

Use of patent, utility models and industrial design

Kazuyuki Motohashi

Department of Technology Management for
Innovation (TMI) University of Tokyo
& Research Institute of Economy, Trade and
Industry (RIETI)

<http://www.mo.t.u-tokyo.ac.jp/>

Overview

(For private firms and other IP holders)

- Defensive use
 - What if your product is infringing other's patent? (in a case of WIPO IP panorama)
 - Prior patent search is needed for R&D project (All patent documents are published in 18 month after application. except for US)
- Proactive use
 - Technology mapping (patent map) and competitive analysis
 - Economic analysis based on patent information (such as creating patent quality index)

(For public agency: patent office and other agencies)

- IP system planning: patent system and utility models (demand forecasting, patent fees or more fundamental changes in IP systems)
- Science, Technology and Innovation Policy: Importance of evidence based policy making



US006871616B2

(12) **United States Patent**
Zhadan-Milligan et al.

(10) **Patent No.:** **US 6,871,616 B2**
(45) **Date of Patent:** **Mar. 29, 2005**

(54) **PET UMBRELLA AND COMBINED PET LEASH AND UMBRELLA**

(76) Inventors: **Irina Zhadan-Milligan**, P.O. Box 6412, New York, NY (US) 10150; **Yuri Zhadan**, P.O. Box 6412, New York, NY (US) 10150

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **10/782,942**

(22) Filed: **Feb. 23, 2004**

(65) **Prior Publication Data**

US 2004/0200437 A1 Oct. 14, 2004

Related U.S. Application Data

(60) Provisional application No. 60/449,451, filed on Feb. 24, 2003.

(51) **Int. Cl.⁷** **A01K 27/00**

(52) **U.S. Cl.** **119/795; 119/769; 135/16**

(58) **Field of Search** **119/795, 850, 119/769; 135/16, 20.1; D30/153, 151; 248/514**

(56) **References Cited**

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4,537,339 A 8/1985 Pearson 224/188

D324,117 S 2/1992 Antoine D30/144
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Primary Examiner—Teri P. Luu

Assistant Examiner—Kimberly S Smith

(74) *Attorney, Agent, or Firm*—Nixon & Vanderhyc

(57) **ABSTRACT**

A pet umbrella combines an umbrella and a leash. The umbrella includes a shaft carrying a canopy moveable between open and closed positions. In the open position, the convex side of the canopy faces the umbrella handle. A leash is secured to the opposite end of the shaft on the concave side of the canopy. The canopy is preferably oval in plan and formed of clear plastic see-through material. The major axis of the oval defined by the canopy forms a plane with the shaft whereby the shaft forms an included angle in the plane with the shaft of less than 90° and preferably about 30°–60°.

18 Claims, 5 Drawing Sheets

Patent Information Sources

Official Patent Offices

- WIPO: PATENTSCOPE (for PCT applications):
<http://www.wipo.int/pctdb/en/search-adv.jsp>
- EPO: esp@snet: <http://ep.espacenet.com/>
- JPO: IPDL: <http://www.inpit.go.jp/ipdl/service/>
- SIPO: http://www.sipo.gov.cn/sipo_English/

Other sources

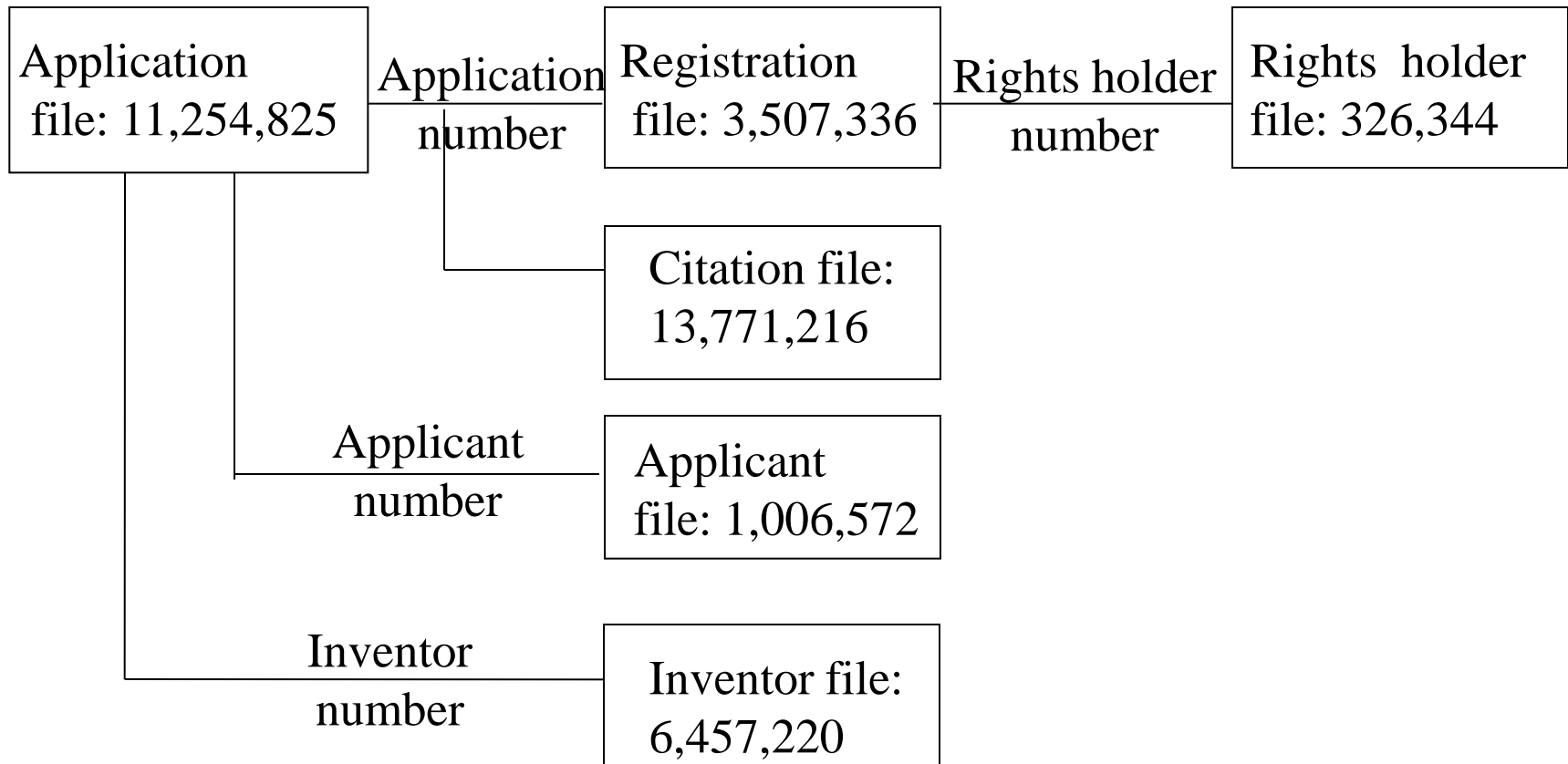
- Patent Databases (for academic researchers):
PATSTAT, NBER Patent Database, IIP-Patent Database etc.
- Private data sources: Derwent-Thomson etc.

