

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LKQ CORPORATION and
KEYSTONE AUTOMOTIVE INDUSTRIES, INC.,
Petitioner,

v.

GM GLOBAL TECHNOLOGY OPERATIONS LLC,
Patent Owner.

IPR2020-00821
Patent D813,759 S

Before KEN B. BARRETT, SCOTT A. DANIELS, and
ROBERT L. KINDER, *Administrative Patent Judges*.

DANIELS, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining The Challenged Claim Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

A. Background

LKQ Corporation and Keystone Automotive Industries, Inc., (collectively “LKQ” or “Petitioner”) filed a Petition to institute an *inter partes* review of the claim for a “Vehicle Hood” in U.S. Patent No. D813,759 (Ex. 1001, “the ’759 patent”). Paper 2 (“Pet.”). GM Global Technology Operations, Inc., (“GM” or “Patent Owner”) filed a Preliminary Response. Paper 9 (“Prelim. Resp.”). On October 13, 2020, we entered a Decision instituting an *inter partes* review of the challenged claim in this proceeding. Paper 10 (“Inst. Dec.” or “Institution Decision”).

Following our Institution Decision, GM timely filed a Response. Paper 21 (“PO Resp.”). LKQ filed a Reply. Paper 25 (“Pet. Reply”). GM subsequently filed a Sur-Reply. Paper 29 (“PO Sur-Reply”). We heard oral argument on June 29, 2021. A transcript of the argument has been entered into the record. Paper 33 (“Tr.”).

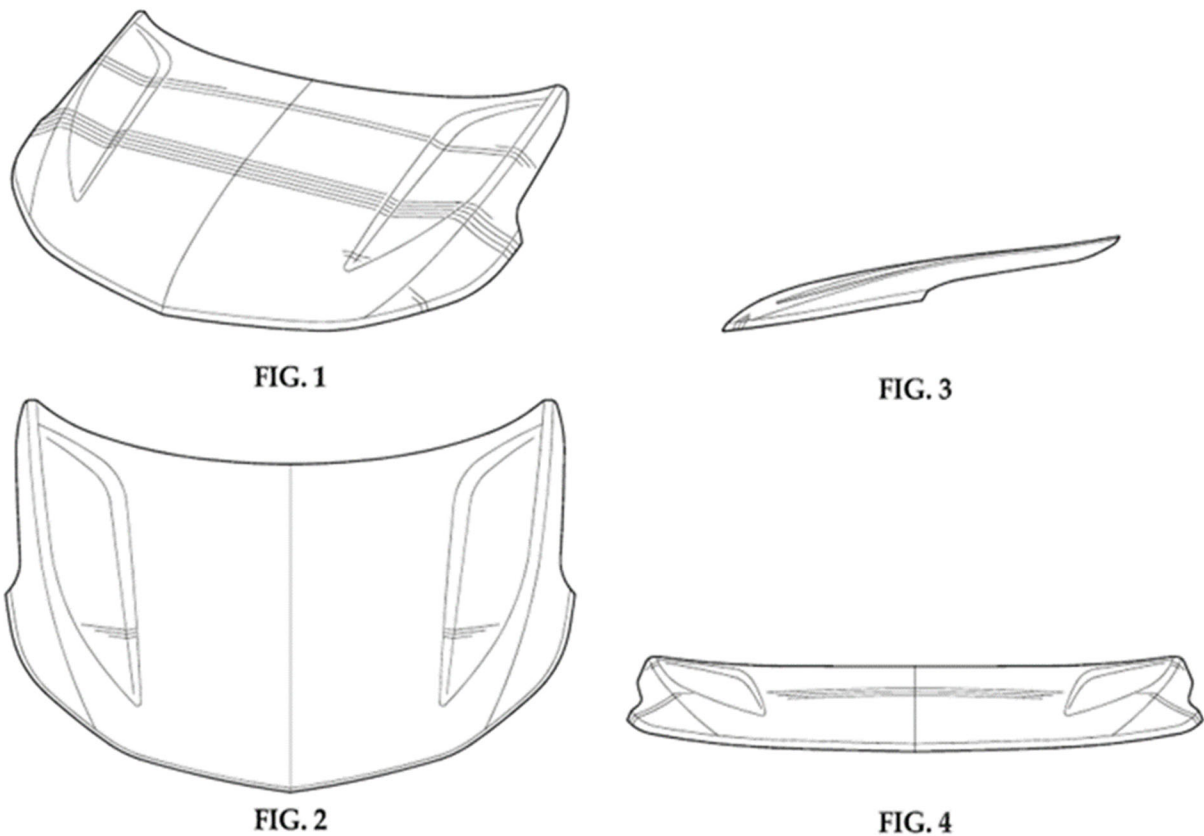
We have jurisdiction under 35 U.S.C. § 6(b). This Final Written Decision is issued pursuant to 35 U.S.C. § 318(a). Having reviewed the arguments of the parties and the supporting evidence, we find that LKQ has demonstrated by a preponderance of the evidence that the sole claim of the ’759 patent is unpatentable.

B. Additional Proceedings

The parties identify various other *inter partes* and post-grant review proceedings that LKQ has filed challenging different patents owned by GM. The parties do not state that these other proceedings affect, or would be affected by, the outcome of this proceeding. Pet. 3; Paper 5, 2.

C. The '759 Patent and Claim

The '759 patent (Ex. 1001) issued March 27, 2018, and lists GM as the assignee. Ex. 1001, codes (72), (73). The title, “Vehicle Hood,” refers to an outer surface of a vehicle hood illustrated in solid lines. The '759 design includes Figures 1–4, reproduced below, illustrating the claimed vehicle hood.¹



Ex. 1001. Figures 1–4 above depict, respectively, the following views of the claimed vehicle hood design: a perspective view, a top plan view, a left side elevation view, and a front view. *Id.*, code (57).

¹ We refer to the claim, i.e., the vehicle hood shown in Figures 1–4, as “the '759 design” and “the claimed design.”

D. Claim Construction

In an *inter partes* review based on a petition filed after November 13, 2018, the claims are construed

using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. [§] 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.

37 C.F.R. § 42.100(b); *see Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc) (setting forth claim construction standard in civil actions).

With respect to design patents, it is well settled that a design is represented better by an illustration than a description. *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 679 (Fed. Cir. 2008) (en banc) (citing *Dobson v. Dornan*, 118 U.S. 10, 14 (1886)). Although preferably a design patent claim is not construed by providing a detailed verbal description, it may be “helpful to point out . . . various features of the claimed design as they relate to the . . . prior art.” *Id.* at 679–80; *cf. High Point Design LLC v. Buyers Direct, Inc.*, 730 F.3d 1301, 1314–15 (Fed. Cir. 2013) (remanding to district court, in part, for a “verbal description of the claimed design to evoke a visual image consonant with that design”).

1. LKQ’s Proposed Claim Construction

LKQ relies on the Declarations of Jason M. Gandy (Ex. 1003) and Jason C. Hill (Ex. 1004; Ex. 1056) in support of its claim construction and arguments. GM relies on the Declaration of Thomas V. Peters (Ex. 2004).

LKQ contends that the claim of the ’759 patent, as shown by the solid lines in the drawings, can be textually described as:

[a] vehicle hood comprising:

a center line running from a front edge of the hood to a rear edge of the hood, and bisecting a central portion of the hood;

the central portion further comprising approximately 65% of the surface area of the hood, has an arcuate rear edge, a slanted and arcuate front edge, and along its centerline slants upwardly towards the rear at approximately a 15° angle from the longitudinal axis of the hood (front of car to back, “the longitudinal”), and further, laterally (from one side of the car to the other), slants rearwardly from the forward tip of the center line at approximately a 25° angle from the lateral axis of the hood (“the lateral”) for approximately 25% of the width of the hood, then curves rearwardly along a convex crease to the arcuate rear edge for a further 10% of the width of the hood in each lateral direction;

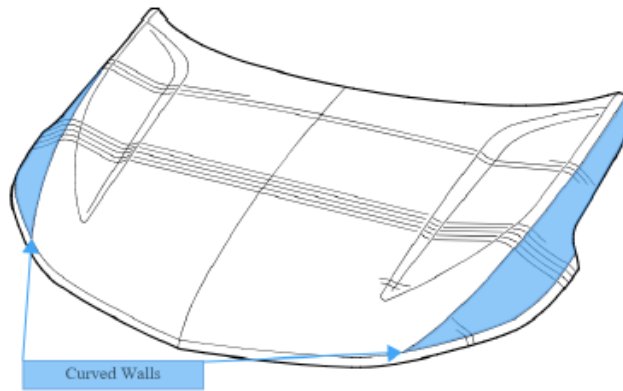
a pair of curved walls each comprising approximately 5% of the surface area of the hood and disposed at the lateral extremes of the hood, each having an inner border defined by the convex crease demarcating the central portion as noted above, and an outer border that extends outwards and rearwards from the front terminus of said convex crease and curves rearwards for approximately 40% of its length and that further creates a convex elevation for the first 45% of that curve and then flattens and transitions to create a concave elevation for the remainder of that curve, the outer edge then inflecting approximately 60° inwardly and upwardly towards the center and top of the hood, then curving outwardly and upwardly over the next 10% of its length until it runs substantially parallel and convexly to said convex crease for 35% of its length, and then curving inwardly and upwardly for the remaining 15% of its length and terminating at the rear terminus of said convex curve at a rear corner of the hood;

a front bevel creating a thin curved, downward–turning lip of substantially uniform thickness comprising approximately 5% of the surface area of the hood and approximately 10% of the total height of the hood, and extending across 50% of the exterior

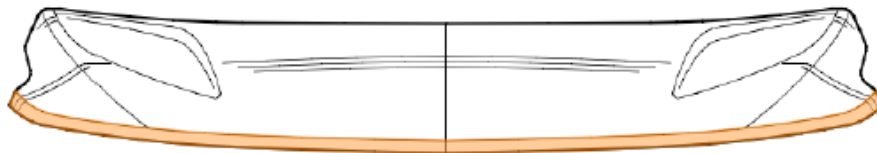
edge of the hood forming the lateral and front edges of the hood;
and

a pair of inset planes each comprising approximately 15% of the area of the hood, each delimited on the outside by an inset plane border crease, each inset plane canted inwardly and forwardly at approximately a 15° angle from the vertical, each inset plane having a rear outer inset plane corner spanning approximately a 60° angle and a front inner inset plane corner spanning an approximately 45° angle, the inset plane border extending from the inner front corner rearwards at an inner border for approximately 60% of the total length of the hood then curving outwardly at an interior angle of approximately 80° and extending outwardly and rearwardly to the outer rear corner of the inset plane and extending from the inner front corner outwardly along an outer border for approximately 30% of the total length of the hood then curving backward to form an outer edge for approximately 40% of the total length of the hood in a line substantially parallel to the inner border of the respective adjacent curved walls and each forming a convex contour between the outer edge and the inner border of the adjacent curved walls, each inset plane further having accent bevels (pink outline) further comprising an inflection line situated proximate to the inner border and demarcating the zone over which the surface of the inset plane inflects upwards to the height of the convex central portion of the hood at an approximately 160° angle, that zone tapering towards its narrowest widths towards each of the inner front and outer rear corners of the inset planes.

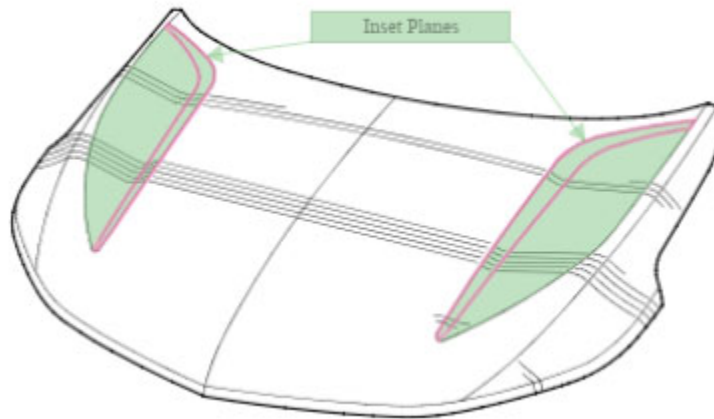
Pet. 11–16 (emphasis omitted). LKQ provides the following annotated Figures 1 and 4 from the '759 patent, emphasizing and highlighting certain features of the claimed design, specifically the “curved walls,” “lateral and front edges of the hood,” and “inset planes.”



In annotated Figure 1, above, LKQ highlights portions of the front perspective view of the claimed vehicle hood labelling the highlighted portions “curved walls.” *Id.* at 13–14.



In annotated Figure 4, above, LKQ highlights the lateral and front edges of the hood in a front elevation view of the claimed vehicle hood, referring in the claim construction to the highlighted portion as the “front bevel.” *Id.* at 14–15.



In annotated Figure 1, above, LKQ highlights the “inset planes” feature in a front perspective view of the claimed vehicle hood. *Id.* at 17.

2. GM’s Claim Description

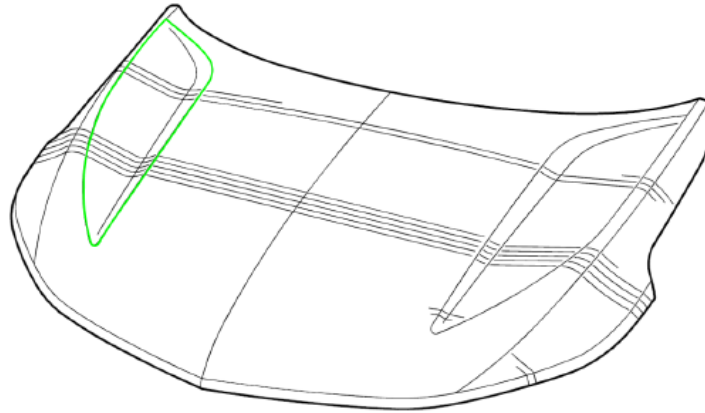
GM does not provide an explicit claim construction but argues that “[t]he ’759 Patent depicts a vehicle hood with a coordinated set of features that contribute to a unique overall appearance that evokes an aggressive and sporty look.” PO Resp. 3. We note that some of the features noted by GM, inset planes, curved walls, and front bevel for example, are consistent with those asserted by LKQ.

GM contends that our focus should be on the following features that contribute to the overall appearance which we summarize below. *Id.* at 3–8 (citing Ex. 2004 ¶¶ 34–41).

(a) “a pair of inset planes that are clearly defined along their entire perimeter and take up a substantial portion of the width of the hood;”

GM argues, *inter alia*, that “each of the inset planes is well-defined along its entire perimeter. It does not blend into the hood at any point, and there is no ambiguity as to where the boundaries of the inset planes lie.” *Id.*

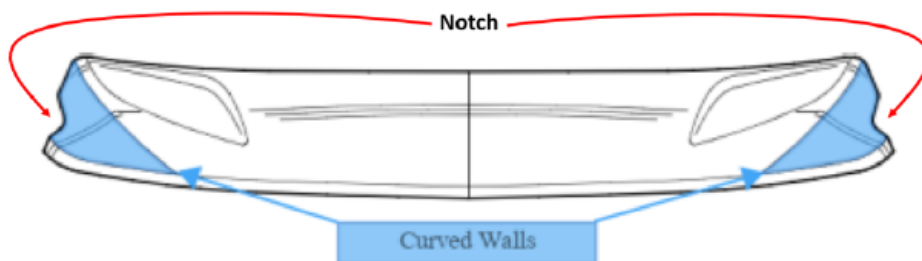
at 3. Reproduced below is GM's annotated version of Figure 1 of the '759 design.



