

QUELLO CHE I BREVETTI NON DICONO

**UNA PANORAMICA
DI FONTI PER
ARRICCHIRE
I DATI DI BREVETTO**



About the speaker

- ◉ Background in Management Engineering @ Politecnico of Milan
- ◉ Database Architect @ **Icrios** since 2002
- ◉ Project manager for data production in **EU Projects** STI-NET, TENIA, AEGIS and EU Tenders ICT network impact, INNOVA, Highly Cited Patents, Measurement and analysis of knowledge and R&D exploitation flows, assessed by patent and licensing data
- ◉ Co-Founder ipQuants.com
- ◉ **Collaborations** on database projects with: MIT, LSE, Danish Board of Technology, Bonn Graduate School of Economic, Universität Mainz, BETA ...
- ◉ Redactor of blog rawpatentdata.blogspot.com

Informazione dal brevetto

Phase	When	Information disclosed
Patent application	Filing date	Some metadata
Patent application – published	18 months after the filing date	Full text and metadata
Granted patent	2 years or more after the filing date	Amended full text and revised metadata
Expired or ceased patent	20 years after the filing date (or before in case of unpaid fees)	Amended full text and revised metadata

Bonino, Dario, Alberto Ciaramella, and Fulvio Corno. "Review of the state-of-the-art in patent information and forthcoming evolutions in intelligent patent informatics." *World Patent Information* 32.1 (2010): 30-38.

Information Providers

Information sources	Information provided	Degree of interest
Free portals of national or regional patent offices	Patent text and metadata	Always of interest, even in combination with complementary portals
Vendor-provided patent databases	Patent text and metadata	Business critical decisions
Vendor-provided extended content of patent information	Patent mutual citations, patent augmented abstracts	Useful
Patent legal databases	Patent legal status and events (e.g., litigations)	Always significant
Scientific literature portals	Scientific papers	For identifying the scientific background
Business databases	Company data and affiliations	For integrating the business background information
News	Business news	For integrating the business background information
Internet	Company portals, sector portals	For low cost identification of the scientific or business background
Web 2.0 solutions	Wiki and blogs for patents	Also for supporting the cooperative work

Le 5 W applicate ai dati

- ◉ Who? («Chi?»)
- ◉ When? («Quando?»)
- ◉ Where? («Dove?»)
- ◉ What? («Cosa?»)
- ◉ Why? («Perché?»)

Who: companies

(19) United States	
(12) Patent Application Publication	(10) Pub. No.: US 2011/0316851 A1
Pettigrew et al.	(43) Pub. Date: Dec. 29, 2011
<hr/>	
(54) 3D HISTOGRAM FOR COLOR IMAGES	Publication Classification
(75) Inventors: Daniel Pettigrew, Pacific Palisades, CA (US); Jean-Pierre Mouilleseaux, Venice, CA (US); Dan Candela, Santa Monica, CA (US)	(51) Int. Cl. G09G 5/02 (2006.01)
(73) Assignee: Apple Inc., a Delaware corporation	
(21) Appl. No.: 13/227,282	
(22) Filed: Sep. 7, 2011	
Related U.S. Application Data	
(63) Continuation of application No. 11/408,741, filed on Apr. 21, 2006, now Pat. No. 8,022,964.	

(19) United States	
(12) Patent Application Publication	(10) Pub. No.: US 2010/0053391 A1
HUANG	(43) Pub. Date: Mar. 4, 2010
<hr/>	
(54) MINIATURIZED IMAGE CAPTURING DEVICE AND METHOD FOR ASSEMBLING THE SAME	Publication Classification
(75) Inventor: Tzai-Kun HUANG, Taipei City (TW)	(51) Int. Cl. H04N 5/335 (2006.01) H04N 5/225 (2006.01) B23P 11/00 (2006.01)
Correspondence Address: ROGER H. CHU 19499 ERIC DRIVE SARATOGA, CA 95070 (US)	
(73) Assignee: APPLE CREATIVE PRODUCTS, INC. (TAIWAN), Taipei (TW)	(52) U.S. CL. 348/294; 29/505; 348/E05.001; 348/340; 348/E05.002
(21) Appl. No.: 12/547,673	(57) ABSTRACT
(22) Filed: Aug. 26, 2009	A miniaturized image capturing device comprises: a base, which has a first open and a second open; at least one light source, which is disposed on a first PCB and around periphery of the first open; at least one lens, which is accommodated in the lens base and close to the first open; a holder, which is accommodated in the lens base for holding the lens; at least one image sensor, which is accommodated

Chi dei due è Apple ?