IIP Patent Database for Japan

- ◆ Original Data Source; JPO Seiri hyojunka Data (publicly available version of JPO examiner's patent information system: embedded text data)
 - Patent
 - Utility models
 - Trademark
 - Industrial design
- ◆ Available at IIP website
<http://www.iip.or.jp/e/index.html>
- ◆ All patents published until September 2009.

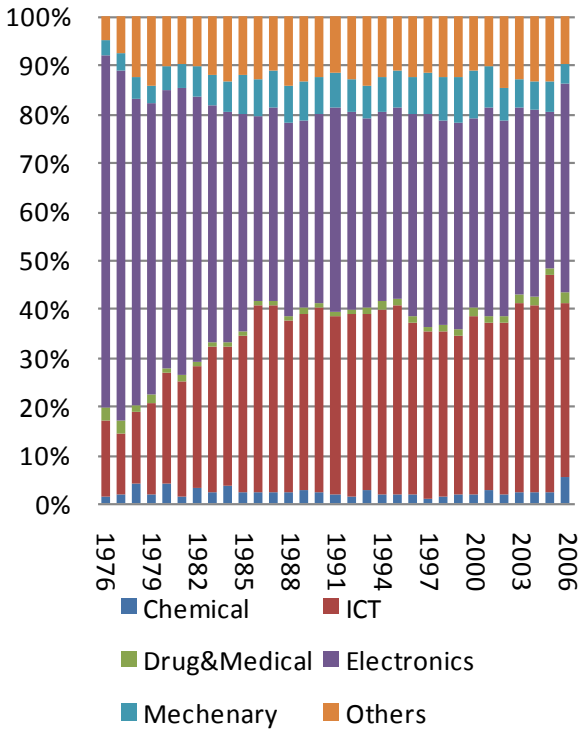
IIP Patent Dataset Structure

- IIP Patent Database (<http://www.iip.or.jp/patentdb/index.html>)
- Up to 2009 September publication data are available
- NBER Patent Data like public database using JPO patent publication information

