

TYNAX

The logo icon for TYNAX is a stylized, symmetrical geometric design. It features a central blue circle with four white curved lines radiating outwards, resembling a compass rose or a stylized 'X'. This central element is surrounded by a square frame with four smaller squares at the corners, each containing a white curved line that mirrors the central design.

THE TECHNOLOGY TRADING EXCHANGE

"Patens: innovació, estratègies i propietat industrial. Catalunya i Espanya perdent la carrera dels estímuls i la monetització"

COEC, Barcelona 7 març 2013

1. IP and Wealth

- “The Congress shall have Power To ... promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries” (**US Constitution**, Art. 1, Section 8)

1. IP and Wealth

1. IP is (one of) the most important(s) assets that companies can own:

"companies and countries that understand how to meet the challenges posed by the growing role of IP (patents), will succeed. Those that don't will lose".
Peter G. Peterson, former US Secretary of the Treasury.

2. IP will determine who are the winners and the losers in the 21st Century competitive Battlefields (Kline & Rivette, HBS)

1. IP and Wealth

From Book "ZERO-TO-IPO" David Smith (on Amazon)



1. Slideshow “Patent Wars”

<http://www.svbs.co/lectures/68/index.aspx>

1. IP and Wealth

Consequences:

- => Patent: POWERFUL STRATEGIC TOOL: allows to decide What, Who, Where and When to exploit the patented invention. Who owns the patent owns the rights to exclude.
- => To be useful, the patent must be well done

1. IP and Wealth

“Patents add the fuel of interest to the fire of genius” (A. Lincoln)



1. IP and Wealth

Patents – Promesa de recompensa a l'inventor

Fomenten (estimulen) la innovació

"Innovation distinguishes between a leader and a follower." (Steve Jobs, Apple)

1. IP and Wealth

- Patent = Dret a excloure. Per tant
- Barrera d'entrada (M. Porter):
Posicionament en lideratge
 - Monopoli legal que "trenca" les lleis del mercat competitiu
- Competitividad – "Jo" sóc més competitiu que el competidor

1. IP and Wealth

Patents foster Innovation as a Driver

The gap between the US and the EU still exists

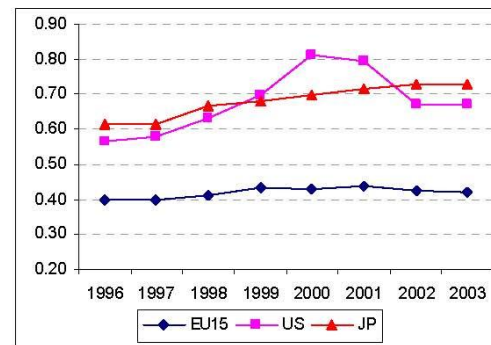
Based on a set of comparable data for 12 indicators, the US and Japan are still far ahead of the EU average and the vast majority of Member States (see Figure I).

The innovation gap between the US and the EU, as well as the gap between Japan and EU, still exist. This innovation gap is measured, based on 12 common indicators.

The EU innovation performance, as measured by the European Innovation Scoreboard, has been relatively constant since 1996, whereas the innovation performance in the US and Japan has further improved, thus widening the gap.

The peak in the US performance innovation in 2000 & 2001 is due to the venture capital indicator.

Figure I. Gap between the US and the EU measured by the SII



The gap between the US and the EU can be largely explained by 3 indicators:

- Patents (50 % of the gap)
- Working population with tertiary education (26 %)
- R&D expenditures (11%) – mainly business R&D

1. IP and Wealth

Patents & Growth

“A tendency for copying costs to increase reduces followers growth rates and thereby generates a pattern of conditional convergence. Poorly defined intellectual property rights imply that leaders have insufficient incentive to invent and followers have excessive incentive to copy” (Robert J. Barro, Xavier Sala i Martin, Technological Diffusion, Convergence, and Growth, 1997)



