining two open questions. The USPTO addressed the first question of how to determine whether a prior art design outside the field of endeavor of the article of manufacture is analogous.[134] Examiners were directed to consider the degree to which an ordinary skilled designer would be motivated to consider other fields.[135] Additionally, the USPTO advised examiners to confer with their supervisory patent examiner or look at examples of what has been determined to be analogous.[136] The guidance did not effectively answer the open question of the scope of analogous art. It still leaves it open to the examiner to consider a broad scope of analogous art to invalidate design patents on obviousness

128. *LKQ*, 102 F.4th at 1300.

129. *See, e.g.*, Campbell Soup Co. v. Gamon Plus, Inc., 10 F.4th 1268, 1276–79 (Fed. Cir. 2021) (considering evidence of commercial success, industry praise, and copying); MRC Innovations, Inc. v. Hunting Mfg., LLP, 747 F.3d 1326, 1335–36 (Fed. Cir. 2014) (considering evidence of commercial success, copying, and acceptance by others).

130. *LKQ*, 102 F.4th at 1300.

131. *See id.* at 1297–1300.

132. *See generally* Memorandum from Katherine K. Vidal, Dir., U.S. Pat. & Trademark Off., to P.T.A.B., Updated Guidance and Examination Instructions for Making a Determination of Obviousness in Designs in Light of *LKQ Corp. v. GM Global Technology Operations LLC* (May 22, 2024) [hereinafter PTO Guidance].

133. *In re* Rudy, 956 F.3d 1379, 1383 (Fed. Cir. 2020) (holding that the Federal Circuit is not bound by USPTO guidance).

134. PTO Guidance, *supra* note 132, at 2.

135. *Id.*

136. *See id.*

grounds.[137] If the scope is vast, as it could be hard to determine the exact field a designer operates in and allow for hindsight, then the continued precedent and examples that the examiner will continue to consider will lead to potentially more patents being found invalid on obviousness grounds.

The new USPTO guidance also did not address the potential for any new secondary considerations. It focused on the considerations outlined by the panel of commercial success, industry praise, and copying.[138] Secondary considerations can be powerful enough to overturn a prima facie case of obviousness, so there remains the potential that new secondary considerations may still be introduced that could influence the examiner's final decision on obviousness.[139]

IV. IMPLICATIONS OF UTILIZING THE *GRAHAM* FACTORS AND AN OPPORTUNITY TO FILTER OUT UNPROTECTABLE FUNCTIONAL ELEMENTS FROM OBVIOUSNESS ANALYSIS

The fallout from shifting to utilizing the *Graham* factors for design patent obviousness analysis will lead to a major change in what designs are considered obvious to a court or examiner. Section IV.A discusses the potential implications of this ruling, one being the increased difficulty of receiving and enforcing design patents, using repair parts in the automotive industry as an example. In addition, it discusses the implications of *LKQ* from the PTAB's most recent ruling in *Next Step Group, Inc. v. Deckers Outdoor Corp.*[140] Section IV.B analyzes *why* the Federal Circuit would choose to make this ruling and align the design patent obviousness factors to utility patents. Section IV.C explores how applying the second *Graham* factor could be used to filter out unprotectable functional elements. Utilizing an abstraction, filtration, and comparison test similar to the Second Circuit's copyright infringement test will allow examiners and courts to filter out functional elements of a design and focus on the ornamental elements that design patents are intended to protect.

137. *See* Brief for Appellee, LKQ Corp. v. GM Glob. Tech. Operations LLC, 102 F.4th 1280 (Fed. Cir. 2024) (No. 21-2348), 2023 WL 6879814, at *48–49 (arguing that an analysis without the *Rosen-Durling* framework will take away guideposts and leave fact finders rudderless in judging particular subsets of obviousness).

138. *See* PTO Guidance, *supra* note 132; *see* MPEP § 1504.03 (9th ed. Rev. 1, Jan. 2024).

139. *See* MPEP § 2145 (9th ed. Rev. 1, Jan. 2024).