GM's annotated version of Figure 1 of the '759 design is shown above with one of the inset planes highlighted in green. *Id.* at 4. Relying on its Declarant, Mr. Peters, GM argues that the inset planes “would have been particularly prominent to a skilled designer.” *Id.* at 5 (citing Ex. 2004 ¶ 36).

(b) “a pair of curved walls that, when viewed from the front of the vehicle include a prominent notch;”

According to GM, the claimed design has “curved walls on the outer sides of the hood includ[ing] prominent notches, or indentations.” *Id.* at 7 (citing Ex. 2004 ¶ 39). Figure 4 of the '759 patent as annotated by GM is reproduced below.



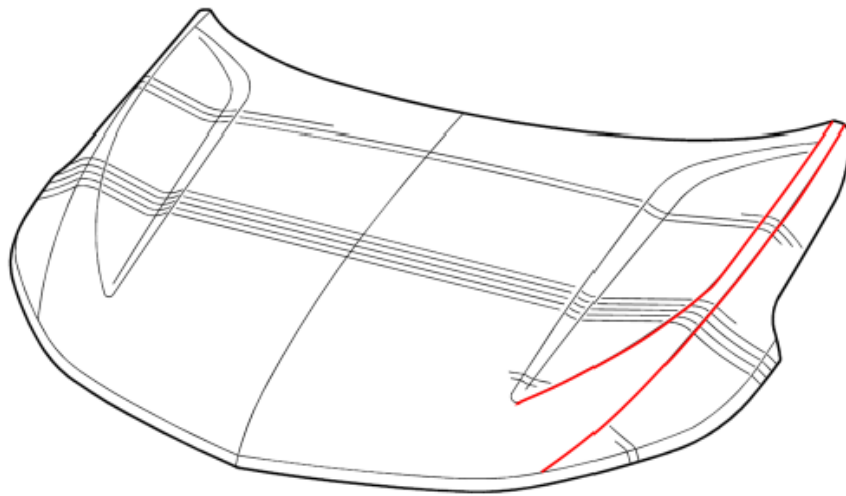
GM's annotated version of Figure 4 of the '759 design is shown above labelling the curved walls and notch on either side of the hood. *Id.*

According to GM's declarant, Mr. Peters, "the side notches . . . would have been notable to a[] skilled designer. In particular, a skilled designer would have found that that these features provide a sporty and aggressive look."

Ex. 2004 ¶ 39.

(c) "a pair of outer longitudinal strips that each create a distinct boundary between the inset plane and curved wall along the side edges of the hood"

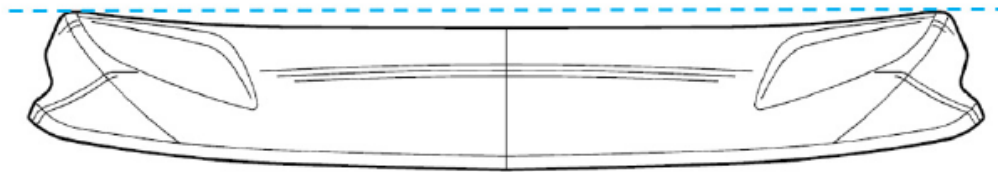
GM argues that "the longitudinal strips form a distinct planar division between the inset planes and outer curved walls, defining the outer edge of each of the inset planes from the rear to the front." PO Resp. 5–6. Patent Owner's annotated Figure 1 is reproduced below.



GM's annotated version of Figure 1 of the '759 design is shown above with the longitudinal strip highlighted in red. PO Resp. 6.

(d) “an overall shape that, when viewed from the front, is higher on the sides than in the middle”

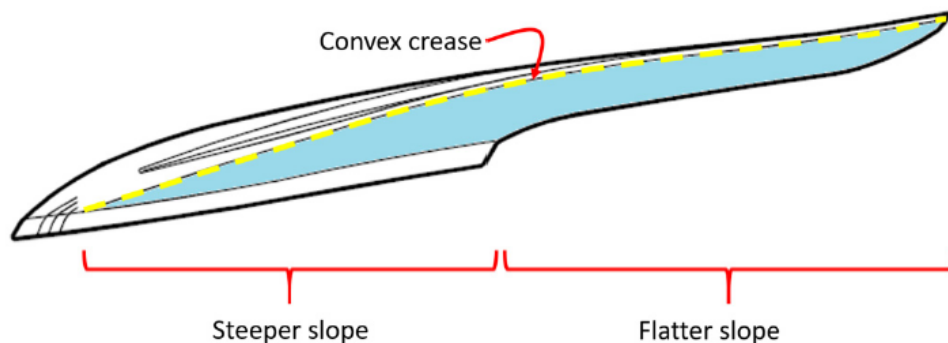
GM contends also that “when viewed from the front, outer edges of the hood are raised relative to the central portion of the hood.” *Id.* at 7. Figure 2, as annotated by GM, is reproduced below.



GM’s annotated Figure 4, above, illustrates with a dashed blue line the difference between some portion of the outer edges of the hood compared to the center of the hood. *Id.*

(e) “a convex crease [] that comprises a line that extends from the front of the hood to the rear of the hood;”

Considering the side view of the claimed design in Figure 2 reproduced below, GM argues that “the curved wall (highlighted blue), when viewed front the side, is defined along its top boundary by a convex crease (highlighted yellow) that comprises a line that extends from the front of the hood to the rear of the hood.” PO Resp. 8.



GM's annotated Figure 3, above, illustrates with a dashed yellow line the convex crease defining the top boundary of the curved wall highlighted in blue. *Id.* GM also contends, as shown in the annotated Figure 3, that the convex crease has a steeper forward slope as compared to a flatter rear slope. *Id.*

3. The Claim Construction Analysis

In addition to the design features discussed above, GM makes several arguments to support its contention that, “in the field of vehicle hood design, nuanced features are significant to overall appearance.” *Id.* at 8–9 (citing Ex. 2004 ¶ 42). GM argues that an ordinary observer would consider the overall appearance of the claimed design and that details are important “because (1) the art is crowded; (2) the hood at issue must interface with other aspects of a vehicle, which puts increased focus on incongruities; and (3) LKQ’s own vehicle replacement part marketing materials tout the importance of details and parts being ‘identical’ in this field.” *Id.* We address these three arguments in turn.

(a) Whether Vehicle Hood Design is a Crowded Art

GM contends that vehicle hoods are in a crowded field. *Id.* at 9. GM argues that during prosecution of the application that became the ’759 patent, the Examiner cited and considered “dozens” of vehicle hoods. *Id.* at 11. GM cites several cases, including *In re Harvey*, 12 F.3d 1061 (Fed. Cir. 1993), where the Federal Circuit discusses crowded art. In *Harvey*, the Federal Circuit distinguished the facts from a prior case, *In re Hopkins*, 34 F.2d 1016 (CCPA 1929), explaining that the loud speaker designs at issue in *Hopkins* were in a field “much less crowded than that of ornamental vase design,” which was the focus of *Harvey*. *Harvey*, 12 F.3d at 1064. To

further support its crowded art theory, Patent Owner, *id.* at 9–10, cites to a General Exclusion Order from the International Trade Commission, USITC Pub. No. 4012 which states, in relation to a challenged patent for an automotive part (headlamps), that headlamps are “in a crowded field and that does weigh in favor of the patentee in determining whether a claimed design is obvious.” *In the Matter of Certain Auto. Parts*, USITC Inv. No. 337-TA-557 (June 2008).

Recognition that the vehicle hood field is considered to be in a “crowded art” would be helpful for GM insofar as small or “nuanced” differences between the claimed design and the prior art might then become even more important. However, the “crowded art” concept is highly fact dependent. GM has presented evidence of other design patents for vehicle hoods. *See* PO Resp. 10–11; *see also* Ex. 1001, code (56) (listing more than three dozen references). GM points out six design patents that “depict vehicle hood designs and reflect common design concepts like those recited in Petitioner’s proposed construction for the ’759 Patent.” PO Resp. 10. Mr. Peters explains that because there are so many hood designs “[t]he skilled designer would have been attuned to nuanced differences between hood designs, and these nuanced differences would have had a substantial impact on the overall appearance of hood designs to the skilled designer.” *Id.* at 11.

We are not persuaded that the field is crowded based on several dozen patents and Mr. Peters’ testimony that as of 2017 there were “over 1,700 different car models [] on the road,” and that “[e]ach car model typically includes a vehicle hood.” Ex. 2004 ¶ 47 (citing Ex. 2002, 2). GM has not provided sufficient evidence to clearly establish that the field of art that is

crowded. GM’s analysis of six hood designs, advanced to show that the field of hood design is crowded, is helpful to show certain commonalities and differences among related hood designs, but it is not as persuasive that hood design is specifically a crowded art. Moreover, to the extent *In re Harvey* is applicable here, we find that vehicle hoods are more fairly akin to loud speakers, as compared to vases, which have been made for thousands of years. *See In re Harvey*, 12 F.3d 1061, 1064 (Fed. Cir. 1993) (The Federal Circuit explaining that “the field of loud speaker design is much less crowded than that of ornamental vase design.”), *see also Un-Making Sense of Alleged Abkhaz-Adyghean Inscriptions on Ancient Greek Pottery*, Alexei Kassian, Copyright: Koninklijke Brill NV, Leiden, 2016 (last viewed Aug. 4, 2021 at https://www.researchgate.net/publication/311802093_Un_Making_Sense_of_Alleged_Abkhaz_Adyghean_Inscriptions_on_Ancient_Greek_Pottery) (explaining that “[a] large number of Ancient Greek vases, starting from the late 8th to the early 4th centuries BC, bear short inscriptions”). Also, we point out that in the ITC case cited by GM, the design patent at issue, D493,552, was to a headlamp, not a hood, and included over six pages of references, listed in double columns—literally hundreds of prior art references relative to vehicle headlamps. Ex. 3001, code (56).

We acknowledge that there are many different hood designs, and we find that this fact helps illustrate both commonalities and differences among the designs. *See, e.g.*, PO Resp. 13 (GM providing a collage of hood designs to illustrate common features). We are not persuaded, on the record before us, that GM has provided sufficient facts or evidence for the Board to determine that vehicle hood design is in fact a crowded art.

(b) Interfacing with Other Vehicle Components and the Similar Appearance of Replacement Parts

GM argues that “the ordinary observer and skilled designer would have been especially attuned to interfacing aspects of the design because they directly impact the match/fit with other parts of the vehicle.” PO Resp. 12 (citing Ex. 2004 ¶ 48; *Auto. Body Parts Ass’n v. Ford Glob. Techs., LLC*, 930 F.3d 1314, 1319 (Fed. Cir. 2019)). Extending our claim construction inquiry beyond the metes and bounds of the claim to address “fit with other vehicle components” is not appropriate. PO Resp. 15–16 (citing Ex. 2004 ¶ 54). For one thing, the claim in the ’759 patent does not include any other body parts or vehicle components. Ex. 1001, code (57), Figs. 1–4; *see also OddzOn Prod., Inc. v. Just Toys, Inc.*, 122 F.3d 1396, 1405 (Fed. Cir. 1997) (“A design patent only protects the novel, ornamental features of the patented design.”). However, we do find persuasive GM’s evidence that, when repairing a vehicle, consumer preference is to choose identical replacement parts, for the reason that identical parts best return the vehicle to its original appearance. PO Resp. 13 (citing Ex. 2003, 10, 14; Ex. 2004 ¶ 49; Ex. 2005, 3–4). This evidence helps support GM’s position that “[t]he overall impression would have been defined by a multitude of readily apparent features of the ’759 Patent’s design.” *Id.* at 13–14.

(c) How the Claim is Construed

In their descriptions of the claimed design, both LKQ and GM point out similar features such as the curved sidewalls, the inset planes, the convex crease, and front bevel as part of the overall ornamental appearance of the claimed design. We are persuaded based on the parties’ claim constructions and descriptions that we should consider and describe these features, and some others, to properly analyze the overall appearance of the claimed

design. *See Richardson v. Stanley Works, Inc.*, 597 F.3d 1288, 1294 (Fed. Cir. 2010) (The Federal Circuit questioning how “a court could effectively construe design claims, where necessary, in a way other than by describing the features shown in the drawings.”).

Furthermore, in addition to the commonalities and differences between hoods described by LKQ and its declarant, Mr. Hill, we find persuasive Mr. Peters’ testimony that “[t]he designer of ordinary skill would have been both familiar with prior art designs and attuned to small differences.” Although not in all instances do we agree with Mr. Peters that “such differences distinguish the vehicle hoods in the eyes of the skilled designer.” Ex. 2004 ¶¶ 43, 45.

In our Decision on Institution, we determined that no express verbal description was necessary. Inst. Dec. 5–6. We explained that “the best description of the ornamental features of the ’759 design comes from the drawings themselves.” *Id.* at 6. Now, on the full record before us, we still find that the best evaluation of the claimed design occurs by observing and considering the overall appearance of the claimed design as shown explicitly in Figures 1–4 of the drawings. *See In re Jennings*, 182 F.2d 207, 208 (CCPA 1950) (“In considering patentability of a proposed design the appearance of the design must be viewed as a whole, as shown by the drawing, or drawings.”). Nevertheless, based on the competing analyses by the parties and considering the relationship of the prior art to the claimed design, we find it helpful to describe verbally certain features and elements of the claim for purposes of our analysis. *See Egyptian Goddess*, 543 F.3d at 680; *see also Durling v. Spectrum Furniture Co.*, 101 F.3d 100, 104 (Fed.

Cir. 1996) (“A proper interpretation of [the] claimed design focuses on the visual impression it creates.”).

As discussed in greater detail in our analysis, we consider Figures 1–4 including the overall appearance of the claimed design and its outer profile as defined by the front, side and rear edges of the design, the shape and contours defining the features of the top surface of the hood as shown by the relevant shading and crease lines, and the relative position and proportions of the various shapes, crease lines, and contours that define the visually apparent ornamental features such as the inset planes, curved walls, and convex creases, of the of a vehicle hood. In addition, we determine that GM’s description facilitates an objective comparison of the similarities and differences between the claimed design and the prior art. Therefore, we use GM’s description as a general roadmap in our analysis below. *See* PO Resp. 3–8 (GM describing five aspects of ’759 design including features that “contribute to the overall appearance of the ’759 Patent’s design . . . that should be the focus of the Board’s attention.”).

We turn below to the obviousness challenge that Petitioner has raised in this proceeding.

E. Instituted Grounds

LKQ contends that the challenged claim is unpatentable under 35 U.S.C. § 103 based on Chevrolet Cruze website, 2015-2016, (Ex. 1006), “Chevy Cruze,” a website scraped by the Internet Archive—Wayback Machine, combined with the images of Chevrolet’s 2014 Malibu “Chevy Malibu” as disclosed at least in a marketing brochure dated ©2013 (Ex. 1007). Pet. 28–40.