1. IP and Wealth

Some Examples

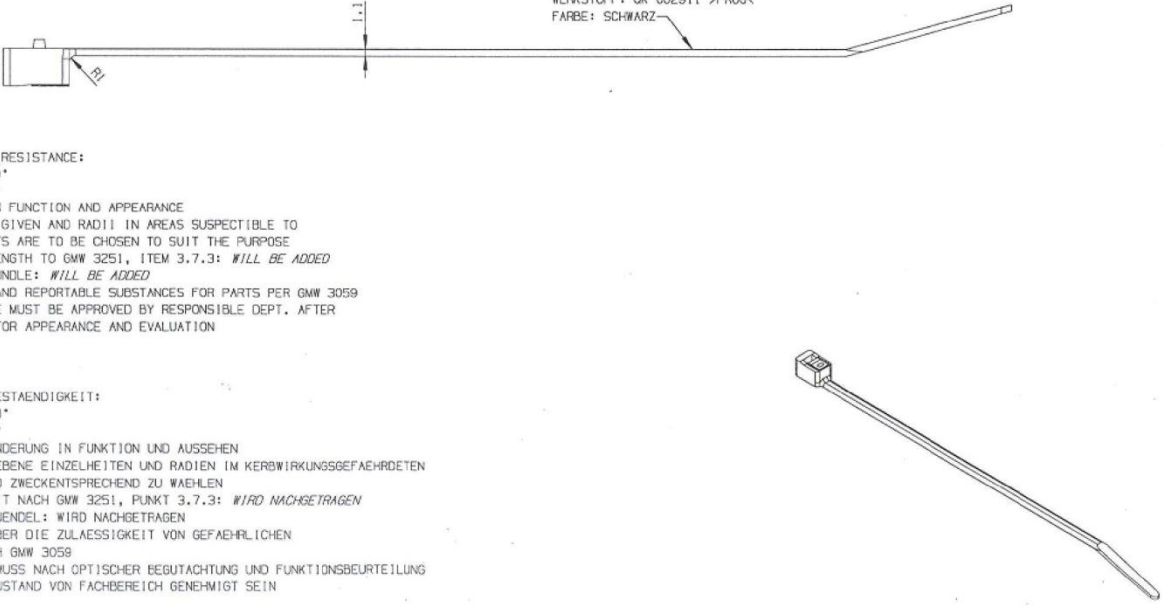
- James Watt (Patent No. GB193)
- Trafalgar Battle (guns' cast-iron)
- Nortel Deal - \$4.5b . MicroSoft & Apple allied!
 - (Bidding against Google's \$0.9b offer)
- Google – Motorola \$12.5b Deal
 - ("The Company is their patents"; L.Page)
- Compalsa – Exclusive Contract with Gouvernement
- Leunamme \$3k Deal -> Patent acquired by Actuant
 - Actuant manufactures 4b ties / year

