

Summary Report

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Protection of graphical user interfaces

Introduction

This Study Question concerns the issue of whether and how graphical user interfaces (**GUIs**) may be protected by various intellectual property rights (**IP rights**).

In this Study Question, the term **GUI** refers to an interface which allows users to interact with electronic devices through graphical elements (e.g. icons, menus, scroll bars, windows, transitional animations, dialogue boxes) instead of typing characters.

This Study Question is primarily concerned with the issue of whether GUIs should be protected by means of "traditional IP rights", namely:

- patents;
- design rights;
- copyright; and
- trademarks.

Where jurisdictions permit patent protection for GUIs by means of similar rights, such as trade dress protection, such rights are within the scope of this Study Question.

Broader forms of legal protection that may also have application to GUIs, such as laws relating to unfair competition, unfair business practices or general contractual principles are generally outside the scope of this Study Question, other than in those jurisdictions where un-registered trademarks and trade dress may be protected under general principles of unfair competition.

The Reporter General has received reports from the following Groups and Independent Members in alphabetical order: Argentina, Australia, Austria, Belgium, Brazil, Bulgaria, Canada, Chile, China, Ecuador, Finland, France, Germany, Hungary, Israel, Italy, Japan, Malaysia, Mexico, the Netherlands, Norway, Pakistan, Paraguay, Philippines, the Republic of Korea, Singapore, Spain, Sweden, Switzerland, Taiwan (Independent Member), Thailand, United Kingdom (**UK**), United States of America (**U.S.**), Uruguay, and Venezuela.

39 reports were received in total. The Reporter General thanks the Groups and Independent Members for their helpful and informative reports.

The reports provide a comprehensive overview of national and regional laws and policies relating to protection of GUIs by various IP rights. This Summary Report cannot attempt to reproduce the detailed responses in any given report. If any question arises as to the exact position in a particular jurisdiction, or for a detailed account of any particular answer, reference should be made to the original reports. See <http://aippi.org/committee/protection-of-graphical-user-interfaces/>

In this Summary Report:

- references to reports of or responses by one or more "Groups" may include references to Independent Members;
- where percentages of responses are given, they are to the nearest 5%; and
- in Part IV below, some conclusions have been drawn in order to provide guidance to the Study Committee for this Question.

I. Current law and practice

Patents

1) Can GUIs generally be protected by patents? If GUIs cannot be protected by patents per se, are any types or aspects of GUIs protectable by patents? If so, which?

37 Groups answered this question.

With respect to the question of whether GUIs can generally be protected by patents, none of the Groups clearly took a position that GUIs as such (i.e. what is shown on a screen of a device) can be protected by patents. Although about a half of the Groups answered YES to the question, their answers were essentially saying that some aspects (e.g. technical aspects) of GUIs are protectable by patents.

With respect to the question of whether any types or aspects of GUIs are protectable by patents, counting the number of Groups which reported that at least some aspects of GUIs are protectable by patents (including the Groups that answered YES to the threshold question), 29 of the 37 Groups (about 80%) answered in the affirmative. The remaining 8 Groups (about 20%) answered that GUIs (or any aspects thereof) are not, or not likely to be, protectable by patents.

With respect to the question of which types or aspects of GUIs are protectable by patents, this is addressed in question 2) below.

2) If any type or aspect of GUIs are protectable by patents, under what conditions and to what extent are those types or aspects of GUIs considered to be within the scope of patentable subject matter?

36 Groups answered this question.

17 of those Groups (about 45%) answered that it must have a technical effect, or have a technical function, or provide a technical solution to a technical problem.

Examples of other views expressed by the Groups include:

- It must not be an aesthetic creation, a computer program, a method for mental activity or a presentation of information per se¹;
- It must have a technical contribution to prior art²;
- It must be implemented in hardware³;
- It must have an additional technical effect that goes beyond the simple use of a classic computer⁴.

3) If yes, do the statutory provisions, case law or judicial or administrative practice require specific claim formats for any patent protection? If yes, what claim formats are available for protecting GUIs?

35 Groups answered this question.

With respect to the question of whether specific claim formats are required, 23 of the 35 Groups (about 65%) answered NO, while 10 of those Groups (about 25%) answered YES. The Pakistani and Thai Groups answered respectively that GUIs are not protectable by patents under their current laws.