Claim Challenged	35 U.S.C. §	References
Claim 1	103	Chevy Cruze website ² and Chevy Malibu brochure ³

II. ANALYSIS

A. Principles of Law

1. Obviousness

“In addressing a claim of obviousness in a design patent, the ultimate inquiry . . . is whether the claimed design would have been obvious to a designer of ordinary skill who designs articles of the type involved.” *Apple, Inc. v. Samsung Elec. Co.*, 678 F.3d 1314, 1329 (Fed. Cir. 2012) (internal quotation and citations omitted); *see also High Point Design*, 730 F.3d at 1313.

Often referred to as the *Durling* test, the obviousness analysis generally involves two steps: first, “one must find a single reference, a something in existence, the design characteristics of which are basically the same as the claimed design”; second, “[o]nce this primary reference is found, other references may be used to modify it to create a design that has the same overall visual appearance as the claimed design.” *Durling*, 101 F.3d at 103 (internal quotation and citations omitted).

The first step has two parts; we must “(1) discern the correct visual impression created by the patented design as a whole; and (2) determine whether there is a single primary reference that creates ‘basically the same’ visual impression.” *Id.* A proper primary reference for the obviousness

² Ex. 1006, 2016 Chevrolet Cruze, <http://www.chevrolet.com/2016cruze/exterior-pictures.html>.

³ Ex. 1007, 2014 Chevrolet Malibu brochure, ©2013 General Motors, September 2013

analysis is “a reference, a something in existence, the design characteristics of which are basically the same as the claimed design.” *In re Rosen*, 673 F.2d 388, 391 (CCPA 1982). In the second step, the primary reference may be modified by secondary references “to create a design that has the same overall visual appearance as the claimed design.” *Id.* However, the “secondary references may only be used to modify the primary reference if they are ‘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.’” *Id.* (alteration in original) (quoting *In re Borden*, 90 F.3d 1570, 1575 (Fed. Cir. 1996)).

Also, when evaluating prior art references for purposes of determining patentability of ornamental designs, the focus must be on actual appearances and specific design characteristics rather than design concepts. *Harvey*, 12 F.3d at 1064; *see also Apple*, 678 F.3d at 1332 (“Rather than looking to the ‘general concept’ of a tablet, the district court should have focused on the distinctive ‘visual appearances’ of the reference and the claimed design.”).

B. The Designer of Ordinary Skill in the Art

LKQ contends that:

a designer of ordinary skill is an individual who has at least an undergraduate degree in transportation or automotive design and work experience in the field of transportation design, or someone who has several years’ work experience in the field of transportation or automotive design.

Pet. 37 (citing Ex. 1003 ¶ 40; Ex. 1004 ¶ 36). GM argues that:

[a] designer of ordinary skill in the art relevant to the ’759 patent would have at least an undergraduate degree in automotive design, or other related industrial design field, with at least two years of relevant practical experience in designing automotive body parts. An increase in experience could compensate for less

education, and an increase in education could likewise compensate for less experience.

Prelim. Resp. 9. We do not discern a significant difference in these definitions proposed by the parties. Both definitions allow for an undergraduate professional degree, or alternatively, a reasonable period of time and work experience in the field of transportation and automotive design field. For purposes of this Decision and on the complete record before us, we adopt LKQ's proposed definition of the ordinary designer. Adopting GM's definition would not alter the outcome of this Decision.

C. Obviousness Based on Chevy Cruze and Chevy Malibu

We instituted review on the basis that the claimed design for the '759 patent would have been obvious to a designer of ordinary skill based on Chevy Cruze and Chevy Malibu. Inst. Dec. 27. In its Petition LKQ argues that the claim of the '759 design for a vehicle hood would have been obvious over the primary reference Chevy Cruze, and Chevy Malibu as the secondary reference. Pet. 40. GM counters with several arguments, including that the Chevy Cruze is insufficient evidence because of low resolution images and that the hood disclosed in Chevy Cruze, *inter alia*, lacks the inset planes of the claimed design. PO Resp. 17–35.

For the reasons below, and based on the complete trial record before us, we determine that Petitioner has established by a preponderance of the evidence that the claim is unpatentable over Chevy Cruze and Chevy Malibu.

1. The Primary Reference – Chevy Cruze (Ex. 1006)

Chevy Cruze is a promotional website which includes images of a 2016 Chevy Cruze vehicle scraped by the internet archive on June 27, 2015,

making it prior art to the '759 patent under AIA 35 U.S.C. § 102(a)(1).

Chevy Cruze is not cited on the face of the '759 patent. Ex. 1001, code 56.

The images in Chevy Cruze present various views of the front hood of a 2016 Chevy Cruze automobile. Ex. 1006, 1–7. Several representative images from Chevy Cruze are reproduced below.⁴



The image above is a front perspective view of the hood of the 2016 Chevy Cruze. Ex. 1006, 4.

⁴ Unless otherwise specified, we use “Chevy Cruze” and “Chevy Malibu” broadly to refer to Exhibits 1006 and 1007 and the website pages and brochure images embodied therein of the vehicle hood shown in the respective references.



The image above is a side view, including the hood, of the 2016 Chevy Cruze. *Id.* at 1.



The image above is a top perspective view showing the hood of the 2016 Chevy Cruze. *Id.* at 7.

2. The Secondary Reference – Chevy Malibu (Ex. 1007)

Chevy Malibu is a Chevrolet marketing brochure for the 2014 Chevy Malibu, including a copyright of “September 2013” on the brochure making it prior art to the ’759 patent under AIA 35 U.S.C. § 102(a)(1). Ex. 1007,

18. Chevy Malibu is not cited on the face of the '759 patent. Ex. 1001, code (56). We reproduce below certain cropped images from Chevy Malibu showing the front hood design of a 2014 Chevy Malibu vehicle.



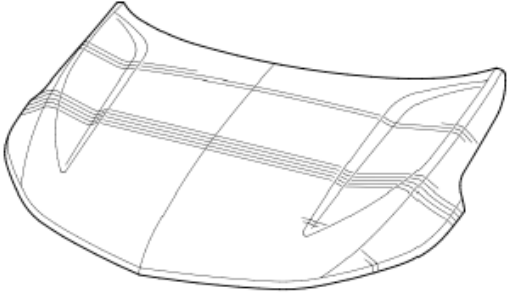
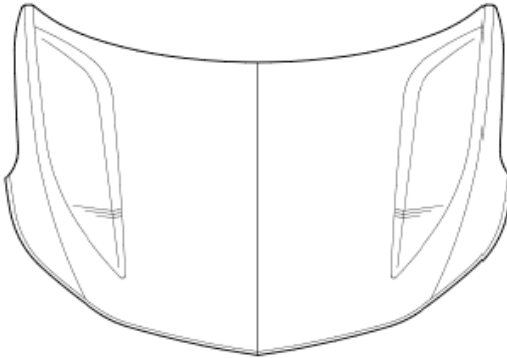
Above is a front perspective view of the 2014 Chevy Malibu. Ex 1007, 1.



Above is a front elevation view of the 2014 Chevy Malibu including the hood. *Id.* at 8.

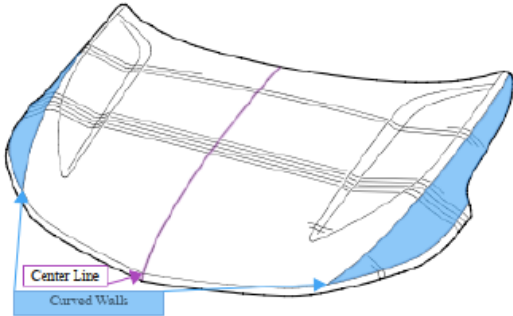
3. LKQ's Arguments

LKQ contends that Chevy Cruze is a proper primary reference because the hood depicted in the images discloses most all the same and similar ornamental features as the claimed design and therefore has an overall visual similarity that is basically the same as the claimed design. Pet. 41 (citing Ex. 1003 ¶ 53; Ex. 1004 ¶ 57). We reproduce below LKQ's comparison chart of Chevy Cruze images with Figures 1 and 2 of the claimed design.

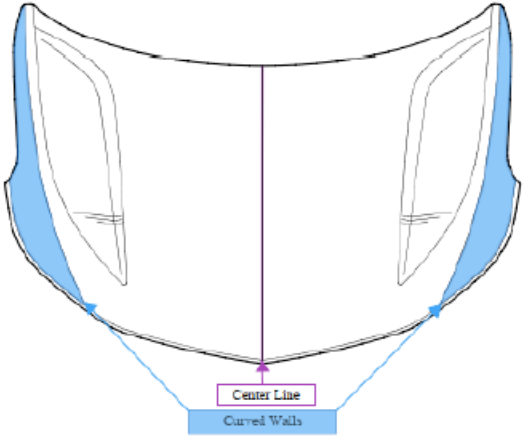
'759 PATENT	CRUZE WEBSITE (PRIMARY)
 Ex. 1001, FIG. 1	 Ex. 1006, at 4 (cropped)
 Ex. 1001, FIG. 2	 Ex. 1006, at 7 (cropped)

LKQ’s comparison chart, above, provides Figures 1 and 2 of the claimed vehicle hood on the left in comparison to cropped images from Chevy Cruze on the right. 40.

LKQ argues specifically that Chevy Cruze discloses the same center line in the middle of the hood as well as the same curved walls as shown and annotated in LKQ’s comparison charts reproduced below. *Id.* at 42–43.

'759 PATENT	CRUZE WEBSITE (PRIMARY REFERENCE)
 Ex. 1001, FIG. 1 (annotated)	 Ex. 1006, at 4 (cropped, annotated)

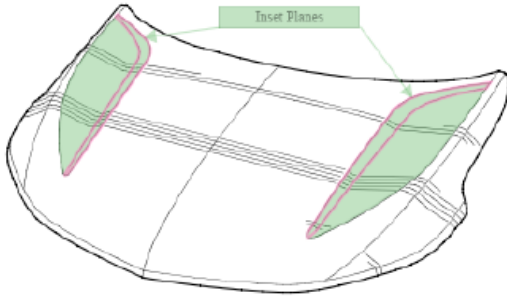
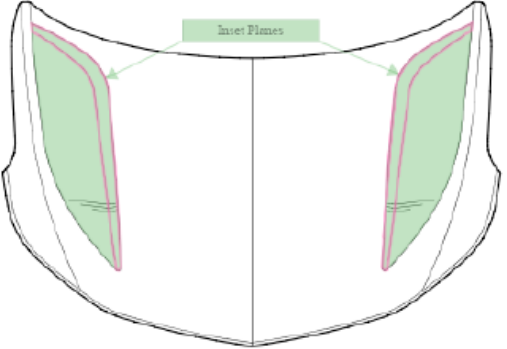
LKQ’s comparison chart, above, depicts annotated Figure 1 of the claimed design on the left in comparison to a cropped and annotated image of Chevy Cruze hood on the right and highlights the curved wall in blue. at 42.

'759 PATENT	CRUZE WEBSITE (PRIMARY REFERENCE)
 Ex. 1001, FIG. 2 (annotated)	 Ex. 1006, at 7 (cropped, annotated)

LKQ’s comparison chart, above, depicts annotated top plan view in Figure 2 of the claimed design on the left compared to a cropped and annotated top perspective image of Chevy Cruze hood on the right with highlighting emphasizing the outer edge hood profile curved walls. *Id.* at 43.

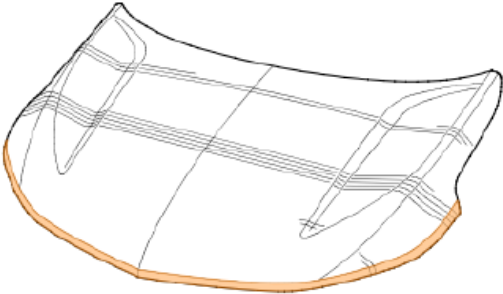
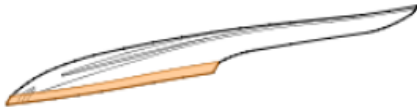
LKQ contends that the overall profile and shape of the hoods are the same including “having a point at the front of the hood with a center line that extends from a front edge of the hood to a rear edge of the hood and bisecting a central portion of the hood.” *Id.* at 41. LKQ argues that the sidewalls are also substantially the same having an inner border defined by a convex crease and a similarly formed “outer border that extends outwards and rearwards from the front terminus of the convex crease.” *Id.* at 41–42.

Another of LKQ’s comparison charts, relating to the inset plane features, is reproduced below.

'759 PATENT	CRUZE WEBSITE (PRIMARY REFERENCE)
 Ex. 1001, FIG. 1 (annotated)	 Ex. 1006, at 4 (cropped, annotated)
 Ex. 1001, FIG. 2 (annotated)	 Ex. 1006, at 7 (cropped, annotated)

LKQ’s comparison chart, above, provides annotated Figures 1 and 2 of the claimed vehicle hood on the left in comparison to annotated cropped images from Chevy Cruze on the right. *Id.* at 44. In the figures and images above, LKQ has highlighted in green the inset feature for the claimed design and Chevy Cruze. LKQ argues that Chevy Cruz discloses inset planes that are defined by similarly angled borders “tapering towards its narrowest widths towards each of the inner front and outer rear corners of the inset planes.” *Id.* at 44 (citing Ex. 1003 ¶ 54; Ex. 1004 ¶ 58).

LKQ also argues that the front edges of the claimed design and Chevy Cruise have similar front bevels as shown in the comparison chart below.

'759 PATENT	CRUZE WEBSITE (PRIMARY REFERENCE)
 Ex. 1001, FIG. 1 (annotated)	 Ex. 1006, at 4 (cropped, annotated)
 Ex. 1001, FIG. 3 (annotated)	 Ex. 1006, at 8 (cropped, annotated)

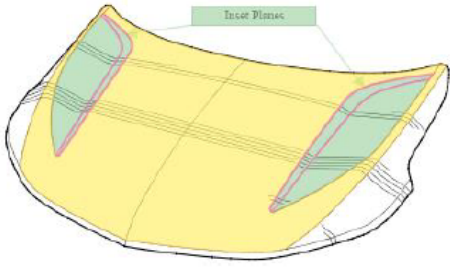
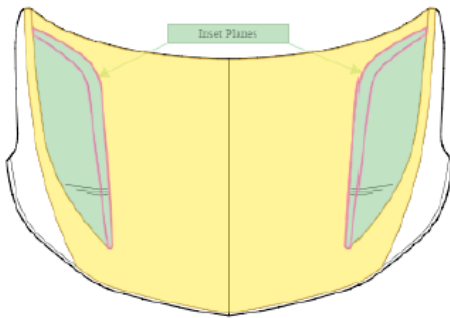
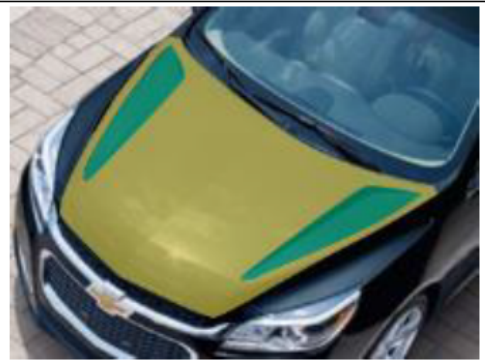
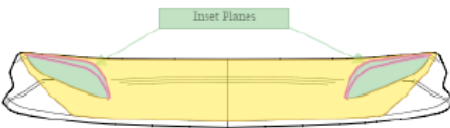
LKQ’s comparison chart, above, provides annotated Figures 1 and 3 of the claimed vehicle hood on the left in comparison to annotated cropped images from Chevy Cruze on the right. *Id.* at 45. LKQ argues that “[e]ach design further depicts a front bevel creating a thin, curved, downward-turning lip of substantially uniform thickness at the lateral edge of the hood.” *Id.* at 45 (citing Ex. 1003 ¶ 55; Ex. 1004 ¶ 59).

