United States Patent and Trademark Office

Summary of public views on the article of manufacture requirement of 35 U.S.C. § 171

UNITED STATES
PATENT AND TRADEMARK OFFICE

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I. Introduction

Section 171 of title 35 provides protection for designs and sets forth that "[w]hoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefor." To comply with the article of manufacture requirement, applicants have been required to show the design as applied to or embodied in an article of manufacture.[1]

In assessing whether the current interpretation of the article of manufacture requirement of section 171 should be reevaluated in order to incentivize and protect innovation in new and emerging technologies, the United States Patent and Trademark Office (USPTO) published a Request for Information in the Federal Register, inviting the public to comment "on whether [the USPTO's] interpretation of the article of manufacture requirement in the United States Code should be revised to protect digital designs that encompass new and emerging technologies."[2]

In response to the Request for Information, a diverse range of stakeholders, including legal associations, companies, practitioners, academics, and individuals, submitted 19 comments, which set forth a wide variety of views.[3] This report summarizes these comments.

II. Summary of Public Views on the Article of Manufacture Requirement in 35 U.S.C. § 171

A. Comments supportive of the view that designs for projections, holograms, and virtual and augmented reality are protectable under 35 U.S.C. § 171

1. USPTO interpretation and guidance could be more flexible

Several commenters expressed the view that the USPTO's interpretation of section 171, including the USPTO's 1996 "Guidelines for Examination of Design Patent Applications for Computer-Generated Icons,"[4] is unduly restrictive.[5] These commenters remarked that the USPTO should adopt a more flexible approach, given the economic and technological importance of "designs for projections, holograms, and virtual and augmented reality" (PHVAR).[6]

Some of these commenters pointed, in particular, to the requirement that the application drawing must depict "a computer-generated icon embodied in a computer screen, monitor, other display panel, or a portion thereof, in either solid or broken lines."[7] In their view, a lifting of that requirement would represent an important step toward protecting new and emerging technologies. Such a step, they believe, is feasible

1 *Curver Luxembourg, SARL v. Home Expressions Inc.*, 938 F.3d 1334, 1340 (Fed. Cir. 2019) (confirming that "long-standing precedent, unchallenged regulation, and agency practice all consistently support the view that design patents are granted only for a design applied to an article of manufacture, and not a design *per se*"); Manual of Patent Examining Procedure (MPEP) § 1504.01 (9th ed., Rev. 10.2019, June 2020).

2 The Article of Manufacture Requirement, 85 Fed. Reg. 83063 (December 21, 2020).

3 Public comments can be viewed at www.regulations.gov/document/PTO-C-2020-0068-0001/comment.

4 Guidelines for Examination of Design Patent Applications for Computer-Generated Icons, 61 Fed. Reg. 11380–82 (Mar. 20, 1996).

5 American Intellectual Property Law Association (AIPLA), comment at 8; *see also* Saidman DesignLaw Group, comment at 3; Sterne Kessler, comment at 2.

6 International Federation of Intellectual Property Attorneys (FICPI), comment at 4; *see also* Sterne Kessler, comment at 2; Banner Witcoff, comment at 2, 5; AIPLA comment at 2; Apple Inc., comment at 2.

7 Volvo Car Corp., comment at 3; Banner Witcoff, comment at 2 ("In practice, applicants typically accommodate the USPTO's interpretation by adding an amoeba-shaped broken line around the computer-generated icon design. Then, the area within the amoeba presumptively corresponds to a computer screen, and the article of manufacture requirement is satisfied. … As a threshold matter, our experience is that the 'amoeba rule' overlooks the fact that a computer screen (and thus an article of manufacture) may already be shown in the drawing. For example, the computer screen could be already shown within the perimeter of the [icon], or even in the lines and curves that comprise the [icon] (which correspond to activated pixels on the computer screen.").

