Leveraging Design Patents to Protect Graphical User Interfaces

Protecting the "Look and Feel" of GUIs, Understanding Current U.S. and Global Prosecution Practices

TUESDAY, MAY 29, 2018

1pm Eastern | 12pm Central | 11am Mountain | 10am Pacific

Today’s faculty features:

Tracy-Gene Durkin, Director, Sterne Kessler Goldstein & Fox, Washington, D.C.
Robert S. Katz, Principal Shareholder, Banner & Witcoff, Washington, D.C.

The audio portion of the conference may be accessed via the telephone or by using your computer’s speakers. Please refer to the instructions emailed to registrants for additional information. If you have any questions, please contact Customer Service at 1-800-926-7926 ext. 1.
**Tips for Optimal Quality**

*Sound Quality*
If you are listening via your computer speakers, please note that the quality of your sound will vary depending on the speed and quality of your internet connection.

If the sound quality is not satisfactory, you may listen via the phone: dial 1-866-819-0113 and enter your PIN when prompted. Otherwise, please send us a chat or e-mail sound@straffordpub.com immediately so we can address the problem.

If you dialed in and have any difficulties during the call, press *0 for assistance.

*Viewing Quality*
To maximize your screen, press the F11 key on your keyboard. To exit full screen, press the F11 key again.
Continuing Education Credits

In order for us to process your continuing education credit, you must confirm your participation in this webinar by completing and submitting the Attendance Affirmation/Evaluation after the webinar.

A link to the Attendance Affirmation/Evaluation will be in the thank you email that you will receive immediately following the program.

For additional information about continuing education, call us at 1-800-926-7926 ext. 2.
Leveraging Design Rights to Protect Graphical User Interface

Tracy-Gene G. Durkin

MAY 29, 2018
Agenda

• Brief overview of U.S. Design Patents
• Current trends in User Experience
• Legal context for GUI design protection in the U.S.
• Examples of U.S. GUI Design Patents
• Advantages of Design Patents over Trademark and Copyright in the U.S.
Overview of U.S. Design Patents

• Utility Patents protect the way an article “works” (for 20 years from filing)
• Design Patents protect the way an article “looks” (for 15 years from issue)
• Both have to be novel and not obvious (35 U.S.C. 102/103)
• Utility patents cannot protect inventions which are not useful (35 U.S.C. Section 101)
• Design patents cannot protect designs which are not ornamental i.e., are primarily functional (35 U.S.C. Section 171)
The Two Are Not Mutually Exclusive

Representative Claim:

1. A method of controlling an electronic device with a touch-sensitive display, comprising:

   - detecting contact with the touch-sensitive display while the device is in a user-interface lock state;
   - moving an unlock image along a predefined displayed path on the touch-sensitive display in accordance with the contact, wherein the unlock image is a graphical, interactive user-interface object with which a user interacts in order to unlock the device;
   - transitioning the device to a user-interface unlock state if the detected contact corresponds to a predefined gesture; and
   - maintaining the device in the user-interface lock state if the detected contact does not correspond to the predefined gesture.

Apple’s 7,657,849 Slide-to-Unock Utility Patent

Apple’s D675,639 Slide-to-Unock Design Patent

Apple’s D704,212 Slide-to-Unock Design Patent
Current Trends in User Experience (UX)

• User Interface is Booming

• As of January 2017
  – iPhone users were able to choose between more than 2 million apps in the Apple App Store
  – Android has a lot too

• How can software developers protect the intellectual property in these lucrative and growing products in light of *Alice Corp. v. CLS Bank International*?

• How can companies protect their 3D products in a virtual world?
GUI Design Applications and Rights Also Booming in the U.S.

- Design patents fastest growing IP asset to protect icons and GUI
- Make up nearly 6% of all U.S. design patents issued to date
- Fastest growing area in the Design Group at the United States Patent & Trademark Office (from 1 – 20+ patent examiners in less than 10 years)
US: Top GUI Design Patent Holders

- Microsoft
- Samsung
- Apple
- Google
- LG Electronics
- Tencent Technology Co.
Who Else is filing in the U.S.?
Legal Context for GUI Design Protection in the U.S.

