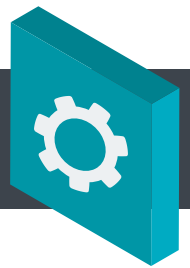


# DESIGN PROTECTION FOR GRAPHICAL USER INTERFACES



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# A. Introduction



## 1. BACKGROUND

Software-based innovation and the growth in artificial intelligence-related technologies has led to a strong growth in devices connected to the Internet, in both professional and personal environments. The importance of graphical user interfaces (GUIs)<sup>1</sup> in making user interaction possible with all types of electronic devices with electronic screens (including smartphones, home appliances and medical devices) has resulted in the notable growth in GUI design applications (see Annex). This growth reflects the increasing importance and value of GUIs as strategic assets for companies and the relevance of design rights as a means of protecting the visual appearance of GUIs.

Many jurisdictions allow design protection for GUIs (both GUIs in general and individual design elements (“GUI elements”)), through design patents or other types of design rights (“GUI designs”). However, different jurisdictions have varying requirements, for example, relating to the scope of protection, or for graphical representation and descriptions in the filing of GUI design applications. Further, the determination of infringement of GUI designs as well as the calculation of damages in relation to their infringement can differ from country to country.

This diversity in design protection for GUIs worldwide, and the lack of compatibility of some aspects of existing design registration systems with the specificities of GUIs, has resulted in a challenging environment for businesses wishing to obtain design protection for GUIs in an efficient and effective way.

## 2. OBJECTIVES AND METHODOLOGY OF THE REPORT

In view of the importance of GUI design protection for an increasing number of sectors, ICC decided to study current requirements and practices in various jurisdictions to help advance discussions on how to best adapt these to the specific characteristics of GUIs.

This report aims to help businesses and policy makers by:

- gathering and sharing information on prosecution and enforcement aspects of GUI designs in different jurisdictions;
- identifying practical issues, and highlighting key points for companies to watch for when formulating their GUI design filing strategy at a national, regional or global level; and
- suggesting issues for policy makers to consider in evaluating and adapting requirements and procedures to make design protection of GUIs more effective and efficient.

The information and the findings in this report are based on information gathered from experts from ICC’s global membership in 24 jurisdictions, and builds upon existing work by the WIPO Standing Committee on the Law of Trademarks, Industrial Designs and Geographical Indications (SCT)<sup>2</sup>, and other organisations<sup>3</sup>.

1 For the purpose of this report, the term “GUI” refers to a graphical user interface that allows a user to interact with electronic devices through GUI elements such as icons, menus, scroll bars, windows, and dialogue boxes.

2 See [http://www.wipo.int/meetings/en/topic.jsp?group\\_id=63](http://www.wipo.int/meetings/en/topic.jsp?group_id=63) .

3 Such as the International Association for the Protection of Intellectual Property (AIPPI); see <http://aippi.org/committee/protection-of-graphical-user-interfaces/> .



# B. GUI design protection—the situation in different jurisdictions



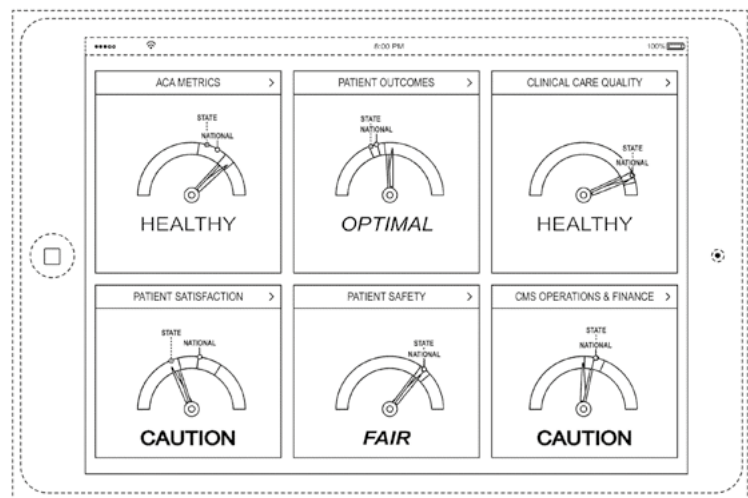
## 1. REQUIREMENTS FOR OBTAINING DESIGN PROTECTION

### a. Availability of design protection

The ICC survey shows that among the 24 jurisdictions studied, 20 allow GUIs to be protected as designs: Argentina, Brazil, China, Croatia, England & Wales, the European Union<sup>4</sup> (as an entity separate from its member states), France, Germany, Italy, Japan, Korea, Mexico, Romania, Russia, Saudi Arabia, Singapore, South Africa, Sweden, Ukraine and the US. Chile, Ecuador and the UAE do not allow design protection for GUIs, while in India, design protection may conceivably be granted under the Designs Act but clear guidelines are awaited<sup>5</sup>.



US D810,762 S (Doro AB)



US D808,989 S (Abbott Laboratories)

4 Unless stated otherwise, when mentioning protection in the European Union or EU, the report is referring to registered Community designs.

5 A well-known case of a design application by Amazon—which was refused protection following examination—illustrates the lack of clarity in GUI design protection in India. The reasons indicated in the Controller’s decision included the argument that the GUI was not a design applied on the article in the finished form to be judged solely by the eye (but was instead just a function of a computer screen which shows only when the device is on) and was neither an integral part of the article nor an article of manufacture. See design application no. 240305, “Graphic user interface for providing supplemental information of a digital work to a display screen” (class 14-02) by Amazon Inc.



CN 201430329167 (Qihu Corporation)

Fig. 1, Examples of graphical representations of GUIs

Depending on the country, design protection for GUIs has different designations—while China and the US protect GUI designs through “design patents”, most other countries use variations of the following terms “(industrial) design (rights)”.

In many jurisdictions<sup>6</sup>, there is no substantive examination (e.g. a search to check whether the design is new or possesses individual character) of GUI design applications by the national IP office.

In other countries like India, Japan, Korea, Mexico, Romania, Russia and the US, substantive examination and prior design searches are conducted in GUI design applications.

## b. Connection between GUIs and physical products

**APPLICATION AND REGISTRATION** | Under the Locarno Classification, an international classification (administered by WIPO) used for the registration of industrial designs<sup>7</sup>, GUIs belong to a specific class—14-04<sup>8</sup>—and do not need to be related to a specific product. Indeed, in several countries, the GUI itself can be registered independently of the physical product to which it is applied<sup>9</sup>.