- nome simile, sede diversa, area tecnologica compatibile

Who: companies (II)

◉ Conoscere:

- Identità
 - Dimensione
 - Struttura di gruppo
 - ...
-
- Match con database di terze parti

Triadic match orbis – TM – patents

[...] the register databases of the EUIPO, the EPO and the CPVO were matched with the commercial database ORBIS.

The resulting matched database contains data on approximately 240,000 companies, including the number of EU trademarks, registered Community designs, patents and CPVRs applied for by each company and subsequently granted, along with the industry classification and various financial and economic variables for each one, providing a set of data that can be used in future, more detailed studies [...]



Orbis provides unique identifiers, Company information and summaries, including incorporation date for over 200M private companies.

Database off line: NBER

<https://sites.google.com/site/patentdataproject/Home>



Contiene i dati completi di brevetto per USPTO ed un match con i dati di COMPUSTAT; 11 tabelle in formato STATA o ASCII

Vantaggi:

Risorsa Gratuita

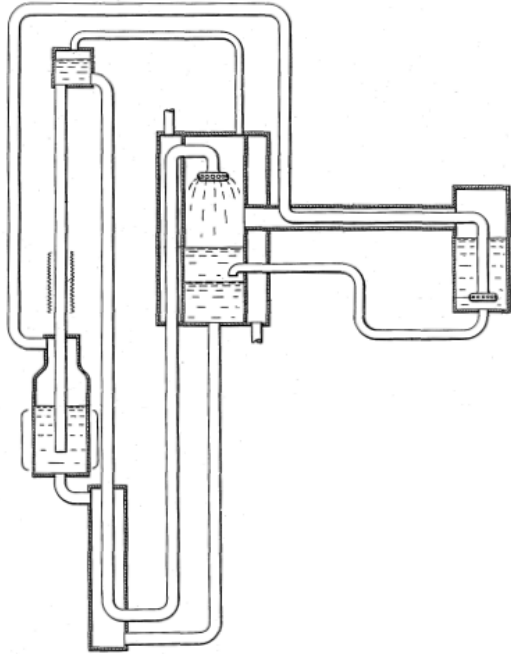
Dati standardizzati e collegati a COMPUSTAT

Svantaggi:

Solo USPTO

Aggiornamento non costante dei dati

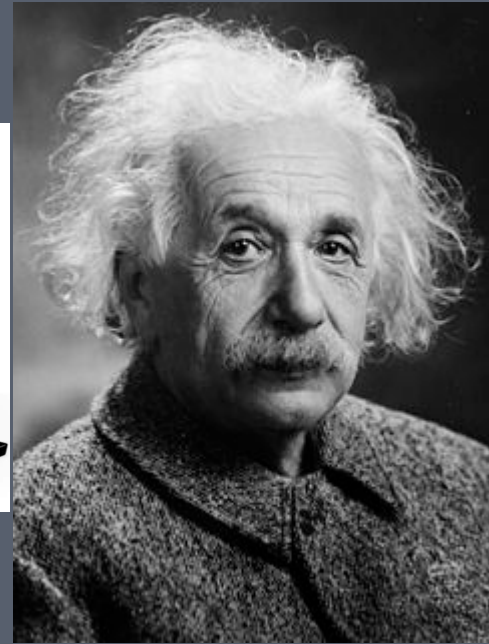
WHO: Inventori



Einstein Refrigerator

Patent number US1781541 -- November 11, 1930

*Albert Einstein
Leo Szilard*



WHO: Inventori (II)

- Mobility studies
- Recruiting
- ...
- Una risorsa di match è LINKEDIN
- “career histories based on patents are less than 70 percent accurate, while histories based on LinkedIn are at least 90 percent accurate.”
- Ge, Chunmian, Ke-Wei Huang, and Ivan PL Png.
"Engineer/scientist careers: Patents, online profiles, and misclassification bias." *Strategic Management Journal* 37.1 (2016): 232-253.