provided only that it is clear in the application—either in the specification or the drawings—that the graphical user interface (GUI) design is for an article of manufacture, such as a computer system. In those circumstances, they contended that the article of manufacture requirement should be satisfied.[8] In addition, one commenter suggested, "the interpretation of the 'article of manufacture' should be extended to computer-generated images of many of the emerging technologies."[9] This commenter also suggested that the USPTO should interpret the term "article of manufacture" broadly enough that "the image may be a component of the overall product."[10]

Several commenters also asserted that current jurisprudence supports a more flexible approach to the article of manufacture requirement.[11] For example, one commenter highlighted the statement in *In re Zahn*[12] that section 171 refers "not to the design of an article, but to the design for an article."[13] The commenter submitted that *Zahn* provides that "surface ornamentation can be claimed without regard to the appearance of the article."[14]

2. PHVAR should be treated the same as type fonts and GUIs

Many commenters urged that PHVAR should likewise be eligible for protection. This group asserted that there are no meaningful distinctions between computer-generated type fonts and other computer-generated designs.[15] In a similar vein, some commenters pointed to the treatment of GUIs as evidence that PHVAR are eligible for design protection.[16] According to these commenters, graphical interfaces comprise GUIs, projections, holograms, and virtual and augmented reality: all are part of a broader group of graphical interfaces and should be eligible for the same protection.[17]

In addition, these commenters urge that because the protection available to GUIs relies on the originality of the design, protection should be available even if a GUI cannot be displayed on a computer screen.

3. Ephemeral nature of PHVAR should not bar protection

Several commenters submitted that the potentially ephemeral or nonstatic physical nature of designs for PHVAR should not disqualify them from protection under 35 U.S.C. § 171.[18] In support of that position, these commenters pointed to the U.S. Court of Customs and Patent Appeals' decision in *In re Hruby*[19] and indicated that "the court found that the portion of a water fountain which is composed entirely of water qualifies as an article of manufacture."[20]

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8 Volvo Car Corp., comment at 3; *see also* Banner Witcoff, comment at 2.

9 Michael L. Kenaga, comment at 4.

10 *Id.* at 4.

11 Apple Inc., comment at 2; *see also* Sterne Kessler, comment at 3–4.

12 *In re Zahn,* 617 F.2d 261, 268 (C.C.P.A. 1980).

13 AIPLA, comment at 3.

14 *Id.*

15 *See, e.g.,* Apple Inc., comment at 4; *see also* AIPLA, comment at 4–5; Dunston Barnes, comment at 1; Intellectual Property Owners Association (IPO), comment at 3; Sterne Kessler, comment at 3, 7.

16 Sterne Kessler, comment at 3 ("In *Adobe Systems, Inc. v. Southern Software, Inc.* [45 U.S.P.Q.2d 1827 (N.D. Cal. Feb. 2, 1998)], the court held six design patents for fonts eligible under § 171 on the basis that the article of manufacture is the computer program that allows the typeface to be rendered. For eligibility purposes, there is no practical difference between a type font and a graphical user interface—both are rendered by computer programs and are symbolic systems for communication.").

17 IPO, comment at 2; *see also* International Trademark Association (INTA), comment at 2 ("PHVAR designs are 'embodied' in electronic devices in the same manner as are GUI designs"); Sterne Kessler, comment at 4.

18 IPO, comment at 2; *see also* AIPLA, comment at 3; INTA, comment at 2; Sterne Kessler, comment at 2.

19 *In re Hruby,* 373 F.2d 997 (C.C.P.A. 1967).

20 IPO, comment at 2; *see also* AIPLA, comment at 3 ("USPTO should amend its examination guidance to encompass computer-generated image designs displayed other than on a display screen. … This proposed amendment is consistent with USPTO precedent."); INTA,

4. Technological developments favor protection for PHVAR

Several commenters urged that technological developments require the USPTO to revise its examination practice to allow protection for PHVAR. Some suggested that protection is necessary to support innovation and the advancement of technology.[21] Commenters also suggested that there should be no requirement for any "link between a GUI/PHVAR design and an article of manufacture" because, given the rapid pace of technological development, it may be impossible at the time a design is developed to foresee where the design might ultimately be displayed.[22] One commenter reported that certain existing products already include designs "that are projected onto a non-conventional medium, such as air (e.g., holograms), a surface (e.g., a wall, window, or arm), and even into the retina of an eye."[23]

