

Intellectual Property (IP) Protection for Software

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Overview

- ≈ A. Brief Summary of IP
- ≈ B. Importance of IP for R&D
- ≈ C. Patented Computer-Related Inventions
- ≈ D. Patent Principles
- ≈ E. Patenting Filing & Procedure
- ≈ F. Copyright & Comparison with Patent Protection
- ≈ G. Questions

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A. Brief Summary of IP

≈ Objective:

Provide an understanding of intellectual (industrial) property and its relevance to the development of software & computer-related inventions.

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A. Brief Summary of IP (Cont'd)

- ≈ **A. Patent**
- ≈ **B. Copyright**
- ≈ **C. Design**
- ≈ **D. Confidential Information**
- ≈ **E. Trade Mark**

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A. Brief Summary of IP (Cont'd)

≈ **A. Patent**

- A statutory right granted by a government to the inventor protecting an article, device, substance, process, or method, satisfying relevant requirements for the "invention" and patent document.

Examples: Dolby audio
GPS-enabled mobile devices
Data warehouse systems
Image processing

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A. Brief Summary of IP (Cont'd)

≈ **B. Copyright**

- A statutory right giving author exclusive "copyright" in his/her creation, namely an original literary, dramatic, musical or artistic work, or other work

- Protects form of expression.

Examples: Novel, photograph, lyrics, computer program

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A. Brief Summary of IP (Cont'd)

≍ **C. Design**

≍ A statutory right protecting the visual appearance of an article of manufacture.

Examples: US Patent No. Des 391,958
US Patent No. Des 409,618

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A. Brief Summary of IP (Cont'd)

U.S. Patent Mar. 10, 1998 Sheet 1 of 3 Des. 391,958

FIG. 1



The ornamental design for a combined digital audio disk player/radio tuner for automobile, as shown.

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A. Brief Summary of IP(Cont'd)

≍ **D. Confidential Information/Trade Secret**

- i. Information must be confidential
- ii. Obligation of confidence imparted
- iii. Unauthorised use causing detriment

Example: Coca Cola formula

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A. Brief Summary of IP (Cont'd)

≍ **E. Trade Mark**

- A statutory right protecting a sign capable of distinguishing goods or services of one party from those of another party.

Example: DOLBY for audio equipment
COCA COLA for beverages

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B. Importance of IP for R&D

Why Protect IP?

- ≍ **Protect investments in R&D**
- ≍ **Maintain competitive edge**
- ≍ **Prevent being locked out of market**
- ≍ **Control item in market place**

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B. Importance of IP for R&D

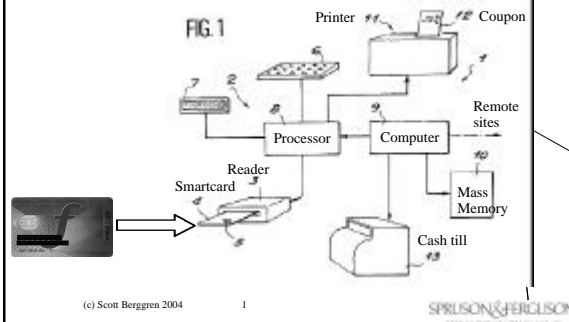
Why Protect IP?

- ≍ **Generate income from licensing**
- ≍ **Raise capital - financing and valuation of business.**

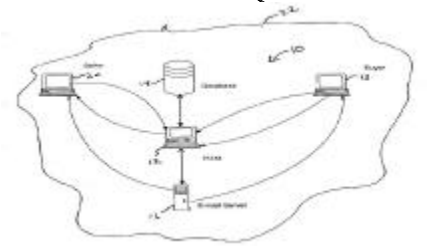
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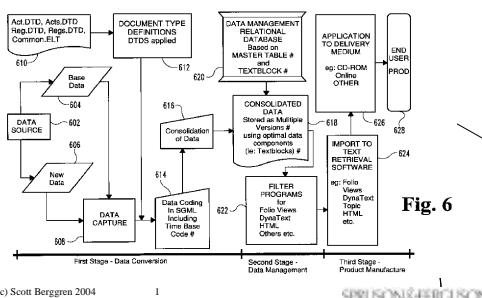
Australian Patent No. 712925
Process and device for data treatment with chip



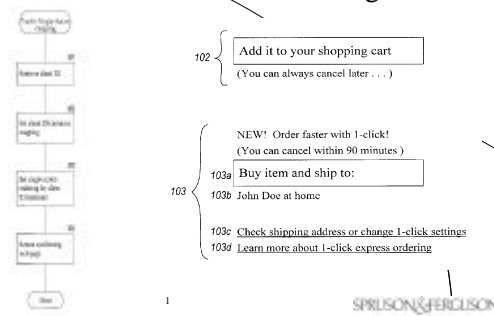
Australian Patent No. 727496
Method and system for promoting buyer anonymity in on-line transactions