LKQ argues that the only differences between the design and Chevy Cruze are “(1) the ’759 Patent has a slightly different overall shape of the inset planes; and (2) the Cruze Website discloses a narrower convex crease between the inset planes and the adjacent curved walls.”⁵ *Id.* According to

⁵ GM refers to this convex crease feature a little differently, contending that in the claimed design there is not only a convex crease, but a “longitudinal strip” between the convex crease and the inset plane. PO Resp. 26–27.

LKQ, “applying the inset feature disclosed in the Malibu Brochure results in a hood that is nearly identical to the claimed design without any of these differences.” *Id.* at 45–46 (citing Ex. 1003 ¶ 56; Ex. 1004 ¶ 60).

LKQ asserts that Chevy Malibu is a proper secondary reference because when viewed side-by-side the hoods are so related “that the appearance of design elements on the Malibu Brochure would suggest their application to the design elements disclosed by the Cruze Website.” *Id.* at 46 (citing Ex. 1003 ¶ 57; Ex. 1004 ¶ 61). LKQ relies specifically on Chevy Malibu for the more definite and sharply shaped inset plane and wider convex crease, (i.e., GM’s longitudinal strip), admittedly missing from Chevy Cruze. Pet. 46–50. LKQ provides the following comparison chart illustrating the inset planes of the claimed design relative to Chevy Malibu.

'759 PATENT	MALIBU BROCHURE (SECONDARY)
 Ex. 1001, FIG. 1 (annotated)	 Ex. 1007, at 1 (cropped, flipped, annotated)
 Ex. 1001, FIG. 2 (annotated)	 Ex. 1007, at 4 (cropped, annotated)
 Ex. 1001, FIG. 4 (annotated)	 Ex. 1007, at 8 (cropped, annotated)

LKQ’s comparison chart above provides annotated Figures 1, 2, and 4 of the claimed design highlighting the inset planes in green in comparison to relevant cropped and annotated images from Chevy Malibu on the right, also highlighting the inset planes of Chevy Malibu’s hood.

LKQ argues that an ordinary designer would have applied Chevy Malibu’s inset planes to Chevy Cruze to create “a sporty, aerodynamic appearance that would create the a [sic] design having a nearly identical central portion of the hood, inset plane appearance, curved walls, and front

bevel as the design of the '759 Patent.” Pet. 49 (citing Ex. 1003 ¶ 60; Ex. 1004 ¶ 64). LKQ relies also upon the testimony of its Declarants, including Mr. Hill who testifies that “a designer of ordinary skill in the art would have been motivated to adjust the shape of the existing inset planes on the Cruze Website hood design as is common among hood designs, especially among the Chevrolet current generation of production models.” Ex. 1004 ¶ 64.

4. GM's Arguments

GM begins by arguing that we should disregard LKQ's Declarants and find that the images from Chevy Cruze are poor evidence of obviousness because they are low resolution, dimly lit, and provide insufficient views. PO Resp. 14–20. GM also argues that Chevy Cruze is not a proper primary reference because it lacks, *inter alia*, the inset planes of the claimed design. And, to the extent it is a proper primary reference, GM contends that Chevy Malibu is not sufficiently related so as to suggest the application of the inset plane features to Chevy Cruze. *Id.* at 21–48. We set forth GM's arguments in more detail below.

GM asserts initially that we should disregard the testimony of Mr. Gandy and Mr. Hill, LKQ's two Declarants, because they “are **word-for-word** the same as each other and the Petition.” *Id.* at 14 (emphasis in original). GM contends that the sameness of the Declarant's testimony compromises the integrity of their testimony and is thus simply “attorney argument—not legitimate expert testimony.” *Id.* GM argues that these are just the type of declarations that the Federal Circuit has found insufficient and entitled to no weight. *Id.* (citing *TQ Delta, LLC v. Cisco Sys.*, 942 F.3d 1352, 1362-64 (Fed. Cir. 2019)). Further, GM argues that LKQ's “attorneys

wrote the substance, copied the substance into two separate documents, and presented those documents for Mr. Hill and Mr. Gandy to sign.” *Id.* at 16. Therefore, GM contends, “the Board in fact has only the testimony of GM’s expert and LKQ’s attorney argument. That evidence weighs in favor of rejecting LKQ’s unpatentability arguments.” *Id.*

GM next argues that the images from Chevy Cruze, specifically the side view reproduced below, are low resolution and so dimly lit that “it is impossible to make out the lines that define the shape and contour of the Chevy Cruze’s hood.” PO Resp. 17 (citing Ex. 1006 at 1; Ex. 2004 ¶ 53).



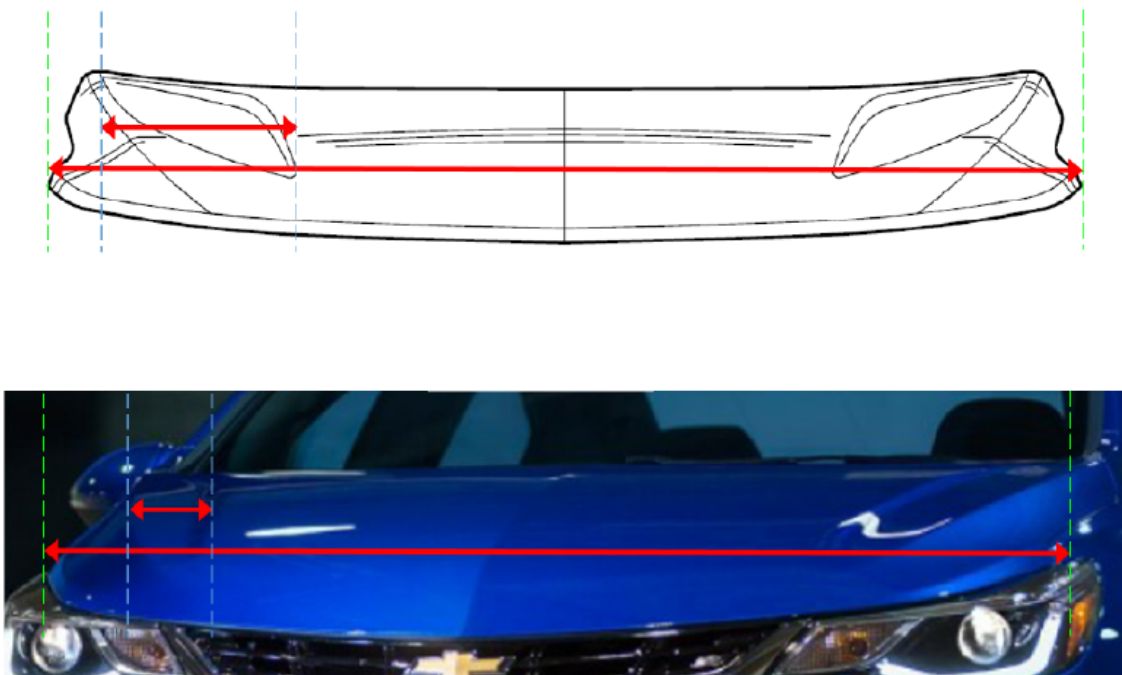
Above is a side-view of image of the 2016 Chevy Cruze vehicle, including the hood. Ex. 1006, 1. GM also argues that the image relied on below from Chevy Cruze is a prospective view, not a perspective view and that “it is difficult to ascertain the relative dimensions of the various parts of the hood.” *Id.* at 18 (citing Ex. 1006, 4; Ex. 2004 ¶ 54). GM similarly argues that Chevy Cruze discloses only a top perspective view, reproduced below, rather than a top plan view, such as Figure 2 of the claimed design, which makes it difficult to compare the hoods. *Id.* (citing Ex. 1006, 7; Ex. 2004 ¶ 54).



Above is a top perspective view of a vehicle hood from Chevy Cruze. GM contends specifically that the obviousness challenge is deficient because no combination of the Chevy Cruze images provides a sufficient side view of the hood “thus failing to show the claimed features of the ’759 design that relate to the side view of the hood.” *Id.* at 19 (citing Ex. 1006, 1, 4; Ex. 2004 ¶¶ 53, 56). According to GM “[t]he obviousness analysis requires the Board to assess the overall visual impressions created by the prior art, and that cannot fairly be done with the blurry, dim, and incomplete images.” *Id.* at 20.

The Chevy Cruze website is also not an appropriate primary reference, GM argues, because it has more than two ornamental differences from the claimed design as asserted by LKQ. PO Resp. 22. GM contends that Chevy Cruze does not disclose inset planes with clear defined perimeters as shown in the ’759 design. *Id.* (citing Ex. 2004 ¶ 65). The inset planes in Chevy Cruze, according to GM “are relatively deeper on their inner edges and appear to fade away or wash out as they extend outward toward a longitudinal crease in the hood where the alleged inset planes meet the alleged curved walls of the hood.” *Id.* GM argues, specifically, relying

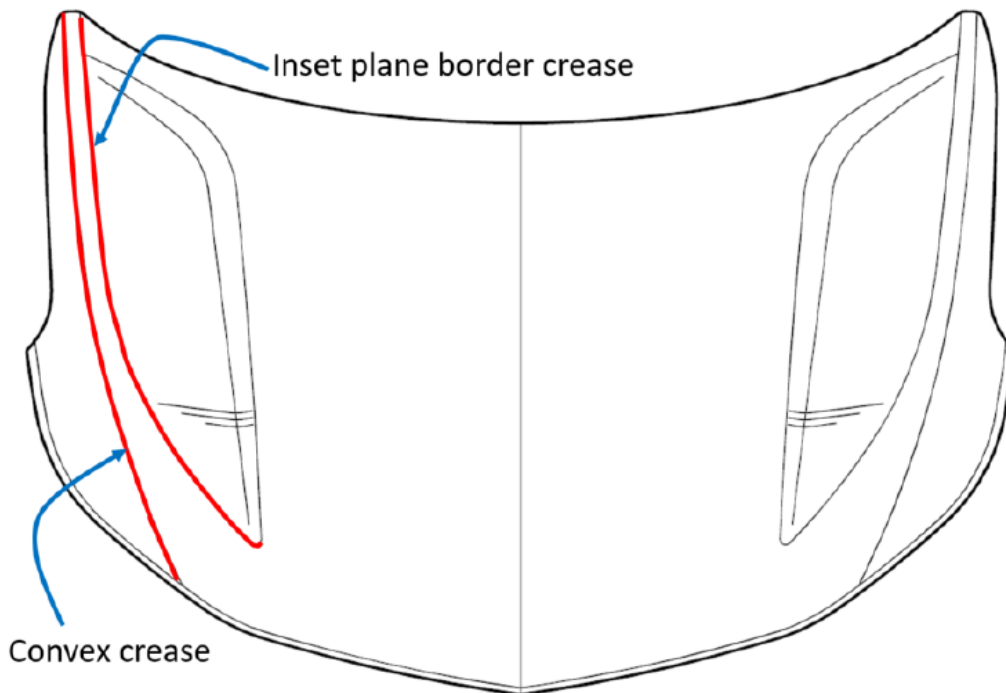
on the testimony of Mr. Peters, that “the more subdued and faded appearance of the Cruze inset planes presents a softer appearance that is more often found on a sedan.” *Id.* at 24 (citing Ex. 2004 ¶ 66). Mr. Peters also testifies that “the width of each of the inset planes of the claimed design takes up approximately 20% of the total width of the hood. In contrast, the width of each of the inset planes of the Cruze Website is noticeably narrower, taking up only about 10% of the total width of the hood.” Ex. 2004 ¶ 67. Mr. Peters provides the following comparison of annotated Figure 4 of the claimed design with a similarly annotated image from Chevy Cruze. *Id.*



The annotated front elevation view in Figure 4 of the claimed design, above, is depicted in comparison to a cropped and similarly annotated front perspective view of the hood in Chevy Cruze. *Id.*

Next, GM argues that Chevy Cruze does not disclose a longitudinal strip that “is substantially uniform in width between the rear and middle of

the hood and increases in width to more than triple near the front of the hood, as shown below.” PO Resp. 26.



GM’s Annotated Figure 4 of the claimed design illustrates the longitudinal strip, (i.e., a wider convex crease as LKQ refers to this portion of the hood), as defined between the inset plane border crease and the outer convex crease. *Id.* at 27. GM contends that Chevy Cruz shows mainly a single crease, not a longitudinal strip widening into a planer surface as in the claimed design. *Id.* at 28 (citing Ex. 2004 ¶ 70).

GM argues further that when viewing the front elevation view of the ’759 design, there is a “notch” in each of the curved walls that cannot be seen in Chevy Cruz. GM provides the following comparison between Figure 4 of the claimed design and Chevy Cruz hood. *Id.* at 29.

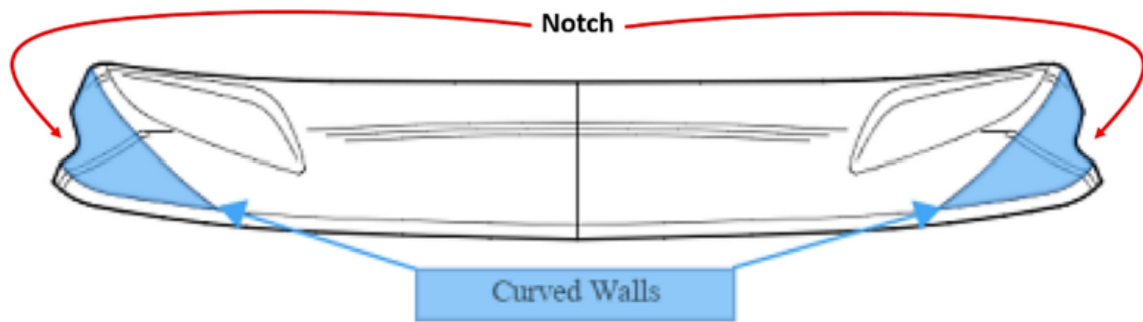


Figure 4 is shown above as annotated by GM to indicate the notch in each of the curved walls highlighted in blue.



GM alleges that the front elevation view in Chevy Cruze, shown above, does not disclose the same notch. *Id.* at 30.

GM argues that Chevy Cruze fails to disclose that the claimed hood design is higher at its outer edges than the middle portion as shown in annotated Figure 4 below. *Id.* at 30–31 (citing Ex. 2004 ¶ 76).