5. Other jurisdictions are moving toward protecting PHVAR

Some commenters noted that many jurisdictions are moving toward broader protection for PHVAR.[24] One commenter suggested, in particular, that "protection for graphical user interface and icon designs is available in most jurisdictions around the world and that most countries which grant design patents or design registrations do so without regard to the appearance of an article of manufacture such as a display screen."[25] Another commenter observed that other jurisdictions, namely, Singapore, Japan, and China, were likewise "moving away from claiming the article of manufacture associated with a graphical user interface or icon."[26]

Commenters suggested that, in view of these international trends, a change in the USPTO's practice would further global harmonization in the design area.[27] Similarly, one commenter noted that European Union (EU) law "protects designs per se, regardless of the article upon which an infringer applies it" and urged that changes to USPTO practice would allow the United States to "catch up to … EU law."[28]

Another commenter reported that the differences between U.S. and other jurisdictions' practices complicate parties' efforts to assert Paris Convention priority claims at the USPTO.[29] In particular, because the European Union Intellectual Property Office (EUIPO), unlike the USPTO, does not require that an article of manufacture be displayed in the drawings, design patent applicants wishing to assert priority at the USPTO based on a prior EUIPO filing must revise their USPTO applications, thereby incurring additional costs. Similarly, another commenter suggested that differences in practice between the USPTO and other intellectual property offices place a burden on applicants with limited resources, as well as on foreign applicants who designate the United States through the Hague system and who have prepared drawings that conform to EU, rather than U.S., requirements.[30]

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comment at 2 ("Regarding the eligibility of projected two- or three-dimensional designs, INTA suggests that the USPTO should rely on the holding of *In re Hruby* [373 F.2d 997] as its guiding precedent."); Sterne Kessler, comment at 2 ("*In re Hruby* [373 F.2d 997] supports the eligibility of GUI designs independent of their connection to a display screen.").

21 AIPLA, comment at 2; *see also* INTA, comment at 2; IPO, comment at 2.

22 INTA, comment at 3; *see also* Apple Inc., comment at 2.

23 Apple Inc., comment at 2.

24 FICPI, comment at 2; *see also* AIPLA, comment at 8; Banner Witcoff, comment at 5.

25 Saidman DesignLaw Group LLC, comment at 1–2.

26 AIPLA, comment at 8.

27 Banner Witcoff, comment at 4–5; *see also* Perry Saidman, comment at 1.

28 Perry Saidman, comment at 1.

29 Volvo Car Corp., comment at 1.

30 Banner Witcoff, comment at 5.

B. Comments critical of the view that designs for PHVAR are protectable under 35 U.S.C. § 171

1. PHVAR should not be eligible for protection under 35 U.S.C. § 171

Several commenters urged that section 171 does not allow design patent protection for PHVAR or designs for similar technologies. For example, in their comments they asserted that design patents are available only for (1) designs for an article's configuration, (2) designs for surface ornamentation applied to an article, and (3) designs for combinations of these.[31] Further, one commenter asserted that "[a] design for a 'projection, holographic imagery, or virtual/augmented reality' display is not a design for the configuration (i.e., shape) of an article. Nor is it surface ornamentation applied to an article."[32] This commenter concluded that a PHVAR "is not a 'design for an article of manufacture' under existing case law."[33] Additionally, that commenter, along with others, opined that the proper inquiry under the statute is whether the projected design is for an article of manufacture and posited that "[t]he statue [sic] does not say that any 'design' is protectable if it can be associated in some way with some article of manufacture."[34]

