



Intellectual Property

A New Asset for Insurers



The law of large numbers

If you add up **enough independent risks**,
results become very predictable.

To live the law of large numbers, an insurer needs to

- be big
- diversify
- understand the risks



Risk expertise

■ Staff

- engineers, chemists, biologists, ...
- geologists, meteorologists, climatologists, ...
- physicians, epidemiologists, ...
- physicists, mathematicians, statisticians, ...

■ R&D

- IT hardware, services, franchises, ...
- natural catastrophe simulations, epidemic models, ...
- pricing models & tools, reserving methodologies, ...
- e-biz solutions, product development, ...



What's intellectual property?

■ Copyrights

- protect expression of ideas
- can be registered
- not essential in insurance (?)

■ Trademarks

- protect the consumer from confusion
- should be registered
- for insurance: Service Marks & URLs

■ Patents

- protect ideas
- must be registered
- for insurance: business methods & SW

easy weak



tough strong



Patents

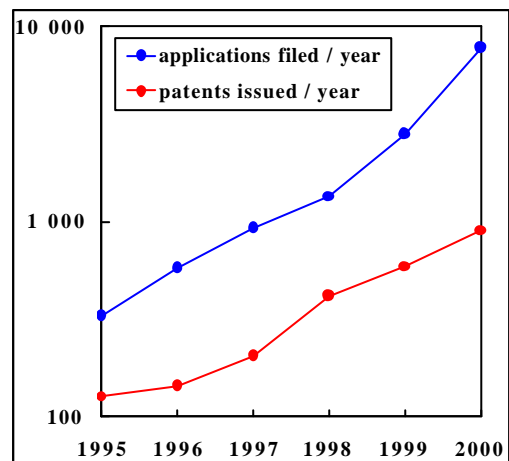
- Apply to anything useful, **new** and non-obvious
- Grant the **right to forbid**
- Imply **public disclosure**
- Last for max **20 years**
- Are **national** in essence
- Take on average **4 years to issue**
- Internet use produced a boom in **business methods & SW patenting**

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Business methods patents

- USA
 - ~ 2'500 patents issued
 - > 15'000 patent applications
 - > 500 insurance related patent applications
- Rest of the world
 - few patents yet issued
 - increasing number of applications



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The creation of a new mindset

.com explosion

need for venture capital

banks require patents as collaterals

banks realize themselves are at risk

banks realize themselves are innovators

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New threats & opportunities

■ Threats

- infringement of competitor's rights
- infringement of 3rd party's rights

■ Opportunities

- publication of trade secrets
- licensing income
- investment into R&D

As in any other industry!

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Patent threats

- Exposure
 - worldwide
 - main claims in the US
- Consequences
 - injunction
 - damages (Polaroid v. Kodak: 873M\$)
 - treble damages (if willful infringement)
 - litigation costs (well into M\$)
- Respect a patent... but verify novelty
 - no dedicated database for financial services SoA
 - most patent examiners are still inexperienced



Patents costs

- Patent attorney
 - ~ 10-20 k\$
- Fees
 - ~ 10 k\$
 - over 20 years
 - for each country
- Many person days of involvement
- True price of a patent = public disclosure



Patents pitfalls

- Long time scales
- Useless if infringement not discoverable
- Quality v. quantity
- No disclosure to 3rd parties allowed before filing



Patent opportunities

Promotion of R&D




- incentive to invest
 - ⇒ enables collecting licensing revenue
 - ⇒ enables outsourcing non-core developments
 - ⇒ enables developing easy-to-copy products
- incentive to publish
 - ⇒ avoids reinventing the wheel
 - ⇒ stimulates competitive collaboration



What's patentable?

Just about anything

that is simultaneously


- useful  commercially applicable
- new  objective
- inventive  subjective



What's patentable?









Just about anything

that is simultaneously

- useful
- new  main criterium
- inventive



Some players & their patents

	Citigroup	367	applications & grants
	Goldman Sachs	52	applications & grants
	UBS	29	applications & grants
	AIG	16	applications & grants
	System & method for user authentication		
	Check verification system & method		
	Apparatus and process for calculating an option		
	Internet insurance product		



AIG: *Internet insurance product*

An internet insurance product provides risk management for persons who conduct business on the Internet. This insurance product includes a suite of different Internet-related coverages, from which a purchaser can select an appropriate combination of insurance protections. These coverages include content-related liability, errors and omissions, E-business interruption, network security, and third party liability, among others, thereby providing comprehensive protection for a broad range of Internet-related security and liability exposures.