1. IP and Wealth

Leunamme Patent

PART 1
STRAP
MATERIAL: OK 002911 >PA66<
COLOR: BLACK

TEIL 1
HALTEBAND
WERKSTOFF: OK 002911 >PA66<
FARBE: SCHWARZ



a) TEMPERATURE RESISTANCE:
24H (+120±3)°
24H (-30±3)°
NO CHANGE IN FUNCTION AND APPEARANCE

b) DETAILS NOT GIVEN AND RADIUS IN AREAS SUSCEPTIBLE TO NOTCH EFFECTS ARE TO BE CHOSEN TO SUIT THE PURPOSE

c) TENSILE STRENGTH TO GWK 3251, ITEM 3.7.3: *WILL BE ADDED*

d) FOR CABLE BUNDLE: *WILL BE ADDED*

e) RESTRICTED AND REPORTABLE SUBSTANCES FOR PARTS PER GWK 3059

f) FIRST SAMPLE MUST BE APPROVED BY RESPONSIBLE DEPT. AFTER SUBMISSION FOR APPEARANCE AND EVALUATION

a) TEMPERATURBESTÄNDIGKEIT:
24H (+120±3)°
24H (-30±3)°
KEINE VERÄNDERUNG IN FUNKTION UND AUSSEHEN

b) NICHT ANGEBEBENE EINZELHEITEN UND RADII IM KERBWIRKUNGSGEFÄHRDETEN BEREICH SIND ZWECKENTSPRECHEND ZU WÄHLEN

c) ZUGFESTIGKEIT NACH GWK 3251, PUNKT 3.7.3: *WIRD NACHGETRAGEN*

d) FÜR KABELBUDEL: *WIRD NACHGETRAGEN*

e) REGELUNG ÜBER DIE ZULÄSSIGKEIT VON GEFAHRLICHEN STOFFEN NACH GWK 3059

f) ERSTMUSTER MUSS NACH OPTISCHER BEGUTACHTUNG UND FUNKTIONSBEURTEILUNG IM MONTAGEZUSTAND VON FACHBEREICH GENEHMIGT SEIN

RD 0PA75623 - STRAP-ENG WRG HARN HALTEBAND-MOT KBL S - 001 -

SCALE 2:1
PROJ. No. - - -
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GM
CHANGE RES NO MANUAL
DO NOT
METR

Buyer: \$2.0b US Company - NYSE

1. IP and Wealth

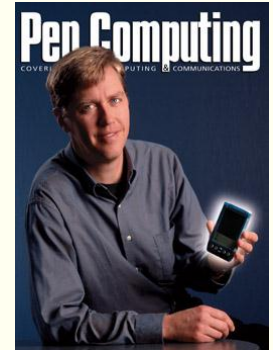
Why to Buy & Sell patents

- Buy patents to:
 - Reinforce Core
 - Avoid litigation
- Sell patents to:
 - Monetization of non-Core
 - Assets sell to get Cash Flow

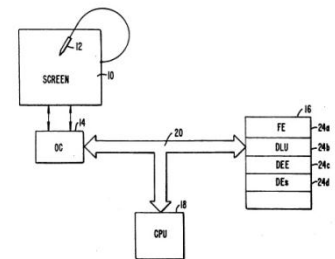
1. IP and Wealth

VC Investors and Patents

- First Thing that VC ask to Entrepreneurs:
 - Where are the patents?
 - How many patents?
 - Are they issued or pending?
 - In which countries?
 - Technology: does it “read on” claims?
 - Patents owned by competitors?
 - Are your patents being infringed (supposedly)?”