Several commenters submitted that PHVAR are not protectable because they amount to ineligible designs per se[35] and that PHVAR are inherently designs per se.[36] Citing the decisions in *In re Schnell*[37] and *In re Zahn*, one commenter noted that "[c]ourts have consistently reaffirmed that § 171 means exactly what it says: design patent protection is only available for designs for articles of manufacture."[38] More specifically, these commenters explained that, regardless of how the USPTO's regulations regarding GUI designs fare under judicial review, PHVAR designs are well beyond existing design patents on icons and GUIs because GUIs are required to be embodied in the computer display.[39] Conversely, according to this commenter, PHVAR are "severed entirely from the article of manufacture" and thus would run afoul of the plain text of section 171 and the admonition in *Curver Luxembourg, SARL v. Home Expressions Inc.* against protecting designs per se.[40]

Another commenter urged that PHVAR are not protectable under section 171 because they do not give form to an article of manufacture, but are instead merely created by the article of manufacture.[41]

Some commenters noted that PHVAR designs are not protectable under section 171 because they are not designs for tangible articles.[42] In

31 Design Law Professors, comment at 3; Erik Stallman & Jennifer M. Urban, comment at 2; *see also* Electronic Frontier Foundation (EFF), comment at 6, citing William J. Seymour & Andrew W. Torrance, *(R)evolution in Design Patentable Subject Matter: The Shifting Meaning of "Article of Manufacture,"* 17 Stan. Tech. L. Rev. 183, 213 (2013), and at 2.

32 Design Law Professors, comment at 14.

33 *Id.* at 14.

34 *Id.*; *see also* Stallman & Urban, comment at 3 ("Courts have consistently reaffirmed that § 171 means exactly what it says: design patent protection is only available for designs *for* articles of manufacture. It is not available for abstract designs unconnected to an article of manufacture.").

35 Computer and Communications Industry Association (CCIA), comment at 3; see also Stallman & Urban, comment at 4; Engine, comment at 1.

36 EFF, comment at 3.

37 *In re Schnell*, 46 F.2d 203 (C.C.P.A. 1931).

38 Stallman & Urban, comment at 3.

39 *Id.* at 4.

40 *Id.*

41 CCIA, comment at 3.

42 CCIA, comment at 2; *see also* EFF, comment at 5; Engine, comment at 1; Irwin IP LLC on behalf of LKQ Corp., comment at 3–7 (providing a historical perspective on the definition of "article of manufacture"), and at 7 ("[t]he term 'article of manufacture' also requires that the thing is both man- or machine-made and tangible"); Design Law Professors, comment at 19.

one commenter's view, the wording "design for an article of manufacture" should be understood as "a design for a tangible item made by humans," or the like.[43] Another commenter urged that "the Federal Circuit has defined 'articles of manufacture' to exclude the effects of transmitting electromagnetic signals that are 'devoid of any semblance of permanence during transmission.'"[44]

One commenter submitted further:

> [D]esign patents on projections, holograms, and augmented reality designs would be examples of those patents "for a surface ornamentation in the abstract such that the patent's scope encompasses every article of manufacture to which [it] is applied" that "[o]ur law has never sanctioned." Because the contemplated designs are divorced from any article of manufacture, Congress would need to amend § 171 before the Office could contemplate granting design patents on these types of designs.[45]

This commenter contended that "[d]esign patent protection should not be expanded to [PHVAR], as this would require untethering patented designs from articles of manufacture."[46] They suggested that "[m]aintaining the connection between the protected design and the article of manufacture to which it is applied is crucial" for at least the three following reasons:

> First, it is necessary for design patents' notice function: tying design patent protection to a specified article of manufacture provides usable notice. Second, the article of manufacture assists parties in distinguishing between a designs [sic] functional and ornamental aspects. Third, it ensures that design patents efficiently protect what the patentee has contributed over the prior art while leaving room for other novel and innovative designs. In short, the article of manufacture anchors a design patent.[47]

