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Design protection for new and emerging technologies: Current global discussions

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Overview

- Are digital designs protectable?
- International approaches
- Current discussions
- Conclusions

Design protection for new technologies, environments, and digital designs

- GUIs and digital designs are widely protectable
 - WIPO report: SCT/37/2 REV
 - ID5 project: Study on design protections for emerging technologies

Design protection for new technologies, environments, and digital designs

- Different jurisdictions have varying requirements relating to:
 - the scope of protection
 - graphical representation
 - descriptions in the filing of GUI design applications
 - infringement determinations

Design protection for new technologies, environments, and digital designs

- Some have developed specific patent/design laws addressing GUIs, icons, holograms, digital designs, non-physical products, AR/VR etc.
- Others provide protection through traditional patent/design practices/laws
 - Partial designs
 - Broad interpretations; simplified and clarified practices
- Most new laws are being used to protect both the physical and virtual designs

Design protection for new technologies, environments, and digital designs

- Expanded protection of digital designs: GUIs, icons, holograms, augmented reality, etc.
 - Updates to patent/design laws and practices specific to digital designs:
 - Singapore, Japan, Israel, Canada, China, Korea, EU, Brazil
 - Jurisdictions considering specific practice changes:
 - Australia (recent public comments on virtual designs) with anticipated legislation in 2025

Design protection for new technologies, environments, and digital designs

- Laws specific to patent/design protections digital designs have been done through redefining the product or design:
 - Example: Referencing a new type of product or re-defining product
 - Singapore: A “non-physical product” is defined as anything that does not have a physical form, is produced by the projection of a design on a surface or into a medium (including air), and has an intrinsic utilitarian function
 - Israel: Removed “article” from the definition and included “product” with a definition broad enough to include screen displays with GUIs

<i>Description of Product:</i>	Virtual Piano created by a smart projector which can convert any flat surface into an interactive screen using a combination of infrared technology and real time detection via built-in camera and allow users to directly interact with the projections like how it would be done with a physical product.	Virtual characters used in augmented reality games (games which integrate the games' visual and audio content with the user's environment by superimposing a pre-created environment on top of the actual environment, for example, Pokémon Go).
<i>What is the non-physical product?</i>	A virtual musical instrument (piano)	A virtual character
<i>What is the virtual design sought to be registered?</i>	Features of shape, configuration, colours, pattern or ornament applied to the virtual piano.	Features of shape, configuration, colours, pattern or ornament applied to the virtual character (for example, virtual character design of Pokémon used in Pokémon Go).
<i>Does the non-physical product have a physical form?</i>	No it is a mere projection.	No it is a mere image displayed on a screen.
<i>Is the non-physical product produced by projection on a surface or into a medium (including air)?</i>	Yes, it is created through projection through a smart projector.	No. The virtual character is displayed or emitted from a screen. It is not created through projection on a surface or a medium.
<i>Does the non-physical product possess an intrinsic utilitarian function that is not merely to portray the appearance of the thing or to convey information?</i>	Yes, the virtual piano had a musical function when the user interacts with the non-physical product (virtual piano).	No. The function of the virtual character is to merely portray its appearance to the user to play and enjoy the game.
<i>Is this a registrable virtual design for a non-physical product under the RDA?</i>	Yes.	No. However such designs may be protected under the RDA as a Graphical User Interface instead.

Example

Design protection for new technologies, environments, and digital designs

- Laws specific to patent/design protections for digital designs have been done through redefining the design:
 - Japan: Defined a design to include “digital images” which may not necessarily be displayed on an article, such as graphic designs viewed or provided through a computer network, projected images, and AR/VR
 - EU: A definition that includes the movement, transition or any other sort of animation of the features of the appearance of a product and the definition of a product to include such things as digital products and the spatial arrangement of interior environments

Example



Design protection for new technologies, environments, and digital designs

- If there aren't specific patent/design laws addressing digital designs, how can they still be protected?
- Expansion of partial design protections
 - China, Israel, Mexico, and Vietnam have either adopted or expanded the scope of protection for partial designs to allow disclaimer practices to capture the digital designs.
 - Australia is considering doing so as well



FRONT VIEW 1

Figure 2. Singapore Design Registration No. 30201501459R filed in the name of *Apple Inc.* on 2 September 2015 for 'Electronic device display screen or portion thereof with animated graphical user interface'. The Statement of Novelty states 'Novelty resides in the pattern and ornamentation applied to the electronic device as shown in the representations. The appearance of the animated images transitions between the images as shown in the representations. The process or period in which one image transitions to another forms no part of the claimed design.'

Design protection for new technologies, environments, and digital designs

- New approaches:
 - Japan: Unfair competition law amended on June 14, 2023, to include a change establishing certain legal protections relating to intangible objects, especially when they are displayed or used in virtual reality spaces such as a metaverse

Current/continued discussions

- Link between design and article
 - Effects on design protection for new physical technologies with non-physical interactive components
- Scope of protection
 - Are virtual and tangible product environments covered by a single industrial registration? Can they be? Should they be?



Thank you!

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