In other jurisdictions, there is a requirement to show a connection between the GUI and the physical product in which it is integrated, through graphical representation and/or a description. For example: in Argentina, the physical product to which a GUI design applies must be described; in Croatia and in Saudi Arabia, the indication of the physical product in the description is a necessary part of an industrial design application; in China, Japan, Korea and the US, the physical product in which the GUI is integrated must be shown in the graphical representation and indicated in the title or description; and in Mexico, the physical product to

6 E.g. Argentina, Brazil, China, Croatia, England & Wales, European Union, France, Germany, Italy, Saudi Arabia, Singapore, South Africa, Sweden, UAE and Ukraine.

7 See <http://www.wipo.int/classifications/locarno/en/>.

8 Class 14 corresponds to “Recording, communication or information retrieval equipment”, and 14-04 specifically to “Screen displays and icons”.

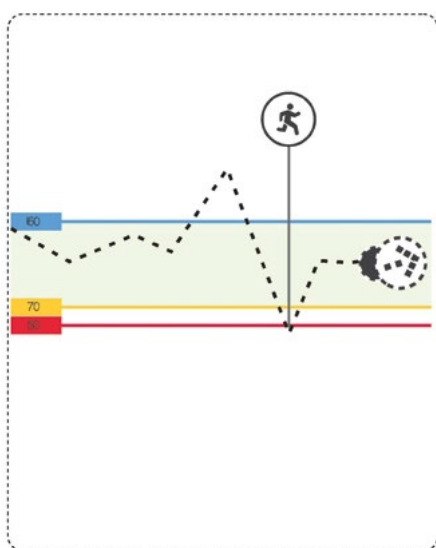
9 This is the case in e.g. Brazil, England & Wales, the European Union, France, Germany, Romania, Russia, Singapore, South Africa, Sweden and Ukraine.



which the GUI is applied has to be depicted in graphical representations and also mentioned in the title of the application.

**SCOPE OF PROTECTION** | In many of the surveyed jurisdictions that confer design protection on GUIs<sup>10</sup>, a GUI design is protected without regard to the physical product to which it is attached, if the physical product is not graphically represented or just shown in dotted or dashed lines (“dotted lines”) which usually serve to disclaim the unprotected part(s).

However, in other surveyed jurisdictions<sup>11</sup>, the type of physical product represented with the GUI does affect the scope of protection, even if the physical product to which the GUI is applied is shown in dotted lines. In these jurisdictions, the GUI design is only protected when it is attached to the specific product depicted in the application, and not to other products.



EU 003831262-0008 (Roche Diagnostics GmbH; F Hoffmann La Roche AG)



EU 004695260-0072 (Euro Games Technology Ltd.)

Fig. 2, Examples of graphical representations of GUIs

**GUIs DISPLAYED THROUGH VIRTUAL REALITY (VR) TECHNOLOGY** | The connection between a GUI displayed through VR technology and a physical product is still an open question and a source of difficulties in many jurisdictions. This is because the GUIs in VR systems are often displayed in the virtual environment in which the user’s presence is simulated, not on a screen or other physical product which can be depicted in a design filing.

In the jurisdictions where it is not necessary to specify a connection between the GUI and the physical product to which it is applied, GUIs displayed through VR technology can be more easily protected. However, as such GUIs and the underlying technologies are still very recent, it is not easy to protect them under the current laws of some jurisdictions. For example, in Korea, if a GUI displayed through VR technology is only visible as a projection without a physical product involved, it cannot benefit from design protection. A similar problem exists in Croatia, which requires a connection between the GUI and a physical product, with the result that a GUI shown by VR is not protectable.

10 Such as Argentina, Brazil, Croatia, England & Wales, the European Union, France, Germany, Russia, Sweden, Ukraine, and the US.

11 E.g. in China, Japan, Korea, Mexico, Romania, Saudi Arabia, and South Africa.

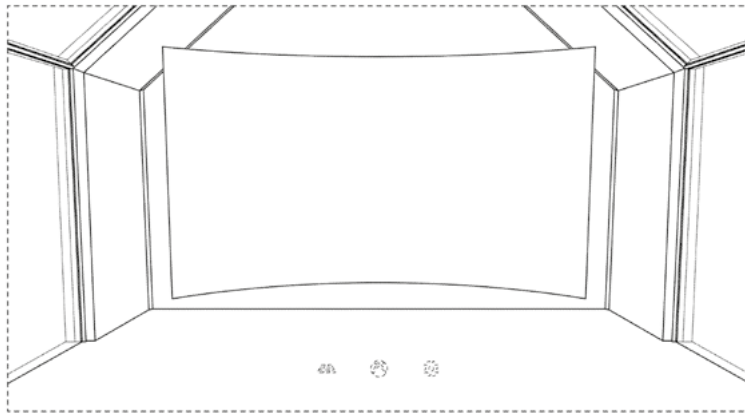


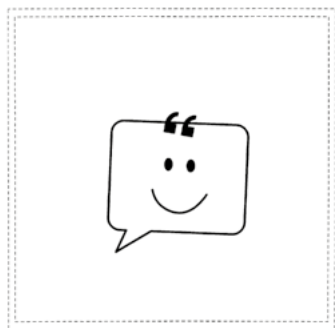
Fig. 3, Example of graphical representation of GUI shown by virtual reality (VR),  
US design patent application D797,767 (Microsoft Corporation)

### c. Graphical representation requirements

Many IP offices have rules or guidelines on acceptable graphical representations of GUIs. The usual basic rule is that the drawing or photograph must clearly show the claimed part, and the disclaimed part must be clearly outlined as well (whenever possible), usually in dotted lines or by colouring or blurring.

**VISUAL DISCLAIMER** | In many jurisdictions<sup>12</sup>, a visual disclaimer is allowed in the application, by using, for example, dotted lines to exclude the part not intended to be protected.