35 U.S.C. §171  Patents for designs

• Whoever invents any new, original and ornamental design for an article of manufacture may obtain a patent therefor, subject to the conditions and requirements of this title.

• Section 171 refers, not to the design of an article, but to the design for an article, and is inclusive of ornamental designs of all kinds including surface ornamentation as well as configuration of goods.”

In re Zahn, 617 F.2d 261, 204 USPQ 988 (CCPA 1980)
How Did GUI Become Patentable in the U.S.?

• Appeal from an Examiner’s final rejection under 35 U.S.C. §171 of an icon design

• Basis for the rejection:
  – Icon is not an ornamental design for an article of manufacture because it is mere surface ornamentation rather than a design applied to an article of manufacture

How Did GUI Become Patentable in the U.S.? (Cont'd)

• The Examiner and Appeal Board agreed that the design was for a computer display, however, no display was shown or described in the application as filed.

• During prosecution Applicant amended the drawings to add a broken line computer

• Board held: had the original application described a display or shown a display, the design disclosed would be patentable subject matter
USPTO GUI Design Guidelines

• To be directed to statutory subject matter, design applications for computer-generated icons must comply with the “article of manufacture” requirement of 35 U.S.C. §171

• Because a patentable design is inseparable from the object to which it is applied and cannot exist alone as mere surface ornamentation, an icon must be embodied on a computer screen, monitor or other display panel or portion thereof

• The article of manufacture on which the design is displayed may be shown in broken lines

MPEP §1504.01(a) Computer-Generated Icons (1996 Guidelines)
Hierarchy - Icons

D804,526

Color v. Gray Scale
Hierarchy – Icons (Cont'd)

D771,707

D745,041

Gray Scale v. Line Drawing
Hierarchy - Screen Layout

D604,305

Same display claimed three different ways

D644,239

D627,790
Hierarchy - Animations

D771,119

A series of images conveying an animated design
Visual Effects

D750,637

Display screen or portion thereof with animated graphical user interface

Figure 1 is a front view of a display screen or portion thereof with animated graphical user interface showing a first image in the sequence showing our new design.

The solid gray shading indicates a portion of unclaimed user-defined content.

The stippling portrays the illusion of translucent portions of the graphical user interface through which portions of the unclaimed user-defined content are partially visible.
Visual Effects (Cont'd)
Transitions

We claim: The ornamental design for a pair of display screens with animated graphical user interface

D769,893

FIG. 1

FIG. 2

FIG. 3

We claim: The ornamental design for a pair of display screens with animated graphical user interface
GUI/Hardware Combination

D769,893

Electronic device with graphical user interface
Pitfalls to Avoid

• Domestically
  – Filing too many designs (each patentably distinct design will need its own patent)
  – Patentability - claiming what’s patentable and not claiming what’s not patentable using broken lines or “masking” (digital images)
  – Choosing the right format - digital image vs. line drawing
  – Bottom line – it is very difficult to amend figures after filing to change anything about the design
Pitfalls to Avoid (Cont'd)

• Internationally
  - Some countries do not allow protection of GUI
  - Some countries do, but protection is limited to certain content only or static images only, not animation
  - Some allow animation, but only a limited number of images
  - Some do not permit broken lines
  - Some limit protection to grayscale digital images or line drawings
  - Some require things in your priority application that can’t be added later
    ▪ Hardware (e.g. Japan and China)
    ▪ Description of the design and/or its function (Japan)
Foreign GUI Design Protection

- EUIPO (Europe)
- Argentina
- Brazil
- Canada
- China
- Colombia
- Hong Kong
- Israel
- Japan
- Jordan
- Mexico
- New Zealand
- Norway
- Panama
- Russia
- Singapore
- South Korea
- Switzerland
- Taiwan
- Turkey
- Australia*
- Chile*
- Malaysia*
- Thailand*
Nuances of Foreign GUI Design Protection

• Some countries require that hardware be shown in the drawings in broken lines with the GUI
  – Canada, Japan, Korea