However, 8 of the 10 Groups that answered YES (about 20% of the 35 Groups that answered this question overall) explained that both apparatus and method (process) claims are available for protection of GUIs. Counting such answers as NO to the primary question of whether specific claim formats are required, 31 of the 35 Groups (about 85%) take the position that specific claim formats are not required for patent protection of GUIs.

With respect to the question of what claim formats are available, 31 of the 35 Groups (about 85%) report that both apparatus and method (process) claims are available. None of the Groups clearly stated that only either one or other of them is available.

4) Is any physical feature required in a claim as a pre-requisite for patentability of a GUI?

34 Groups answered this question.

¹ Brazil, Ecuador, Singapore, Switzerland

² Hungary, Philippines, UK

³ Japan, the Republic of Korea, Uruguay

⁴ France, New Zealand

25 of those Groups (about 75%) answered NO, while 8 of the 34 Groups (about 25%) answered YES. (The Pakistani Group answered that GUIs are not protectable by patents under its current law.)

However, 8 of the 25 Groups that answered NO (about 25% of the 34 Groups that answered this question) explained that, while physical feature is not a pre-requisite for patentability of a GUI, lack of a physical feature could affect whether a GUI is patentable. For example, the Swedish Group explained that technical effect, which is a pre-requisite for patentability of GUIs, may be implied by physical features.

5) To what extent does involvement of the user's mental activities in a GUI process affect the patentability of the GUI?

31 Groups answered this question.

11 of those Groups (about 35%) answered that GUIs directed to a user's mental activity (e.g. assisting the user in non-technical decision making, lowering the cognitive burden of the user, or instructing humans to behave in a particular manner) is not considered technical, and thus is not patentable.

8 of the 31 Groups (about 25%) answered that involvement of user's mental activities does not affect the patentability of GUIs.

Examples of other views expressed by the Groups include:

- A feature that involves the user's mental activity is ignored in evaluating patentability⁵;
- Mental activities cannot be involved, or will be considered against patentability⁶.

Designs

6) Can GUIs generally be protected by design rights? If not, are any types or aspects of GUIs protectable by design rights? If so, which?

38 Groups answered this question.

With respect to the question of whether GUIs can generally be protected by design rights, 35 of the 38 Groups (about 90%) answered YES, while the remaining 3 Groups (about 10%) answered NO. For example, the Australian Group answered NO, explaining that the Australian Designs Office Manual of Practice and Procedure states that, in the case of a GUI, there is no product under the Australian Designs Act in respect of which the GUI is to be registered.

With respect to the question of whether there are types or aspects of GUIs protectable by design rights, the Groups that answered NO to the first question either answered NO or did not answer this question.

⁵ China, Hungary, New Zealand

⁶ Mexico, Philippines

7) If any type or aspect of GUIs are protectable by design rights, under what conditions and to what extent are those types or aspects of GUIs protectable? In particular:

a) is a GUI that temporarily appears on a screen of an electronic device considered a "design" that is protectable by design rights?

36 Groups answered this question.

32 of those Groups (about 90%) answered YES, while 2 of the 36 Groups (about 5%) answered NO. The Australian and Pakistani Groups answered respectively that GUIs are not protectable by design rights under their current laws, and gave the same answer for each of the questions at b), c) and d) below.

b) is a GUI protectable by design rights independently from the design of the electronic device itself?

36 Groups answered this question.

31 of those Groups (about 85%) answered YES, while 3 of the 36 Groups (about 10%) answered NO. For example, the Chinese Group answered NO, explaining that a GUI must be incorporated with a product to be eligible for design patent protection.

c) are smaller elements included in a GUI (e.g. icons, slide buttons) protectable by design rights independently from the GUI as a whole?

36 Groups answered this question.

32 of those Groups (about 90%) answered YES, while 2 of the 36 Groups (about 5%) answered NO. For example, the Chinese Group answered NO, explaining that smaller elements included in a GUI (e.g. icons, slide buttons) have to be protected in the form of a whole product that encompasses the elements.

d) are movements or screen transitions in a GUI protectable by design rights?

36 Groups answered this question.

24 of those Groups (about 65%) answered YES, while 10 of the 36 Groups (about 30%) answered NO.

e) are there any other types or aspects of GUIs protectable by design rights? If so, under what conditions and to what extent?