2. USPTO's current interpretation and guidance should not be expanded further to capture PHVAR

Several commenters suggested that "[d]esign patentable subject matter has already been extended far beyond what Congress intended and beyond what can be supported by the plain text of 35 U.S.C. § 171."[48] Specifically, some commenters generally thought the 1996 guidelines should not have permitted protection for GUI designs.[49] One commenter observed that these guidelines (and subsequent amendments to them) have not been tested by a court to determine if they meet the article of manufacture requirement of section 171.[50] Some commenters advocated stricter guidance, limiting design protection to physical articles.[51] For example, one commenter suggested that the USPTO should "restor[e] the historical fixation requirement so that a design would have to be 'fixed' onto or

43 CCIA, Written Comments, at 2, citing *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429, 434–35 (2016).

44 EFF, comment at 5 ("In the utility patent context, the Federal Circuit held in *In re Nuijten*, 500 F.3d 1346 (Fed. Cir. 2007), following the Supreme Court's decision in *Diamond v. Chakrabarty*, 447 U.S. 303 (1980), that electromagnetic signals—even those that can produce visible emanations—do not qualify as 'manufactures' under 35 U.S.C. § 101. Based on the definitions of 'manufacture' considered in *Chakrabarty*, the Federal Circuit emphatically concluded that 'articles of manufacture' must be '*tangible articles or commodities*.'").

45 Stallman & Urban, comment at 4 (citing *Curver Luxembourg, SARL v. Home Expressions Inc.*, 938 F.3d 1334, 1339 (Fed. Cir. 2019)).

46 Stallman & Urban, comment at 4.

47 *Id.* at 4; *see also* Irwin IP LLC on behalf of LKQ Corporation, comment at 6–8.

48 Design Law Professors, comment at 3; *see also* CCIA, comment at 1, 3; EFF, comment at 7; Irwin IP LLC on behalf of LKQ Corp., comment at 1–2; Engine, comment at 3; Stallman & Urban, comment at 4 ("design patents for computer-generated icons are not without controversy").

49 Design Law Professors, comment at 3, and at 7; *see also* EFF, comment at 6; Stallman & Urban, comment at 4 ("design patents for computer-generated icons are not without controversy").

50 Stallman & Urban, comment at 3.

51 Design Law Professors, comment at 3; *see also* EFF, comment at 6.

within an article of manufacture to be eligible for protection under section 171."[52]

Another commenter noted that *Zahn*'s holding was not as broad as others (including the USPTO) have interpreted it; the commenter suggests *Zahn* is limited to the proposition that "when an article's design is embodied in less than all of an article, the design patent need only include those aspects of the article in the design patent application."[53] Likewise, another commenter suggested that "[i]n the 1990s, the Office built upon the faulty logic of *Zahn* to extend design patent protection to designs for computer icons and interfaces. Scholars have criticized this expansion. Further expansions of design patentable subject matter are neither necessary nor advisable."[54] On the basis of this assessment, these commenters suggested that "this trend of expansion should be reversed" and "urge[d] the Office to take appropriate steps in that direction."[55]

3. Nature of PHVAR as a disqualifying factor for PHVAR under 35 U.S.C. § 171

Several commenters urged that the nature of PHVAR technologies precluded their protection under section 171. One commenter[56] pointed to the Federal Circuit's ruling in *In re Nuijten* that a "transitory, propagating signal … is not a 'process, machine, manufacture, or composition of matter.'"[57] The commenter suggested that projected images composed of light (a transitory propagating electromagnetic signal) are thus not proper subjects for design patent protection.[58] Also citing *Nuijten* and noting that decision's reliance on the Supreme Court's decision in *Diamond v. Chakrabarty*,[59] another commenter urged that the Federal Circuit's definition of "articles of manufacture" does not encompass the impermanent effects that result from the transmission of electromagnetic signals.[60]

Citing the *In re Hruby* decision,[61] one commenter stated that "[t]o support design patent protection, the design must give form to the article of manufacture itself, not simply be created by the article of manufacture."[62] In its view, rather than giving form, PHVAR designs are separate from the article that produces the designs and therefore do not give a particular appearance to the article itself.[63] Along similar lines, another commenter posited that, because *Nuijten* concludes that articles of manufacture must be "tangible articles or commodities" and *Samsung Elecs. Co. v. Apple Inc.*[64] confirms that a patented design must be for "a thing made by hand or machine," PHVAR designs existing in natural media such as air would be excluded from eligibility.[65]