Figure 4 is shown above as annotated by GM with a dashed red line indicating the height difference between the outer edges of the claimed hood and the middle portion. In fact, GM argues that LKQ's Declarant, Mr. Hill

conceded in his deposition that the Chevy Cruze hood was opposite—that “the center portion of the Cruze Website hood is higher than the side edges.” *Id.* at 32 (citing Ex. 2006, 42:2–10). GM contends that Mr. Hill also concedes that Chevy Cruze fails to disclose a bevel, as shown in GM’s annotated Figure 4 below, forming the lateral and front edges of the hood. *Id.* at 33 (citing Ex. 2006, 27:7–28:4).

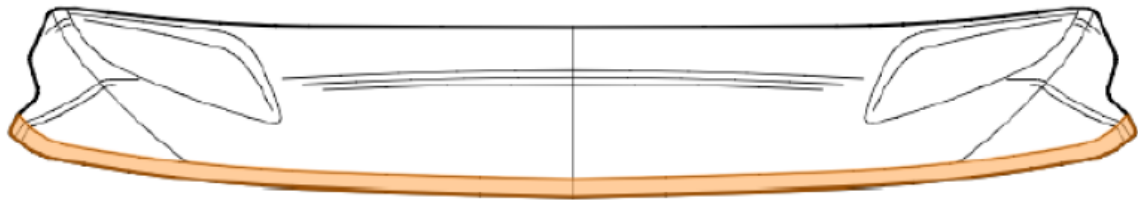


Figure 4 is shown above, as annotated by GM to highlight the bevel in the claimed design extending along the lateral and front edges of the hood, in comparison with a cropped front perspective view of Chevy Cruze. *Id.* at 32–33.

Considering one close-up view of the hood as shown below, GM argues that at the front of the Chevy Cruze hood the curved wall has a blunted, or rounded profile, whereas “the claimed design shows that the front end of the side view of the curved wall (highlighted blue below) is pointed, with a sharp aggressive shape.” PO Resp. 35 (citing Ex. 1001, Fig. 3; Ex. 1004 ¶ 72).

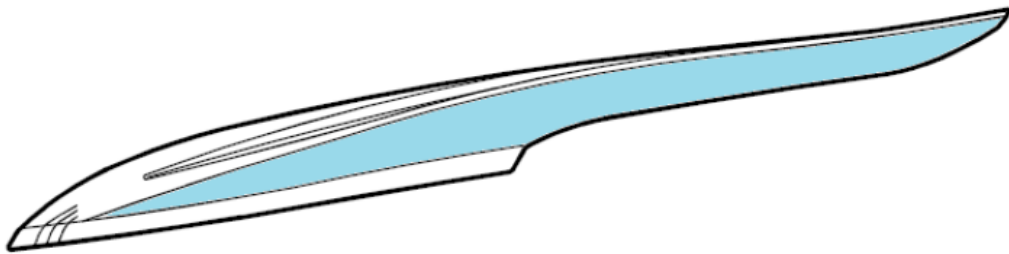
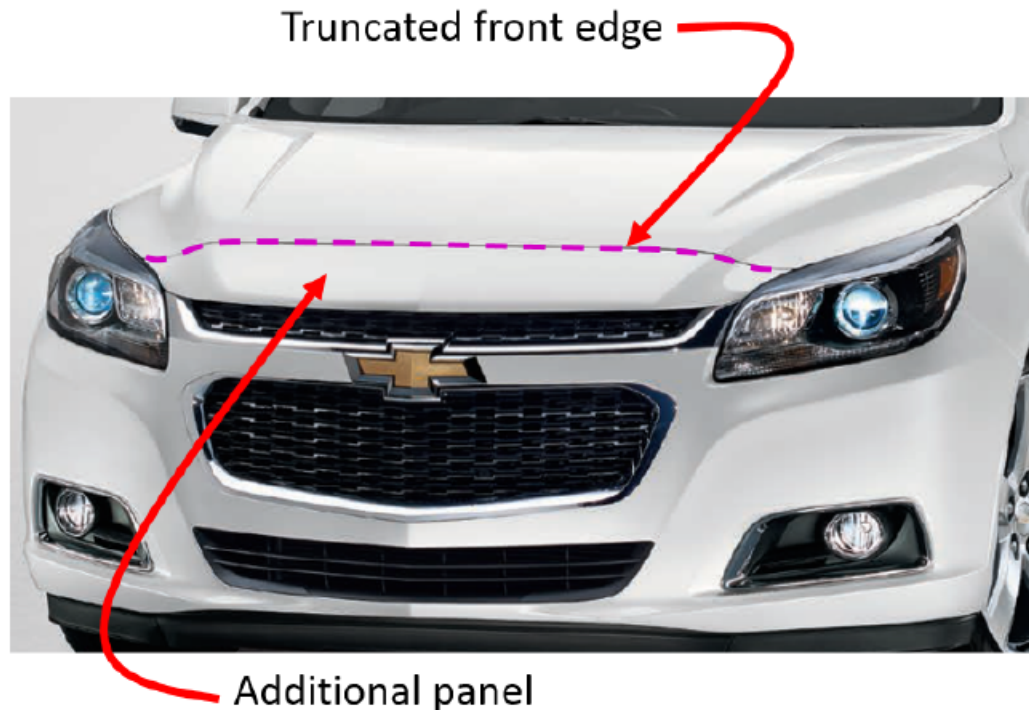


Figure 3 is shown above, as annotated by GM to highlight the curved wall profile from the side view in the claimed design, in comparison with a front perspective side view of Chevy Cruze.

GM argues further that a designer of ordinary skill in the art would not have combined Chevy Cruze and Chevy Malibu because they “are not ‘so related’ that the appearance of certain ornamental features in the Malibu Brochure would suggest the application of those features in the Cruze Website.” PO Resp. 35–36 (citing Ex. 2004 ¶ 79). GM argues in particular that due to the truncated nature of the Malibu hood as shown in GM’s annotated image from Chevy Cruz reproduced below, “a separate panel is present between the main hood and the header panel in the Malibu Brochure, while the shape of the hood in the Cruze Website does not necessitate this additional panel.” *Id.* at 36.



Above is a cropped and annotated image from Chevy Malibu with a purple dashed line indicating the hood front cut line labeled “Truncated front edge,” and also labeling the “Additional panel.” *Id.* at 37. And, GM argues that LKQ’s combination of Chevy Cruze and Malibu fails to provide “any reasoned explanation why the Malibu Brochure would have suggested application of its overall shape of the inset planes and convex crease, to the exclusion of other significant features.” *Id.* at 39–40.

Finally, GM argues that even if Chevy Cruze and Malibu are properly combined,

LKQ’s combination ignores the numerous other differences between its combination and the claimed design—including the relative width of the inset planes, the defined boundaries of the inset planes, the side view of the curved walls, and the front view of the claimed design—that would have been significant to the overall appearance in the eyes of the ordinary skilled designer.

PO Resp. 42 (citing Ex. 2004 ¶ 86). GM contends specifically that even with the combination of Chevy Cruze and Malibu “the Petition fails to demonstrate that the result would have an overall appearance ‘basically the same’ as the claimed design.” *Id.*

5. Discussion

Based on the final trial record before us, LKQ has established by a preponderance of the evidence that the claim of the ’759 patent would have been obvious based on Chevy Cruze and Malibu. As explained below, LKQ has established that Chevy Cruze is a proper *Rosen* reference and that Chevy Malibu is a proper secondary reference. We determine that although the combination does not account for every attenuated difference with respect to the claimed design, certain differences alleged by GM are minor and do not take away from the similarities of the overall designs. Considering the ’759 design as a whole, we determine for the reasons set forth below that the combination of Chevy Cruze and Malibu create a design that has the same overall visual appearance as the claimed design. Before assessing Chevy Cruze and Chevy Malibu in the context of obviousness, we address GM’s arguments with respect to LKQ’s Declarants and the sufficiency of the Chevy Cruze and Malibu images.

(a) Declaration Testimony of Mr. Gandy and Mr. Hill and Sufficiency of the Chevy Cruze and Malibu Images

GM argues that we should give no weight to the declaration testimony of LKQ’s experts, Mr. Gandy and Mr. Hill, because “these declarations, from Mr. Hill and Mr. Gandy, are **word-for-word** the same as each other and the Petition.” PO Resp. 14 (emphasis in original). GM alleges, without compelling evidence, that “the attorneys wrote the substance, copied the substance into two separate documents, and presented those documents for

Mr. Hill and Mr. Gandy to sign.” *Id.* at 16. GM asserts that “[t]he Gandy and Hill declarations are attorney argument, masquerading as expert testimony, and the Board should give them no weight.” *Id.*

LKQ states that “[e]ach of LKQ’s experts extensively participated in preparing every part of his respective declaration, including developing and refining the language thereof.” Reply 35 (citing Ex. 1006 ¶ 8). According to LKQ, “[t]hat the language was harmonized during this process (without either expert’s knowledge) shows only that both were in accord.” *Id.*

We appreciate that the declarations are quite similar and a circumstantial inference could be made, as GM does, that the experts did not write their own declarations. However, it is probable that LKQ’s attorneys would confer with Mr. Gandy and Mr. Hill, separately, and based on their substantive input with respect to the issues in this case, develop consistent opinion testimony satisfactory to both, and then present to them for independent editing and review and eventually signature. Apart from the similarity, no facts presented by GM indicate that LKQ’s counsel rather than Mr. Gandy and Mr. Hill were responsible for the substantive content of their declarations.

Indeed, during his deposition Mr. Peters even admitted he did not write his Declaration without assistance from counsel:

Q. So you did not personally choose these six patents to depict in your declaration; right?

A. I did not select these.

Q. Okay. So you did not make the decision to depict these six in particular in your declaration, right?

...

A. No, I didn’t.

Ex. 1055, 400:18–25.

GM’s accusation that the declarations were drafted entirely by counsel is not compelling evidence that LKQ’s attorneys failed to confer with their experts and, without substantive input, wrote declarations for subsequent acquiescence to the contents thereof by Mr. Gandy and Mr. Hill. Mr. Hill testifies persuasively that

I participated in and directed the drafting of my opening declaration in this proceeding (and all of the other proceedings initiated by LKQ regarding GM patents in which I have submitted a report).[] In each circumstance, I engaged in extensive discussions with the attorneys representing LKQ where we thoroughly discussed my thoughts and opinions regarding the issues ultimately addressed in my report. The attorneys then prepared a draft report in accordance with those discussions. I then reviewed and when appropriate modified the report to capture my opinions. Through this process, I actively developed and guided the development of the language, exemplary images, and ultimately every part of my declarations, including this one.

Ex. 1056 ¶ 8. Notably, GM’s mostly unfounded concerns regarding the extent of defense counsel’s influence on Mr. Gandy and Mr. Hill’s reports goes more to the weight we should accord their testimony. Based on all the evidence before us, we consider Mr. Gandy and Mr. Hill’s deposition testimony and GM’s presentation of contrary evidence and competing expert testimony from Mr. Peters as appropriate vehicles to challenge their declarations.

We also determine that Mr. Gandy and Mr. Hill’s declaration testimony is not *ipse dixit*, i.e., conclusory, as GM argues. Mr. Hill is clearly qualified to render an opinion regarding vehicle hood design. Mr. Hill holds a Bachelor of Science in Transportation Design and has thirty years of

experience as an automotive designer, including working for Mercedes Benz, Samsung Motors, and Porsche. Ex. 1004 ¶¶ 10–12. Mr. Hill has offered pertinent opinions, reasoning, and evidence to support his opinions based on an understanding of the law of obviousness as explained to him by LKQ’s counsel. *Id.* ¶¶ 19–28.

With respect to the sufficiency of the images in Chevy Cruze, we have reproduced various images, including annotated images from both parties from Chevy Cruze, in this Decision *supra*. On their face, we do not find the Chevy Cruze images, annotated or otherwise, overly difficult to visually assess as to the comparative details which GM considers pertinent to the overall appearance of the claimed design.

We observe that the side view of the 2016 Chevy Cruze vehicle at page 1 of Chevy Cruze does not lend itself well to magnification in order to view minute details due to poor lighting and pixilation. Ex. 1006, 1. However, in our opinion, that image is not unreasonably vague and allows for viewing curvature of the side wall and convex crease as well as the slope of the hood generally. We do not find Mr. Peters’ testimony persuasive that “[n]o close-up view of the hood alone is provided in the Cruze Website.” Ex. 2004 ¶ 53. Chevy Cruze additional figures at pages 4, 7, and 8 also show the side of the hood in greater detail in relevant perspective views. The perspective views allow for sufficient visual inspection of the overall visual impression of the hood so as to reasonably compare and contrast all the features which GM contends are significant to the appearance of the claimed design.

Considering the perspective views in Chevy Cruze, we do not find persuasive Mr. Peters’ testimony that “[b]ecause the image is captured at an

angle rather than directly from the top, it is again difficult to determine relative dimensions of components.” *Id.* ¶ 55. Using annotated figures from Chevy Cruze, Mr. Peters and GM provide testimonial and comparative evidence asserting that “the claimed design takes up approximately 20% of the total width of the hood. In contrast, the width of each of the inset planes of the Cruze Website is noticeably narrower, taking up only about 10% of the total width of the hood.” *Id.* ¶ 67 (citing Ex. 1001, Fig. 4; Ex. 2008, 10). Overall, the images at pages 1, 4, 7, and 8 of Chevy Cruze, as a whole, provide sufficient overall visual impression of the hood permitting a designer of ordinary skill in the art to compare and contrast all the features which GM contends are significant to the appearance of the claimed design.

(b) Chevy Cruze as a Primary or Rosen Reference

As discussed previously, for design patents, the obviousness inquiry is a two-step process. First, we must identify a primary or *Rosen* reference, “a something in existence, the design characteristics of which are basically the same as the claimed design.” *MRC Innovations v. Hunter Mfg.*, 747 F.3d 1326, 1331 (quoting *Rosen*, 673 F.2d at 391). The “basically the same” test requires initial consideration of the “visual impression created by the patented design as a whole.” *Id.* The second step requires a determination of whether any secondary reference is “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.” *Id.* (alteration in original) (quoting *In re Borden*, 90 F.3d 1570, 1575 (Fed. Cir. 1996)). We address the two steps of the obviousness inquiry below.

We set forth in our claim construction that the most appropriate visual impression of the claimed design occurs by observing and considering the

overall appearance of the claimed design as shown explicitly in Figures 1–4 of the drawings. Section I.D. Considering Figures 1–4, the overall appearance of the claimed design includes its outer profile as defined by the front, side, and rear edges of the design, the shape and contours defining the features of the top surface of the hood as shown by the relevant shading and crease lines, and the relative position and proportions of the various features, crease lines, and contours that define the visually apparent aspects of a vehicle hood.