31 Groups answered this question.

14 of those Groups (about 45%) answered that there are no other aspects of GUIs that are protectable by design rights, while 10 of the 31 Groups (about

30%) answered that any designs and graphical representations can be protected.

Examples of other views expressed by the Groups include:

- Special fonts and typefaces can be protected;⁷
- Colors can be protected⁸.

Copyright

8) Can GUIs generally be protected by copyright? If not, are any types or aspects of GUIs protectable by copyright? If so, which?

All 39 Groups answered this question.

With respect to the question of whether GUIs generally can be protected by copyright, 38 Groups (about 95%) answered that GUIs generally can be protected by copyright, while the Korean Group answered that GUIs are not generally protectable by copyright.

With respect to the question of whether any types or aspects of GUIs are protectable by copyright and the question of which types or aspects of GUIs are protectable by copyright, the Korean Group⁹ explained that icons are protectable by copyright.

9) Does the fact that GUIs shown on screens are computer-generated affect the eligibility of GUIs for copyright protection?

All 39 Groups answered this question.

28 Groups (about 70%) answered NO. For example, the Danish Group explained that the fact that GUIs shown on screens can be said to be computer-generated does not mean that the GUI is not a human creation, as the algorithms, pre-defined designs, and software of the GUI have been created by one or more human beings.

The remaining 11 Groups (about 30%) answered YES. For example, the Finnish Group explained that where the expression of the GUI is to a large extent determined by algorithms in the underlying software and predefined designs, there can be a point at which it becomes questionable whether a computer-created graphic is still an intellectual creation of a human author.

10) If any type or aspect of GUIs can be protected by copyright, under what conditions and to what extent are those types or aspects of GUIs protectable?

38 Groups answered this question.

18 Groups (about 45%) answered that GUIs should be protected by copyright as long as they satisfy the requirements for copyright protection (e.g. originality). For

⁷ Finland, Germany

⁸ Canada

⁹ The Republic of Korea

example, the French Group explained that the conditions for protection of GUIs under copyright law are the same as for other types of works, and that to be protected, a GUI must meet the originality requirement.

9 Groups (about 25%) answered that idea, functionality and method of operation are not protectable by copyright. For example, the Danish Group explained that copyright will not protect the technical functions of the GUI, i.e. what the GUI makes the computer program do.

Examples of other views expressed by the Groups include:

- Aspects of the design that are exclusively determined by technical function is not protectable;¹⁰
- There must be originality in selection and arrangement.¹¹

11) Can the overall "look and feel" of GUIs be protected by copyright? If not, can individual elements included in a GUI be protected?

38 Groups answered this question.

With respect to the question of whether the overall "look and feel" may be protected by copyright, 26 of those Groups (about 70%) answered YES, while the remaining 12 Groups (about 30%) answered NO. For example, the Norwegian Group answered YES, explaining that the combination of several protected aspects of a GUI may constitute a collective work that is in itself protected by copyright, thereby effectively providing a protection for the look and feel of a GUI. Conversely, the U.S. Group answered NO, explaining that its case law over the years has abandoned protecting the "look and feel" of software graphics as copyrightable separately from the original expressions or elements or combinations.

With respect to the question of whether individual elements included in a GUI can be protected, only 8 Groups¹² answered this question and all of them answered YES.

Trademarks

12) Can GUIs generally be protected as trademarks? If not, are any types or aspects of GUIs protectable by trademarks? If so, which?

All 39 Groups answered this question.

With respect to the question of whether GUIs can generally be protected by trademarks, 35 of those Groups (about 90%) answered YES, while the remaining 4 Groups (about 10%) answered NO. For example, the Hungarian Group answered YES, explaining that GUIs as such can be protected under the trademark protection if the GUI in its entirety meets the requirements of the eligibility for trademark protection. By contrast, the Independent Member from Taiwan answered NO, explaining that in

¹⁰ Belgium, France, Italy

¹¹ U.S.

¹² Czech Republic, Ecuador, France, Israel, the Netherlands, the Republic of Korea, Turkey, U.S.

most cases, GUIs do not serve to indicate the origin of products. Therefore, they are not trademark eligible.

With respect to the question of whether any types or aspects of GUIs are protectable by trademark and the third question of which types or aspects of GUIs are protectable, 3 Groups¹³ (each of which answered NO to the threshold question) explained that individual elements such as icons, pictures and color combinations can be protected by trademarks.