52 EFF, comment at 6.
53 Irwin IP LLC on behalf of LKQ Corp., comment at 8.
54 Design Law Professors, comment at 7.
55 *Id.* at 7; *see also* Irwin IP LLC on behalf of LKQ Corp., comment at 13.
56 CCIA, comment at 2.
57 *In re Nuijten,* 500 F.3d 1346, 1357 (Fed. Cir. 2007).
58 CCIA, comment at 2.
59 *Diamond v. Chakrabarty*, 447 U.S. 303 (1980).
60 EFF, comment at 5.
61 *In re Hruby*, 373 F.2d 997 (C.C.P.A. 1967).
62 CCIA, comment at 3.
63 *Id.,* citing *Gorham Co. v. White*, 81 U.S. 511, 525 (1871).
64 *Samsung Elecs. Co. v. Apple Inc.*, 137 S. Ct. 429, 435 (2016).
65 EFF, comment, at 5–7.

Citing *Curver*, one commenter asserted that unless a design is for a particular article of manufacture, it is a design per se and therefore ineligible for protection.[66] In particular, that commenter suggested that the "article" to which a PHVAR design is applied "is inchoate when the device is manufactured and could be any surface on any manufactured or non-manufactured item. Permitting a design patent on any projection that intersects with any surface, no matter what that surface is, is precisely permitting a patent on a design *per se*."[67] This commenter concluded that this type of protection for PHVAR designs would read out "design for an article of manufacture" from the statute and is beyond the USPTO's authority.[68] Other commenters suggested that "[n]o matter how original, disembodied designs do not exhibit the type of innovation at the heart of design patent protection: the novel *application* of designs to articles of manufacture. That application, whether the design is entirely original or drawn from nonanalogous prior art, is what design patents encourage."[69]

4. Comments on practices in other jurisdictions

One commenter criticized the USPTO's reference to Singapore's design patent system as an example of a jurisdiction that has changed its laws to permit protection of PHVAR designs because, among other reasons, Singapore's law differs from that of the United States. For example, it includes content-based prohibitions on the registration of certain designs and a registration system that did not rely on novelty checks until 2019.[70] This commenter suggested that the USPTO should instead look to Germany's system, in which "registered designs 'protect the appearance of industrially manufactured or manually crafted products, for example, clothes … decorative objects or graphical symbols,' but '[a] computer program is not considered to be a product.'"[71]

5. Patenting designs for PHVAR will stifle innovation and creativity

One commenter urged that protection for designs for PHVAR would stifle innovation.[72] The commenter suggested that in the areas of holographic imagery and virtual and augmented reality, expanded design protection could enable early market entrants to bar smaller companies and later innovators from carrying out their own research or developing their own products. Another commenter urged that expanding protection to PHVAR designs would wreak havoc on the U.S. economy because people depend on computer technology and connectivity to work, learn, and communicate with each other and to obtain essential products and services.[73] This commenter further suggested that the existence of the current limitations has enabled the development of recent technological advances.[74]

66 CCIA, comment at 3.

67 *Id.* at 3.

68 *Id.* at 3.

69 Stallman & Urban, comment at 7, citing *In re Schnell*, 46 F.2d 203, 209 (C.C.P.A. 1931) ("it is the application of the design to an article of manufacture that Congress wishes to promote"); *see also Ex Parte Cady*, 1916 Dec. Comm'r Pat. 62, 68 (1916) ("A disembodied design or a mere picture is not the subject of [a design] patent. … The invention is not the article and is not the design per se, but is the design applied.").

70 EFF, comment at 8.

71 *Id.* at 8.

72 Engine, comment at 2, 4.

73 EFF, comment at 2.

74 *Id.* at 3.