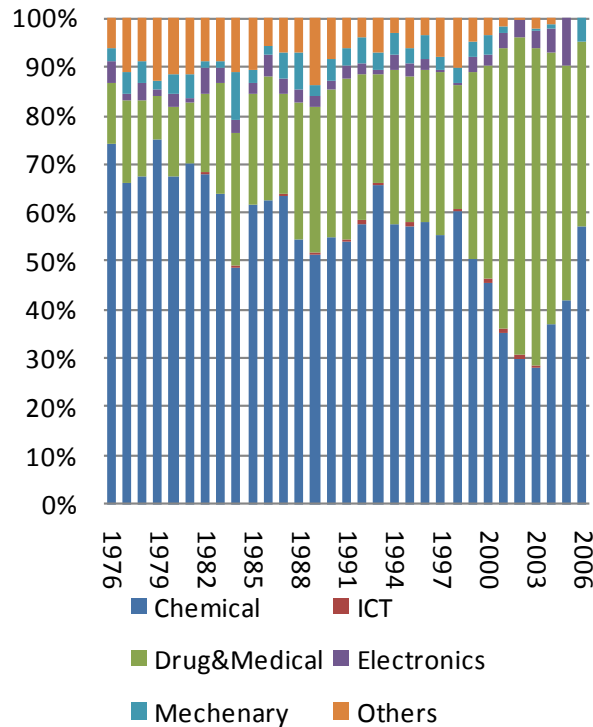


Changes in technology Portfolio

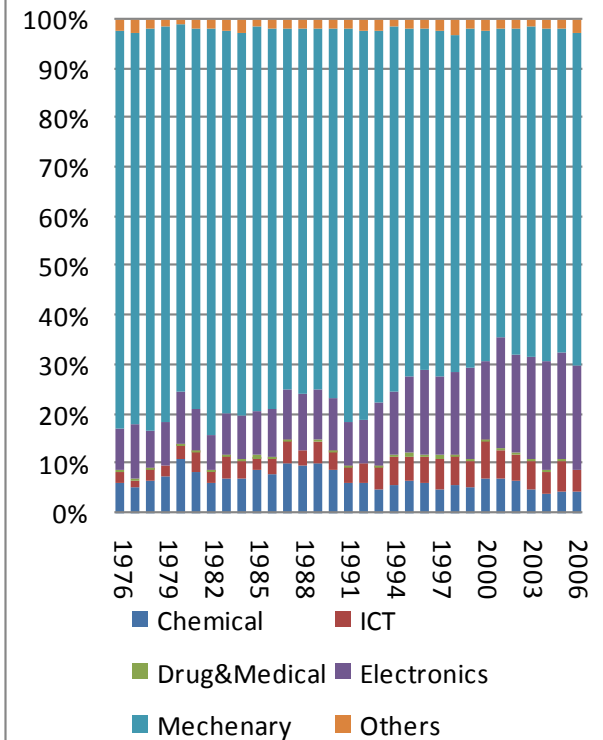
CANNON