**GUIs AND GUI ELEMENTS** | The design registration of just one GUI element out of the multiple elements that can compose a GUI is permitted in almost all the countries studied, provided that the concerned component (most often an icon) is identified with solid lines and placed in its environment (e.g. a screen display). In other jurisdictions, GUI elements can be protected by just showing the elements themselves, without the need to display environmental information such as other GUI elements and the physical product<sup>13</sup>. Finally, in countries like Argentina, Japan, Korea, Mexico, and Saudi Arabia, single GUI elements are not protectable without being connected to a physical product. In China, GUI elements like icons can be protected by showing not only the elements themselves but also the environmental information in solid lines (meaning that the scope of protection will also include the environmental features).



US D587,726 (Yahoo!, Inc.)



DE 402017001288-0003  
(E+S Gesunde Lösungen GmbH)

12 E.g. Argentina, Croatia, England & Wales, the European Union, France, Germany, Korea, Japan, Mexico, Romania, Russia, Saudi Arabia, Singapore, South Africa, Sweden, Ukraine, and the US.

13 E.g. Brazil, Croatia, the European Union, France, Germany, Romania, Russia, Sweden, Singapore, South Africa, Ukraine and the US.



KR 3009131140002  
(The Procter & Gamble Company)



EU 003877364-0001 (SHOWLAB S.R.L.)

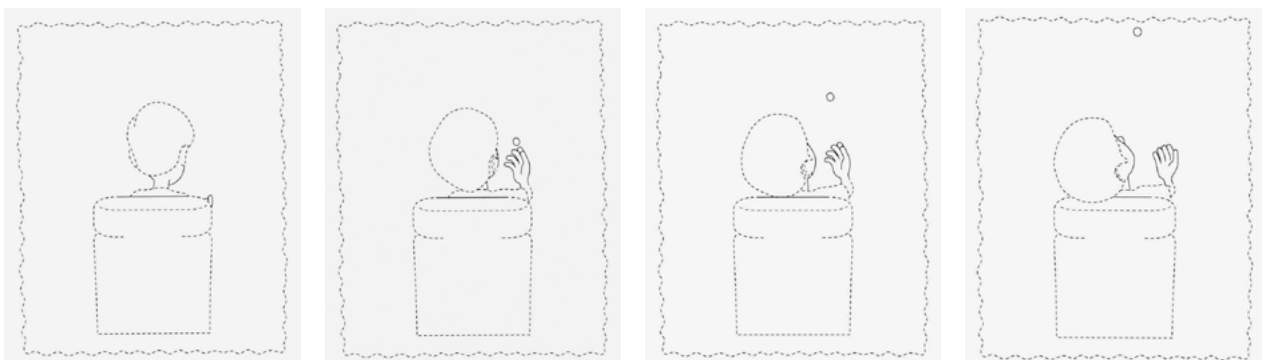


EU 000490693-0012 (Xerox Corporation)

Fig. 4 Examples of graphical representations of GUI elements

**ANIMATED GUIS** | Animated GUIs<sup>14</sup> bring additional challenges in terms of graphical representation, as the animation itself cannot usually be depicted in the application or in most design databases. In some jurisdictions<sup>15</sup>, animations can be protected through a single application. In most of these cases, the graphical representation requirement is achieved through the inclusion of a sequence of drawings or photographs which reflect the changing trend of the animation in a clearly understandable sequence where all the images are visually linked to one another<sup>16</sup>. Usually the number of images per application is limited. In addition, jurisdictions like China, Japan, and Russia require a description of the changing trend or essential particularities of the claimed GUI design.

In other jurisdictions<sup>17</sup>, animations cannot be directly protected through a single application, but some allow protection indirectly through the filing of multiple design applications, each with a static graphical representation of a different position of the animations—such is the case in Brazil, Germany and Romania.



14 For the purpose of this report, the term “animation” refers to moving images, transitions etc. that reflect changes in GUIs or GUI elements.

15 E.g. Argentina, China, Croatia, European Union, France, Japan, Korea, Mexico, Russia, Singapore, South Africa, Sweden, Ukraine and the US.

16 Such is the case in Croatia, the European Union, France, Mexico, Singapore, South Africa and Sweden.

17 E.g. Brazil, England & Wales, Germany, Romania and Saudi Arabia.

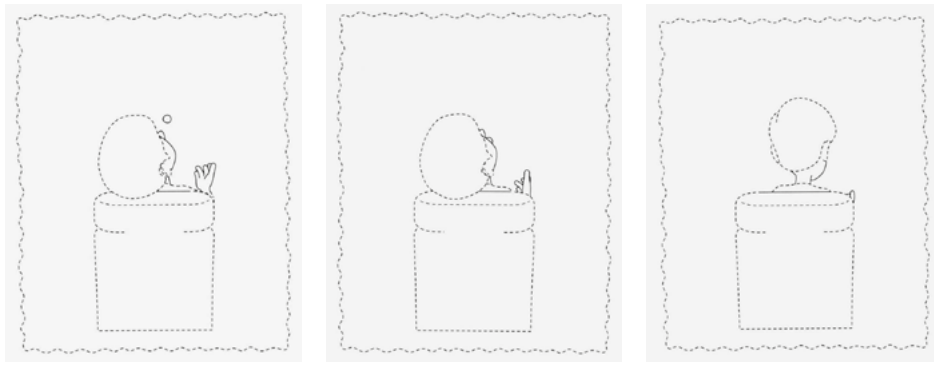
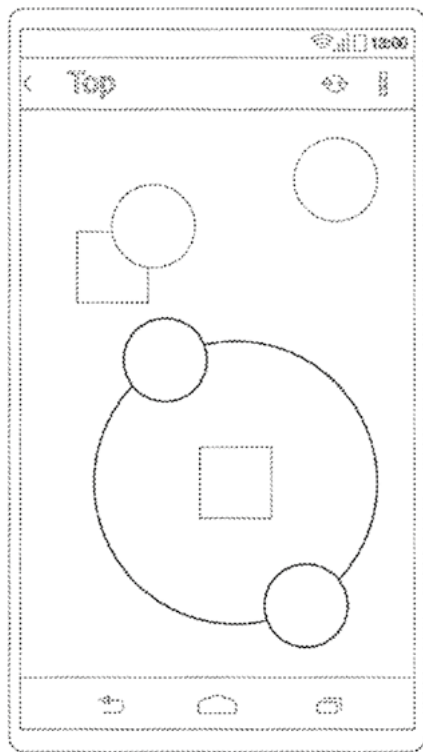