Another commenter suggested that the article of manufacture requirement helps ensure that design protection is accorded only to the design's ornamental aspects, aiding both courts and examiners in making determinations regarding eligibility for protection.[75] In particular, this commenter stated that "[u]ntethering the scope of a design patent from the article of manufacture would compromise the patent's ability to define the patented design and to give later innovators clear notice of its metes and bounds."[76]

6. Granting design patents when there was no previous protection may lead to a lack of prior art

One commenter suggested that if patents are granted "[i]n fields that have previously been free from design patents, there will be no prior art in the form of patents or patent applications."[77] This commenter cautioned that "[t]he lack of identifiable prior art will make examination as well as subsequent litigation unworkable in practice because deciding design patent infringement requires comparing the claimed and accused designs to the prior art as well as each other."[78]

7. PHVAR designs are already protectable under copyright or trademark law

Some commenters noted that U.S. law already provides protection to creators and owners of visual work (e.g., user interface designs) under copyright law, trade dress law, and, in some cases, trademark law.[79] One commenter suggested that the subject matter of design patents "is different from that of utility patents, which protect useful inventions, and copyright law, which protects creative works of art." If the distinctions between these legal regimes are to be maintained, the commenter urged that the subject matter of design patent protection "must remain distinct and must extend only to ornamental (i.e., visible and non-functional) features of articles of manufacture (i.e., physical or tangible objects)."[80]

Additionally, the commenter suggested that because parties can be strictly liable for design patent infringement, "someone could independently create a design, but … be liable for infringement even if they had no idea a patent on their design existed."[81] This commenter also suggested that "[g]iven the presumption of validity afforded to granted patents and the exorbitant cost of district court litigation, the specter of design patent liability would decimate competition and employment in the graphic design industry."[82]

Another commenter indicated that "Congress has already provided protection for aesthetic elements, such as user interface designs, that fall outside the scope of design patents, via copyright and trade dress law. … Accordingly, protection for the designs at issue in the Request may already exist via other areas of intellectual property law."[83] The commenter concluded, "[g]iven the potential availability of appropriate copyright protection and the potential pitfalls of extending design patent protection to cover these types of displays, the USPTO should wait for Congress

75 Stallman & Urban, comment at 6.
76 *Id.* at 6.
77 EFF, comment at 3.
78 *Id.* at 3.
79 *Id.* at 2, 7; *see also* Stallman & Urban, comment at 8.
80 EFF, comment at 1.
81 *Id.* at 7.
82 *Id.* at 7.
83 CCIA, comment at 4.

to determine whether to address the issue via legislation."[84]

Additionally, this commenter expressed concerns that changes to the USPTO's policy on section 171 may result in the protection of photos and frames from movies, which historically have never been protectable by design patents.[85] In particular, the commenter noted that "if design patent protection could cover animations projected from a projector system, it would be possible to obtain a design patent on a copyrighted film and use that design patent to defeat critical aspects of copyright such as fair use."[86] This commenter suggested that "ephemeral images and animations—such as some of the augmented reality and virtual reality interface designs described in the Request—are difficult, if not impossible, to meaningfully distinguish from a movie projected by a projector, and protection thereof runs the risk of extending to all forms of projected audiovisual works."[87]

Another commenter noted that the "proposed changes appear to be, at least in part, an attempt to evade important limits of copyright law."[88] It maintained that "[p]rojected designs are already protected by U.S. copyright law upon fixation as long as they meet the low originality standard set forth in *Feist Publications, Inc. v. Rural Telephone Service Co., Inc.*"[89] According to this commenter, "[d]esign patentable subject matter should not be expanded to allow applicants to subvert the constitutional minimum set in *Feist*."[90] Additionally, this commenter urged that "applicants should not be able to game the system by obtaining design patents for designs that are deemed too uncreative even for copyright law."[91] Finally, the commenter suggested that some applicants may want to "take advantage of the special design patent 'total profits' remedy set forth in 35 U.S.C. § 289 and avoid limitations such as fair use," but that these are "neither good nor sufficient reasons to further distort design patent law."[92]