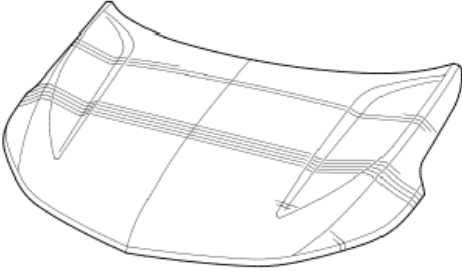
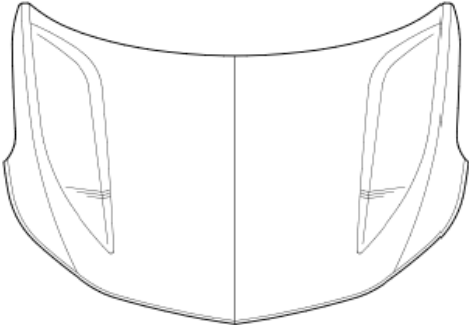
In addition, we found that GM’s descriptions of certain ornamental features of the ’759 design, summarized below, provide a thorough comparison of certain ornamental features of the claimed design relative to the prior art and help to guide our analysis. *Id.*

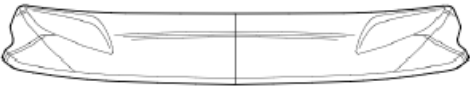
- (1) a pair of inset planes that are clearly defined along their entire perimeter and take up a substantial portion of the width of the hood;
- (2) a pair of curved walls that, when viewed from the front of the vehicle include a prominent notch;
- (3) a pair of outer longitudinal strips that each create a distinct boundary between the inset plane and curved wall along the side edges of the hood;
- (4) an overall shape that, when viewed from the front, is higher on the sides than in the middle; and
- (5) a convex crease [] that comprises a line that extends from the front of the hood to the rear of the hood.

See PO Resp. 3–8.

Considering the overall visual impression of the ’759 design including the above noted features which are part and parcel of the designs’ ornamental appearance, we compare, below, the ’759 design with Chevy

Cruze. We initially review LKQ’s comparison charts, reproduced below, as they fairly represent and permit a reasonable initial objective evaluation of the overall appearance of the two designs.

'759 PATENT	CRUZE WEBSITE (PRIMARY)
 Ex. 1001, FIG. 1	 Ex. 1006, at 4 (cropped)
 Ex. 1001, FIG. 2	 Ex. 1006, at 7 (cropped)

'759 PATENT	CRUZE WEBSITE (PRIMARY)
 Ex. 1001, FIG. 3	 Ex. 1006, at 1 (flipped, cropped)
 Ex. 1001, FIG. 4	 Ex. 1006, at 4 (cropped)

LKQ’s comparison chart, above, provides Figures 1–4 of the claimed vehicle hood on the left in comparison to cropped images from Chevy Cruze on the right. Pet. 40–41.

A direct comparison of the claimed vehicle hood with Chevy Cruze shows substantial similarities between the designs including that the profiles of the designs and other ornamentally significant features, from essentially any perspective, are mostly the same. For example, the comparison of Figures 1 and 2 with Chevy Cruz front and top perspective views shows that both designs have almost identical outer profiles. Both designs include a smoothly curved rear edge and side edges extending forward from the rear edge that flare out at a midpoint of the side edge creating a notch in the side edge of the hood design. The front edge profile of both hood designs is also highly similar having a consistent curvature from a slightly angular intersection with the side edges, extending toward a pointed juncture defined by a center crease that is clearly evident in both designs. Also, both designs include a pair of insets positioned towards the outer edges of the hood and a

concave wall adjacent the insets that curves down to the side edges of the hood.

But an overview does not tell the whole story. To paint a more complete picture and make a fair comparison we evaluate in greater detail certain ornamental aspects of the claimed design alongside Chevy Cruze. *See Durling*, 101 F.3d at 104 (The Federal Circuit explaining that “the focus in a design patent obviousness inquiry should be on visual appearances rather than design concepts.”).

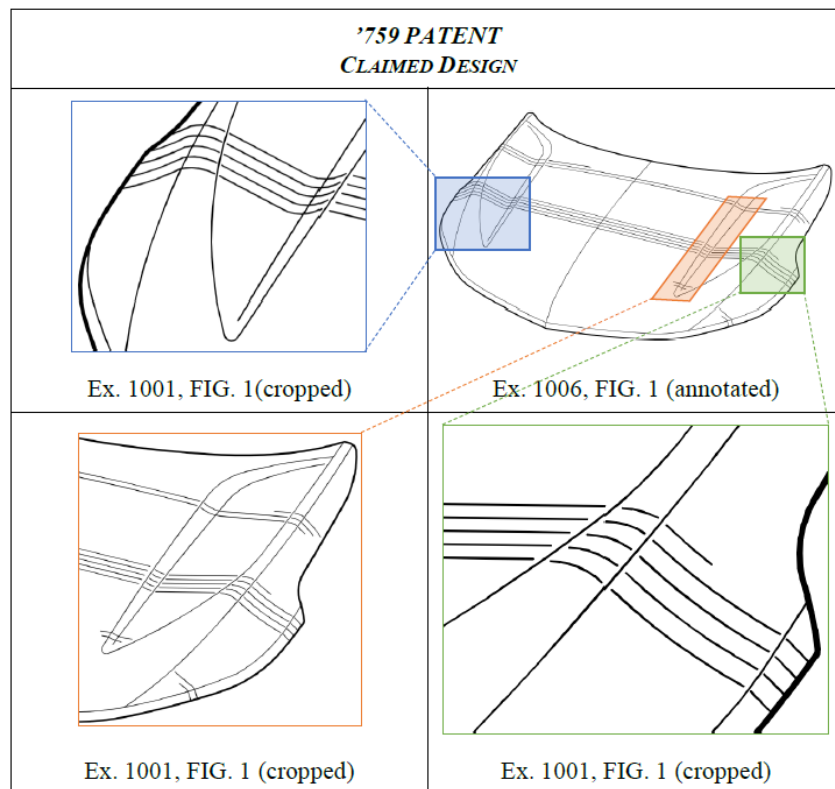
inset planes

The inset planes in both hoods are defined by a sloping inner wall having a characteristic hockey stick shaped curvature. Mr. Hill explained during his deposition that “the inner feature of the inset plane, the kind of hockey stick or, you know, offset from the central portion to the inset plane. That’s the defining feature.” Ex. 2006, 31:11–18. GM and its Declarant, Mr. Peters, do not expressly dispute LKQ’s characterization of this feature, but argue that when observing the claimed design

[t]he skilled designer would have found that the clearly defined perimeter of the inset planes of the claimed design evokes an aggressive look that one would typically expect to find on a sports car or SUV. In contrast, the more subtle and faded appearance of the inset planes of the Cruze Website provides a softer appearance more likely to be found on a sedan.

Ex. 2004 ¶ 66. We find the testimony of both Declarants helpful in determining the similarity and differences between the designs. Our observation is on one hand commensurate with Mr. Peters’ testimony that the inset planes as illustrated in the ’759 design appear at least slightly more distinct, perhaps more “sporty and aggressive” as compared to Chevy Cruze, in the way that Mr. Peters indicates. *See* Ex. 2004 ¶ 34, *see also id.* ¶ 36

(Mr. Peters testifying that “the claimed design evokes a more sporty and aggressive appearance.”). On the other hand, we agree with Mr. Hill that the inset planes of both designs include a similarly prominent feature of a sloping hockey stick shaped inner wall, and that the claim figures should be interpreted by considering the contour lines in the drawings which show little or no change where they cross the outer border of the inset planes in the ’759 design. *See* Ex. 1056 ¶ 27 (Mr. Hill testifying that a designer of ordinary skill would understand that “the contour lines of the ’759 Patent’s drawings, the sole means of identifying how the claimed design should be sculpted, show no change in contour whatsoever at the interface of the inset planes and the surrounding surface.”). Considering as a whole the experts’ testimony and annotated ’759 design drawings and the contour and shade lines as reproduced in LKQ’s chart below, we agree with LKQ that there is not as great a difference as GM asserts.

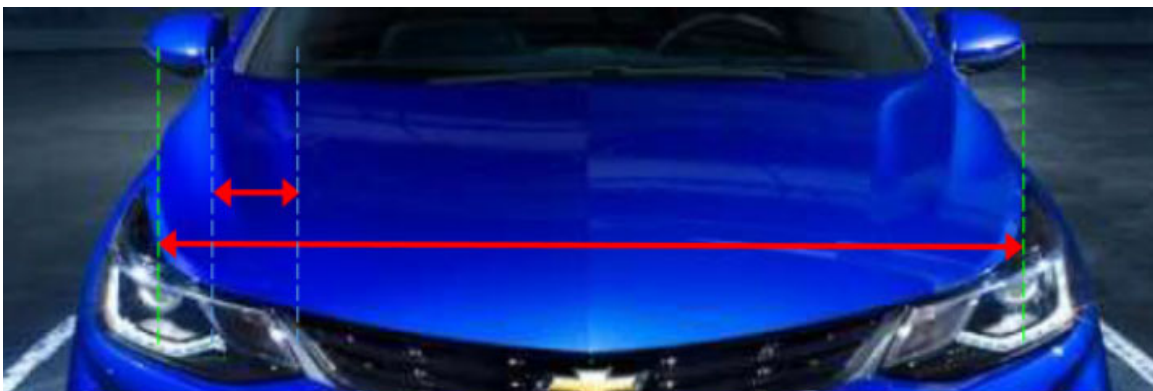
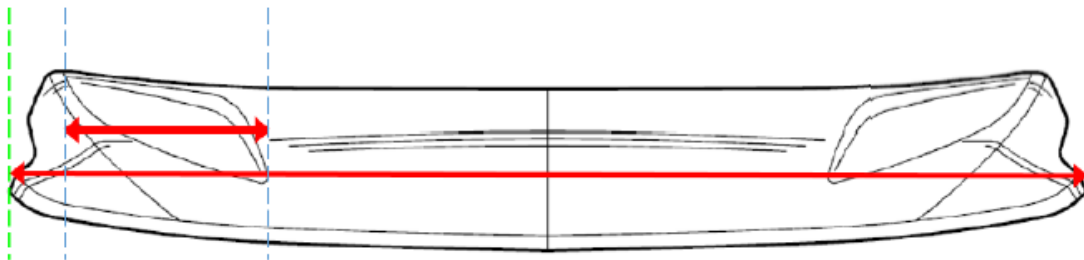


As shown in LKQ's chart above detailing Figure 1 of the claimed design, the contour lines that cross the drawing lines delimitating the outer most edges of the inset planes do not show a significant surface bend, crease, or discontinuity. Reply 15. The contour lines, as shown for example in the green highlighting exploded view, inform us that this portion of the inset plane surface remains substantially planar as it transitions into a weakly rounded surface leading to the slightly concave curved wall. This would not indicate to a designer of ordinary skill that this outer most edge of the inset plane is visually distinctive. This is particularly true, for instance, as compared to the inner edges within the orange highlighted section of the inset plane, which reveal a more definitive angle or curvature at the drawing lines representing the hockey stick shaped inner wall of the inset plane.

In addition, LKQ presents evidence that GM considered the Chevy Cruze hood design also to be sporty and aggressive in line with other GM vehicles. *See* Ex. 1051 (GM press release proclaiming the 2016 Chevy Cruze having "detailed, layered line work in the hood and body-side panels contributing to an overall impression of muscularity – with an athletic stance . . . [w]ith styling influenced by the acclaimed 2014 Impala and all new Malibu."). Ex. 1051, 2. Along with the substantial similarities between the inset planes of both designs, we find the evidence provoking similar sporty characteristics across the family of GM vehicles, including the Chevy Cruze, to mute somewhat the effects of minor disparities between these designs. Although there are certainly subtle differences, the desire to evoke similar design characteristics across a family of vehicles indicates that a designer of ordinary skill in the art would have been motivated to use similar hood features, for example, inset planes, to present a similar aerodynamic, sporty,

and aggressive, i.e., muscular, appearance to the vehicle hood. *Id.*; *see also* Ex. 1003 ¶ 60 (Mr. Hill testifying that “[a] designer of ordinary skill in the art would have been further motivated to adjust the existing overall shape of the inset planes of the design disclosed in the Cruze Website because it is a common feature among hood designs across the Chevrolet line-up.”).

GM argues further that the ’759 design has essentially wider planar insets, that the insets take up a greater portion of the hood surface, for example 40% of the claimed hood area, as compared to 20% for Chevy Cruze. PO Resp. 23 (citing Ex. 2004 ¶ 66). GM makes the following comparison using annotated Figure 4 of the claimed design as compared to an image of the Chevy Cruze hood.



Cropped and annotated Figure 4 of the claimed design, above, illustrates the difference in width of the inset panels as compared to an annotated image of the Chevy Cruze hood. *Id.* at 25. Although we cannot dismiss the visually

apparent width differences between the inset planes, we are also not persuaded that the greater width is sufficient to overshadow the more significant similarities. Mr. Hill testifies persuasively that the more prominent features of the inset planes are “(1) the shapes of the inset planes, formed by the distinctive and highly similar curved beveled edges flanking their rearward and inboard borders; (2) the manner in which they taper outwards and the rear and inwards at the front; (3) their surface treatment and contouring; and (4) their recessed-appearing contour and orientation along their inner edges.” Ex. 1056 ¶ 30. Also, Mr. Hill testifies that

a designer of ordinary skill in the art would have been motivated to adjust the shape of the existing inset planes on the Cruze Website hood design as is common among hood designs, especially among the Chevrolet current generation of production models. It would have been well within the ordinary knowledge, creativity, and experience of a designer of such skill to make the inset planes shorter, wider, rounder at the corners of the shape, shallower, or any other number of modifications and their inverses in order to adjust the overall shape of the inset plane to create an aerodynamic and sporty appearance on vehicles of all sizes across the Chevrolet family.

Ex. 1004 ¶ 64.

Mr. Peters testifies for GM that Chevy Cruze fails to disclose inset planes having the same or similar width, and we acknowledge that this is true. Ex. 2006 ¶ 67. What we do not have from GM and Mr. Peters is persuasive testimony and evidence that slightly altering the shape and proportion of the inset planes would have created such a difference as to overwhelm the substantial similarities and render the overall inset plane features specifically unique in the eyes of a designer of ordinary skill in the art. Ex. 2006 ¶¶ 67–68. This type of evidence and testimony would have been especially helpful where, as we have here, there is evidence showing

GM's attention to a level of ornamental consistency and similar features across a family of vehicles.

Thus, we find that any disparity in the definiteness and proportions between the inset planes of the designs would have been of relatively less significance to a designer of ordinary skill in the art than the numerous similarities and overall visual impression of the inset planes.

convex crease and curved walls

The convex crease and curved wall are perhaps best illustrated in GM's annotated Figure 3 reproduced below.

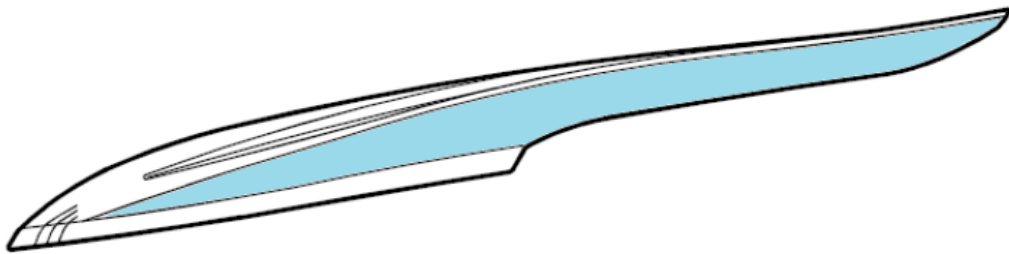


Figure 3 is shown above as annotated by GM to highlight the curved wall profile in the side view of the claimed design. The upper most edge of the curved wall is the convex crease. PO Resp. 35.