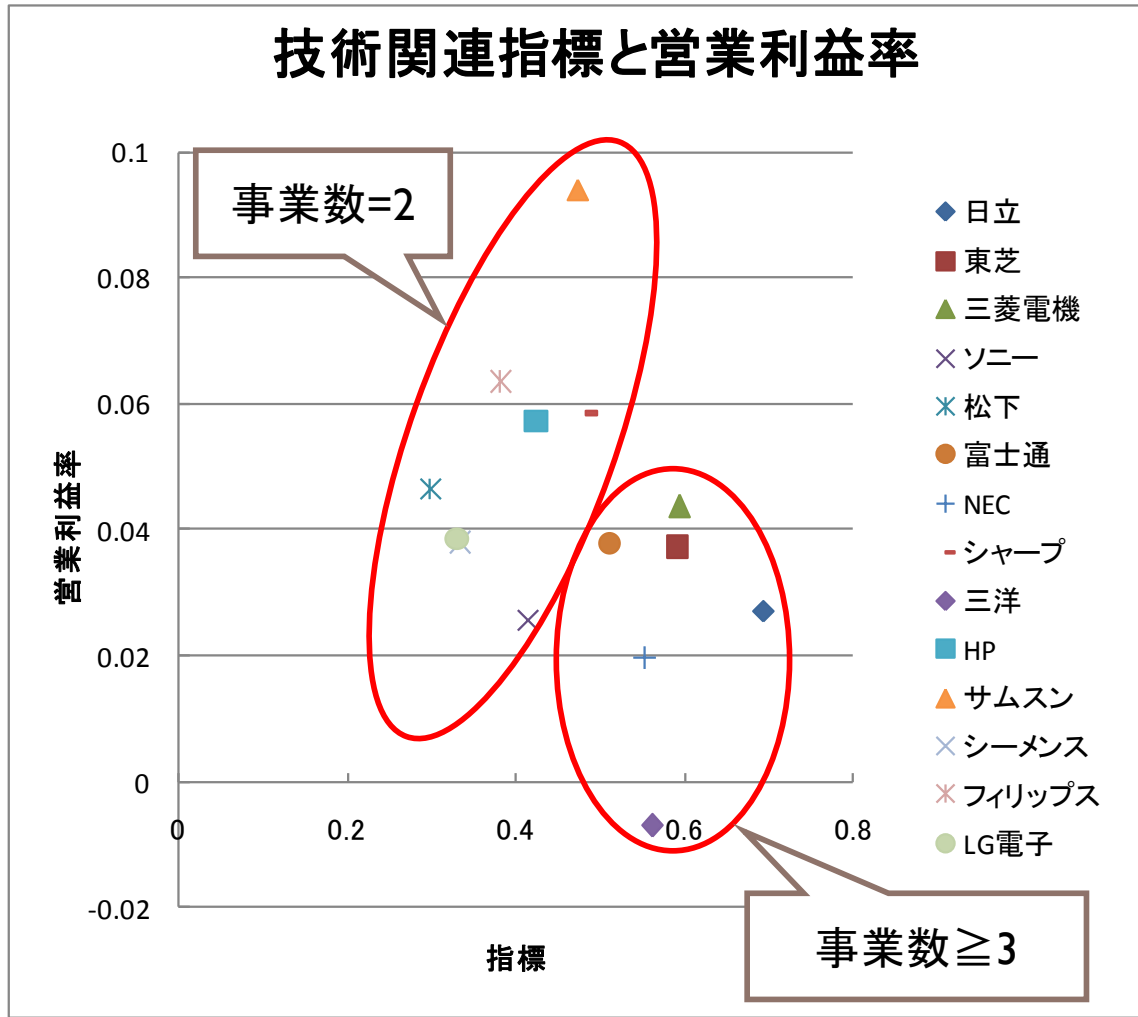
TAKEDA Pharma



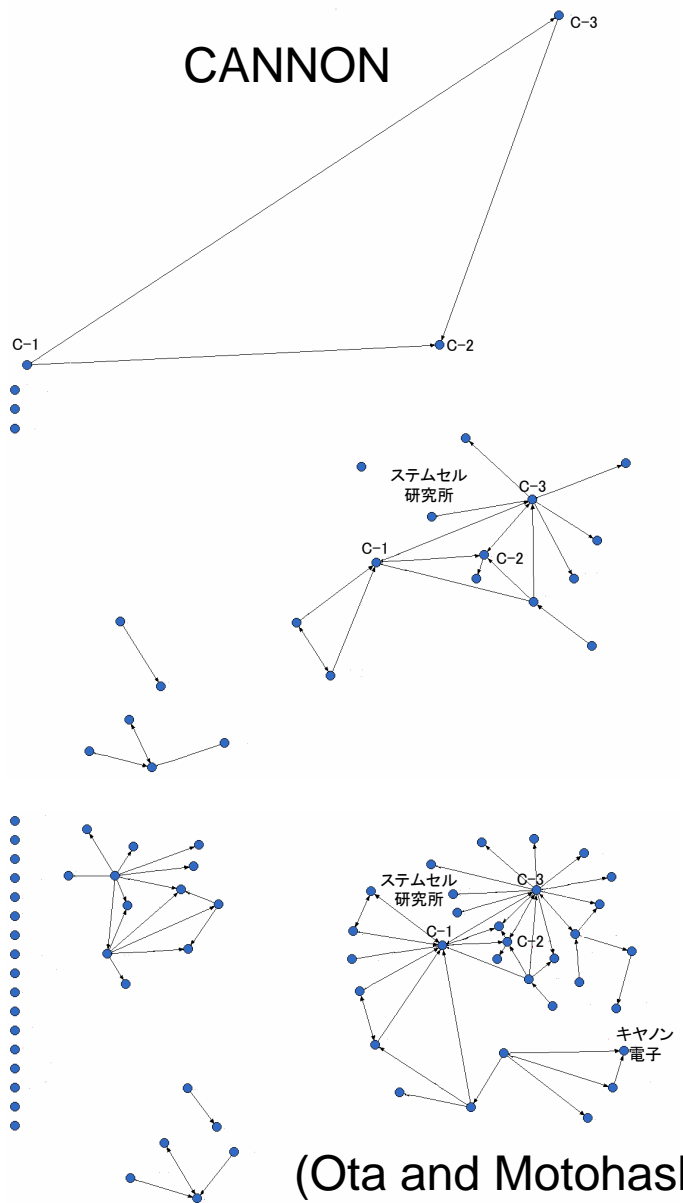
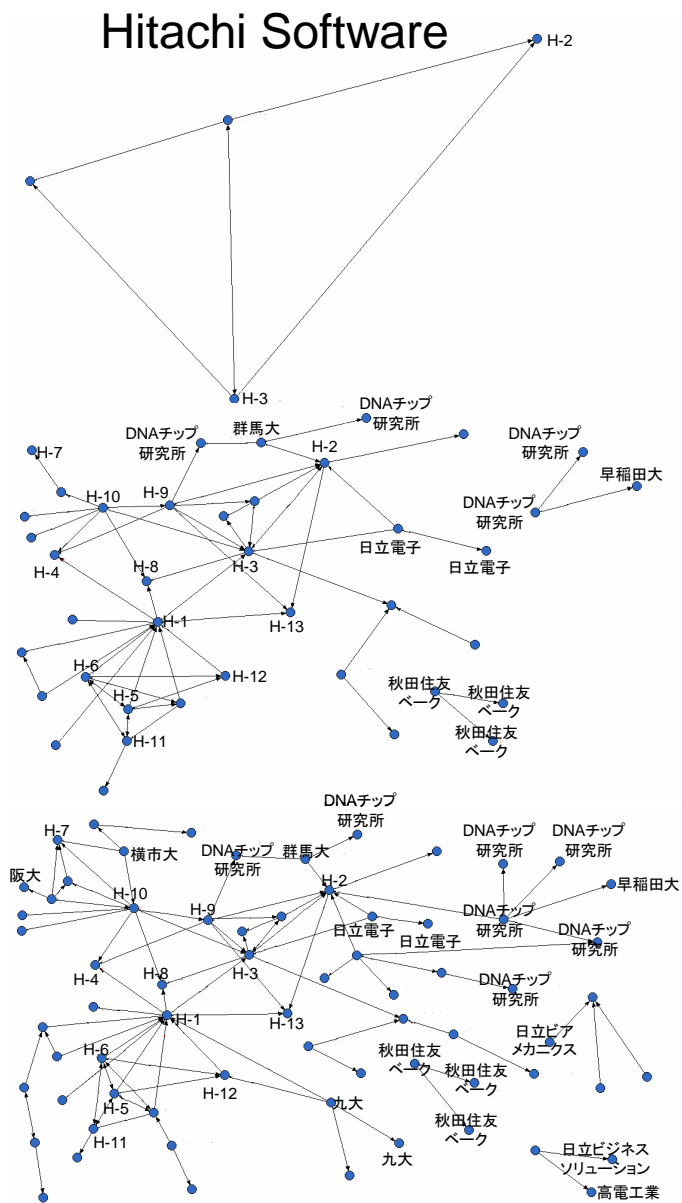
TOYOTA Motors