140. IPR2024-00525, Paper 16, 2 (P.T.A.B. Aug. 6, 2024).

A. POTENTIAL IMPLICATIONS OF UTILIZING *GRAHAM* FACTORS

The panel's decision in *LKQ* reshaped the analysis for design patent obviousness and will have several potential implications. Section IV.A.1 discusses the potential drawbacks of applying the *Graham* factors to design patents, including increased uncertainty, the possibility of more successful invalidity claims, and the increased potential to allow hindsight analysis affect the obviousness determination. Section IV.A.2 explores how the Graham factors might make obtaining and enforcing design patents more difficult. Section IV.A.3 examines the specific implications of the *Graham* factors on the automotive repair parts industry, where design patents are critical to maintaining market control and higher prices. Finally, Section IV.A.4 discusses the PTAB's application of the *Graham* factors in a recent case, demonstrating that while the new approach offers flexibility, a high threshold remains to prove obviousness.

1. Criticism for a Uniform Test with Utility Patents

Utilizing the *Graham* factors to determine obviousness for design patents has the benefit of a uniform test with utility patents. However, the Graham factors can be criticized and may also lead to more successful invalidity claims due to obviousness. Eliminating the established *Rosen-Durling* framework, which has been in place since 1996, exposes up to four hundred thousand U.S. design patents to substantial uncertainty as they can now be challenged in court under the new obviousness standard.[141] The flexibility of utilizing the *Graham* factors could leave fact finders without the proper guidelines to conduct the obviousness analysis.[142] The *Graham* factors can lead to unpredictable results on what is considered obvious and what is not because, unlike utility patents, there are no written claims and just a drawing of the claimed design.[143] Casting aside the "so related" step from *Durling* could allow hindsight because it removes the step to ensure that the patent challenger identifies why an ordinary designer would modify the primary reference because of another design.[144] The current ambiguous state of the first *Graham* factor could allow a challenger to successfully use hindsight to identify and combine elements that had no role in the design to challenge a design patent on obviousness grounds.[145]

---

141. AIPLA Brief, *supra* note 13, at *26.
142. Brief for Appellee, *LKQ*, 102 F.4th 1280 (No. 21-2348), 2023 WL 6879814, at *13.
143. *Id.* at *16.
144. *See id.* at *23.
145. *See* Brief for Ford Motor Co. as Amici Curiae Supporting Appellee, *LKQ*, 102 F.4th 1280 (No. 21-2348), at *11.

2. *The* Graham *Factors Can Make It Harder to Receive and Then Enforce Design Protections*

Another implication of utilizing the *Graham* factors in the design patent space is that it could be harder to receive design protection and enforce it once it is obtained. Basic design elements such as a straight line, a curve, and a spline can be found in virtually any prior art reference and combined because they are simple design elements.[146] With the *Graham* factors' flexibility, patent examiners can see the repeated design elements and decide that the combination of the elements is obvious. The uncertainty of receiving design protection will also carry over to enforcing design protection. The unpredictability of design protection may embolden copycats to flood the markets with knockoffs that could harm the brand's value, knowing it is uncertain if the design patent holder will be able to enforce their design protections.[147] The uncertainty whether a design may receive protections combined with the uncertainty that it may be enforced against counterfeits may impact the future of product innovation by diminishing the value of industrial design and disincentivizing innovation in industrial design.[148] However, this disincentivizing could conversely increase innovation in industrial design due to a diminished fear that a design will be found to be infringing.[149]

Although the *Graham* factors are a more flexible approach to determining obviousness for design, there is still the potential that there will be no overall change because obviousness is an objective test done through the eyes of the examiner or fact finder. The Federal Circuit reasoned that a more flexible approach would allow fact finders to use common sense that a rigid rule would limit.[150] However, even utilizing common sense, a fact finder can still find an obviousness determination that reaches the same outcome the *Rosen-Durling* test would have produced.[151] A patent examiner looking at a new design could still limit the scope of their analogous prior art that is still "so related" even though it is no longer required.[152] They could also look for a primary reference

146. Corrected Brief of Amicus Curiae Indus. Designers Soc'y of Am. in Support of Appellee and Affirmance, *LKQ*, 102 F.4th 1280 (No. 21-2348), 2023 WL 7183956, at *13 [hereinafter Amicus Brief of IDSA].

147. Corrected Brief for Amicus Curiae Apple Inc. in Support of Appellee GM Global Technology Operations LLC, *LKQ*, 102 F.4th 1280 (No. 21-2348), 2023 WL 7296931, at *28.