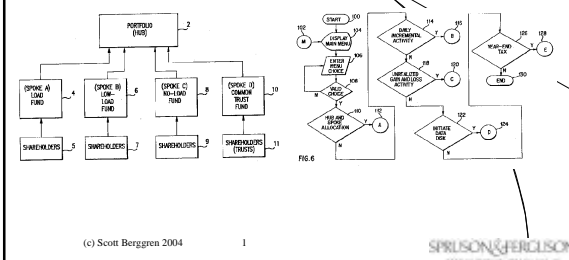
Australian Patent No. 706144
A system for electronic publishing



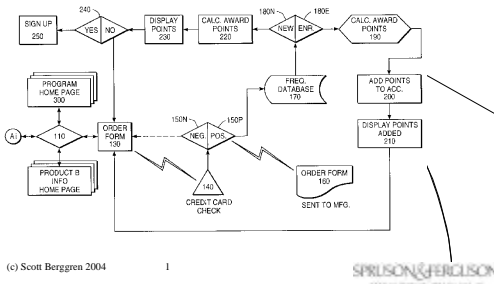
U.S. Patent No. 5,960,411
One-click online retailing



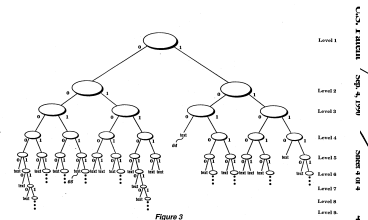
U.S. Patent No. 5,193,056
Data processing system for hub and spoke financial services configuration



U.S. Patent No. 5,774,870
Fully integrated, on-line interactive frequency and award redemption program



U.S. Patent No. 4,955,066 (MS)
Compressing and decompressing text files

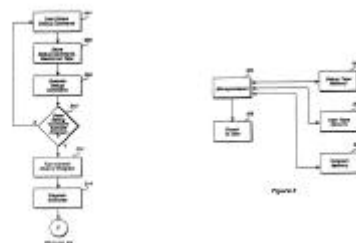


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U.S. Patent No. 5,124,989 (MS)
Method of debugging a computer program

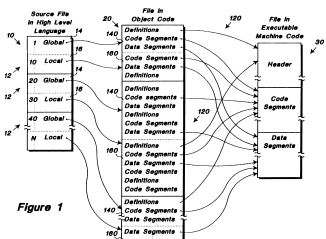


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U.S. Patent No. 5,204,960 (MS)
Incremental compiler

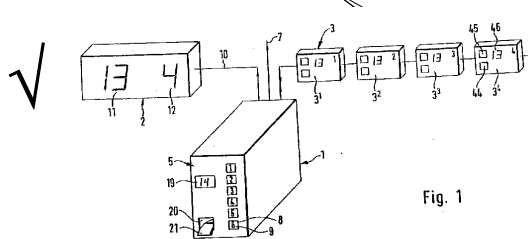


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European Patent No. 0086199
A process and a system for serving customers in a specific queue sequence



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D. Patents Principles

Patent

⚡ **A patent is a legal instrument conferring onto the patentee for a limited time a monopoly right in respect of the invention**

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D. Patents Principles

TITLE →
INVENTOR →
OWNER →
APPL. NO. →

PAT. NO.
ISSUE DATE

ABSTRACT →

US PAT. NO.
5,636,324

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D. Patents Principles

SUMMARY

BRIEF DESCRIPTION OF DRAWINGS

DETAILED DESCRIPTION

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D. Patents Principles

CLAIM

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D. Patents Principles

Patent rights

- ≠ The right conferred is the sole right to **exclude** others from using the invention.
- ≠ Patent rights are negative ones.

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D. Patents Principles

Patent term

- ≠ In most countries, 20 years from the **filing date** subject to payment of fees to keep the patent in force.

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D. Patents Principles

Patent term

- ≠ Once a patent expires, the public has **free right to exploit the invention.**
- ≠ Invention is put into public's full possession.

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Requirements of valid patent

<u>Invention</u>	<u>Patent Specification</u>
≠ proper subject matter (right type of thing)	≠ full written description of invention
≠ new, or novel	≠ enabling disclosure
≠ inventive step, or non-obvious	≠ disclose best mode of carrying out invention
≠ useful, or industrial applicability	≠ 1 or more claims fully and clearly defining the invention

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D. Patents Principles

Patentable subject matter

≈ AU: a mode or manner of achieving an end result which is an artificially created state of affairs of utility in the field of economic endeavour.

≈ US: any new and useful process, machine, manufacture or composition of matter under the sun that is made by man.