Technology Portfolio and Performance (Electronics firms)

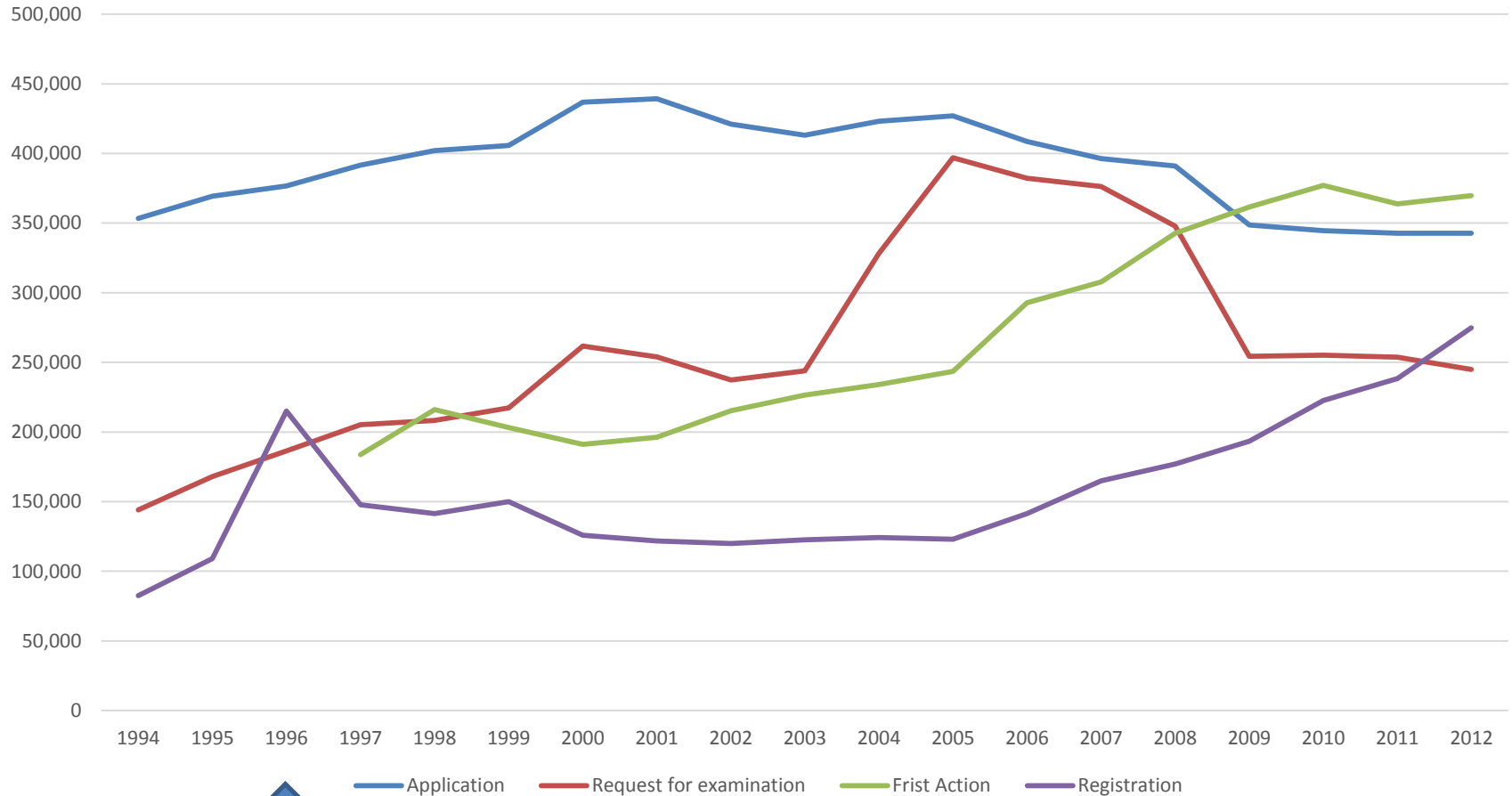


Organization of research team by inventor information



Patent statistics and policy

JPO Patent Statistics



Post Grant Opposition



Request for exam (7->3 years)