13) If any type or aspect of GUIs are protectable as trademarks, under what conditions and to what extent can those types or aspects of GUIs protectable? For example, is a screen movement or transition in a GUI protectable as a trademark?

37 Groups answered the question of under what conditions and to what extent GUIs can be protectable by trademarks. 30 of those Groups (about 80%) answered that GUIs will be protected as long as they are distinctive. For example, the Japanese Group explained that a GUI as a whole as well as elements of a GUI, such as icons, can be protected as long as they are distinctive.

31 Groups answered the question of whether screen movement or transition in a GUI is protectable as a trademark. 20 of those Groups (about 65%) answered YES, while 11 of them (about 35%) answered NO. For example, the Singaporean Group answered YES, explaining that as moving marks may qualify for trade mark protection (in certain scenarios), it is possible that screen movements or transitions in a GUI may also be protectable. However, the Chinese Group answered NO, explaining that screen movements or transitions in a GUI cannot be protected as trademarks.

14) Does a GUI need to acquire secondary meaning through use in order to be protected as a trademark?

38 Groups answered this question.

34 of those Groups (about 90%) answered NO, while the remaining 4 Groups¹⁴ (about 10%) answered YES. For example, the German Group answered NO, explaining that there is no general requirement that a GUI needs to acquire secondary meaning in order to be protected as a trademark, although it might in some cases foster or even enable the protection of GUIs by trademarks.

Other forms of protection

15) Does your Group's current law provide any other means for protecting GUIs that are similar in nature to traditional IP rights?

37 Groups answered this question.

¹³ Bulgaria, Mexico, Taiwan (Independent Member)

¹⁴ Finland, Malaysia, the Republic of Korea, U.S.

10 of those Groups (about 25%) answered NO, while 9 of the 37 Groups (about 25%) of the Group answered that there are such other means (other than unfair competition law, which is outside the scope of this Study Question).

Examples of such means provided by those 9 Groups are as follows:

- Passing off;¹⁵
- Misleading imitation of products;¹⁶
- Trade dress.¹⁷

It should be noted that, although generally outside the scope of this Study Question, 18 Groups (about 45% of all respondents) made a reference solely to unfair competition as another means for protecting GUIs.

16) If yes, what forms of protection are available, and under what conditions, and to what extent, are such other forms of protection available?

Examples provided by the Groups include:

- Passing off can protect the look and feel of a GUI (Canada, Hungary);
- Misleading imitation of products is found when there is confusion with another company's products which are well known and have individual character (Sweden);
- Trade dress is protected if it is non-functional and has acquired secondary meaning in the minds of the public (U.S.).

II. Policy considerations and proposals for improvement of your current law

17) Does your law provide sufficient IP rights protection for GUIs? If yes, is that by means of any one or more types of IP rights protection (and if so, which), or by means of combination of those types of IP rights protection?

All 39 Groups answered this question.

30 Groups (about 75%) answered that their law provides sufficient IP rights protection for GUIs, by means of a combination of IP rights protection. 8 Groups¹⁸ (about 20%) answered that their law does not provide sufficient IP rights protection for GUIs.

The Venezuelan Group answered that its law provides sufficient IP rights protection for GUIs mainly by copyright.

¹⁵ Canada, Hungary, Israel, Malaysia, New Zealand, Singapore, UK

¹⁶ Sweden

¹⁷ U.S.

¹⁸ Bulgaria, China, Germany, Mexico, the Netherlands, Pakistan, Paraguay, Thailand

18) If no, how is your law deficient?

Examples provided by the Groups include:

- GUIs per se are not eligible for design right protection (China);
- When filing a design application with the EUIPO for animations, the number of views that can be filed is too small (France);
- Only limited copyright protection is available for GUIs (Germany).

19) Is your law sufficiently clear on whether and to what extent GUIs are protected by various IP rights?

38 Groups answered this question. 20 of those Groups (about 55%) answered YES, while the remaining 18 Groups (about 45%) answered NO.

20) If no, how is your law deficient in this regard?

Examples provided by the Groups are as follows:

- The law does not expressly refer to GUIs;¹⁹
- The law regarding patentability of GUIs is unclear and uncertain;²⁰
- It is debatable which elements/aspect of the GUI are protected by copyright and which by designs;²¹
- It is unclear whether a GUI produced by a computer program is protectable as a standalone artistic or literary works apart from the underlying computer program.²²

21) Are there any aspects of your law that could be improved (for example, by strengthening or reducing the extent to which GUIs may be protected)?