148. Amicus Brief of IDSA, *supra* note 146, at *13.

149. *See* Mueller & Bream, *supra* note 8, at 511 (noting that blindly applying KSR to design patents could be devastating to the field of design).

150. *LKQ*, 102 F.4th at 1291–92; *see* KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 420–21 (2007).

151. *See LKQ*, 102 F.4th at 1291–92; *KSR*, 550 U.S. at 420–21.

152. *See LKQ*, 102 F.4th at 1295.

that is "basically the same" and ignore the combination of multiple prior arts as obvious.[153] Until more cases demonstrate the application of the *Graham* factors in the design patent space, there is no way to fully predict its effect on the ability to obtain and enforce design patents.[154]

3. Impact on the Automobile Parts Industry

One market in which the *Graham* factors for obviousness could have the most significant impact is automobile parts because manufacturers rely on design patents to maintain market dominance on repair parts. Automotive manufacturers control more than 70 percent of the market for repair parts and can charge up to 80 percent more for their repair parts due to design patent protection.[155] Automakers can effectively block competition for crash parts, leading to higher repair costs, which insurers pass to the consumer as higher auto insurance premiums.[156] An automaker blocking a third-party parts manufacturer was the crux of the *LKQ* case, with an auto part supplier (LKQ) contesting the validity of an automotive manufacturer's (GM) design patent on a fender so they cannot be excluded from the market.[157]

This issue of car manufacturers excluding third-party suppliers has also been at the forefront of discussion in Congress, most recently with the introduction of the Save Money on Auto Repair Transportation (SMART) Act. This Act would create a carve-out for design patent infringement if the purpose of the infringing design is to provide a part for the repair of a motor vehicle and restore it to its original appearance.[158] However, due to lack of congressional support, the SMART Act faces an uphill battle. If the flexibility of the *Graham* factors leads courts to find more design patents invalid on obviousness grounds and makes it more difficult to obtain and enforce design protection, then the goals of the SMART Act would be realized.[159] Auto part makers will be able to enter the market without worry of exclusion by a design patent, and the increase in competitors beyond just the original equipment manufacturers will drive the repair price down, leading to lower insurance rates for the consumer.[160]

---

153. *See id.* at 1294.

154. *See id.* at 1300.

155. *Hearings*, *supra* note 3, at 16 (statement of Jack Gillis, Dir. of Pub. Affs., Consumer Fed'n of Am.).

156. *Id.*

157. *See generally LKQ*, 102 F.4th 1280.

158. *See* Save Money on Auto Repair Transportation (SMART) Act, H.R. 1707, 188th Cong. § 2 (2023).

159. *See id.*

160. *See Hearings*, *supra* note 3, at 16 (statement of Jack Gillis, Dir. of Pub. Affs., Consumer Fed'n of Am.) (arguing that the lack of competition for repair parts due to design patent

4. *The PTAB's First Final Written Decision Since* LKQ: Next Step Group Inc. v. Deckers Outdoor Corporation

On August 6, 2024, the PTAB issued its first final written deci Next Step sion applying the *Graham* factors as the test for the obviousness of design patents.[161] This case demonstrated the early implications of *LKQ* and showed that the PTAB still required petitioners to be detailed in their explanation of any combinations or modifications of prior art that achieved the claimed design.[162] In this case, Next Step Group, Inc. (NSG) asserted ten unpatentability grounds, including eight obviousness theories against a boot design patent owned by Deckers Outdoor Corporation.[163] However, the PTAB determined that their obviousness theories were not reasonably likely to prevail and declined to initiate an *inter partes* review.[164]

The PTAB criticized NSG for not being more detailed about the prior art and for not explaining why combining or modifying it would have been obvious.[165] NSG needed to provide an adequate reason why a designer would select particular elements from all possible design options, and they needed to sufficiently address all the differences in the overall appearance of the claimed design and the prior art.[166] The PTAB criticized NSG for not addressing all the subtle differences in the design of the prior art boots, including "the ratio of the length of the foot opening to the length of the boot, the pull tab, and the sloping top line."[167] Although the *Graham* factors provided a more flexible approach, as seen in this case, a high threshold remains to invalidate a design patent for obviousness.[168]

The removal of the *Rosen* reference and the relaxation of the *Durling* "so related" requirement may make it easier to provide relevant prior art. However, the PTAB is still looking for petitioners to explain every aspect of a claimed

---

protections allows car companies to charge monopolistic prices, leading to higher repair costs and auto insurance premiums).