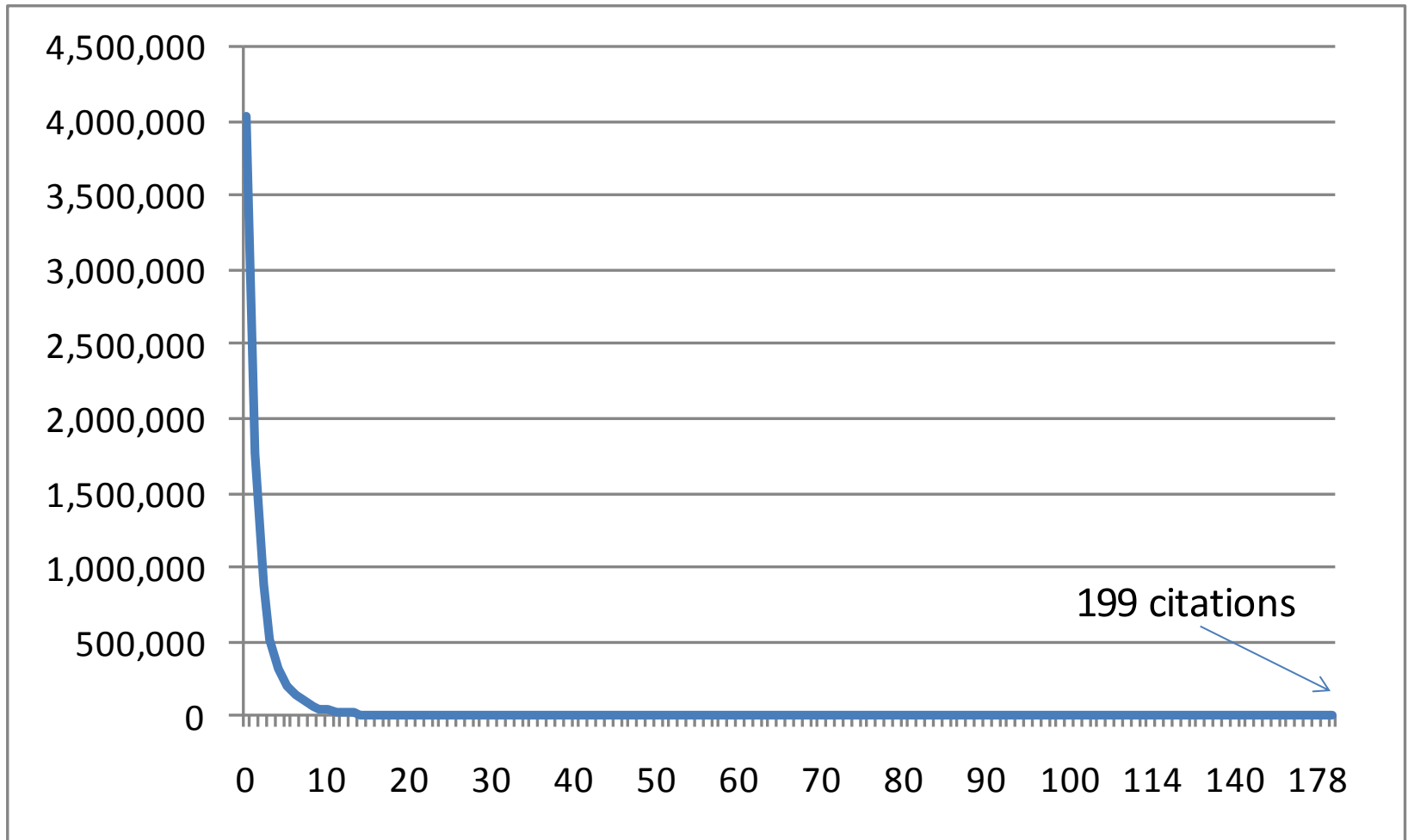
Only trial for invalidation

Application Request for examination Frist Action Registration

Patent Quality Index

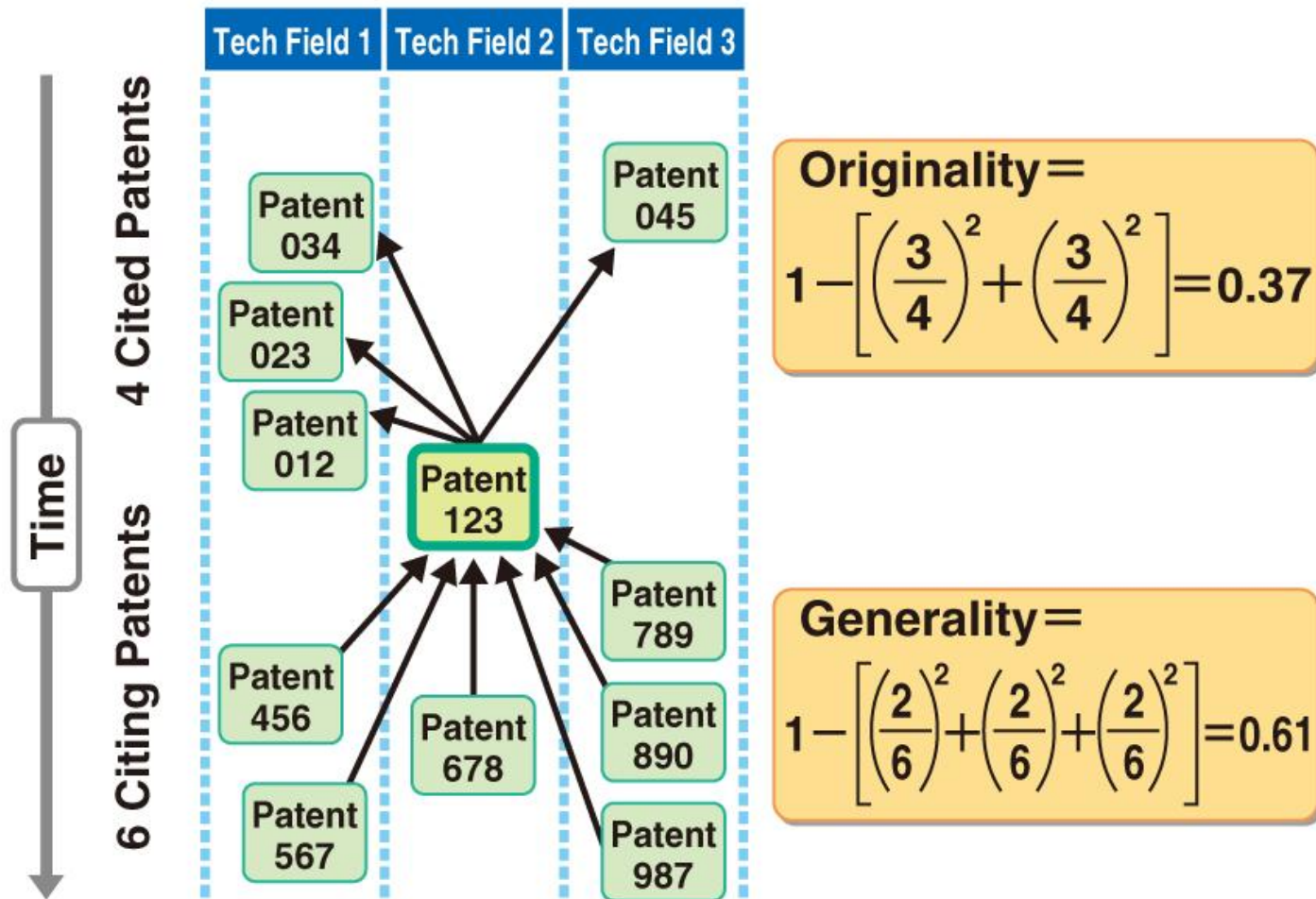
- Citation Indicator
 - # of forward citations
 - # of non-self citations...
- Patent family
 - International patenting
 - Continuation patenting
- Patent renewal data (for granted patent)
- Request for opposition (for granted patent)
- Patent litigation data (for granted patent)