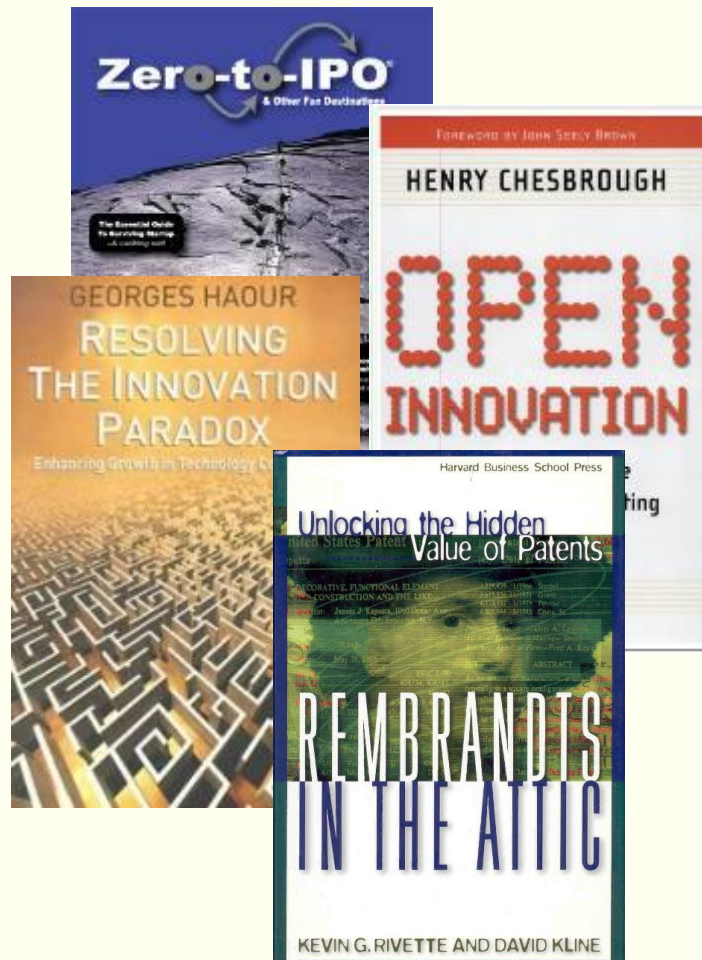


United States Patent		[11] Patent Number:	5,125,039	
Hawkins		[45] Date of Patent:	Jan. 23, 1992	
[56] OBJECT RECOGNITION SYSTEM				
[76] Inventor:	Jeffrey C. Hawkins, 18 W. Summit Ave., Redwood City, Calif. 94062	4,830,026	7/1989 Jung et al.	382/20
		4,837,002	10/1989 Hagan	382/24
		4,837,004	10/1989 Taylor	382/25
		4,832,345	10/1989 Eshel et al.	382/26
[21] Appl. No.:	367,183	Primary Examiner—Michael Razzari		
[22] Filed:	Jan. 16, 1989	Assistant Examiner—Viv Jung		
[23] Int. Cl.	G06K 9/00	[37]	ABSTRACT	
[52] U.S. Cl.	382/26, 382/24, 382/18, 382/14, 34, 14	An object recognition system that includes feature encoding and dictionary look-up procedures that are independent of any particular feature set. The procedures utilize only logical operations and require no multiplications. Only one dictionary entry per object is utilized.		
[54] References Cited		U.S. PATENT DOCUMENTS		
4,461,029	7/1984 Van Blommestein et al.	382/25		
4,461,335	2/1983 Wang et al.	382/24		
		16 Claims, 3 Drawing Sheets		



1. IP and Wealth

Global IP commercialization market:



- It is Big and Growing: In 1990 \$20BN in 2010 >\$500 BN
- Patent alone +\$4BN market. Growing 30%
- 80% of companies stock market value linked to immaterial assets

Some driving forces:

- Outsourced innovation
- Open innovation
- Interoperability
- Financial markets

1. IP and Wealth

Impact of IP on the value of companies

- Ratio of Intellectual Capital to Market Capitalization in US companies grew from 17% in 1975 to 80% in 2005.
- Data from US, Europe, Japan: The more intellectual property a company holds, the higher its market valuation. Examples:
 - Qualcomm - in CDMA
 - Microsoft
 - Xilinx - in FPGA
 - NetLogic Microsystems - in Network Search Engines

1. IP and Wealth

- ***"We can sit by and watch competitors steal our patented inventions, or we can do something about it. We've decided to do something about it"***

Steve Jobs, (Palo Alto, Ca., US 1955 – Palo Alto, Ca., US 2011) - CEO and Founder of Apple.. and one of David's best friends.

1. IP and Wealth

Slideshow Narrated Presentation

"<http://www.svbs.co/Public/SampleLecture/index.aspx>" (Slide 38:4')

2. Espanya / Catalunya

Top-50 US "Patent Holders" a Europa
(Font: USPTO Febrer 2012)

1	29,910	Siemens AG	DE
2	26,027	Philips BV	NL
3	14,875	Bayer AG	DE
4	14,540	Robert Bosch GmbH	DE
5	14,070	BASF AG	DE
6	11,005	Sanofi-Aventis	FR
7	10,128	Thomson CSF	DE
8	10,882	Ericsson	SE
9	9,438	Nokia Corp.	FI
10	8,156	Infineon AG	DE
11	7,462	Alcatel SA	DE
12	6,760	Shell Oil Co.	UK
13	4,750	Schlumberger Techs.	FR
14	4,469	ESPANYA	ES
15	4,081	L'Oreal, S.A.	FR
16	3,795	Henkel	DE
17	3,095	Commisariat E. Atomique	FR
18	3,047	Tyco Healthcare LP	UK
19	2,904	Daimler AG	DE
20	2,540	Institut Français du Pétrole	FR
21	2,267	Merck Patent GmbH	DE
22	2,148	Rolls-Royce PLC	UK
23	2,122	Carl Zeiss SMT AG	CH
24	2,062	SAP AG	DE
25	2,027	Saint Gobain	FR