ZFS: *Web-based risk management*

A web-based risk management system that analyzes a business to identify potential liabilities, evaluates their current practices associated with the identified risks, recommends solutions and verifies that the solutions have been implemented.

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Converium: *Method for rating & structuring crop insurance*

A method of providing insurance coverage for a producer, the method comprising: receiving producer input data, identifying an insured value for an amount of production; and defining one or more bands of coverage for the producer based on the input data and the insured value, each band of coverage including an upper limit and a non-zero lower limit.

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Patent databases

US Patent Office:

<http://www.uspto.gov>

European Patent Office:

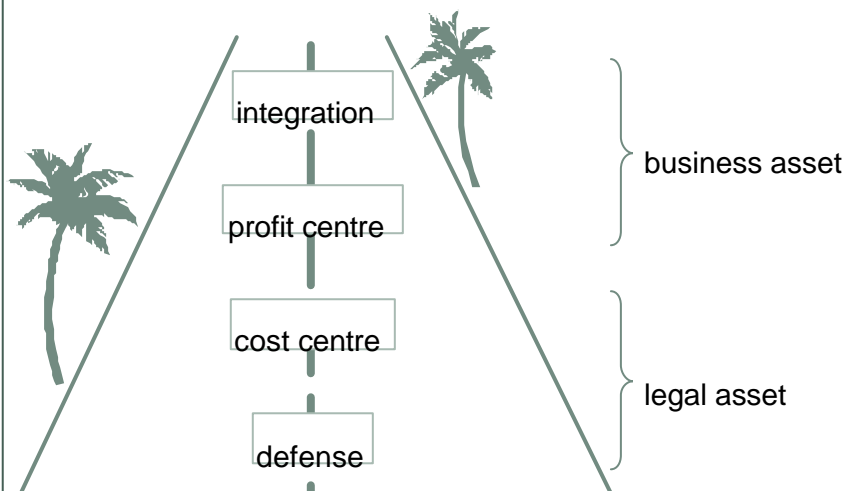
<http://ep.espacenet.com>

German Patent Office:

<http://www.depatistnet.de>



Road to IP proficiency



Road to IP proficiency Defense

- passive:
 - perform a patent clearance on new projects
 - reduces risk of ransom from patent terrorists
 - reduces likelihood of treble damages

- active:
 - build your own patent portfolio
 - provides cross-licensing opportunities
 - deters preposterous attacks



Road to IP proficiency Cost Centre

- Patent department & workflow
 - Identification of R&D
 - Guidelines & decision process

- Patenting strategy
 - What to patent?
 - Alternatives to patents: trade secret or publication

- Patenting tactics
 - Where to patent?
 - When to patent?



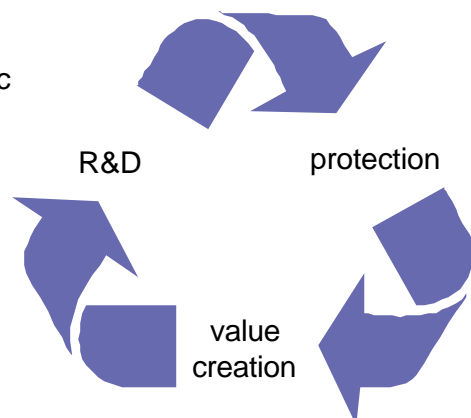
Road to IP proficiency Profit Centre

- Monopoly
 - for stand-alone inventions, s.a. pharmaceuticals
- Licensing
 - for intertwined inventions, s.a. electronics or financial services (?)
 - opportunity to set standards
 - risk transfer
- Balance sheet asset (FASB 121, 141, 142)
- Tax optimization



Road to IP proficiency Integration

- Recognize R&D as a natural & embedded activity
- Integrate the patenting & licensing workflow and awareness into R&D
- Feed-back IP strategic overview into R&D





Road to IP Proficiency

Setting up a patent department

- Not in legal
- Outsource prosecution
- Build awareness & recognition
- Identify R&D
 - effectively
 - efficiently

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A brave new world

- Current situation
 - R&D outputs are hidden into trade secrets
 - investments in long-term projects with visible & reproducible output are questioned
- New paradigm
 - cross-fertilization through publication and generation of improvement technologies
 - investment in long-lasting R&D

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