• Hardware may seldom be added to the foreign application without losing priority
• Some require solid line or digital image hardware
  – China

CN 303439384 S

CN 303683971 S
Nuances of Foreign GUI Design Protection (Cont'd)

• Some countries require written description of the function of the GUI
  - Japan
  - Description may seldom be added to the foreign case without losing priority

  The present article is a portable information terminal having a function of management, for example, activity management, fitness management, and/or wellness management etc. The image shown in the front view and the enlarged front view of the display portion shown in the front view is for displaying such as progression or achievement of the various management items, for example, the activity, fitness and/or wellness etc. of a user.
Nuances of Foreign GUI Design Protection – Hague System

• Countries that do not register/patent GUI designs but are members of the Hague System for International Design Registration can cause confusion to applicants

• International Design Registrations are still subject to each contracting party’s statutory subject matter requirements in the national application phase
  – Filing a GUI application with the Hague System will not grant protection in countries that do not register/patent GUI designs
How the U.S. Design Law Has Developed Since 1996

• The law has developed very slowly

• Although there have been some decisions by the USPTO Patent Trial and Appeal Board involving the patentability of GUI designs since 1992, none have been published

• The only way to know about them is if the Examiner is reversed and the patent issued – but finding such a patent is like looking for a “needle in a haystack”

• Even these decisions are not reported unless the Board chooses to do so, and they have not to date
One Needle:
U.S. Patent No. Des 757,052

- Can 2D designs claim attributes of 3D designs?
- Claim rejected as indefinite under §112
- Board reversed
- The language “illusion of translucent/transparent surface” is sufficiently clear such that one of ordinary skill in the art would understand.
- Conversion of broken line to solid line supported

Filed January 4, 2000
Issued May 24, 2016
Design Patent Infringement (I)

*Gorham v. White* (U.S. Sup. Ct. 1871)

“[I]f, in the eye of an **ordinary observer**, giving such attention as a purchaser usually gives, two designs are **substantially the same**, if the resemblance is such as to deceive such an observer, inducing him to purchase one supposing it to be the other, the first one patented is infringed by the other.”
First Court Decision on a GUI Design Patent

Apple Inc. v. Samsung Electronics
N.D. California 2012

Patent valid and infringed; Affirmed by the Federal Circuit
Another Datapoint?

Microsoft Corp. v. Corel Corp.
filed N.D. California 2015
What is Next?

**Microsoft v. Corel**
filed N.D. California 2015

Parties stipulated to infringement and validity of the patents
Only issue tried was “notice” for purposes of damages
Advantages of Design Rights Over Other IP Rights

• Available for icons and screen designs (which may not function as a trademark)
• No creativity requirement (as for copyright)
• Presumption of validity
• Limited term, but seldom outlived
• May be easier to enforce (no consumer surveys needed)
• Infringer’s profit is common measure of damages
• Use design rights while establishing secondary meaning
Thank You

More information available at:
http://www.skgf.com/design-patents

tdurkin@sternkessler.com
Leveraging Design Patents to Protect Graphical User Interfaces

Robert S. Katz  
Banner & Witcoff, Ltd.  
(202) 824-3181  
rkatz@bannerwitcoff.com  
www.bannerwitcoff.com/rkatz
Design Patents for Screen Designs

• Why
• How
  – Mechanics
  – Strategy
• Emerging Technologies and Issues
WHY: Display-Based Design Patents

- Rapidly growing in real life
  - Predicted: by 2017, 50% of all designs will be screen designs
  - Common sense observations → More products have displays

- Companies are picking up on this reflected by design patent grants directed to GUIs

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>DPs/year</th>
<th>% all DPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990-1995</td>
<td>1</td>
<td>&lt; 0.1%</td>
</tr>
<tr>
<td>1997-2005</td>
<td>70</td>
<td>0.5%</td>
</tr>
<tr>
<td>2007-2012</td>
<td>440</td>
<td>1.8%</td>
</tr>
<tr>
<td>2013-2014</td>
<td>1000</td>
<td>4.3%</td>
</tr>
<tr>
<td>2015</td>
<td>1484</td>
<td>5.7%</td>
</tr>
</tbody>
</table>
WHY: Display-Based Design Patents