35 Groups answered this question.

22 of those Groups (about 65%) answered YES, while 13 Groups (about 35%) answered NO.

Examples provided by the Groups which answered YES include:

- Better compliance with the EU legislation and strengthening of protection of GUIs (Bulgaria);
- Establishing an examination process specific to GUIs which does not involve substantive examination, in consideration of the short product life of GUIs (Japan).

¹⁹ Argentina, Norway, Spain

²⁰ China, the Netherlands

²¹ Bulgaria

²² Canada

III. Proposals for harmonisation

22) **Does your Group consider that harmonisation in this area is desirable?**

38 Groups answered this question.

31 of those Groups (about 80%) answered YES, while 7 Groups (about 20%) answered NO.

Examples of the Groups' explanation on why harmonization is not desirable are as follows:

- The law related GUIs is already sufficiently harmonized (Czech Republic, Italy);
- Any modification to well-established IP laws that are specific to GUIs would be tantamount to establishing a sui generis protection regime for GUIs, and would distort other aspects of IP regimes (UK).

Patents

23) **Should GUIs generally be capable of protection by patents? If not, should at least some types or aspects of GUIs be protectable by patents? If so, which? Please explain your reasons.**

36 Groups answered this question.

With respect to the question of whether GUIs generally should be capable of protection by patents, none of the Groups clearly took a position that GUIs as such (i.e. what is shown on a screen of a device) should be protectable by patents. Although about 55% of the 36 Groups answered YES, their answers were essentially saying that some aspects (e.g. technical aspects) of GUIs should be protectable by patents.

With respect to the question of whether any types or aspects of GUIs should be protectable by patents, counting the number of Groups which essentially took the position that at least some aspects of GUIs should be protectable by patents (including the Groups that answered YES to the threshold question), 31 of the 36 Groups (about 85%) answered in the affirmative. The remaining 5 Groups²³ (about 15%) answered that GUIs (or any aspects thereof) should not be protectable by patents.

With respect to the question of which types or aspects of GUIs should be protectable by patents, this is addressed in question 24) below.

24) **Under what conditions, and to what extent, should GUIs fall within the scope of patentable subject matter? For example, should involvement of user's mental**

²³ Austria, Chile, Switzerland, Taiwan (Independent Member), Thailand

activities in a GUI process affect the patentability of the GUI? If so, to what extent? Please explain your reasons.

30 Groups answered the question of under what conditions and to what extent GUIs should fall within the scope of patentable subject matter. 21 of those Groups (about 70%) answered that aspects of GUIs should be patentable as long as there is technical effect (or technical solution to a technical problem).

Examples of other views expressed by the Groups include:

- Mental activities that rely on human judgment should not be patentable, but mental activities that involve the ascertaining and sensing facilities should be patentable (Canada);
- If a specific calculation or processing of information depending on the intended use is implemented by specific means or procedures on which the software and hardware resources cooperate, the GUI should fall within the scope of patentable subject matter (Japan);
- GUIs should be analysed under the same framework for patent eligibility as software-related inventions (U.S.).

24 Groups answered the question of whether involvement of user's mental activities in a GUI process should affect the patentability of the GUI.

12 of those Groups (50%) of the Groups answered NO. Examples of other views expressed by the Groups include:

- Mental activities should not be protectable by patents²⁴;
- Mental step should be ignored when assessing patentability²⁵;
- Mental activities should not be claimed as a part of an invention²⁶.

25) Should a physical feature be required in a claim as a pre-requisite for patentability of GUIs? Please explain your reasons.

31 Groups answered this question.

23 of those Groups (about 75%) answered NO, while 8 of the 31 Groups (about 25%) answered YES. For example, the Australian Group answered NO, explaining that while a GUI may have physical features, these features may not necessarily be where the invention lies in all cases. However, the Czech Group answered YES, explaining that a solution that is not connected to hardware is not a technical solution but rather a method that is excluded from patentability.

²⁴ Denmark, Finland, Japan, Malaysia

²⁵ China, Hungary

²⁶ Mexico

26) What claim formats should be available for protecting GUIs?