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D. Patents Principles

Novelty Standards

≈ Absolute (Australia, Singapore, UK)

≈ Relative (US, China)

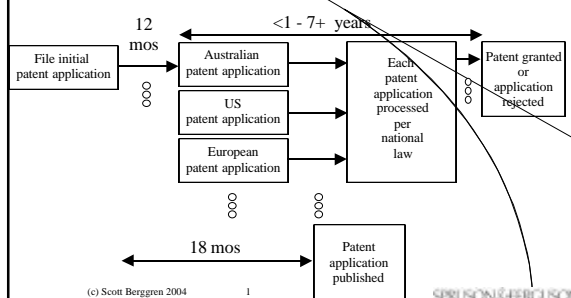
≈ Local (New Zealand)

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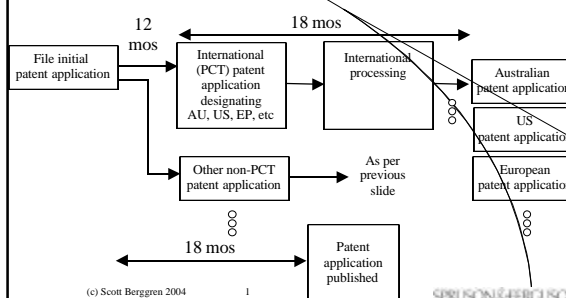
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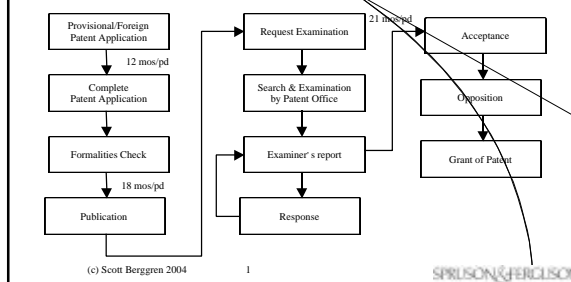
Patent filing procedure



Patent filing procedure



E. Overview of Australian Patent Application Procedure.



F. Copyright Protection of Software & Comparison with Patent Protection

Copyright

≈ An author has exclusive "copyright" in his/her creation, being an original literary, dramatic, musical or artistic work, or other work.

≈ Protects material form of expression.

≈ No copyright in mere ideas or information.

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F. Copyright Protection of Software & Comparison with Patent Protection

What is Protected?

- ≠ Literary works
- ≠ Dramatic works
- ≠ Artistic works
- ≠ Musical works
- ≠ Films, sound recordings, television and sound broadcasts, and published editions of works.

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F. Copyright Protection of Software & Comparison with Patent Protection

Literary work

- ≠ A computer program or compilation of computer programs.
- ≠ A “computer program” means a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.

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F. Copyright Protection of Software & Comparison with Patent Protection

Exclusive rights

- ≠ reproduce the work in material form
- ≠ make an adaptation of the work
- ≠ publish the work
- ≠ perform the work
- ≠ communicate the work to the public
- ≠ for computer program, enter into commercial rental arrangement for program

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F. Copyright Protection of Software & Comparison with Patent Protection

Reproduction of computer program

- ≠ an object code version of program derived from the program in source code by any process including compilation, or
- ≠ a source code version of the program derived from the program in object code by any process, including decompilation.

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F. Copyright Protection of Software & Comparison with Patent Protection

Not an infringement

- ≠ Reproduction made in normal use of running program (technical process of running program)
- ≠ Reproduction made for the purpose of studying ideas behind the program and how it functions
- ≠ Reproduction made as back-up copy of computer program by licensee from original copy of program

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F. Copyright Protection of Software & Comparison with Patent Protection

Not an infringement

- ≠ Reproduction made to make interoperable products (another program or article to be used with original program)
- ≠ Reproduction made to correct errors in the original copy that prevents it from operating with other programs or hardware
- ≠ Reproduction made for testing in good faith the security of program and for correcting any flaw

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F. Copyright Protection of Software & Comparison with Patent Protection

Term

- ≈ 50 years either from expiration of
 - year of author's death, or
 - Year work was first published after author's death.

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F. Copyright Protection of Software & Comparison with Patent Protection

Patent

- ≈ Protects thing or functionality
- ≈ Must apply
- ≈ 20 year term

Copyright

- ≈ Protects material form of expression, not thing or functionality
- ≈ Comes into existence automatically
- ≈ 50 years from death, or 1st publication after death

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F. Copyright Protection of Software & Comparison with Patent Protection

Patent

- ≈ Patentability & written requirements
- ≈ Subsequent independent invention is not a defence to infringement

Copyright

- ≈ Original work in material form
- ≈ Original independent creation is a defence to infringement

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F. Copyright Protection of Software & Comparison with Patent Protection

High Court of Australia:

- ≈ "In form, the definition of a computer program seems to have more in common with the subject matter of a patent than copyright.

Data Access Corp v Powerflex (1999) AIPC 91-514

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Questions



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