Integrazione con dati linkedin

- ◉ Titolo di studio
- ◉ Carriera
- ◉ Brevetti / pubblicazioni
- ◉ Skill / formazione
- ◉ Disambiguazione nomi

Due progetti github per LinkedIn

- ◎ <https://github.com/hexgnu/linkedin>
 - Ruby wrapper for the [LinkedIn API](#). The LinkedIn gem provides an easy-to-use wrapper for LinkedIn's REST APIs.
- ◎ <https://github.com/yatish27/linkedin-scraper>
 - LinkedIn-scraper is a gem for scraping linkedin public profiles. Given the URL of the profile, it gets the name, country, title, area, current companies, past companies, organizations, skills, groups, etc

APE-INV - <http://www.esf-ape-inv.eu/>

- Ape inv è un progetto realizzato con fondi ESF per realizzare una disambiguazione dei dati degli inventori accademici



The screenshot shows the homepage of the APE-INV project website. The header features the European Science Foundation logo on the left, the text 'Research Networking Programmes (RNPs) Social Sciences' in the center, and the title 'Academic Patenting in Europe (APE-INV)' on the right, accompanied by the logo of the University of Commerce Luigi Bocconi. A navigation bar below the header contains links for 'home', 'news', 'steering committee', 'database', 'contacts', and 'credit'. The main content area is divided into a left sidebar and a right main section. The sidebar lists various categories: 'About us' (with sub-links for Background, Objectives, and Activities), 'Participants', 'Publications', 'Grants for visits and exchanges', 'Workshops and Conferences', 'Name Game Algorithm Challenge & Tools', 'Useful links', and 'APE-INV on Facebook'. The main section is titled 'database' and lists three items: '1. EP-INV (disambiguated inventor data)', '2. BENCHMARK DATASETS', and '3. Academic Patents'. Below these, there is a section for '1. EP-INV (disambiguated inventor data)' which provides a detailed description of the dataset, its compatibility with PATSTAT, and instructions on how to access it, including a link to the terms and conditions and a contact email address.

EUROPEAN SCIENCE FOUNDATION
SETTING SCIENCE AGENDAS FOR EUROPE

Research Networking Programmes (RNPs)
Social Sciences

Academic Patenting in Europe (APE-INV)

Università Commerciale Luigi Bocconi

home news steering committee database contacts credit

About us
Background ■
Objectives ■
Activities ■

Participants

Publications

Grants for visits and exchanges

Workshops and Conferences

Name Game Algorithm Challenge & Tools

Useful links

APE-INV on Facebook

database

1. **EP-INV (disambiguated inventor data)**
2. **BENCHMARK DATASETS**
3. **Academic Patents**

* * *

1. EP-INV (disambiguated inventor data)
Complete inventor dataset for EPO patents, for name-matching to academics' names and/or network analysis, geographic analysis etc. Fully compatible with PATSTAT
--> To access EP-INV read the [terms and conditions](#), then fill the data access form ([click here](#)) and send it to francesco.lissoni@u-bordeaux.fr
--> Technical documentation: [click here](#) to download
--> Extra information: conversion tool [PERSON_ID,CODINV2 table](#) (patstat version 2010/09 see technical documentation for details)
--> Extra information: conversion tool [PERSON_ID,CODINV2 table](#) (patstat version 2011/09 temporary table, it will be soon!!!)

Una risorsa per processare dati di brevetto

Release from Fung inst. Berkeley

<https://github.com/funginstitute/patentprocessor>

A collection of scripts performs pre- and post-processing on patent data as part of the patent inventor disambiguation process. Raw patent data is obtained from [Google Bulk Patent Download](#).

When

- Catturare il momento dell'innovazione attraverso la letteratura scientifica
- Individuare prior art / disclosures (opposition)
- Lens.org → risorsa che normalizza la NPL
- ORCID → progetto per dare un id univoco agli autori

When (II) lens.org

◎ <https://www.lens.org/lens/search?q=nanopipes> -

◎ Link ad
articoli
Scientifici
(DOI)