26	2,004	Voith Paper Patent GmbH	DE
27	1,995	Novartis AG	CH
28	1,847	BMW	DE
29	1,834	Porsche AG	DE
30	1,793	Michelin	FR
31	1,719	Sandoz	CH
32	1,712	Böhringer Ingelheim GmbH	DE
33	1,712	S.N. Moteurs Aviation	FR
34	1,695	Airbus	FR
35	1,580	ELF	FR
36	1,465	Sandvik AB	DK
37	1,464	VOLVO AB	SE
38	1,442	Nestec SA	CH
39	1,309	CATALUNYA	CAT
40	1,308	Unilever Patent Group	NL
41	1,225	Novo Nordisk AS	DK
42	1,202	NXP BV	NL
43	1,180	PIRELLI SpA	IT
44	1,148	Schneider Electric	FR
45	1,110	DSM IP Assets	NL
46	1,104	Astrazeneca AB	SE
47	1,100	Syngenta AG	DE
48	1,058	ZF Friedrichshafen AG	DE
49	1,027	Qimonda AG	DE
50	1,027	Sony Ericsson AB	SE

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9	9,438	Nokia Corp.	FI	34	1,695	Airbus	FR
10	8,156	Infineon AG	DE	35	1,580	ELF	FR
11	7,462	Alcatel SA	DE	36	1,465	Sandvik AB	DK
12	6,760	Shell Oil Co.	UK	37	1,464	VOLVO AB	SE
13	4,750	Schlumberger Techs.	FR	38	1,442	Nestec SA	CH
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24	2,062	SAP AG	DE	49	1,027	Qimonda AG	DE
25	2,027	Saint Gobain	FR	50	1,027	Sony Ericsson AB	SE

2. Espanya/Catalunya

- Patents USA Empreses espanyoles = 4.469
- Patents USA Empreses catalanes = 1.309
- Patents USA Empreses alemanyes = 253.000

- Patents USA inventors espanyols = 9.761
- Patents USA inventors catalans = 4.469
- Patents USA inventors Múnic = 15.000

- MOLTS INVENTORS POCS TITULARS

2. Espanya / Catalunya

The Global Competitiveness Index 2011-2012 rankings

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Country/Economy	GCI 2011-2012		GCI 2010-2011		No. of US Patents	Popul. Mhab	patents/ Mhab	/ES
	Rank	Score	Rank	Change				
Switzerland	1	5.74	1	0	51407	7.87	6532	68
Singapore	2	5.63	3	1	6205	5.2	1193	12
Sweden	3	5.61	2	-1	34769	9.5	3660	38
Finland	4	5.47	7	3	19251	5.4	3565	37
United States	5	5.43	4	-1	582549	313	1861	19
Germany	6	5.41	5	-1	253000	81.8	3093	32
Netherlands	7	5.41	8	1	38532	16.7	2307	24
Denmark	8	5.40	9	1	10075	5.6	1799	19
Japan	9	5.40	6	-3	884879	128	6913	71
United Kingdom	10	5.39	12	2	40280	62.3	647	7
Hong Kong SAR	11	5.36	11	0	8350	7.1	1176	12
Canada	12	5.33	10	-2	60163	34.7	1734	18
Taiwan, China	13	5.26	13	0	83048	23	3611	37
Qatar	14	5.24	17	3	1	1.7	1	0
Belgium	15	5.20	19	4	11257	10.8	1042	11
Norway	16	5.18	14	-2	4823	5	965	10
Saudi Arabia	17	5.17	21	4	437	27.1	16	0
France	18	5.14	15	-3	99474	65.3	1523	16
Austria	19	5.14	18	-1	8898	8.4	1059	11
Australia	20	5.11	16	-4	19405	22.8	851	9
Malaysia	21	5.08	26	5	450	28.3	16	0
Israel	22	5.07	24	2	13971	7.8	1791	19
Spain	36	4.54	42	6	4469	46.2	97	1