161. Connor Scholes & John Evans, *PTAB Issues First Post-LKQ Design Patent Decision*, PTAB LITIG. BLOG (Oct. 13, 2024), https://www.ptablitigationblog.com/ptab-issues-first-post-lkq-design-patent-decision/.

162. *See* Next Step Grp., Inc. v. Deckers Outdoor Corp., IPR2024-00525, 2024 WL 3678413, at *17 (P.T.A.B. Aug. 6, 2024) ("Petitioner does not offer adequate reasoning why a designer would select, from all the possible design options, the specifically configured pull tab of the claimed design.").

163. *Id.* at *2.

164. *Id.* at *1.

165. Next Step Grp., Inc. v. Deckers Outdoor Corp., IPR2024-00525, Paper 16, 45 (P.T.A.B. Aug. 6, 2024).

166. *Id.*

167. *Id.* at 50.

168. *Id.* at 45.

design and any combinations or modifications to the prior art that achieve the claimed design.[169] This first determination from the PTAB demonstrates that the new obviousness standard may not affect the ability to receive a design patent. It is yet to be seen if a district court will require the same detailed explanation the PTAB required in future cases or if they will accept general assertions of obviousness like NSG put forward. If the PTAB is looking for an obvious explanation for differences in even slight, trivial variations, such as the shape of a line or the height-to-width ratio, that could be an incredibly high threshold to prove obviousness with available prior art.

B. WHY ALIGN WITH THE UTILITY PATENT STANDARD IF DESIGN PATENTS ARE DIFFERENT? WHY NOT KEEP SEPARATE STANDARDS LIKE INFRINGEMENT?

If the *Rosen-Durling* test has been the controlling rule to determine obviousness since 1996, why did the Federal Circuit decide to upend its precedent by applying a Supreme Court decision that occurred fifteen years ago? GM and supporting amici briefs criticized the need to upend the *Rosen-Durling* framework, which the public has come to rely on and the USPTO has developed a body of jurisprudence around.[170] The Federal Circuit established a separate standard to determine infringement in design patents from utility patents, knowing that the utility patent infringement framework would not apply to design patents.[171]

One of the most straightforward explanations is that the Federal Circuit did not want to be overruled by the Supreme Court on its test for design patent obviousness. This concern arose because they had previously been overruled on their TSM test for utility patent obviousness. In Judge Stark's concurrence-in-part during the panel decision, he acknowledged that there was "at minimum, substantial tension between the Supreme Court's holding in KSR and our [. . .] test."[172] He noted that the *Rosen* reference requirement and the "so related" *Durling* requirement were the types of limiting rules similar to the

169. Scholes & Evans, *supra* note 161; *see Next Step Grp.*, IPR2024-00525, 2024 WL 3678413, at *17 ("Petitioner does not offer adequate reasoning why a designer would select, from all the possible design options, the specifically configured pull tab of the claimed design.").

170. *See* Brief for Appellee, LKQ Corp. v. GM Glob. Tech. Operations LLC, 102 F.4th 1280 (Fed. Cir. 2024) (No. 21-2348), 2023 WL 6879814, at *43–44; AIPLA Brief, *supra* note 13, at *26.

171. *See* Mark A. Lemley & Mark P. McKenna, *Design Patents Aren't Patents (and It's a Good Thing Too)*, 92 GEO. WASH. L. REV. 811, 818–31 (2024) (discussing the differences between design and utility patents).

172. LKQ Corp. v. GM Glob. Tech. Operations LLC, No. 2021-2348, 2023 WL 328228, at *13 (Fed. Cir. Jan. 20, 2023) (Stark, J., concurring in part and concurring in judgment).