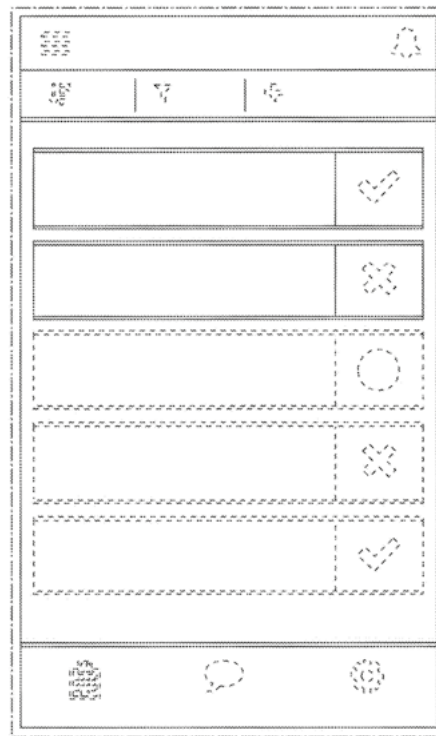
Fig. 5, Example of graphical representation of GUI animation EU 001216329-0015 (Microsoft Corporation)

**d. Text, pattern and colour**

**TEXT AND PATTERN IN GUI ELEMENTS** | Regarding design protection for the layout of GUI elements<sup>18</sup>, all the surveyed countries which allow design rights for GUIs, except for China, allow applicants to display only the layout in the design application, without any text or pattern in the icons or dialogue boxes, as illustrated below.



US D812,623 (Sony Corporation)



US D812,640 (TeleTracking Technologies, Inc.)

Fig. 4, Examples of graphical representation of the layout of GUIs without text or patterns

Further, jurisdictions like China or Romania allow the use of words or expressions (e.g. “WORD ELEMENT”) to indicate textual elements in the GUI elements, to show the positions of the words without limiting the scope of protection.

18 For the purpose of this report, the term “layout of GUI elements” refers to the arrangement of two or more GUI elements, which reflect the position, relationship and/or size ratio among the GUI elements.

In many of the surveyed jurisdictions, text or patterns displayed may have an influence on the scope of protection (depending on the originality of the specific text or pattern and the impact on the overall aesthetic appearance).<sup>19</sup> If the text contributes to the form (shape, pattern, or colour) of the design, then it impacts the scope of protection, which is not the case if the text only functions as information.

**COLOUR** | In some jurisdictions<sup>20</sup>, black and white graphical representations cover variations of the GUI in any colour. In other countries (e.g. Croatia, Singapore and Sweden), however, black and white graphical representations do not extend the scope to colour designs.

In some jurisdictions, if a specific colour of a design is to be protected, it must be shown in the graphical representation for the scope of protection to be limited to that or those colour(s).<sup>21</sup> In Singapore, if a colour is to be protected, the applicant must select “colour” as a design feature and may also attach a cover letter specifying the Pantone colour(s) used.

## **e. Description and written disclaimer**

**DESCRIPTION** | In a majority of jurisdictions, the graphical representation alone defines the scope of protection of a GUI design, but in some countries a description is also required. For example, in China, the function of the GUI, the type of physical product to which the GUI is connected, and whether or not colour is intended to be protected must be mentioned in the description. In Russia, the description is part of the application and includes the essential particularities of the claimed design. In Argentina, Croatia, Japan, Romania, and the US, the type of the physical product usually needs to be clarified in the description.

**DESCRIPTION OF THE GUI'S FUNCTION** | In a majority of the surveyed jurisdictions<sup>22</sup>, a description of the function of the GUI is not required in order to obtain design protection. In Germany, although there is no requirement to include a description of the function, such description might be used for clarification purposes when explaining the design or, to some extent, to limit the scope of protection.

In some other jurisdictions, however, the function of the GUI must be described. In China, the function must be explained in a brief description in the design patent application. In Japan, it is generally required to explain the function of GUI. In Russia, the use and advantages of the GUI must be described, as is the case for its overall visual impression and essential elements.

**WRITTEN DISCLAIMER** | In the same way that visual disclaimers can be included in the graphical representation in some jurisdictions, certain countries allow a written disclaimer to exclude a part of the design, which is not intended to be protected, from the scope of protection<sup>23</sup>. This is not possible in other countries<sup>24</sup>. In Japan, applicants can apply to protect GUIs as partial designs which allow the scope of protection to be limited to the portion or portions of the product for which design protection is sought.

19 This is the case in China, England & Wales, Japan, Korea, Germany, Mexico, Russia, Singapore, South Africa, Sweden, Ukraine and the US.

20 E.g. Argentina, Brazil, China, England & Wales, the European Union, France, Germany, Japan, Korea, Mexico, Romania, Saudi Arabia, South Africa, and the US.

21 This is the case in Croatia, Germany, Japan, Romania, Russia and Saudi Arabia.

22 Argentina, England & Wales, the European Union, France, Germany, Japan, Korea, Mexico, Romania, Saudi Arabia, Singapore, South Africa, Sweden, Ukraine and the US.

23 E.g. China, Croatia, Germany, Japan, Korea, Mexico, Russia, Saudi Arabia, Singapore, and South Africa.

24 This is the case in Brazil, the European Union, France, Russia, Ukraine and the US.

## 2. VALIDITY, INFRINGEMENT AND DAMAGES

### a. Validity

In all of the surveyed jurisdictions, there are no special requirements for the determination of GUI design validity compared to other designs—in most countries a design is valid if it meets the requirements on novelty and distinctive character/inventiveness.

There has been a limited number of validity-related cases in the surveyed jurisdictions so far. In one recent case, decided by the Patent Re-examination Board in China,<sup>25</sup> the Board resorted to traditional methods when determining the validity of a GUI design right, by comparing the GUI in the design patent with those in prior designs. As the GUI design patent at issue showed both the shape of a smartphone and the GUI itself, the shape of the smartphone was also considered when making the validity comparison. The Board finally ruled that the GUI design patent was partially invalid based on prior designs for both smartphones and GUIs.

