

Introduction to Writing and Filing a US Patent: A Software Perspective

Presented by:
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What is a US patent?

- *Exclusive rights to make, use or sell a product in the USA*
- 20 years, with proviso's:
 - Date of filing
 - Periodic maintenance fees
 - Unless held invalid by a court
- “Offensive” vs. “defensive” legal tactic

Why file a patent?

- Impressive wall-hanging
- Resume padding
- Competitive advantage
- \$\$\$ in the bank

The Patent Process

- Identify need / problem
- Draft a solution to the need / problem
- Research existing solutions
- **Write & File Patent**
- Prosecute Patent
- Market / Develop Patent

Who can file a US patent?

- Anyone, from anywhere in the world
- Small entity
 - Individual
 - Company < 500 employees
- Large entity
 - Double Small Entity fees

What is patentable?

- Must fall within 5 statutory classes:
United States Code - 35 USC § 101
 1. **Process, i.e. steps to manipulate a physical thing**
(e.g. software manipulating a computer)
 2. **Machines, i.e. devices to accomplish a task**
 3. **Manufactures, i.e. manufactured items**
 4. **Compositions of matter, e.g. chemicals**
 5. **New use of any of the above, e.g. using a clock in navigation**

What is patentable?

(cont'd)

- Utility - must be useful

[United States Code - 35 U.S.C. § 101](#)

- Novel - must be different from others

[United States Code - 35 U.S.C. § 102](#)

- Unobviousness

[United States Code - 35 U.S.C. § 103](#)

How much does it cost ¹?

- Filing fee, e.g. \$385 small entity
- Issue fee, e.g. \$665 small entity
- Maintenance fees, e.g. small entity:
 - 3.5 yrs = \$ 445
 - 7.5 yrs = \$1,045
 - 11.5 yrs = \$1,610
- Note: Fees change over time – always check¹
- Legal assistance - average \$5,000 to write and file

¹ <http://www.uspto.gov/main/howtofees.htm>
(Life Cycle PTO Fees = \$4,150)

How do you write a US patent?

- Specification for others [in your field] to follow:
 - E.g - Technical specification
 - E.g - Business plan
 - E.g. - Academic paper
- Accepted format to follow
- Online resources: [US Patent Office](#)
- 90% can be done without legal help
 - 99% first rejection by PTO
 - 60% issuance through persevering and negotiating

Rough patent draft

- Technical Notebook
 - Sketch
 - Key components and ideas
 - Date and signature [+ witness]
- Business Plan
 - Market
 - Execution plan

Research the existing market

(i.e. Prior Art / Background)

- Use Notebook jottings as guide
 - Existing products, publications, etc.
 - Existing patents² and patent applications
 - e.g searching “telephone directory AND local”
- **To Go, or Not To Go?**
 - Not to go – save time and \$\$
 - To go - used in Background of patent application

² www.uspto.gov/patft/index.html

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Components of a US patent application

- Title
- Background
- Brief Summary
- Brief Description of Drawings
- Drawings
- Specification
- Claims
- Abstract
- US PTO paperwork + filing fee

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Claims

- Legal stuff, written in “legalize”
- **Can only claim what is written in the Specification**
- Don’t be daunted – it’s translatable into English
- Will be able to modify this section [but limited]
- Use exiting prior art as a template
- Note: most initial claims are rejected
- May need legal counsel’s assistance

References

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Parting Thought

**“The hardest part isn’t inventing the solution,
but
*figuring out how to get people to adopt it”***

Bill Joy
Co-Founder Sun Microsystems
Fortune magazine Oct. 13, 2003

Biography

Lester Sussman is the CEO and Founder of ccBerg, Inc. He has 20 years experience in the design and development of complex information systems. He graduated as an Electronic and Electrical Engineer from the University of Cape Town, South Africa in 1983.

Mr. Sussman worked for a number of companies in the greater Washington D.C. area including MCI Telecommunications, PRC and INTELSAT.

At MCI, Mr. Sussman was one of the principal systems architects in the design and development of MCI's next generation network management system, which remains in critical use today.

In 1994, Mr. Sussman joined INTELSAT as a senior systems engineer. Upon joining, he identified the potential value of the Internet for INTELSAT's business. He helped securely connect the organization to the Internet, conducted seminars throughout INTELSAT on its benefits, and lobbied INTELSAT's management to market Internet connectivity via satellite. Mr. Sussman's efforts culminated in the launch of INTELSAT's Internet connectivity product, at a summit meeting attended by the more than 140 global telecommunications providers that owned the organization. Mr. Sussman was instrumental in acquiring one of the Summit's keynote speakers, Dr John Gage, Chief Researcher at Sun Microsystems.

Mr. Sussman is well qualified to present on software patents. He currently holds four sole US patents, has an additional six pending patent applications and is researching a further two patents. He has licensed one of the patents for upfront fees to companies such as Sharp Corp. and Casio. For the past couple of years he has been working on launching a high-tech start-up anchored on his fourth patent - embedding multi-media Yellow Pages directly into a phone.



154 ELECTRONIC ON-LINE SUBSCRIBER TELEPHONE DIRECTORY

176 Inventor: Lester Sussman, 9213 Bulls Run Pkwy., Bethesda, Md. 20817

121 Appl. No.: 374,701

122 Filed: Jul. 18, 1994

151 Int. Cl. 5 H04M 3/43

152 U.S. Cl. 379/201, 379/252, 379/216

153 Field of Search 379/94, 36, 97, 379/98, 201, 207, 213, 216, 354, 355, 355

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Primary Examiner: Jeffrey A. Hoffman

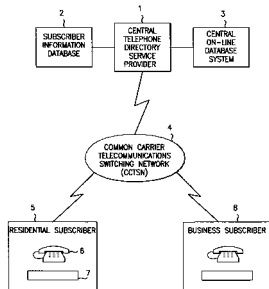
Assistant Examiner: Scott Willschky

ABSTRACT

A compact telephone directory system that integrates a

subscriber's telephone with a local on-line telephone directory database system and with a central directory service provider that maintains the local on-line telephone directory database. The telephone directory database system comprises an electronically stored equivalent of a telephone book. The telephone directory database can, for example, store local residential directories, local business directories, local and federal government directories, and a user-specific directory. The user-specific directory contains telephone numbers and other information that is particular to a subscriber, or a group of subscribers at the user's home or business. This information can be grouped into various lists as determined by the subscriber. All of the directories, including the user-specific directory, are maintained by a Central Telephone Directory Service Provider (CTDSP), that downloads the directories to the subscriber's telephone directory system. The subscriber can select the frequency at which updates to his directories are received from the CTDSP via the public telephone network. The compact telephone directory system is sourced from non-attached users, i.e. subscribers. This system provides advantages over current telephone directory systems, including books and CD-ROMs, for example, by automating the maintenance of the various directories for a central service provider and eliminating the mailing of updated directories to the subscriber.

15 Claims, 2 Drawing Sheets



The
United
States
of
America

The Commissioner of Patents and Trademarks

Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

Grants to the person or persons having title to this patent the right to exclude others from making, using or selling the invention throughout the United States of America for the term of seventeen years from the date of this patent, subject to the payment of maintenance fees as provided by law.

Henry F. Marshall, Jr.

Commissioner of Patents and Trademarks

Linda D. Elliott

Attest