TSM rule that *KSR* faulted.[173] However, Judge Lourie presented additional views that differed, acknowledging that although § 103 applies to all patents, the considerations involved in determining obviousness between design and utility patents differ.[174] To settle the differences of opinions on the panel for *LKQ*, and since there was no clear direction from the Supreme Court if *KSR* applied to design patents, the Federal Circuit made the rare decision to hear *LKQ* en banc.

The *LKQ* en banc opinion acknowledges that the *KSR* Court emphasized that § 103 and *Graham* "set forth an expansive and flexible approach" and that rigid factors are not consistent with their case law.[175] There are significant differences between design and utility patents, but they are governed by § 103 for obviousness.[176] The Federal Circuit, keen to avoid being overruled again for applying strict rules that limit the flexible approach of § 103, removed the *Rosen-Durling* test before the Supreme Court could potentially overturn them.

Another reason the Federal Circuit could have chosen to adopt the *Graham* factors is because they are more in line with how designers approach a new design. The *Graham* factors can be adjusted for design patents easily.[177] With the previous *Rosen* reference requirement, the majority of designs that made a trivial change to a current design were found to be protectable. However, designers often draw from various sources and combine different design concepts.[178] Utilizing the *Graham* factors, fact finders can now find specific designs that combine multiple elements to be obvious if they are based on known principles of design and what designers would do.[179] Because the Federal Circuit was easily able to apply the *Graham* factors to design patents in conjunction with how they are closely related to how designers operate, it made sense for the court to keep the standard the same as utility patents rather than come up with a new standard that would fit § 103.

Additionally, the court in *LKQ* explicitly stated that the standard for design obviousness in the third *Graham* factor was to be viewed through the lens of a

---

173. *Id.*

174. *Id.* at *8 (Lourie, J., filing additional views).

175. LKQ Corp. v. GM Glob. Tech. Operations LLC, 102 F.4th 1280, 1300 (Fed. Cir. 2024).

176. *See* Lemley & McKenna, *supra* note 171, at 819–22 (discussing the three major differences between design patent and utility patent infringement analysis: (1) design patents are claimed visually rather than verbally, (2) design patent infringement has no all-elements rule, and, lastly, (3) the difference in the perspective between design and utility patents from which the comparisons are made).

177. *See LKQ*, 102 F.4th at 1295–1300 (discussing how the *Graham* factors will apply to design patents).

178. Lemley & McKenna, *supra* note 171, at 844.

179. *See id.*

designer with skill in the field to which the claimed design pertains as a person having ordinary skill in the art.[180] This requirement that the standard for obviousness is from a designer's viewpoint will benefit the obviousness analysis to design patents specifically because it requires a holistic inquiry focused on what designers would do and look at.[181] This potentially will also be a higher standard than a PHOSITA in utility patents, where a person with a mechanical engineering degree can be considered a PHOSITA for a mechanical utility patent even if they are not a practicing engineer. The standard the court defines for design patents is "the designer of ordinary capability who designs articles of the type presented in the application."[182] The higher standard—requiring a designer who works in the relevant field rather than someone with only a design education—may lead courts to find more designs obvious. Practicing designers are aware of more design elements and know how those elements are combined and modified in their field.

C. THE SECOND *GRAHAM* FACTOR SHOULD FILTER OUT FUNCTIONAL ELEMENTS AT THE NONOBVIOUNESS VALIDITY STAGE

The *Graham* factor analysis presents an opportunity for the courts to fix one of the most significant issues that plague design patents: the inclusion of unprotectable functional elements.[183] The Federal Circuit's decision in *Apple, Inc. v. Samsung Electronics Co.* reinforced the narrow framework of interpreting ornamentality and non-functionality established in *L.A. Gear, Inc. v. Thom McAn Shoe Co.*[184] In *L.A. Gear*, the Federal Circuit held that the availability of alternative designs—in this case, alternative designs for a shoe—means the design of the shoe cannot be solely dictated by function.[185] The Federal Circuit has treated designs for which there are alternatives as non-functional, which has allowed manufacturers such as Apple to use design patents to protect functional elements of their designs as long as there are suitable alternatives.[186] This opposes the 1902 Design Patent Act, where Congress clarified that they were limited to ornamental attributes and did not extend to functional attributes.[187] Utilizing the *Graham* factors for obviousness presents the

180. *LKQ*, 102 F.4th at 1298–99.