When trying to determine the validity of a GUI design, a key question to be addressed relates to the scope of the prior art, for which both the place of prior disclosure and the categories of products to be taken into account to assess the novelty of a design are relevant. With respect to the place of prior disclosure, many countries require absolute novelty, meaning that public disclosure of a design anywhere in the world prevents the subsequent registration of the same or similar design due to lack of novelty.<sup>26</sup> Certain countries provide a grace period, usually of six or twelve months.

Another issue is whether to consider elements of the GUI design which are not included in—but represent additions to—prior GUI designs. Some jurisdictions—such as Brazil, China and Croatia—adopt an overall visual impression test while others—like Russia—do not consider the additional elements.<sup>27</sup>

The validity of GUI designs may also be challenged by the exclusion from design protection of designs purely dictated by function. The function of a GUI is generally understood as being to allow a user to interact with an electronic device. In order to avoid the functionality exclusion, the various technical steps allowing this interaction and the design of the GUIs must have a strong visual impact and appeal.<sup>28</sup>

Although the function of a GUI does not affect its scope of protection in many jurisdictions—as only the graphical representation is considered—it may be relevant in determining validity, as the description of the function of the GUI can help understand its design or can be relevant for determining the scope of the prior art<sup>29</sup>. For example, in the GUI design invalidation decision in

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25 Case 6W107969 of 12 April, 2017.

26 In the EU, owners of Community designs are allowed to rebut the presumption of disclosure if the circumstances of the case could reasonably prevent the allegedly disclosing events from becoming known in the normal course of business to the circles specialised in the sector concerned: see art 7 (1) of the Community Design Regulation No. 6/2002.

27 In Germany, the visual impression test applies, but additional elements may be considered if they have a “strong/significant aesthetic impact” on the overall impression. “Insignificant” additional elements, on the contrary, will not change the overall visual impression.

28 See the decision of the EUIPO Invalidity Division of 12 June 2013 involving a GUI registered by Apple and contested by Samsung (file ICD 8538): The Board analyzed aspects like disclosure on the internet, technical function, novelty and individual character and informed user; it decided to uphold the validity of Apple’s design registered in 2007.

29 E.g. in Japan, the relevant prior art for determining novelty is limited to articles that have similar intended use and function to the article in the design filing.

China referred to above, the Board referred to the description of the function to understand the trend of the animation in the graphical representations.

## **b. Infringement**

**CRITERIA** | In most countries, the determination of infringement of a GUI design right follows the principles and criteria applicable to the infringement of designs in general. These include the determination of novelty and identification of distinctive features protected by the claimed design (considering, to a variable extent, the degree of creative freedom of the designer), and the assessment of the overall impression produced by the alleged infringing design on the informed observer compared to prior designs.

In Argentina, Brazil, China and South Africa, the existence of additional elements not in the original design in infringing products might have an effect on the infringement comparison, depending on the circumstances of specific cases. In France, however, the addition of standard elements to a GUI design may not disrupt the overall impression of similarity. In England & Wales and Russia, elements in the infringed GUI which are additional to those in the protected design would usually not affect the determination of infringement.<sup>30</sup>

In most countries, a clear depiction of the claimed design is a key element to support an infringement claim. In the EU, the Court of Justice of the European Union (CJEU) has dismissed EU design infringement claims because of poor representations in the design registration which failed to show the full and clear features of the claimed design and to determine the overall impression.<sup>31</sup> Many of the experts surveyed concur that the quality of the views filed for GUIs is paramount for asserting and enforcing a clear scope of design protection.

**CASE LAW** | In an important decision on the scope of protection of design rights, the CJEU ruled that the product indication of an EU registered design does not limit the scope of protection, nor the citable prior art which can be searched and found in any sector<sup>32</sup>. Moreover, for purposes of assessing individual character, it is not required that the informed user should know the prior art or the product to which the design of the prior art is applied. This conclusion increases the risks of unexpected infringement claims made by owners of previous designs registered or used in sectors unrelated to the sector of the challenged design.

There are not many examples of GUI design infringement cases in the jurisdictions surveyed so far. Best known among these is the litigation between Apple and Samsung over both utility and design patents on certain features of Apple's iPhones and tablets (concerning the layout of icons and shapes of the product), which shed light on the challenges of defending design rights. Infringement by Samsung has been established in the US and now the method of computation of damages is to be decided by the lower court of the Northern District of California.<sup>33</sup>

.....  
30 For Germany, see footnote 27 above.

31 See case T-286/16, 21 June 2017.

32 Joined cases C-361/15 and C-405/15, 21 September 2017.

33 Another recent US case concerning IP protection of GUIs dealt with the validity and infringement of a utility patent directed to user interfaces and consisting of the display of a menu of applications to be selected by the user, who is then taken to a summary of apps including functions and associated data files. In January 2018 the Court of Appeals for the Federal Circuit held that the "claims are directed to an improved user interface for computing devices, not to the abstract idea of an index", hence are patentable subject matter. The court also concluded that substantial evidence supports the jury's finding of infringement. See 'Core Wireless Licensing SARL v LG Electronics Inc & al', 2016-2684, CAFC 25 January 2018.



Another well-known case opposing security software developers Qihoo 360 Inc. and Jiangmin Inc. was decided by the Beijing IP court in December 2017 in China<sup>34</sup>. The case concerned the protection of a desktop computer with an animated GUI shown in the desktop screen. In the granted GUI design patent, both the shape of the desktop computer and the GUI were graphically represented in solid lines, in accordance with Chinese legal requirements. The alleged infringer (Jiangmin) produced software for displaying GUIs on desktop screens. The Court ruled that the relevant GUI patent protects the tangible product, that is, the physical product of the desktop computer, but not the software which allows the GUI to be displayed on the desktop screen. Therefore, the software developer had no direct or indirect relationship with any infringements of the GUI patent. The Court dismissed the case, the first one on GUIs in China since they were classified and protected as a type of design patent in May 2014. The case is now on appeal.

### **c. Damages**

In all the surveyed jurisdictions, damages for the infringement of GUI designs are calculated based on the principles used in design cases in general—in short, infringement damages will account for lost sales and/or lost royalties, and the profits of the infringers may also be considered. The rules applied in some major jurisdictions are detailed below.

US federal law provides that the infringer of a design patent on an “article of manufacture” is liable to the owner for the infringer’s total profits<sup>35</sup>. The Supreme Court held in the *Apple v. Samsung* case that the term “article of manufacture” is broad enough to encompass both a product sold to a consumer and a component of that product, and remanded the case to the Northern District Court of California to set out a test to identify the relevant article of manufacture and to determine the appropriate damages for Samsung’s infringement of Apple’s design patents.