2. Espanya/Catalunya

■ Incentius Treballadors – Recercadors

- Molt extés a USA, Clusters Nórdics, Alemanya
 - **“Patent Incentive Program” (PIPs) - “Inventor Reward and Recognition Programs” (IRRPs)**
 - 30% revenue – Stanford (\$100 - \$200m/any)
 - % equity - 100 accions de \$100 per patente
 - Upfront – Adobe : \$1.000 sol·licitut patent
\$3.000 concessió patent
 - Upfront – Starups: \$500 “submission”
\$1.500 sol·licitut patent
\$5.000 concessió patent
 - Mitjana: \$568 “submission”
\$973 sol·licitut patent
\$1.24 concessió patent
- Apple – \$5.000 a tot treballador que figura en una patent

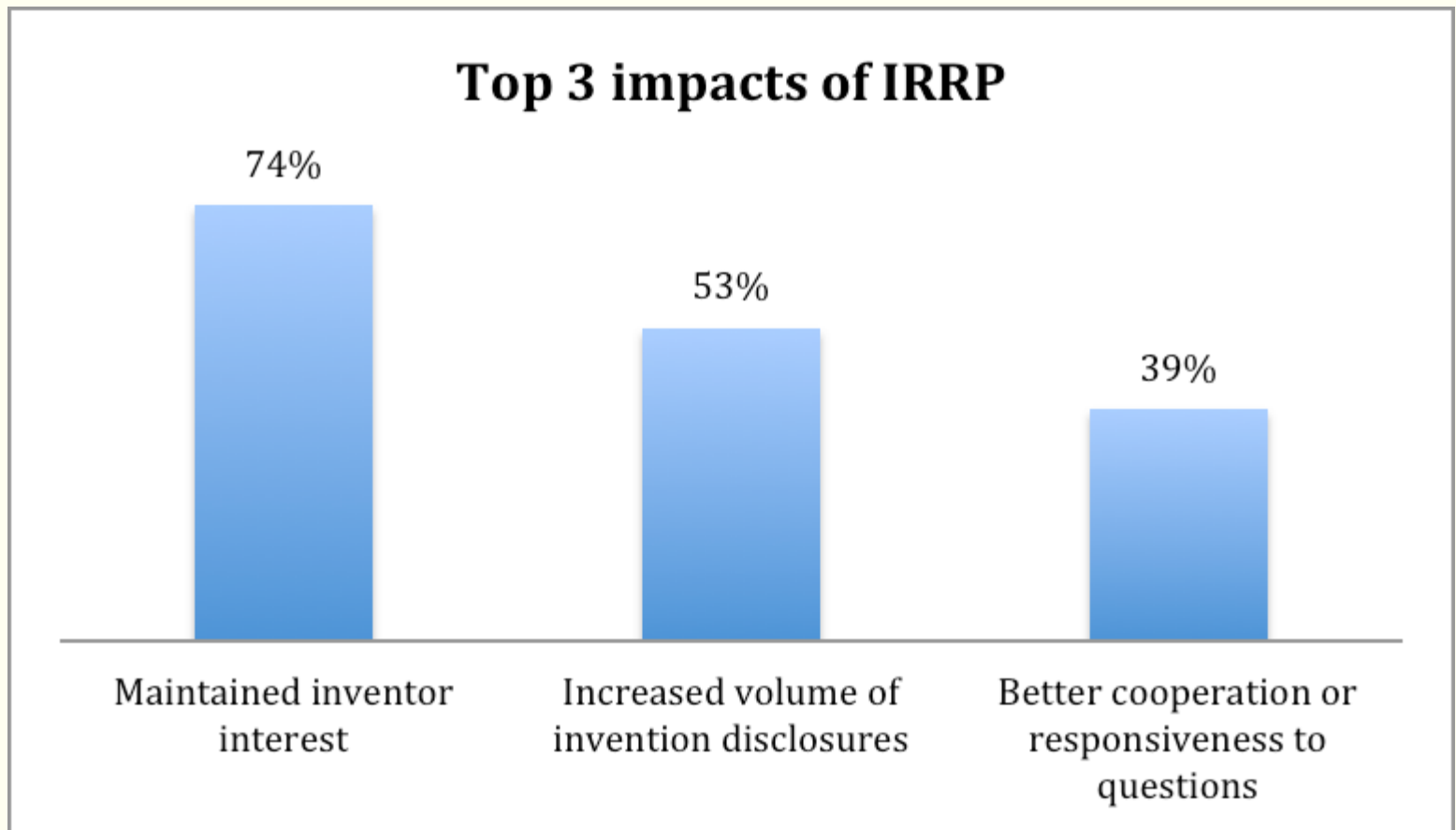
2. Espanya/Catalunya

- **“Patent Incentive Program” (PIPs):**
- • Companies that actively promote their Inventor Reward and Recognition programs had an increase in innovation activity by 58 percent, measured in invention disclosures submitted per engineer.
- • 66 percent of companies indicated that they attributed maintaining inventor interest to the inventor incentive program, 61 percent stated their program's purpose as increasing invention disclosures.

2. Espanya / Catalunya

- • Annual financial awards reported are up to \$15,000; companies that reward inventors based on commercial success can be in excess of \$100,000.
- Google, Apple, IBM Applied Materials, Cargill, Kodak, USG Corp., Pitney Bowes, Caterpillar, Delphi, Motorola, DSM, Nestle, Boston Scientific, Halliburton, Ford, Deere, Sharp, Siemens, Philips
- **CHINA** – Per Llei CPL (2010) Rules 77 – 78: Y3000 (\$500) per patent concedida + 2% beneficis obtinguts explotació invent patentat
- **DE, JP, UK** – No quantifiquen
- **ES** – “El trabajador podrá...”. “Ningú” ho sap

2. Espanya / Catalunya



2. Espanya / Catalunya

- Sistema de Patents de poca qualitat (Es un “**Poorly defined intellectual property rights**” que implica que els líders tenen incentius insuficients per innovar i els seguidors tenen excessiu incentiu per copiar):
 - Patents no s'examinen
 - Poca preparació “managerial” dels agents de patents a Espanya
- Falta de tribunals especialitzats
