Software Patents

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Software Patents

- Patents Generally
- What Is Software?
- What Software Can Be Patented
- How Software Should Be Patented
- iPhone Security As An Example
Patents Generally

• Right To Make Or Exclude?

• Market Weapons, Not Technology Weapons

• Hunt Inventions In Customer Feedback/Market Position/User Features

• Value Of Feature Exclusivity Is Business Strategy

• Technology/Programming Defines Ways To Offer Feature

• Negative Rules Of Patentability
What Is Software?

• Algorithms Have Never Been Patentable
  • Mental Steps, Written Material

• Industrial Process Control Has Always Been Patentable
  • Transforms Matter (*Diamond v. Diehr*), Technical Effect (EP)

• Most Software Lies Between These Extremes
What Software Can Be Patented?

• Outer Limit Is A Program Fixed In a Tangible Medium Of Expression

  • USPTO Guidelines On Computer-Related Inventions

• Reasonable Limit Is A Programmed General Purpose Computer

  • This Is A New Machine \((\text{In Re Alappat})\)

• Methods Of Use, User Interface
**IPhone Example - “Slide to Unlock” Patent**

- U.S. Patent No. 7,657,849

- The ‘849 patent illustrates three different ways to claim software-related inventions: i) a method of controlling an electronic device; ii) a portable electronic device; and iii) a computer program product for use in conjunction with a portable electronic device.

- Patent with similar claims also granted in Europe (EP 1964022B1) and successfully asserted against Motorola.
Apple’s Method 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 Device Claim

14. A portable electronic device, comprising: a touch-sensitive display; memory; one or more processors; and one or more modules stored in the memory and configured for execution by the one or more processors, the one or more modules including instructions: to set the device to a user-interface lock state; to display an unlock image on the touch-sensitive display while the device is in the user-interface lock state; to detect contact with the touch-sensitive display; to transition the device to a user-interface unlock state if the detected contact corresponds to moving the unlock image across the touch-sensitive display according to a predefined displayed path on the touch-sensitive display; and to maintain the device in the user-interface lock state if the detected contact does not correspond to moving the unlock image across the touch-sensitive display according to the predefined displayed path.
Apple’s Computer Program Product Claim

20. A computer program product for use in conjunction with a portable electronic device comprising a touch-sensitive display, the computer program product comprising a computer readable storage medium and an executable computer program mechanism embedded therein, the executable computer program mechanism comprising instructions for:

1. detecting contact with the touch-sensitive display while the device is in a user-interface lock state;
2. 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;
3. transitioning the device to the user-interface unlock state if the detected contact corresponds to a predefined gesture; and
4. maintaining the device in the user-interface lock state if the detected contact does not correspond to the predefined gesture.
How Software Should Be Patented

• Identify A Strategic Product Feature

• Write Pseudo-Code To Implement The Feature

• Claim Programmed General Purpose Computer

• Claim Method Of Using Device By User

• Software As System Including Hardware And User Interactions