In China, the Patent Law (last amended in 2009) provides that courts must start by considering the actual loss suffered by the patentee. In cases where that is difficult to ascertain, the court is to consider the profits obtained by the infringer. Where both are difficult to ascertain, the court may take into account other relevant factors such as patent type, the intention of the infringer (such as bad faith), and the applicable licence fees, in determining the amount of compensation within the statutory range of RMB 10,000—1 million (approximately USD 1,600-160,000).

In the EU, the Directive on the enforcement of IP rights<sup>36</sup> provides that judicial authorities, when determining damages, must take into account all the relevant aspects, such as the negative economic consequences (including lost profits) which the injured party has suffered, any unfair profits made by the infringer and, in appropriate cases, elements other than economic factors, such as the moral prejudice caused to the right holder by the infringement (mostly damage to reputation). As an alternative, the court may set the damages as a lump sum on the basis of elements such as the amount of royalties or fees which would have been due if the infringer had requested authorisation to use the IP right in question.

In the countries surveyed, the classification (e.g. through the Locarno system) of the physical product does not impact the calculation of damages, and the range of products incorporating the protected design may be wider than the range designated in the registration process.

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34 Qihu 360 v Beijing Hanmin, (2016) Jing 73 Minchu No. 276, Beijing IP court, 25 December 2017.

35 35 U.S.C 289.

36 Article 13, Directive 2004/48/EC of 29 April 2004 on the enforcement of intellectual property rights.

Some issues regarding the calculation of damages have been identified as being unclear and may require clarification in case law, for example:

- Whether the basis of lost profits and infringer's benefits is the price of the entire product or the value share of the elements of the product reproducing the protected design. Following the decision of the Supreme Court in 2016 in the Apple v. Samsung case, this issue is pending before the Northern District Court of California, which has adopted a test protocol with four factors<sup>37</sup>. Its decision is awaited with interest, in view of the award by the Southern District of California in 2017 of total damages for infringement of a design patent on part of a glove<sup>38</sup>.
- When the same feature is protected by different IP rights (e.g. design, copyright and trademark), will cumulative damages be awarded for the infringement of each right?
- How these criteria for indemnification will be applied to cases of infringement of GUI designs, whether registered or unregistered, as available case law is very limited so far.

.....

37 (i) The scope of the design claimed in the design patent, including the drawing and the written description; (ii) the relative prominence of the design within the product as a whole; (iii) whether the design is conceptually distinct from the product as a whole; (iv) the physical relationship between the patented design and the rest of the product, including whether the design pertains to a component that the user or seller can physically separate from the product as a whole, and whether the design pertains to a component part that the user or seller can physically separate from the product as a whole and whether the design is embodied in a component that is manufactured separately from the rest of the product, or if the component can be sold separately; see Apple Inc. v. Samsung Elecs.Co. No11-CV-01846-LHK (N.D.Cal.Oct.22, 2017).

38 See Columbia Sportswear North America, Inc. v. Seirus Innovative Accessories, Inc. Case No 3 :17—cv-1781-HZ (S.D.Cal.2017).

# C. Devising a global GUI design filing strategy—practical aspects to consider



## 1. SCOPE OF PROTECTION—USE OF GRAPHICAL REPRESENTATION, WRITTEN DESCRIPTIONS AND DISCLAIMERS

In order to obtain an optimal scope of protection for GUI designs, the graphical representation and any written descriptions or visual or written disclaimers will need to be considered carefully, taking into account the requirements in the targeted countries.

**GRAPHICAL REPRESENTATION** | The scope of protection of a registered GUI design is mainly determined by its graphical representation—shown with line drawings, pictures, images, etc.—as is the case with traditional designs.

One unique issue faced by GUI designs is the relationship of the GUI with the physical product to which it is applied. Filing the GUI by itself without depicting a physical product in the graphical representation can be advantageous, if allowed by the local jurisdiction, as in this way the scope of protection could extend to any physical product. In jurisdictions where the physical product must be shown, and which allow the use of dotted lines in the graphical representation as visual disclaimers to exclude the part not intended to be protected, it is advisable to depict the physical products in dotted line so as to clearly define (and enlarge to the extent possible) the scope of protection.

The scope of protection of the GUI can also be broadened by filing various versions of GUI designs, either in a single application, or in separate simultaneous applications, depending on the requirements of the jurisdiction. The scope claimed in each version can be varied by disclaiming different parts in the various embodiments. Making separate filings for the layout of GUI elements, the GUI elements themselves, as well as for the whole GUI, can also help to ensure protection for both the setting and its individual components.

In addition, in order to avoid uncertainty in the interpretation of the scope of protection, the inclusion of text and patterns in the design application is generally not recommended—especially if those elements can limit the scope.

Another unique challenge faced by GUI designs concerns the representation of animations. In the majority of jurisdictions surveyed which allow design protection for GUI animations, applications must contain static graphical representations of the animation. When choosing those representations, applicants should ensure that the link between them is clear and that they show the movement. Although it is desirable to include as many graphical representations as possible to reflect the animation trend, there is often a maximum number of views that can be included (e.g. seven views for Registered Community designs in the EU).

In the jurisdictions where animations are not allowed to be protected as such in a single application, filing multiple applications—with in total enough static graphical representations of the animation—should be considered.

**WRITTEN DESCRIPTIONS AND DISCLAIMERS** | In some countries, elements other than graphical representation in the application may have some bearing on the scope of protection.

Although written descriptions do not directly influence the scope of protection in many jurisdictions, they can favour a better understanding and broader interpretation of the visual representation of the design in some countries, especially the ones granting design patents. Including information on the physical products to which the GUI can apply, or a description of the function of the design or the changing trend of animation, for example, may help clarify the scope.

With respect to written disclaimers, there is some debate as to their usefulness for delineating the scope of the claimed design, in addition to (and consistent with) its visual representation. The practice in some jurisdictions shows that it may indeed clarify rather than create confusion and may also help avoid overlaps with other IP rights where such overlaps are prohibited by national laws.