28 Groups answered this question. No Group takes the position that any specific claim format should be required.

18 of those Groups (about 65%) answered that there should be no claim format restrictions or that the same claim formats that are available for other types of inventions should be available for GUIs as well. For example, the Korean Group explained that all available claim formats that can represent GUI inventions should be available for protecting GUIs.

8 of the 28 Groups (about 30%) answered that both apparatus and process (method) claims should be available.

The Japanese Group further commented that claims to an "apparatus," "system," and "computer program" and "computer readable recording medium in which a program is recorded" should be available as claim formats for GUIs.

Designs

27) Should GUIs generally be capable of protection by design rights? If not, should at least some types or aspects of GUIs be protectable by design rights? If so, which? Please explain your reason.

35 Groups answered this question.

All Groups (100%) answered that GUIs should generally be protectable by design rights. For example, the Chilean Group is of the view that design rights are the most appropriate tool for protection of GUIs. There were no Groups that answered NO to this question.

Just as no Groups answered NO to the first question, no Groups answered the question of whether at least some types or aspects of GUIs should be protectable by design rights).

28) Under what conditions, and to what extent, should GUIs be protectable by design rights? For example, should screen movements or transitions in a GUI be protectable by design rights? Please explain your reasons.

33 Groups answered the question of under what conditions and to what extent GUIs should be protectable by design rights.

13 of those Groups (about 40%) answered that a GUI should be protected as long as it meets the general requirements for design protection. For example, the Norwegian Group answered that GUIs generally, and any types or aspects of GUIs, should be protectable by design rights to the extent that they fulfil the general criteria for design registration.

On the other hand, the Dutch Group stated that the protection of GUI elements should be limited to the extent that from the standpoint of the reasonable observer, they actually create a relevant visual appearance.

32 Groups answered the question of whether screen movements or transitions in a GUI should be protectable by design rights).

29 of those Groups (about 90%) answered YES, while the remaining 3 Groups²⁷ (about 10%) answered NO. For example, the German Group answered YES, explaining that screen movements or transitions should also be protectable by design rights since they typically constitute an aesthetic impression that goes beyond that of the single elements or still images of the sequence. However, the Finnish Group answered NO, explaining that it is unclear what the protected design actually is and what should be compared in the case of prior art searches or infringement.

29) Should a GUI be protectable by design rights independently from the design of the electronic device itself? Please explain your reasons.

33 Groups (100%) answered YES. For example, the Singaporean Group answered YES, explaining that the software/application incorporating the GUI is unlikely to be used on only one type of electronic device, and may be used on numerous forms of devices.

There were no Groups that answered NO.

Copyright

30) Should GUIs generally be capable of protection by copyright? If not, should at least some types or aspects of GUIs be protectable by copyright? If so, which? Please explain your reasons.

37 Groups answered the question of whether GUIs should generally be protectable by copyright.

34 of those Groups (about 90%) answered YES, while 3 of the 37 Groups (about 10%) answered NO. For example, the Australian Group answered NO, explaining that copyright protection for GUIs as a whole (i.e. encompassing elements not traditionally within the realm of copyright, such as the "desktop" metaphor or the concept of particular interactive processes) is inappropriate.

Only 2 Groups answered the question of whether at least some types or aspects of GUIs should be protectable by copyright. The Australian Group answered YES and the Pakistani Group answered NO. The Australian Group explained that copyright may be the appropriate protective mechanism for elements of a GUI (such as visual elements). The Pakistani Group explained that copyright offers very weak protection for GUIs and thus it is not desirable that GUIs be protected under copyright law.

31) Should the fact that GUIs shown on screens are computer-generated affect the eligibility of GUIs for copyright protection? Please explain your reasons.

37 Groups answered this question.

²⁷ Bulgaria, Denmark, Finland

28 of those Groups (about 75%) answered NO, while the remaining 8 Groups (about 20%) answered YES. For example, the Korean Group answered NO, explaining that even though the GUIs on screens are technically generated by a computer, the works are expressed, designed or created by a human artist. On the other hand, the Swedish Group answered NO, explaining that if the GUI is randomly generated by a computer, lacking human input, it should not be able to obtain copyright protection.

The Pakistani Group answered that GUIs should not be protected by copyright, and gave the same answer for question 32) below.

32) Under what conditions, and to what extent, should GUIs protectable by copyright? For example, should the overall "look and feel" of a GUI be protectable by copyright? Please explain your reasons.