• More Why:
  – More things via computers and mobile devices
    • shopping and buying platforms, news, sports, mapping, dining, dating, critiquing, gaming, museums, reality touring, drawing, video/photo editing, watching/listening content, messaging, taxis, social media, financial exchanges, etc.
    • Idea is to provide a great user experience (protecting APPs)
  – Connection with source/branding
  – Connection to platform based training
  – Virtual Migration
    • Movement to under the glass
    • Shift to multi-purpose devices
  – Internet of Things (more things interconnected)
Protecting Apps

• It may be the only meaningful way to protect
  – Connection with source/branding
  – Connection to platform based training
  – Virtual Migration
    • Movement to under the glass
    • Shift to multi-purpose devices
  – Internet of Things (more things interconnected)
Tinder, Snapchat, and Urbanspoon
Match Group, LLC (Tinder) v. Bumble Trading

Lawsuit filed 3/16/2018

United States Patent No. D798,314
Display Screen or Portion Thereof With a Graphical User Interface of a Mobile Device
Virtual Migration
Part 1
Virtual Migration Part 2
More Categories of Home Controls
Example of Evolving Design Experiences
Nest Thermostat
Why: Final

- Companies spend hundreds of thousands/millions of dollars to develop GUIs for appearance and functionality.
- To be successful:
  - They should look cool
  - They should be intuitive
  - They should be easy to use
- Design patents may be the only way to stop third parties from skinning your design
  - Skinning is real
  - Other forms of IP may be difficult
  - Design patents are likely the best way to prevent identical and substantial skinning
  - If you want to prevent this, protecting essential portions is a must
How: Part 1: The Mechanics
What is a GUI?

- Broad definition: Any and all aspects of a screen-based user experience

- Capable of being sensed: Visual, Audible, Haptic, etc.
  - But design protection will be limited to visual

- Can be static or dynamic (animated or transitional)

- Can vary greatly in type and presentation and experience provided
How: Part 2: The Mechanics
The Design Application

- **Drawings:**
  - Must show on a display screen
    - Can show display screen boundary in broken lines
  - Disclaimed portions in broken lines
  - Image can be screenshot (color/grayscale) or line drawings

- **Title:**
  - Display Screen with....
  - USPTO reluctant
  - If title not “commonly approved” may need to tie to computer

- **Special Statement:**
  - Use to “explain” drawings as needed
How: Part 3a
The Strategies

- Capture the User Experience
- What protects the look and feel of the visual experience
  - Don’t think like a patent attorney – think like a user
  - Strategy is a mix of science and art
  - Appreciate the uniqueness in the user experiences provided
  - Attempt to predict branding and usability effects
  - Other factors
- GUI – visual part of the user experience
  - Traditional GUIs
  - Icons
  - Wait routines/cursors
  - Fonts
  - Anything visual that contributes to the user experience
Look for Differentiation

Award Winning Folding Examples
How: Part 3b
The Strategies

• AFTER you have figured out what creates the user experience
  – Use design patent principles for focusing on desired portions, colors, tonal contrasts, etc.
  – Static or animated
  – Be smart with disclaiming
  – Don’t be afraid to be creative

• Know USPTO practice rules and pitfalls
  – Some unique practices associated with screen designs
  – Stay up to date on all formal and informal USPTO design practices relating to screen designs
  – Dabbling can lead to a disastrous outcome
  – Minimal chance to amend/fix post-filing
Sidebar Discussion – Pokemon Go
Sidebar Discussion – Angry Birds
User Interface Example – D704,212 (Apple)
User Interface Example – D738,901 (Uber)
User Interface Example – D699,259 (Sony)
User Interface Example – D725,662 (Samsung)
User Interface Example – D714,313 (Microsoft)
User Interface Example – D723,054 (Nissan)
User Interface Example – D686,222 (Microsoft)
Example GUI –
D457,164 (Apple)
Example
GUI D619,614
(Google)
Animated Screen Designs