## 2. FILING ROUTES

**THE DIFFERENT FILING ROUTES** | All the surveyed jurisdictions which protect GUI designs have a national registration system in place. Additionally, regional routes such as registered Community designs (in the EU) and OAPI designs (in the African OAPI Member States) may be available. Jurisdictions that participate in the Hague System<sup>39</sup> also benefit from an international filing route.

National filing can be a convenient route for obtaining GUI design protection as it only requires compliance with local laws and procedures.

The regional route, when available, can also be an advantageous filing route as it grants protection in a wider range of countries than by filing a single national application.

Finally, the international filing route through the Hague System lets applicants choose among the multiple countries or regions which are part of the system. As with the regional route, there is a single application, but after a formal examination by WIPO, the application is transmitted to each of the designated countries for substantive examination (if any).

A first national or international design application may trigger a 6-month priority right for filing subsequent design applications elsewhere, subject to consistent requirements in the first jurisdiction and in the subsequent ones.

**CONSIDERATIONS FOR CHOICE OF FILING ROUTE** | The choice of filing routes depends on factors like the number and geographical situation of the countries or regions where the applicant wishes to protect the GUI design and the available budget.

The experts surveyed indicated that national filing is often a convenient route for the registration of GUI designs in one or a limited number of countries. This is seen as a cost-efficient way to obtain design protection at the national level as it only requires compliance with local laws and practices, without the additional burden of compliance with the often different requirements in other national, regional and international systems.

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39 Hague System for the International Registration of Industrial Designs, which provides a solution for registering designs in member countries through a single international application; <http://www.wipo.int/hague/en/>.

When several countries are targeted, the regional or international routes, if available, are preferred filing strategies as they protect in a wide range of countries through a single application. However, as the requirements for obtaining protection vary widely among countries, amendments to the design application (e.g. formality adjustments) are often necessary during the national phase which follows the filing, and the designated countries can refuse protection if the design does not fulfil the substantive conditions of protection in their domestic legislation.

### 3. PRIORITY RIGHT

Design applications in member countries of the Paris Convention<sup>40</sup> trigger a “right of priority” which allows the applicant (usually) six months to file a subsequent application in another Paris Convention jurisdiction for the same design, which is effective as of the filing date of the first application.

When an applicant intends to file for protection in various jurisdictions, the first filing should be prepared already taking into consideration the requirements for GUI design protection in the other target countries, so that the priority right can be claimed based on the first application.

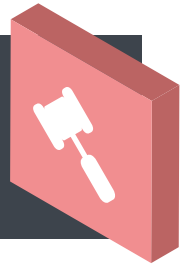
For example, if at least some of the targeted jurisdictions require the GUI design to be connected to a physical product, the original GUI design application should have the physical product indicated in dotted line in the graphical representation or in an annex/auxiliary. This should be done in a manner that does not limit the scope of protection in the first filed application while already taking into account the requirements of the subsequent jurisdictions.

With respect to animations, even if, for example, the first jurisdiction has a limitation on the number of graphical representations showing the changing trend of an animation, additional ones can sometimes be added as an auxiliary or annex, to preserve the possibility of using more graphical representations when filing in subsequent jurisdictions.

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40 Paris Convention for the Protection of Industrial Property (1883), one of the first intellectual property treaties and adopted by most countries.

# D. Suggestions for GUI-related legal reforms



## 1. STRENGTHENING THE PROTECTION OF GUI DESIGNS GLOBALLY

The sometimes insufficient or unclear design laws and regulations in many countries (especially regarding registration requirements, validity and cross-border enforcement) and the (so far limited) case law show that there is still room to improve and adapt design protection to technological evolution and the unique characteristics of GUIs.

Some relevant issues for businesses, which may require reforms in certain jurisdictions to strengthen the protection of GUI designs, include the following:

- › Design protection should be similar in substance under design patents and under standalone design rights;
- › The concept of “product” should not be restrictively construed;

Given that the same GUI usually can and will be used in different physical products, many businesses would find it useful to obtain protection for GUIs *per se* without the need for them to be connected to a specific physical product, which can unduly limit the scope of protection of a GUI design right. In addition, clearly acknowledging that GUIs and GUI elements meet the definition of “product” (currently defined as an industrial or handicraft item by most design laws) would help make it clear that GUIs not connected to any depicted physical products are still eligible for design protection.

- › The requirements for the filing of design applications should take into account the unique characteristics of GUI animations;

The filing of video or moving images in applications should be allowed, and databases should be updated to allow the display and search of animations by the public. However, given the significant technical changes this would entail, the requirement for traditional graphical representations may continue to be the rule for some time. In the current situation, therefore, the number of views allowed should not be limited or should be more generous for GUIs; this is especially important in the case of complex animations. Additionally, systems (such as tagging) to indicate the relationship between multiple views/applications representing the same animation could be introduced to make it easier to search for animations in databases.

- › It should not be a requirement to indicate the function of a GUI in general (e.g. through a written description or title indicating the use of the design);

The image is the most important feature and usually adequately depicts the subject matter of the design protection. If the function has to be indicated (e.g. for search purposes), it should be clarified that this will not limit the scope of protection.

- The distinctive visual appearance should be reaffirmed as the sole subject matter of design rights, not other elements present in GUIs such as their underlying software, which are not included in the scope of protection of designs and can be protected by other IP rights such as copyright or patents.

## 2. HARMONISING STANDARDS ON GRANTING GUI DESIGNS

The international filing route of the Hague System is an efficient way to protect GUI designs in different countries. However, because of different formality requirements in some jurisdictions, such as Japan and the US, it is difficult to have one international application complying with all the national or regional requirements.

If the requirements on graphical representations are harmonised—for example, by allowing filings for GUIs alone (without being attached to a product) and for videos or an unlimited number of graphical representations in the case of animations—this would facilitate the adoption of common standards in different jurisdictions, hence improving access to cross-border design protection of GUIs and increasing its consistency and reliability.