Despite GM's arguments that the side view of the Chevy Cruz hood is unhelpful, reasonable observation shows the profile image of Chevy Cruze on page 1 of the reference, reproduced below and flipped horizontal, is not entirely unclear.



Above is a flipped side view of Chevy Cruze including the hood, from the web page of Exhibit 1006. Ex. 1006, 1. The Chevy Cruze side view profile discloses a hood with an overall similarly curved top surface with that of the claimed design, and also a curved wall defined by a convex crease contour extending forwards toward a sharper flatter profile at the front of the hood.

Our understanding of the Chevy Cruze convex crease and curved wall features is also informed by the front and top perspective views from Chevy Cruz which reveal visual aspects of the hood contours, curved side wall and convex crease arrangement similar to the claimed design and Figure 3.

Indeed, the front perspective view in the following image from Chevy Cruze appears to show, as highlighted by the Board, that the convex crease contours on either side of the hood are continuous along the hood and extend to, or near to, the front edge of the hood.



The image above, as annotated by the Board, is a front perspective view of the front hood of the 2016 Chevy Cruze adding two red circles along each side of the hood. Ex. 1006, 4. Considering this, and other Chevy Cruze images, we do not find that GM's reliance specifically on the image reproduced below from Chevy Cruze persuasive as to the actual convex crease curvature and contour of the hood.



Considering the image from Chevy Cruze, above, GM's argument is that this shows a blunted, as opposed to a sharp, end of the convex crease contour

where it meets the front edge of the hood. PO Resp. 34–35 (citing Ex. 1004 ¶ 72). It is not clear to us, however, that this lighting effect in one single image is indicative of the actual convex crease contour. Our concern with the above image as interpreted by GM, is akin to that which Mr. Hill expressed in his deposition when discussing elements of Chevy Cruze shown in this image. Mr. Hill testified that “I would venture that this -- this has been -- this photo’s been manipulated, as is common practice.” Ex. 2006, 26:16–17. Whether manipulated or not, we do not find the evidence relying on this apparent lighting effect highly compelling as to the actual convex crease in Chevy Cruze. Looking at the Chevy Cruze images as a whole, and as Mr. Hill testifies, the “Cruze has an almost identical, if not identical front terminus of the curved side walls as that claimed.” Ex. 1056 ¶ 44.

Considering further the curved wall which depends downward and outward from the convex crease, we observe most clearly from a comparison of Figures 1 and 4 with the Chevy Cruze image depicting a front perspective view of the hood at page 4, that the curved walls of both designs are similarly concave. This is shown by the appropriate shading and contour lines in Figures 1 and 4 of the ’759 design, and was consistently testified to by Mr. Hill with respect to Chevy Cruze during his deposition:

Q. Okay. So let me just be very clear here. What you’re saying is that most of the curved wall is concave surfacing?

...

A: Correct. Most of the curved wall surfacing is concave.

...

Q. Okay. That’s what you said earlier. I just wanted to make sure we’re clear.

Ex. 2006, 21:12–20. Overall, we determine that a designer of ordinary skill would find substantial similarity in the convex crease and concave curved wall of both designs.

notch

We provide a further annotation to GM's annotated Figure 3 reproduced below, to indicate the notch generally.

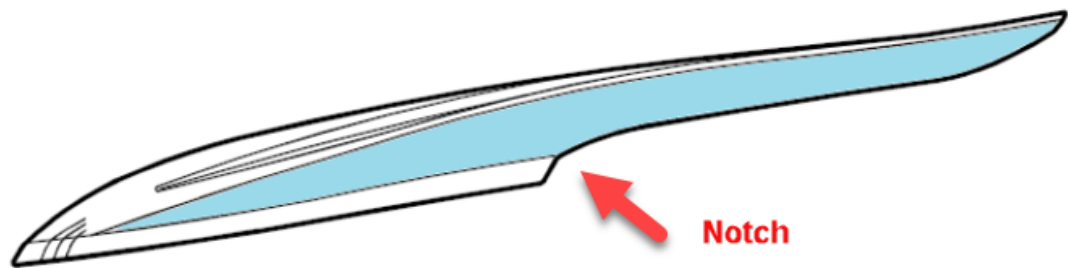
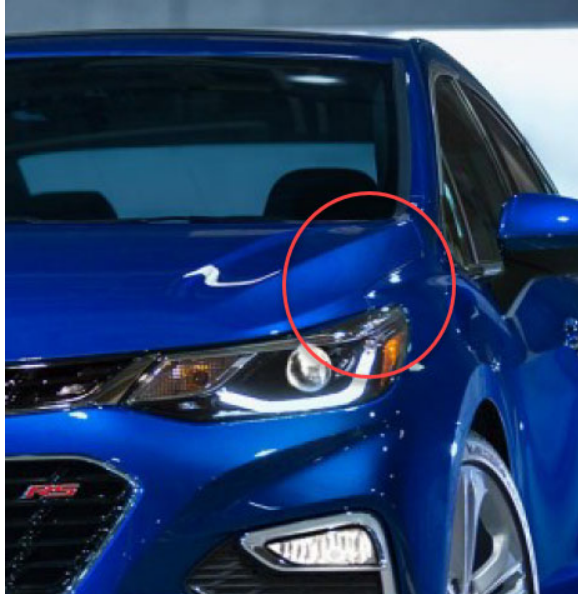


Figure 3 is shown above as annotated by GM to highlight the curved wall profile in blue, and also annotated by the Board in red to indicate the notch, in the side view of the claimed design.

The curved wall of the '759 design, as depicted in Figure 3, above, also defines a notch where the side edge flares outward and slightly downward to form a lower edge or bezel portion leading to the front edge of the hood. The notch can be observed in each of Figures 1–4 of the '759 design as a feature which interrupts and impacts significantly the side edge profile of the claimed vehicle hood. GM points to the notch mainly with respect to Figure 4 arguing that Chevy Cruze fails to disclose a similar feature. PO Resp. 29–30. We disagree for several reasons. First, the claimed notch feature is not shown solely in Figure 4 of the '759 design. The notch is readily apparent in each of Figures 1–4 and a similar feature is fairly disclosed by the perspective and side views of Chevy Cruze showing a similar outward and downward flare in the side edge of the hood. Second,

the notch in Chevy Cruze is shown in a different context, mainly because Chevy Cruze is an image of the complete vehicle, including the adjacent fender panel. As shown in the cropped highlighted image from page 4 of Chevy Cruz, below, a portion of the adjacent fender panel is present within the space defined by the notch in the side of the hood.



Above is a cropped Chevy Cruz image from page 4, as annotated by the Board, highlighting the notch in the side edge of the hood and the related fender surface interfacing with the notch. The relevant fender is not shown or claimed in the claimed hood design. Third, our observation of the Chevy Cruze and particularly the images at pages 4 and 7 is consistent with Mr. Hill's testimony that Chevy Cruze discloses this notch:

Q. Okay. And when I'm talking about a notch in the side of the hood, would you -- I mean, that's a fair characterization of what's shown in figure 4, right?

...

A: It serves.

Q. Okay. And if you go back to Exhibit 1006, there's no notch shown in any of the illustrations of the Cruze, correct?

A. I disagree, because on page 7 you can see the part line which is determining what you call the notch in the front view very clearly, on page 7 driver's side, and on page 4 I can see the same. And I understand that if I -- if I rotate in my mind that to make it a true front view, or orthographically, it would present a notch as you describe.

Q. Okay. What view are you rotating?

A. Page 4.

Q. Okay. Page 4.

A. Right.

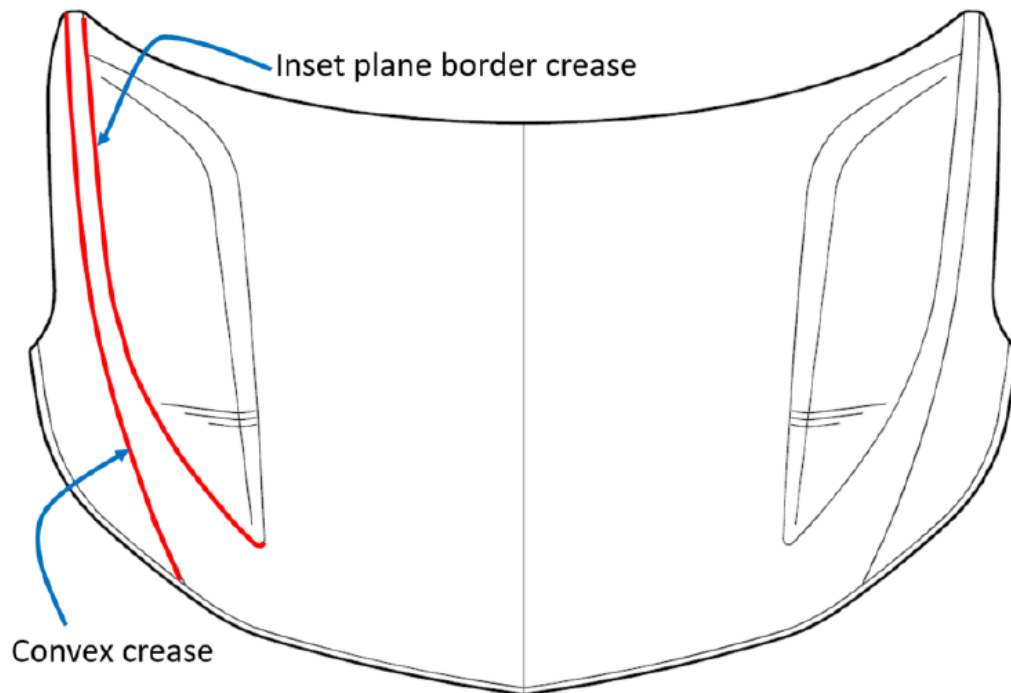
Ex. 2006, 46:6–25. We are persuaded that Chevy Cruze fairly discloses a notch that is substantially similar to that claimed in the '759 design.

a pair of outer longitudinal strips

A top perspective view of Chevy Cruze 7 is reproduced below.



Above is a cropped image from Chevy Cruze showing a top perspective view of the hood and inset panels. Ex. 1006, 7. GM argues that the inset panels on Chevy Cruze are not separated from the convex crease and thus do not appear to delineate as wide a longitudinal strip between the convex crease and the inset plane border crease as shown in GM's annotated Figure 4 below. PO Resp. 27.



GM's Annotated Figure 2 of the claimed design illustrates the longitudinal strip as defined between the inset plane border crease and the outer convex crease. *Id.* Nevertheless, Chevy Cruze discloses a similarly situated inset plane having a hockey stick shaped inner wall and a generally planar surface extending upwards and outwards towards the convex crease as in the claimed design. *See* Ex. 2006 (Mr. Hill describing during his deposition the “hockey stick” shape). We appreciate that there appears to be a minor difference between the designs in how the inset planes transition, as a crease or “longitudinal strip” as GM asserts, to the curved wall. Chevy Cruze

appears to have a narrow crease, i.e. the convex crease, defining the transition as opposed to a slightly wider more rounded transition as shown in Figure 4 of the claimed design reproduced below.

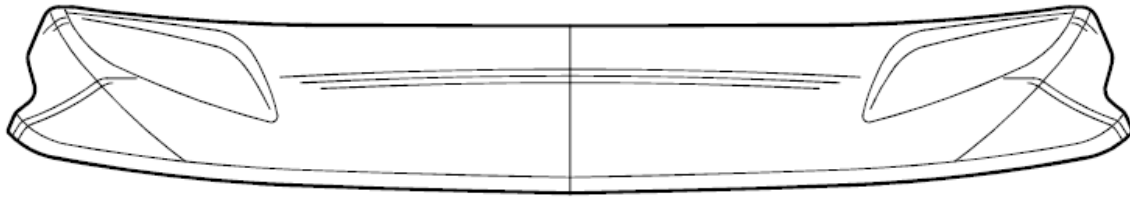


Figure 4 of the '759 design, above, shows a front elevation view of the vehicle hood and contour lines illustrating curvature of the transition between the inset planes and curved walls.

Despite this minor difference in the outer transition of the inset planes we are persuaded by the testimony of Mr. Hill that the more important aspect of the inset plane is the hockey stick shaped inner wall:

The inset planes are defined not by the outer transition into a surface, they're defined by the inner; in other words, that the surface is set downward, inset plane, and determined its shape, you can see on page 7, by the inner feature of the inset plane, the kind of hockey stick or, you know, offset from the central portion to the inset plane. That's the defining feature.

Ex. 2006, 31:11–18. Thus, we give this difference in the transition between the inset plane and curved wall less weight in the overall appearance of the claimed design compared to other features.

bevel and height of convex crease

Two features merit additional discussion as to whether Chevy Cruze is a proper primary or *Rosen* reference. These features are the uniform thickness bevel along the front and side edges, and the apparent raised nature of the convex crease relative to the center of the hood in the '759 design. The '759 illustrates a bevel of uniform thickness extending from the notches

on either side edge across the front edge as shown in GM's annotated Figure 4 below, forming the lateral and front edges of the hood. PO Resp. 33 (citing Ex. 2006, 27:7–28:4).

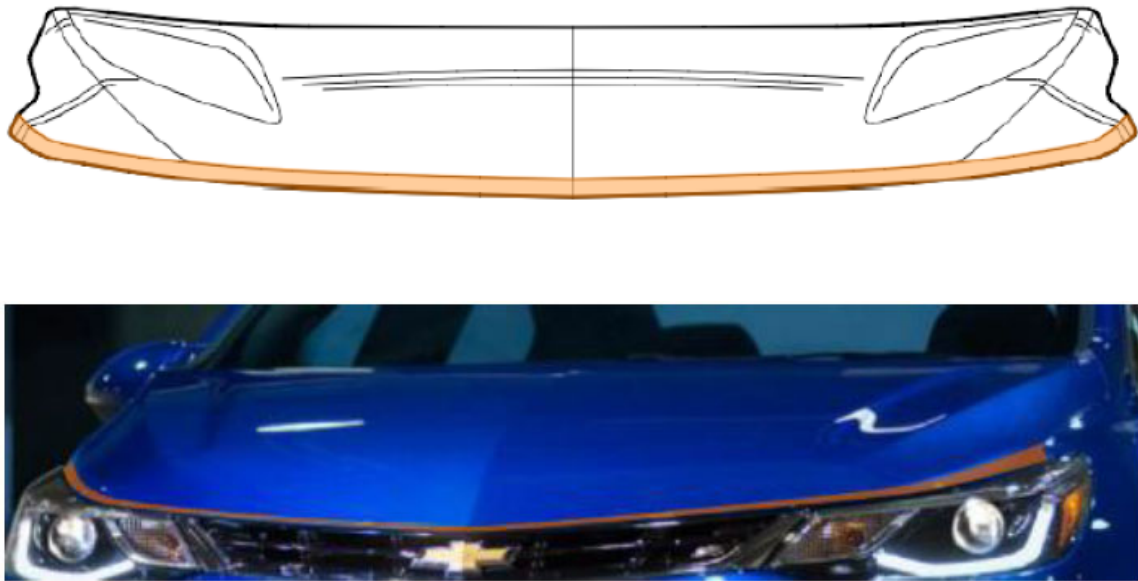


Figure 4 of the '759 design is shown above, as annotated by GM to highlight the uniform thickness of the bevel in the claimed design extending along the lateral and front edges of the hood, in comparison with LKQ's cropped, annotated image and non-uniform bevel, in a front perspective view of Chevy Cruze. *Id.*; Pet. 45 (citing Ex. 1006, 8). Chevy Cruze also discloses a bevel along the lateral edges of the hood, and the bevel appears to decrease in thickness as it traverses the front edge of the hood towards the center crease and is thus not uniform. Our observation is confirmed by LKQ's Declarant Mr. Hill explaining that "there is a point when that beveled edge diminishes as it leads towards the center line and covers the central portion." Ex. 2006, 26:18–20.