- Different scopes/impressions from single static image designs

- Animations
  - An important part of portfolio if experience includes movement.
  - Moving screen designs have made up about 20% of total number of screen designs over the last 3 years
  - Scope can cover minor differences in static impression if dynamic impressions are more similar
Icons – Static and Animated
Pat. No. D662,945 and D663,317 (NIKE)
Example Animated
GUI D643,850
(Microsoft)
Example Animated GUI D687,047 (Nest Labs)
Example Animated GUI
D750,637 (Apple)

The **solid gray shading** indicates a portion of a **lower layer** of unclaimed user-defined content…
The stippling indicates a translucent portion…
Wait Cursors/Loading Routines/Selectors
D656954 and D644,661 (Microsoft)
Font Examples - Reading, Fanciful, and Symbols

A B C D E F G H I J
K L M N O P Q R S T
U V W X Y Z
a b c d e f g h i j
k l m n o p q r s t
u v w x y z
0 1 2 3 4 5 6 7 8 9
! " # $ % & ' ( ) * + , . / ; : ; < = > ? @

ABCDEF
HIJKLM
PQRSTU
WXYZ1234
567890

aA bB cC dD eE fF gG hH iI jJ kK lL mM nN oO pP qQ rR sS tT uU vV wW xX yY zZ

Ss kK rR mM nN
O o q Q p P r R s S t T u U v V w W x X y Y z Z

Bull
Bear
Heart
Emerging Technologies
→ How to Protect Future Designs

• The US has a design for an “article of manufacture” requirement in Section 171
  – *Europe does not*

• What kinds of designs are we starting to see and what will we see in the future?
  – Virtual Reality
  – Augmented Reality
  – Projected designs

• Know the law and make new law
AR and VR Become More Mainstream

- **VR**: is an artificial, computer-generated simulation or recreation of a real life environment or situation. It immerses the user by making them feel like they are experiencing the simulated reality firsthand.
  - Replaces your reality with a new one.

- **AR**: layers computer-generated enhancements atop an existing reality in order to make it more meaningful through the ability to interact with it.
  - Takes your current reality and adds to it.
AR and VR Become More Mainstream
Virtual 3D GUI – US D797,767
Microsoft Corporation

FIG. 1
Projected Designs
Seattle Museum of Pop Culture
Projected Design—US D609947
Osram Sylvania, Inc.
Tabletop with an Applied Pattern of Projected Light
Recent Emerging Issues in Remedies

• While relatively new, good track record
  – 2-0 in lawsuits
  – 5-0 in design patents

• Both cases include Section 289 damages issues
Apple v. Samsung

D604,305

Galaxy S
Microsoft v. Corel

The D’532 patent

CorelCAD:
Microsoft v. Corel

D554,140
Monetary Remedies

• For an infringement patentee can choose
  • Damages (no less than a reasonable royalty) 35 U.S.C. § 284 (1st ¶) OR
  • Infringer’s Profits — 35 U.S.C. § 289

• Can only increase damages
• Can’t collect both
Section 289

Whoever during the term of a patent for a design, without license of the owner,
(1) applies the patented design, or any colorable imitation thereof, to any article of manufacture for the purpose of sale, or
(2) sells or exposes for sale any article of manufacture to which such design or colorable imitation has been applied
shall be liable to the owner to the extent of his total profit, but not less than $250, recoverable in any United States district court having jurisdiction of the parties.

Nothing in this section shall prevent, lessen, or impeach any other remedy which an owner of an infringed patent has under the provisions of this title, but he shall not twice recover the profit made from the infringement.
Recent Section 289 Issues

• In *Apple v. Samsung*
  • Could the article of manufacture be smaller than the article as sold?

• In *Microsoft v. Corel*
  • Can software be an article of manufacture?
Thank you!

Robert S. Katz
Banner & Witcoff, Ltd.
(202) 824-3181
rkatz@bannerwitcoff.com
www.bannerwitcoff.com/rkatz

www.bannerwitcoff.com