 - Fins ara: 50 Jutg 1^a Instància a Catalunya
 - **Acord Pilot del CGPJ: Enrique Grande Bustos, Luis Rodríguez Vega y Daniel Irigoyen Fujiwara (1, 4 i 5 de BCN) especialitzats en patents**
- Falta de Plans Estudis a Universitats
- Excés de centralització burocràtica a Madrid

Innovación sí, pero bajo patentes

CARL SHAPIRO RECIBE EL PREMIO ECONOMIST FOR MANAGEMENT LECTURE SERIES

El profesor Carl Shapiro, director del Institute of Business and Economic Research de la University of California at Berkeley, impartió la conferencia "El diseño y el uso de las patentes", en el marco del Foro de Regulación y Competencia, en la sede del IESE en Barcelona, el 18 de abril. El experto destacó la importancia de la innovación como motor del crecimiento económico. En este foro, organizado por el Centro de Investigación Sector Público-Sector Privado del IESE, también se subrayó el hecho de que la innovación genera una ventaja competitiva para la empresa que innova, ayudándola a sobrevivir.

Sin embargo, el profesor Shapiro agregó que las fuentes que generan estas ventajas competitivas son temporales, y aprender a mantenerlas es tan importante como aprender a crearlas.

A continuación, el profesor resaltó que el mejor modo de proteger la innovación es a través de patentes. Éste es el mecanismo legal con que cuenta una empresa para evitar que sus innovaciones sean copiadas por sus rivales, y de esta forma prolongar su ventaja competitiva, que de otro modo sería temporal.

Shapiro recordó el caso de Estados Unidos para visualizar que el sistema de patentes de aquel país presenta algunos inconvenientes que vulneran su efectividad como medio de promover la innovación.

Asimismo, Shapiro aseguró que la calidad es uno de los problemas del sistema de patentes de Estados Unidos. De este modo, el profesor remarcó que si las patentes son fuertes y fáciles de obtener, las empresas encontrarán el modo de aplicarlas y obtenerlas. Esto puede «no suponer más innovación, sino al contrario, originar una lucha que derive en menos innovación», añadió.