8. First Amendment concerns

Some commenters expressed concern that expanding design law to include protection for PHVAR may bring design law into conflict with the First Amendment.[93] These commenters noted that copyright and trademark law have "various First Amendment guardrails,"[94] such as the "fair use exceptions that enshrine the First Amendment, including for educational, non-profit, and critical purposes."[95] Accordingly, they suggested that because design law lacks these guardrails, the USPTO "should be particularly careful about expanding design patent protection in ways that could run afoul of the First Amendment."[96]

84 *Id.* at 4.
85 *Id.* at 4.
86 *Id.* at 4.
87 *Id.* at 4.
88 Design Law Professors, comment at 2.
89 *Id.* at 7, citing *Feist Publications, Inc. v. Rural Telephone Service Co. Inc.*, 499 U.S. 340 (1991).
90 Design Law Professors, comment at 8.
91 *Id.* at 8.
92 *Id.* at 8–9.
93 CCIA, comment at 4; *see also* Design Law Professors, comment at 9–12; EFF, comment at 7.
94 Design Law Professors, comment at 12.
95 EFF, comment at 7.
96 Design Law Professors, comment at 13; *see also* CCIA, comment at 4; EFF, comment at 7.

C. Integrality to the operation of a device or degree of interactivity with the user as the basis of eligibility of a design for patent protection

Among the questions presented in the USPTO's Request for Information was whether the eligibility of a design for patent protection should depend on (1) the degree to which users interact with the design or (2) the integrality of the design to the operation of the device.[97] The commenters who answered these questions in the negative included both supporters and opponents of the view that PHVAR designs should be eligible for patent protection.[98] For example, one commenter who favors protecting PHVAR designs noted that "[a] design does not need to have utility (e.g., be 'integral' ...) to be eligible under 35 U.S.C. § 171."[99] Similarly, another commenter stated that:

> [w]hile being "integral to the operation of a device" may be sufficient to render a graphical interface eligible under Section 171, it is too high a bar to be a requirement for eligibility under Section 171, and graphical interfaces with a lesser or different relationship to an underlying device should also be eligible for design protection.[100]

Additionally, one commenter suggested that "[d]isclosure of interactivity may be instructive as to whether a computer-generated image design is eligible ... but it is the appearance, not utility, that is claimed in a design patent."[101]

Conversely, some commenters who urged that PHVAR should not be protected suggested that a design is not patentable merely because it is integral to the operation of a machine.[102] In particular, all that matters for the analysis is whether the design is for a configuration, surface ornamentation, or a combination of both.[103] Similarly, another commenter noted that "[t]he article of manufacture requirement cannot and should not be changed to make eligibility hinge on the question of whether the claimed design is 'integral to the operation of a device.' That is [a] question of function, not form, and therefore is irrelevant to eligibility for design patent protection under section 171."[104] Finally, another commenter stated:

> [T]his proposed criterion would unavoidably entangle examiners and courts in the separation of functional and ornamental aspects, with only the operation of the article of manufacture—rather than the article itself—for guidance. The design would need to be simultaneously "necessary for completeness" of the article's operation and "created for the purposes of ornamenting." Aside from the strained reading of § 171 to reach this point, there is scant guidance for how to approach the separation of functional and ornamental evidence of disembodied designs once here.[105]

97 The Article of Manufacture Requirement, 85 Fed. Reg. 83063 (December 21, 2020).

98 Apple Inc., comment at 3; *see also* EFF, comment at 4; INTA, comment at 3 ("a design being 'integral to the operation of a device' or 'interactive with a user or device' should not be a requirement for patent eligibility for a PHVAR design"); Stallman & Urban, comment at 6–7.

99 Apple Inc., comment at 3.

100 IPO, comment at 3.

101 AIPLA, comment at 7.

102 Design Law Professors, comment at 13.

103 *Id.* at 13–14.

104 EFF, comment at 4.

105 Stallman & Urban, comment at 7.