Furthermore, a harmonisation of graphical representations of GUI designs would render written descriptions (when allowed) less necessary and reduce the risk for confusion as to the scope of the claimed design. In the EU, the EUIPO Convergence Programme on visual representation of designs (CP6) provides useful guidance which could be adopted by other countries. It should be noted that the draft regulations of the draft WIPO Design Law Treaty contain a rule on representation of industrial design which takes into account forms of representation of designs such as *“computer-animated representations or forms which are not currently known, but which may develop in the future”* (if admitted by the national office), with the precision that *“whatever the form which the representation of the industrial design may take, it should always be visual”*.<sup>41</sup>

The modernisation of design systems to cater for the specificities of GUIs will not only improve protection for this increasingly important field of design, but also pave the way for the protection of future generations of digital designs. ICC looks forward to continuing to participate and contribute to this discussion by providing businesses with practical guidance, and by contributing proposals for reform and harmonisation of design law and practice worldwide.

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41 Rule 3, Note R3.02 of the Rules on Industrial Design Law and Practice (version SCT 35/3).





Statistics on published GUI design applications under Locarno Classification class 14-04 (“Screen displays and icons”) in some key jurisdictions for which data is available

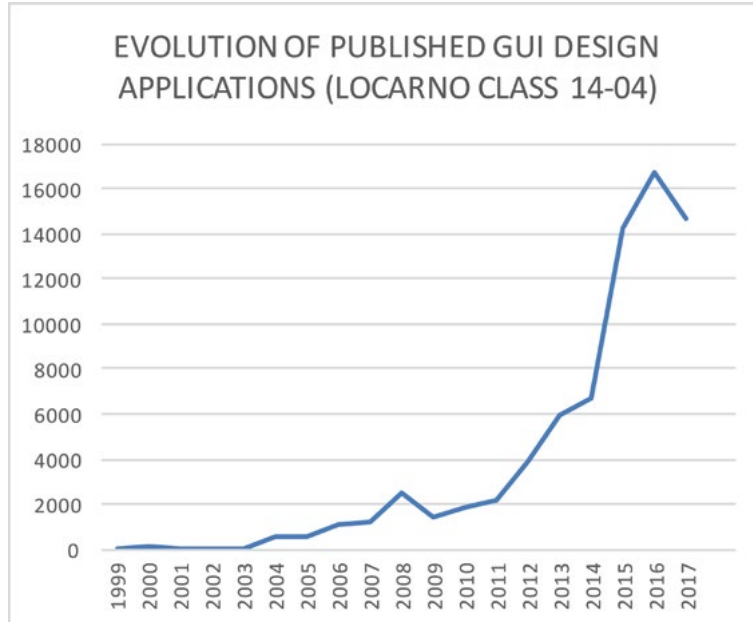


Fig. 1, Evolution of published GUI design applications (Locarno Classification class 14-04) in China, EU, France, Germany, Hague System/WIPO, Hong Kong, Korea, Russia, UK, US, Taiwan.

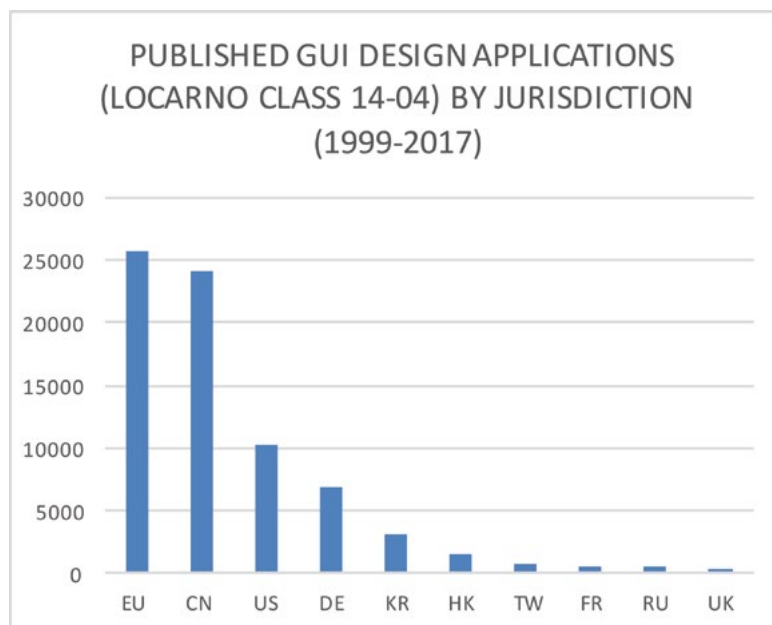


Fig. 2, Published GUI design applications (Locarno Classification class 14-04) by jurisdiction (1999-2017).

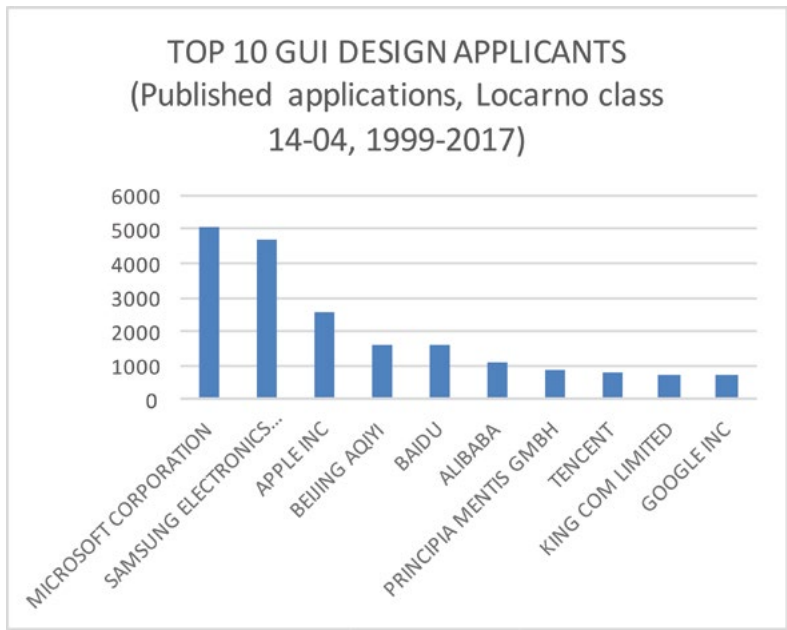


Fig. 3, Top 10 GUI design applicants (Published applications, Locarno Classification class 14-04, 1999-2017) in China, EU, France, Germany, Hague System/WIPO, Hong Kong, Korea, Russia, UK, US, Taiwan.

Source of statistics: **incoPat**; reproduced with permission.

Notes

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Publication number: 450/1081-7E  
ISBN: 978-92-842-0507-3