181. *See* Lemley & McKenna, *supra* note 171, at 844.

182. *LKQ*, 102 F.4th at 1299 (citing *In re* Borden, 90 F.3d 1570 (Fed. Cir. 1996)).

183. *See* Peter S. Menell & Ella Corren, *Design Patent Law's Identity Crisis*, 36 BERKELEY TECH. L.J. 1, 115 (2021).

184. *Id.*; *see* Apple, Inc. v. Samsung Elecs. Co., 678 F.3d 1314 (Fed. Cir. 2012); L.A. Gear, Inc. v. Thom McAn Shoe Co., 988 F.2d 1117 (Fed. Cir. 1993).

185. *L.A. Gear*, 988 F.2d at 1123.

186. *See* Menell & Corren, *supra* note 183, at 115.

187. *See* Act of May 9, 1902, ch. 783, sec. 4929, 32 Stat. 193 (amending R.S. 4929, relating to design patents).

opportunity to first filter out non-protectable functional elements before considering the difference between the prior art and the claimed design.

The court should look to copyright law and the abstraction, filtration, and comparison test to identify the best way to filter out unprotectable elements. That framework helps determine which elements are protectable by copyright and which are infringed. In *Computer Associates International v. Altai, Inc.*, the Second Circuit devised the abstraction, filtration, and comparison test and applied it to computer code. The first step of abstraction for copyright law involves separating the unprotectable ideas from the protectable elements of expression.[188] Applying this step to design patents would separate the non-protectable elements from the protectable ornamental elements. The second step, filtration, requires separating the protectable expression from the non-protectable material.[189] For design patents, this would mean filtering out any functional elements and leaving just the ornamental elements.[190] The final step, comparison, requires comparing the remaining protectable elements and determining if there is substantial similarity between the alleged infringing work and the protected work.[191] Applying this step to design patents to determine obviousness would require moving to the third *Graham* factor and viewing the remaining elements as a whole of the claimed design and prior art from the perspective of a designer who works in the field.[192] Then, it must be determined if it would have been obvious to a designer in the field—if the designer would have been motivated to modify the remaining elements of the prior art to create the same overall visual appearance of the remaining elements of the claimed design.[193]

Utilizing the abstraction-filtration-comparison test during the second *Graham* factor will help prevent companies from using design patents to receive protection for functional elements. In the case of *LKQ*, any unprotectable functional elements, such as the aerodynamic sculpting of the fender, the wheel arch shape, and the door cut line, would be filtered out during the abstraction obviousness analysis. These are also elements that the PTAB concluded were key differences between the prior art and the claimed

188. Comput. Assocs. Int'l, Inc. v. Altai, Inc., 982 F.2d 693, 706 (2d Cir. 1992); *see* Oracle Am., Inc. v. Google Inc., 750 F.3d 1339, 1357 (Fed. Cir. 2014) (discussing endorsement of the abstraction-filtration-comparison test in the Ninth and Tenth Circuit courts).

189. *Altai*, 982 F.2d at 707.

190. *See id.*

191. *Id.* at 710.

192. *See* LKQ Corp. v. GM Glob. Tech. Operations LLC, 102 F.4th 1280, 1298–99 (Fed. Cir. 2024).

193. *Id.*

design.[194] With these major functional elements removed, a designer in the field will likely find it obvious to modify the prior art design to create the same overall visual appearance of the remaining elements in the claimed design and invalidate the design patent.

The ability to filter out unprotectable functional elements at the obviousness phase will allow design patents to be granted only for unique ornamental designs; however, the issue of determining what is considered functional remains. In *L.A. Gear*, the Federal Circuit determined that "when there are several ways to achieve the function of an article of manufacture, the design of the article is more likely to serve a primarily ornamental purpose."[195] This standard means a design element could not be considered functional if the claimed design can point to other alternatives to achieve the same function. This current standard allows designers a back door for functional design protection—as long as they can point to alternative designs, then the design itself is not "dictated by function" and can be granted a design patent.[196]

The Federal Circuit should turn to the Third Circuit's opinion in *Ezaki Glico Kabushiki Kaisha v. Lotte International America Corp.* to close this loophole and prevent backdoor design protection for functional elements. Although this case concerns trade dress protection and not design patents, it still involves filtering out unprotectable functional elements. The Third Circuit determined that a feature of a particular design is functional if it is "useful," even if it is not essential to the product's function.[197] The court also held that evidence could show that the design is functional even with alternatives.[198]