Cited Articles (CR)	Nanoneedles
<input type="checkbox"/> Raghothamachar Balaji et al. (2002) (16) "Synchrotron white beam topography characterization of physical vapor transport grown AlN and ammonothermal GaN" Journal of Crystal Growth 246 :271-280.	<input checked="" type="checkbox"/> Published: Jul 22, 2010 Family: 1 Cited: 2 Info: Applicant: Imp Innovations Ltd, Thanou Maya, Whitby Max, Quirke Nick
<input type="checkbox"/> Kordis J. (1964) "The BeO — MgO system" Journal of Nuclear Materials 14 :322-325.	<input type="checkbox"/> Reducing Or Eliminating Nanopipe Defects In Iii-nitride Structures
<input type="checkbox"/> Balkaş Cengiz M. et al. (1997) (12) "Sublimation growth and characterization of bulk aluminum nitride single crystals" Journal of Crystal Growth 179 :363-370.	<input checked="" type="checkbox"/> Published: Oct 20, 2016 Family: 9 Cited: 0 Info: Applicant: Koninklijke Philips Nv
<input type="checkbox"/> Arulkumaran S. et al. (2002) (12) "Improved dc characteristics of AlGaIn/GaN high-electron-mobility transistors on AlN/sapphire templates" Applied Physics Letters 81 :1131.	<input type="checkbox"/> Carbon Nanopipes And Ductwork With Nanometric Walls And Methods Of Making The Same
<input type="checkbox"/> Chitnis A. et al. (2003) "Milliwatt power AlGaIn quantum well deep ultraviolet light emitting diodes" physica status solidi (a) 200 :99-101.	<input checked="" type="checkbox"/> Published: Apr 28, 2015 Family: 5 Cited: 0 Info: Owner: The Government Of The United States Of America As Represented By The Secretary Of The Navy
<input type="checkbox"/> Gorbатов A. G., Kamyshov V. M. (1970) "Electrical conductivity of materials from mixed aluminum and silicon nitrides" Powder Metall Met Ceram 9 :917-920.	<input type="checkbox"/> Carbon Nanopipes And Ductwork With Nanometric Walls And Methods Of Making The Same
<input type="checkbox"/> Dugger Cortland O. (1974) "The synthesis of aluminum nitride single	<input checked="" type="checkbox"/> Published: May 9, 2013 Family: 5 Cited: 0 Info: Owner: The Government Of The United States Of America As Represented By The Secretary Of The Navy
	<input type="checkbox"/> Nanotransfer And Nanoreplication Using Deterministically Grown Sacrificial Nanotemplates
	<input checked="" type="checkbox"/> Published: Aug 23, 2011 Family: 8 Cited: 0 Info: Applicant: Ut Battelle Llc
	<input type="checkbox"/> Carbon Nanopipes And Ductwork With Nanometric Walls And Methods Of Making The Same

When (III) ORCID API

● ORCID (www.orcid.org) API

Scope	Request	Description
	/orcid-profile	returns data from the entire record
	/orcid-bio	returns data from the biographical section of the record
/read-limited	/orcid-works	returns research works data
	/funding	returns funding data
	/affiliations	returns affiliations data

Comparing the ORCID APIs

	Public API	Basic Member API	Premium Member API
READING ORCID DATA			
Get authenticated ORCID iD	✓	✓	✓
Search/retrieve public data ORCID iDs & data made public by iD holders	✓	✓	✓
Search/retrieve member-subscriber data Subject to permissions granted by iD holders		✓	✓
Update notifications (webhooks) API-based notifications when changes happen on ORCID iDs that you are watching			✓

Vedi anche <https://groups.google.com/forum/#!forum/orcid-api-users>

Where

- I dati di brevetto spesso non contengono un'informazione geografica utilizzabile (missing / molto sporca / bias temporale).
- Oecd Regpat **domande di brevetto EPO e PCT legate a più di 5 500 regioni utilizzando gli indirizzi di inventori / applicant**

Altri DB OECD

- ◉ L'OCSE ha sviluppato 4 diversi set di dati sui brevetti, disponibili senza costo scrivendo a: sti.contact@oecd.org.
 - HAN (“Harmonised Applicants’ Names”) fornisce un dizionario di nomi applicant elaborati con i dati del registro imprese, in modo che possa facilmente essere utilizzati da tutti gli utenti. I Per EPO e PCT.
 - Famiglie triadiche: l’insieme di brevetti depositati presso EPO, JPO e concessi da USPTO che condividono una o più priorità.
 - Database di Citazioni : citazioni di brevetti pubblicati dall'EPO e WIPO (PCT).
- ◉ Tutti i DB si legano facilmente a Patstat (alcuni dati sono già integrati) ma sono collegabili anche ad altri database

What

<http://db.crios.unibocconi.it>

+ Accesso libero;

+ Consente di scaricare dati in CSV per 18 tipi di reports;

+ Dati ripuliti e riclassificati; dati geografici disponibili;

Home

Report 1a
Patent count by inventor country / year

Report 1b
Patent count by applicant country / year

Report 2a
Patent count by inventor region / year

Report 2b
Patent count by applicant region / year

Report 3a
Patent count by inventor nuts3 / year


Report 3b
Patent count by applicant nuts3 / year

Report 4
Patent count by applicant name / year

Report 5a
Patent count by main IPC - first 4 digits

Report 5b
Patent count by main IPC class reclassified on OST30

Report 6a



CRIOS
Center for Research on Innovation, Organization and Strategy

Contacts

PATSTAT-CRIOS database.

