

Legal Aspects of Web Systems

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roadmap

a bunch of observations surrounding legal topics. . .

observation

legal issues ↔ technology

case studies of (commercial) web systems

- accessing
- downloading
- publishing (public) datasets
- reverse engineering

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observation

the patent system is broken

not so good because

Patents are the new currency of the Information Age

— Takach, *Computer Law, Essentials of Canadian Law series*,
2003 (<http://www.georgetakach.ca/>)

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an opinion

The Patent and Copyright Clause grants Congress the power “[t]o...promote the Progress of Science and useful Arts,” not science fiction and litigious arts.

...

The system has lost its true north.

—

complaints

- patent trolls
- “fantastic allegations”
- “damage claims are grossly overblown”
- huge unrecoverable legal costs

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— **Barnes & Noble**, *Fortune 500 company, open letter to the FTC*

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patents affect the functioning of the web

patents in the web domain

- shopping cart (troll; US 5,715,314 and US 5,909,492)
- embedded content in web browser (troll, US 5,838,906)
- hyperlinking (BT, 2000)
- 1-click shopping (Amazon)
- highlighting of search results in browser (Google; US 6,839,702 B1)
- ...

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n.b.: fun patents

- Method of swinging on a swing: “A method of swing on a swing is disclosed, in which a user positioned on a standard swing suspended by two chains from a substantially horizontal tree branch induces side to side motion by pulling alternately on one chain and then the other”
(US 6,368,277 B1)
- “a!=b” operator (Microsoft; US 2004/0230959 A1)
About “trivial” software patents: The IsNot case
J. Bergstra and P. Klint, SCICO 3/2007

observation

new focus: design patents

Apple has “patented the hell” out of the iPhone
— Steve Jobs at Macworld, 2007

Apple is the king of design patent exploitation
— Forbes, August 2013

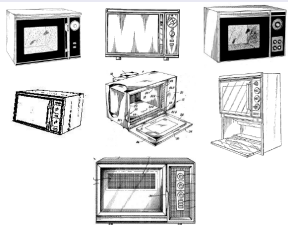
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design patents then...



microwave ovens, 1970s

...and now (Apple)



FIG. 2

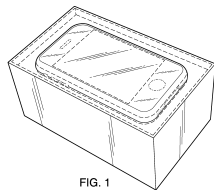
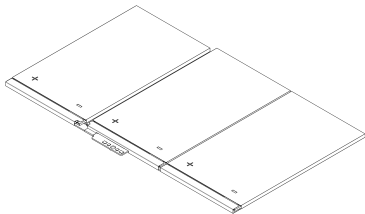
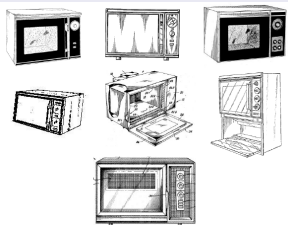


FIG. 1

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FIG. 2

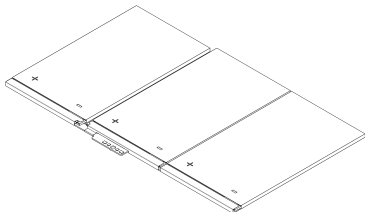


FIG. 1

observation

new protection strategies for software

the old way

- copyright^a

^aApple vs. Microsoft GUI lawsuit in 1994: copyright

brave new world

- copyright
- utility patent^a
- design patent

^aOracle vs. Google Java API lawsuit in 2012: 2 patents + copyright

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**Function Points as a Universal Software Metric****Capers Jones, VP and CTO****Namcook Analytics LLC**

Draft 6.0 May 10, 2013

[www.Namcook.com](http://www.namcook.com)**Copyright © 2013 by Capers Jones. All rights reserved.****Abstract**

Function point metrics are the most accurate and effective metrics yet developed for software sizing and also for studying software productivity, quality, costs, risks, and economic value. Unlike the older "lines of code" metric function points can be used to study requirements, design, and in fact all software activities from development through maintenance. In the future function point metrics can easily become a universal metric used for all software applications and for all software contracts in all countries. The government of Brazil already requires function points for all software contracts, and South Korea and Italy may soon follow. However, there are some logistical problems with function point metrics that need to be understood and overcome in order for function point metrics to become the primary metric for software economic analysis. Manual function point counting is too slow and costly to be used on large software projects above 10,000 function points in size. Also, application size is not constant but grows at about 2% per calendar month during development and 8% or more per calendar year for as long as software is in active use. This paper discusses a method of high-speed function point counting that can size any application in less than two minutes, and which can predict application growth during development and for five years after release. **This new method is based on pattern matching and is covered by U.S. utility patent application and hence is patent pending.**

The Strengths of Function Point Metrics

1. IFPUG function point metrics have more measured projects than all other metrics combined.
2. IFPUG function point metrics are endorsed by ISO/IEC standard 20926:2009.
3. Formal training and certification examinations are available for IFPUG function point counting.
4. Hundreds of certified IFPUG function point counters are available in most countries.
5. Counts of function points by certified counters usually are within 5% of each other.
6. IFPUG function point metrics are standard features of most parametric estimating tools such as KnowledgePlan, SEER, and Software Risk Master.
7. Function points are increasingly used for software contracts. The government of Brazil requires function points for all software contracts.

The Weaknesses of Function Point Metrics

1. Function point analysis is slow. Counting speeds for function points average perhaps 500 function points per day.
2. Due to the slow speed of function point analysis, function points are almost never used on large systems > 10,000 function points in size.

"This new method is based on pattern matching and is covered by U.S. utility patent application and hence is patent pending."


observation

research is playing the patent game

Select text

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Function Points as a Universal Software Metric



Capers Jones, VP and CTO **Namcook Analytics LLC**
Draft 6.0 May 10, 2013 www.Namcook.com

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two alternative futures

availability of research results (= papers, software, datasets, etc.)

- copyright: 70+ years
- commercial publishers with paywalls
- utility/design patents: 15/20 years
- CC-BY
- free access in document repositories
- – / royalty-free patent pool

observation

a holistic research approach is needed

viewpoints

- technical
- legal
- societal
- economic
- ...

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