28 Groups answered the question of under what conditions and to what extent GUIs should be protectable by copyright.

16 of those Groups (about 55%) answered that GUIs should be protected as long as they meet the general requirement for copyright protection.

On the other hand, examples of other views expressed by the Groups include:

- GUIs should be protected either as a whole or element by element (Argentina, Chile);
- GUIs should be protected element by element only (Australia, Finland).

25 Groups answered the question of whether the overall "look and feel" of a GUI should be protectable by copyright. 14 of those Groups (about 55%) answered YES, while 10 of the 25 Groups (about 40%) answered NO. For example, the Spanish Group answered YES, explaining that the so-called "look and feel" factor should be considered an integral part of the GUI and, as such, must be covered by copyright. On the other hand, the U.S. Group answered NO, explaining that the potential of protection as trade dress is sufficient for "look and feel" protection, and thus there is no particular need for such protection also under copyright.

Trademarks

33) Should GUIs generally be capable of protection as trademarks? If not, should at least some types or aspects of GUIs be protectable as trademarks? If so, which? Please explain your reasons.

36 Groups answered this question.

With respect to the question of whether GUIs should generally be protectable as trademarks, 28 of the 36 Groups (about 80%) answered YES, while the remaining 8 Groups (about 20%) answered NO. For example, the Japanese Group answered YES, explaining that GUIs should generally be protectable as trademarks as long as they are distinctive as trademarks. On the other hand, the Bulgarian Group answered NO, explaining that the meaning and the role of a trademark (to distinguish and recognise the origin of products) rather contradicts with the idea behind GUIs.

With respect to the question of whether at least some types or aspects of GUIs should be protectable as trademarks), only 5 Groups answered this question. 4 Groups²⁸ answered YES, while the Pakistani Group answered NO. For example, the Dutch Group answered YES, explaining that while it seems undesirable that GUIs as a whole deserve trade mark protection, certain aspects of GUIs like icons and movements (e.g. swiping) should be able to obtain trade mark protection, since icons do not essentially differ from regular device and word-device marks. However, the Pakistani Group explained that GUIs do not qualify as a trademark under the definition in its law, and if GUIs are protected under trademark law, theoretically the rights can be acquired for an indefinite period.

34) Under what conditions, and to what extent, should GUIs be protectable as trademarks? For example:

a) should screen movements or transitions in a GUI be protectable as trademarks?

32 Groups answered this question.

24 of those Groups (about 75%) answered YES, while the remaining 8 Groups (about 25%) answered NO. For example, the UK Group answered YES, explaining that screen movements or transitions in a GUI are in principle protectable as trademarks and there is no reason why they should not be. On the other hand, the Thai Group answered NO, explaining that since "screen movements" or "transitions" are one function of the operating systems and not considered a mark, they should not be protected as trademarks.

b) should a GUI be required to acquire secondary meaning through use?

32 Groups answered this question.

26 of those Groups (about 80%) answered NO, while the remaining 6 Groups (about 20%) answered YES. For example, the Spanish Group answered NO, explaining that GUIs and the elements comprising them should be protected by trademark regulations if they have an inherently distinctive character, and not only when they have acquired it as a result of continued use. On the other hand, the Singaporean Group answered YES, explaining that this will be an additional safeguard to ensure that the GUI is in fact serving as a badge of origin and to ensure that protection (which could last indefinitely) is only granted in appropriate circumstances.

Other forms of protection

35) Should there be other forms of protection for GUIs? If so, what forms of protection should there be? Please explain your reasons.

30 Groups answered this question.

²⁸ Chile, China, Mexico, the Netherlands

13 of those Groups (about 45%) answered NO to this question. For example, the Swiss Group explained that it does not consider it necessary or appropriate to introduce additional forms of protection, although the existing IP rights may need to be adapted.

Examples of other views expressed by the Groups include:

- Passing off should be available (Malaysia, Singapore);
- *Sui generis* right should be available (Mexico).

It should be noted that, although outside the scope of this Study Question, 12 Groups made a reference to unfair competition.

36) Should there be a sui generis right for protection of GUIs? If so, what aspects of GUIs should be protected by such a right, to what extent, and under what conditions?