Como contrapunto, el ponente se refirió al sistema de patentes europeo (EPO). Para él, los cuatro aspectos en los que el sistema europeo es superior al de Estados Unidos son: el mayor énfasis de la oficina europea en la calidad de patentes, la manera más cautelosa por parte de la UE de otorgar las patentes de software, el sistema de oposición con que cuenta la UE para analizar las patentes concedidas y eliminar otras. Y por último, los derechos de uso que se permiten en Europa si se descubre que alguien ha desarrollado y

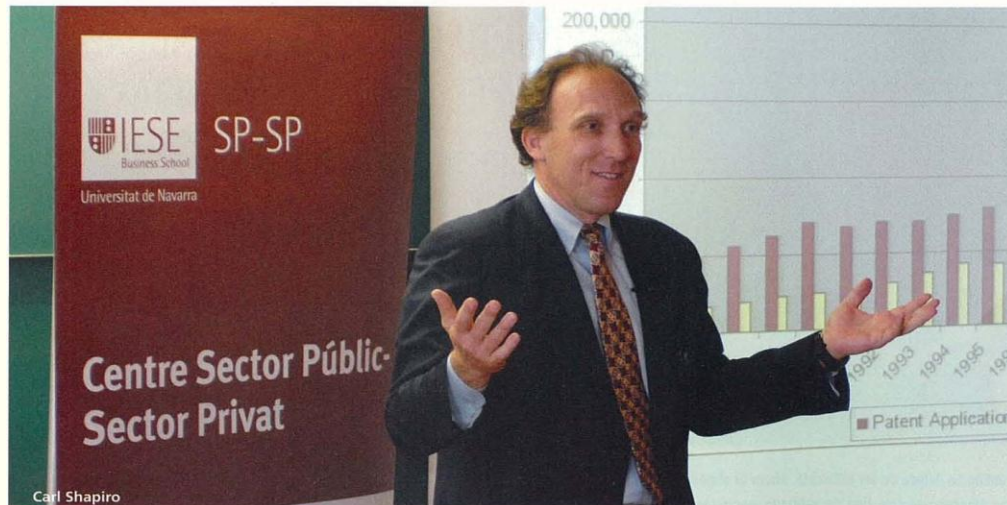
ha utilizado la invención antes de que la patente fuera concedida.

Premio Economist for Management Lecture Series IESE-Fundación BBVA

El profesor Shapiro recibió el Premio Economist for Management Lecture Series, el pasado 17 de abril, en la sede de la **Fundación BBVA** de Madrid. Este galardón, cuyo organizador y director académico es el profesor del IESE Joan Enric Ricart, reconoce la labor investigadora de un experto internacional en el área de economía cuya contribución al ámbito empresarial haya sido especialmente significativa. Con motivo de la entrega de este premio, al economista, cuyas investigaciones actuales pasan por la economía *antitrust*, la propiedad intelectual y la concesión de patentes, le será publicada esta conferencia sobre "El diseño y el uso de patentes" por la editorial Cambridge University Press.

¿Restringir Internet?

Por otra parte, el 24 de mayo, en otra sesión del Foro de Regulación y Competencia del Centro Sector Público-Sector Privado, participó Michael Katz, director del



Carl Shapiro

Final Thought

- “La innovació és el que diferencia un líder d’un seguidor” (S. Jobs).
- Aquestes paraules mai no han sigut més certes que avui. La creació, el descobriment, la imaginació, la invenció són les accions que separaran les companyies que esdevindran obsoletes en els propers anys, d’aquelles que lideraran l’avui i el demà. Els nous mercats no poden comptar solament en generar valor; les economies d’escala que garanteixen i augmenten el guany i la influencia de les organitzacions han de venir també de les idees, les millors idees.
- Llavors, aquestes organitzacions com troven aquestes millors idees enmig de la boira? Com promocionen aquesta generació d’idees? I, en general, com creen cultures d’innovació? Aquestes cultures innovatives no es creen per accident. Sorgeixen del capital intel·lectual que atesora la organització, i aquest a de sortir de la boira a la llum amb incentius justos, raonables, pactats i entesos per tothom.

THANK YOU!

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