Considering the bevel from the point of view of a designer of ordinary skill in the art, it is not that the bevel would not play a role in the overall

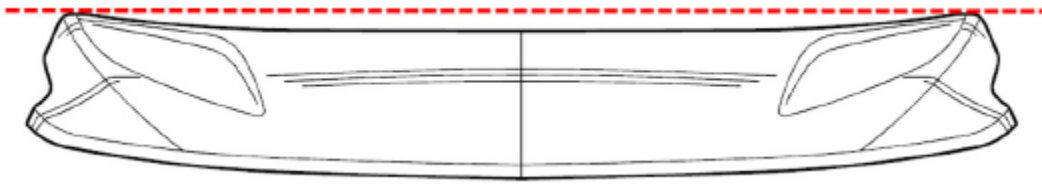
appearance of the hood, but that the bevel is not as significant a feature as others when considering the design as a whole. Mr. Hill testifies persuasively that

the lack of a bevel along the front edge of the Cruze does not detract from the basic similarity of the hood designs as a whole given the overwhelming constellation of more prominent, highly similar features shared between the two designs. These include the perimeter shape of the front edge itself, as well as the sharp, downturned and pointed design of the Cruze's hood (which conveys no less boldness or aggression than the Equinox's hood).

Ex. 1056 ¶ 36. Moreover, Mr. Hill explained that to a designer of ordinary skill in the art the Chevy Cruze bevel would appear more as a similarity than a difference “and the fact that the beveled edge does not span the center would not detract from the designs’ basic similarity.” *Id.* ¶ 34. Mr. Hill testifies that carrying the beveled edge across the front of the hood would have been a simple modification for a designer of ordinary skill in the art because “there are only two ways to resolve the bevels of the Cruze as they currently span across the headlamps: to carry the bevel across the front edge of the hood, or to fade them out at some point short of the centerline of the vehicle (as the Cruze did).” *Id.* ¶ 35. Based on Mr. Hill’s testimony, we are persuaded that a designer of ordinary skill in the art would have known to modify the Chevy Cruze diminishing bevel to be uniform, a straightforward design feature modification adequately revealed by Chevy Cruze even if not in the exact uniformity shown in the claimed design.

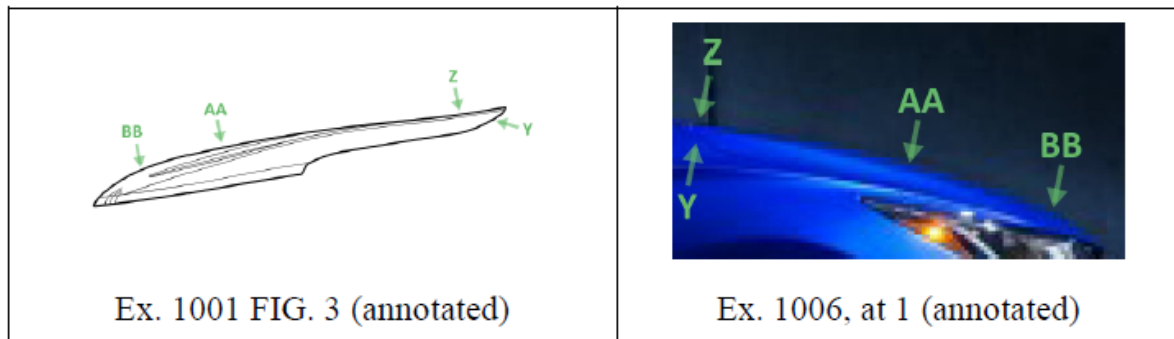
As for the elevation difference between the height of the outer edges and the center portion of the ’759 design, we are persuaded that Chevy Cruze in fact has a similar height differential, and to the extent it does not, that this less significant aspect of the claimed design is overwhelmed by

other similarities. Below we reproduce GM's annotated Figure 4 of the claimed design.



GM's annotated Figure 4, above, illustrates a height difference between the center of the hood and the top of the curved walls. PO Resp. 31.

LKQ argues that this distinction is illusory, and that “[j]ust like the ’759 Patent, the Cruze’s side walls rise up as they approach the A-pillars.” Reply 22 (citing Ex. 1056 ¶ 41). Mr. Hill testifies that “like the ’759 Patent, the Cruze appears to disclose a hood whose highest points appear at the points where it adjoins the A-pillars.” Ex. 1056 ¶ 41. Mr. Hill points out in the following annotated figures how the side view represents a similar hood configuration for the Chevy Cruze.



The figure above compares LKQ's annotated Figure 3 from the '759 patent on the left with annotated cropped side view of Chevy Cruze on the right. Mr. Hill testifies that “like in the ’759 Patent, the center peak of the hood appears visible towards its front (at the location marked BB) . . . and then recedes beneath the level of the side walls as the hood progresses rearwards (at the location marked Z).” *Id.*

While we rely on LKQ and Mr. Hill's evidence and testimony to determine that the any hood height differential between the designs is minimal, we note that Mr. Hill's testimony appears consistent with the additional views of the 2016 Chevy Cruze in Exhibit 2008, which GM refers to as the "Cruze II website." PO Resp. 30. Exhibit 2008 is similar in many respects to LKQ's Exhibit 1006, but includes additional images of the 2016 Chevy Cruze, including the image reproduced below of the front elevation view of the hood. *Id.*



The cropped image, above, is a front elevation view of the hood of the 2016 Chevy Cruze. Ex. 2008, 10. Our observation of this figure is consistent with Mr. Hill's testimony, that the sidewalls rise as they reach the A-pillars of the Chevy Cruze. Indeed if we impose a similar annotated horizontal line to the front elevation view of Chevy Cruze, as reproduced below, we are able to discern a difference in height between the edges and center portion of the Chevy Cruze hood.



The image above, as annotated by the Board, is a front elevation view of the front hood of the 2016 Chevy Cruze. Ex. 2008, 10. Thus, our observations and review of all the evidence pertaining to the Chevy Cruze hood confirms Mr. Hill’s testimony that in fact “the Cruze appears to disclose a hood whose highest points appear at the points where it adjoins the A-pillars.” Ex. 1056 ¶ 41.

Also, to the extent that the ’759 design does provide a slightly greater rise in the side walls relative to the center portion of the hood, we determine that this difference would not have detracted from the myriad of more significant corresponding features between the Chevy Cruze hood and the ’759 design. We find persuasive Mr. Hill’s testimony, as it is consistent with the overall ornamental appearance of the hood, that a designer of ordinary skill in the art would have found more visually apparent “the striking similarity of the shape and contours of the side portions, the similarity of the visual character of the inset planes, the perimeter of the front portion of the hood, the shape, height, and visual character of the beveled edges along the front thirds of the side walls as they carry onto the front edge of the hood, and the similarity of the center peak.” *Id.* ¶ 42.

We appreciate that there are differences, as we have discussed above, between the designs. We also acknowledge that these differences would be considered by a designer of ordinary skill in the art. *See* Ex. 2004 ¶ 60 (Mr. Peters testifying that “[t]he differences I noted below plainly impact the appearance of the ’759 Patent’s design, and would have been meaningful to [a] skilled designer’s impression of the overall appearance of the vehicle hood.”). We cannot, however, simply add up the number of similarities and differences that the parties present and make an equivocal determination based on which party provides more. The similar and different features of a design can each have a relative significance which can be profound in evaluating the overall ornamental appearance of a design. In some cases the significance may be somewhat the same, and in other cases the significance of a particular feature may be more, or less, compared to other features.

Chevy Cruze discloses a hood that includes essentially every visually salient feature of the ’759 design including a highly similar profile and center crease, inset planes, curved concave sidewalls defined by an upper convex crease, a notch in the side edge profile, and a front bevel. Due to the almost complete match of similar features, the diminishing bevel and height differences, like the proportional difference and lack of a longitudinal strip adjacent the inset planes of Chevy Cruze are less significant in the context of the overall similarity in appearance between the Chevy Cruze hood and the ’759 design. Considering both designs as a whole including the more significant similarities and relatively more minor differences presented by the parties and evaluating the Declarant’s testimony as to the same, we find that the overall visual appearance of the Chevy Cruze hood provides a single

reference, “a something in existence, the design characteristics of which are basically the same as the claimed design.” *In re Rosen*, 673 F.2d at 391.

(c) Chevy Malibu as a Secondary Reference

The second step of the obviousness inquiry requires us to determine whether Chevy Malibu is a proper secondary reference. *See Durling*, 101 F.3d at 103, (The Federal Circuit explaining that “secondary references may only be used to modify the primary reference if they are 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.”).

Chevy Malibu is admittedly tied to a family of Chevrolet vehicles that includes Chevy Cruze. *See* Ex. 1053 (Chevrolet Product Information Sheet describing “[a]ll-new expressive styling echoes sculpted designs seen in Volt, Malibu and Cruze.”). We also use LKQ’s comparison charts, reproduced below, to initially assess the visually apparent relatedness of the hoods disclosed by Chevy Malibu and Chevy Cruze.

CRUZE WEBSITE (PRIMARY REFERENCE)	MALIBU BROCHURE (SECONDARY REFERENCE)
 Ex. 1006, at 4 (cropped)	 Ex. 1007, at 1 (cropped, flipped)
 Ex. 1006, at 4 (cropped)	 Ex. 1007, at 8 (cropped)
 Ex. 1006, at 7 (cropped)	 Ex. 1007, at 4 (cropped)

LKQ’s comparison charts, above, show cropped front and top perspective views of Chevy Cruz on the left, in comparison to similar cropped front and top perspective views of Chevy Malibu on the right. Pet. 46–47.

Readily apparent from the above comparison, the hood designs disclosed by the Chevy Cruze and the Chevy Malibu are differently contoured and shaped to a certain extent. In particular we observe a difference at the front of the hood where the Chevy Malibu hood features are contoured inwards giving an impression of narrowness and aerodynamics.

Also, as GM points out the front of Chevy Malibu hood is truncated by a front cut line. PO Resp. 36–37 (citing Ex. 2004 ¶ 80). Yet both designs share many of the same visually significant features including a central portion of the hood having a bisecting center crease; a pair of hockey stick shaped inset planes similarly positioned, and a pair of curved walls defined by an upper convex crease at the lateral edges of the hood.

GM argues that Chevy Malibu is not so related to Chevy Cruze, for one reason because, “[a]s an interfacing feature, the shape of the front edge of the hood would have been particularly significant to the ordinary skilled designer.” PO Resp. 36 (citing Ex. 2004 ¶¶ 80–81). GM asserts that the truncated nature of the Chevy Malibu hood forms a second panel between the hood and grill that is not found in Chevy Cruze and would be important to a designer of ordinary skill “because the front of the hood must interface with other components for the vehicle, such as the headlights and grille.” *Id.* GM also argues that instead of a curved wall on either side of the hood Chevy Malibu discloses a substantially vertical wall. *Id.* at 38.

GM’s arguments as to certain differences in design features, such as the truncated hood line, or a more vertical transition in the curved wall, misses the point of the relatedness issue for secondary references. There is no requirement that all the features of the secondary reference be the same, or even substantially the same, as the primary reference, only “so related that the appearance of certain ornamental features in one would suggest the application of those features to the other.” *In re Glavas*, 43 C.C.P.A. 797 (CCPA 1956). Like the Chevy Cruze hood, Chevy Malibu is a vehicle hood including many of the same visually significant features such as similarly positioned inset planes, curved walls and convex creases as Chevy Cruze.

That these elements are sculpted somewhat differently to evoke a different look or characteristic for the vehicle, and that other elements such as the different hood cut line create a different interface with the front grill, does not remove Chevy Malibu hood as being closely related in appearance to Chevy Cruze.

GM also argues that LKQ is using hindsight analysis and failed to provide “any reasoned explanation why the Malibu Brochure would have suggested application of its overall shape of the inset planes and convex crease.” PO Resp. 39. We disagree. LKQ’s Declarant, Mr. Hill testified that

[a] designer of ordinary skill would have been motivated to combine the teachings of a pair of inset planes having a greater cant and a wider convex crease as disclosed by the Malibu Brochure with the overall design of the hood disclosed in the Cruze Website *to create a sporty, aerodynamic appearance* that would create [] a design having a nearly identical central portion of the hood, inset plane appearance, curved walls, and front bevel as the design of the ’759 Patent.

Ex. 1004 ¶ 64 (emphasis added). To the extent that Mr. Hill agreed that the Chevy Cruze also has a sporty and aerodynamic appearance during his deposition, we do not find that this compromises Mr. Hill’s stated motivation and reasoning as to the relatedness of Chevy Cruze and Malibu. *See* Ex. 2006, 10:25–13:13. In his deposition Mr. Hill was not asked to compare and contrast, for example, the relative visual sportiness and aerodynamics of Chevy Cruze to that of Chevy Malibu. Overall, we find persuasive Mr. Hill’s testimony that based on their admitted relationship “[i]t would have been well within the ordinary knowledge, creativity, and experience of a designer of such skill to make the inset planes shorter, wider, rounder at the corners of the shape, shallower, or any other number of

modifications and their inverses in order to adjust the overall shape of the inset plane to create an aerodynamic and sporty appearance on vehicles of all sizes across the Chevrolet family.” Ex. 1004 ¶ 64.

We find persuasive LKQ’s evidence and Mr. Hill’s testimony that a designer of ordinary skill in the art would have modified Chevy Cruze with more defined inset planes and a wider convex crease (longitudinal strip) as taught by Chevy Malibu, and in doing so would have bridged the gap between Chevy Cruze and the ’759 design “to create a design that has the same overall visual appearance as the claimed design.” *Durling*, 101 F.3d at 103 (internal quotation and citations omitted).

(d) Conclusion as to Obviousness

LKQ has established persuasively that a designer of ordinary skill in the art would have considered Chevy Cruze a *Rosen* reference and thereafter modified Chevy Cruze based on Chevy Malibu. Weighing the evidence of obviousness and nonobviousness as a whole, we determine that LKQ has demonstrated by a preponderance of the evidence that the claim of the ’759 patent would have been obvious based on Chevy Cruze and Malibu.

III. CONCLUSION

LKQ has proved by a preponderance of the evidence that the claim of the ’759 patent would have been obvious over Chevy Cruze and Chevy Malibu.

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1	103	Chevy Cruze and Chevy Malibu	1	

Claims	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
Overall Outcome			1	

IV. ORDER

For the reasons given, it is

ORDERED that, based on a preponderance of the evidence, the claim of the '759 patent has been shown to be unpatentable; and

FURTHER ORDERED that, because this is a Final Written Decision, any party to the proceeding seeking judicial review of this Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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