Applying this standard to the design patents in *Apple v. Samsung*, a court could likely find the rounded edges of Apple's design useful because they better distribute the impact during drops and prevent screen cracking.[199] Although alternative designs exist for the corners, which are not essential to the phone's function, under the standard set forth by the Third Circuit, the rounded edges would be deemed functional and, therefore, not protectable.[200]

Taking elements from copyright and trademark protections may seem like a radical step to prevent design patents from protecting functional aspects; however, it will also bring the United States closer to the current E.U. design

194. LKQ Corp. v. GM Glob. Tech. Operations LLC, No. 2021-2348, 2023 WL 328228, at *2 (Fed. Cir. Jan. 20, 2023).

195. L.A. Gear, Inc. v. Thom McAn Shoe Co., 988 F.2d 1117, 1123 (Fed. Cir. 1993).

196. Menell & Corren, *supra* note 183, at 122–24.

197. Ezaki Glico Kabushiki Kaisha v. Lotte Int'l Am. Corp., 986 F.3d 250, 256–57 (3d Cir. 2021).

198. *Id.* at 260.

199. *See* Apple, Inc. v. Samsung Elecs. Co., 678 F.3d 1314, 1318 (Fed. Cir. 2012).

200. *See id.*; *Lotte*, 986 F.3d at 256–60.

protections. In 1998, the European Parliament adopted the European Directive on the Legal Protection of Design to establish an E.U.-wide design protection regime.[201] Just like in U.S. design patents, the E.U. Designs Regulation and Directive expressly exclude from design protection features of appearance of a product which are "solely dictated by its technical function."[202]

The Court of Justice of the European Union (CJEU) clarified the test to determine what design features are solely dictated by technical function in *Doceram Gmbh v. CeramTec Gmbh*.[203] The CJEU rejected the multiplicity of forms test, similar to the standard *LA Gear* outlined in the United States, that the availability of alternative designs means it cannot be solely dictated by function.[204] The EU Design Regulation also authorizes the filtration of features within a multicomponent product by excluding features that are not eligible for protection.[205] If U.S. courts are to adopt the proposed changes by adding an abstraction, filtration, and comparison step similar to copyright and a functionality determination identical to the Third Circuit's opinion in *Lotte* during the second *Graham* factor, the United States will be closer to the design protection regulations in the European Union.

V. CONCLUSION

The Federal Circuit's determination in *LKQ* removed the rigid *Rosen-Durling* test and replaced it with the *Graham* factors for obviousness analysis in design patents. This opinion brought the obviousness analysis in line with utility patents and could lead to more invalidated design patents on obviousness grounds with a more flexible standard. However, the factors do not apply directly to design patents and will rely on future case law to shape the scope of the prior art and any additional secondary conditions. With the subjectiveness of determining nonobviousness, there remains a possibility that using the flexible *Graham* factors will affect patent eligibility in the future. Using the *Graham* factors also presents an opportunity to fix an issue plaguing design patents by preventing the protection of functional elements of design. Implementing an abstraction, filtration, and comparison test to remove any functional elements will prevent designers or inventors from obtaining

201. Peter S. Menell, *Navigating the Trans-Atlantic Design Protection Quandary*, *in* HARMONIZING INTELLECTUAL PROPERTY LAW FOR A TRANS-ATLANTIC KNOWLEDGE ECONOMY 333–34 (Péter Mezei, Anett Pogácsás & Hannibal Travis eds., 2023).

202. *Id.* at 334–35.

203. *Id.* at 336.

204. *Id.* at 328–29.

205. *Id.* at 334–35; *see also* Samsung Elecs. (UK) Ltd. v. Apple Inc. [2012] EWHC (Pat) 1882 [64], [91]–[176] (applying filtration analysis to all the design features relied on by the potential infringing design).

backdoor design patents to protect functional designs. Although *LKQ* represents a welcomed change to design patents by potentially limiting eligibility, the significant issues of design patents remain until there is a defined process to filter out unprotectable functional elements.