30 Groups answered this question.

With respect to the question of whether there should be a *sui generis* right for protection of GUIs, 26 of those Groups (about 85%) answered NO, while the remaining 4 Groups²⁹ (about 15%) answered YES. For example, the Hungarian Group answered NO, explaining that it would be senseless to prepare a new international instrument with exceptions and limitations and to bring about an international register to protect an object that is subject to extremely frequent changes due to the business demands of internet, and where the protection can easily be circumvented.

With respect to the question of what aspects of GUIs should be protected by the *sui generis* right and to what and under what conditions, examples of the views expressed by the Groups include:

- The *sui generis* right should protect the substance of GUIs, namely, an interface which allows users to interact with electronic devices through graphical elements (China);
- Protection should be available either for static elements and dynamic elements that may be shown in motion or in any manner transformed in a screen as well as for screen transitions and associated to a function or operation of an article or device (Mexico).

37) Should there be any exceptions or limitations to a sui generis right in order to ensure an innovative and competitive market? If so, what exceptions and limitations should there be and why?

Only 6 Groups answered this question. Examples of the views expressed by the Groups include:

²⁹ China, Mexico, Singapore, Turkey

- Method, system, program or any other element providing the functionality should be excluded (Mexico);
- Protection must be provided to expressions, not the ideas, and the interaction flow must be written down clearly in a format that is determined by the authorities for its originality to be proven (Turkey).

38) Please comment on any additional issues concerning protection of GUIs that your Group considers relevant to this Study Question.

Examples of the comments provided by the Groups include:

- There is an issue of whether GUIs that are not indicated on a display screen, such as those projected by a projector a display screen, can become protectable in the future (Japan);
- A more universal set of guidelines may be helpful in allowing there to be some harmony in the protection of GUIs as this area grows (Singapore);
- There are strong arguments both for increasing/broadening GUI protection and for keeping it limited. Broad GUI protection would theoretically force larger strides in innovation. Narrow GUI protection would allow competitors to build upon the work of those before them, and thereby speed the pace of innovation by not repeatedly reinventing the wheel and by providing common/standardized interfaces to facilitate more familiar user experiences (U.S.).

IV. Conclusions

Patents

There is a consensus among the Groups that answered the relevant questions that GUIs as such (i.e. what is shown on a screen of a device) should not be protectable by patents, while about 85% of the Groups believe that at least some aspect of GUIs should be protectable by patents.

About 70% of those Groups consider that certain aspects of GUIs should be protectable by patents when they have a technical effect, or they provide a technical solution to a technical problem.

About 75% of those Groups believe that a physical feature should not be required in a claim as a pre-requisite for patentability of GUIs.

About 95% of those Groups believe that both the apparatus claim and the process (method) claim should be available as claim formats for protecting GUIs, and that specific claim formats should not be not required for patent protection of GUIs.

With respect to the above points, the Groups might be able to reach a consensus.

On the other hand, there was no majority view on whether and how involvement of user's mental activities in a GUI process should affect patentability of the GUI. Half of the Groups

that addressed this question consider that the patentability should not be affected. In the least, the Groups seem to agree that mental activities per se are not protectable by patents.

Designs

There is general consensus among the Groups that answered the relevant questions that GUIs should generally be protectable by design rights.

About 90% of those Groups believe that screen movements or transitions in a GUI should be protectable by design rights.

There is general consensus among those Groups that a GUI should be protectable by design rights independently from the design of the electronic device itself.

With respect to the above points, the Groups might be able to reach a consensus.

Copyright

About 90% of the Groups that answered the relevant questions consider that GUIs should generally be protectable by copyright.

About 75% of those Groups consider that the fact that GUIs shown on screens are computer-generated should not affect the eligibility of GUIs for copyright protection.

About 55% of those Groups consider that the overall "look and feel" of a GUI should be protected by copyright.

With respect to the above points, the Groups might be able to reach a consensus.

Trademarks

About 80% of the Groups that answered the relevant questions consider that GUIs should generally be protectable as trademarks.

About 75% of those Groups consider that screen movements or transitions in a GUI should be protectable as trademarks.

About 80% of those Groups consider that a GUI should not be categorically required to acquire secondary meaning through use to be protected as a trademark.

With respect to the above points, the Groups might be able to reach a consensus.

Other forms of protection

About 85% of the Groups that answered the relevant questions believe that there should not be a sui generis right for protection of GUIs. This seems likely to be the consensus view.

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