PATSTAT (i.e. EPO Worldwide *PATent STATistical* Database) is a single patent statistics raw database, held by the European Patent Office (EPO) and developed in cooperation with the World Intellectual Property Organisation (WIPO), the OECD and Eurostat. PATSTAT provides raw patent data coming from around 90 patent offices worldwide, including of course the most important and largest ones such as the European Patent Office (EPO) and the United States Patent and Trademark Office (USPTO).

The data set includes the full set of bibliographic variables concerning each patent application, in particular:

- Priority, application, and publication number and dates
- Title and abstract
- Designated states for protection
- Status of application
- Main and secondary *International Patent Classification* (IPC) codes
- Applicant's name and address
- Inventors' names and addresses
- References (citations) to prior-art patents and to non-patent literature

What

PIUG WIKI <http://wiki.piug.org/display/PIUG/Patent+Resources>

Elenco
di risorse
online
sul mondo
dei brevetti

Topic
Patent Databases Table of Contents Multi-national patent databases AmberScope http://www.amberscope.com/ - Interactive visualization of citation connections between US, WO, EP, JP and other patents. Filters to suggest similar and important patents to a known patent. Intel
Patent Blogs, Feeds & Forums All are welcome to add and edit entries directly. Please add useful, brief descriptions as appropriate. Table of Contents Patent Blogs & Feeds Becker North Patent Damages Blog - http://blog.beckernorth.com/ http://blog.beckernorth.com/ 271 Patent Blog - h
World Patent Information journal World Patent Information journal 01722190_00320002_cov150h.gif ISSN: 0172-2190 Imprint: ELSEVIER World Patent Information journal has been published regularly since 1978 and is now issued four times a year. At its core are peer-reviewed articles on topics
Patent Analysis, Mapping, and Visualization Tools This page was created to encourage PIUG wiki participation in sharing knowledge about various tools and techniques relating to patent analysis, mapping, and visualization. The entries are in alphabetical order and are maintained in the brief style of othe
Patent Law Resources US USPTO Manual of Patent Examining Procedure (MPEP) http://www.uspto.gov/web/offices/pac/mpep/ Title 35 US Code http://ipmall.info/hosted_resources/lipa/patents/Title_35.pdf - Patents Title 37 Code of Federal Regulations (CFR) http://www.copyright.gov/ti
China Native Patent Databases There are many websites that can search Chinese patents: (2014-05-03) China patent office has released a new patent search system in 2011, which is Patent Search and Service System of SIPO (PSSS): http://www.pss-system.gov.cn http://www.pss-system.gov.cn/
Patent Classification Systems The Cooperative Patent Classification (CPC) http://www.cooperativepatentclassification.org , is developed by a joint partnership between the USPTO and the EPO. CPC would be used EPO and USPTO from Jan. 1, 2013, replacing ECLA and USPTO classifications. T
Patent News Sources Independent News Sources IPO DAILY NEWS http://www.ipo.org/AM/Template.cfm?Section=This_Weeks_Daily_News - available online and e-mailed to Intellectual Property Owners (IPO) members Monday through Friday. It includes a mix of brief items on lawsuits, leg
Patent FAQ Sites Contents Patent Office Sites University Sites Association Sites Law Firm Sites Other Sites Glossaries Patent Office Sites General Information Concerning Patents http://www.uspto.gov/web/offices/pac/doc/general/ - compiled by the United States Patent and T

Conclusioni (I)...

- I dati di brevetto per se spesso non contengono un'informazione completa
- Esistono numerose risorse che arricchiscono questi dati
- Sempre più queste risorse sono messe a disposizione gratuitamente o a basso costo di acquisizione
- Vanno considerati i costi 'nascosti' di integrazione (IT/DBM)
- Possibilità ridurre costi legandosi alla ricerca accademica (PhD, Tesi...)

Conclusioni (II)...

^{i brevetti}
Quello che ~~le donne~~ non dicono
è niente rispetto a quello che
gli uomini non capiscono.



Q & A

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