of forward citations

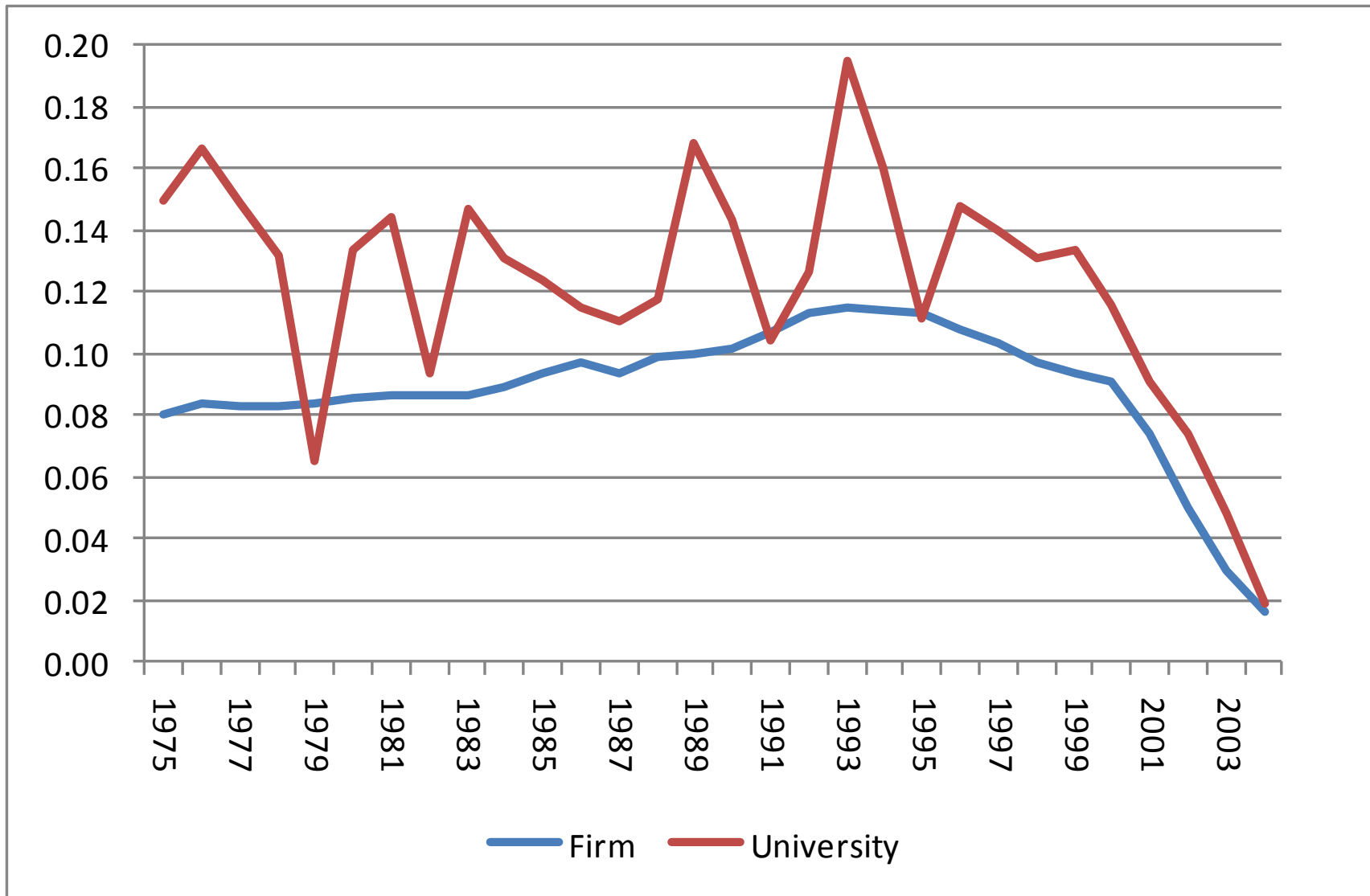


(IIP-Patent Database)

Originality and Generality Index



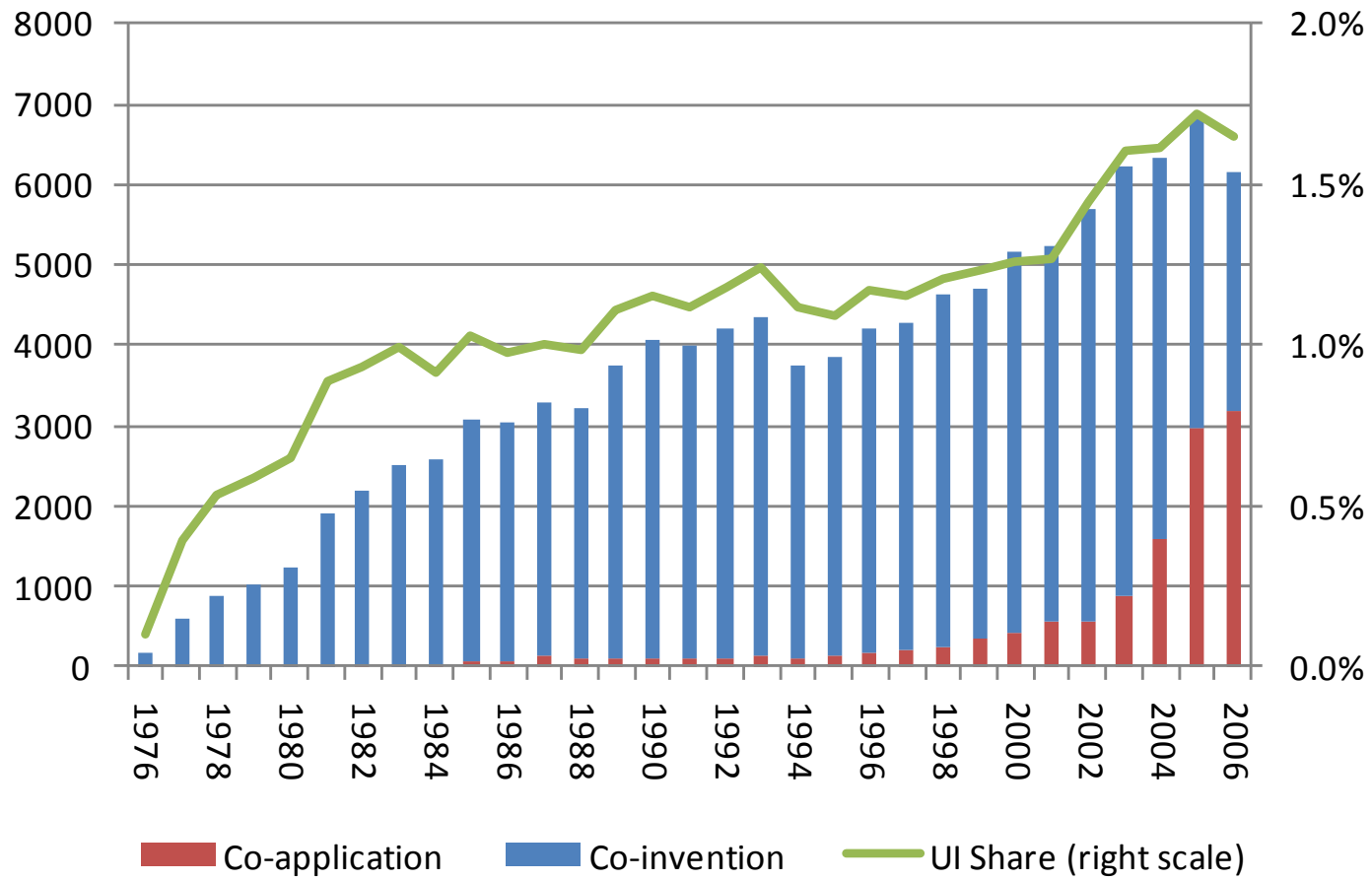
Comparing Generality Index



(IIP-Patent Database)

Policy analysis of UI promotion

-2004 incorporation of national university of Japan-



Quality of UI patent: change by policy?

Variable	Mean difference UIC-matched	Wilcoxon signed rank test
Overall sample		(obs=162303)
Numbers of claims	-0.321	+++
Number of inventors	1.553	+++
Number of forward citations	0.201	+++
Number of forward self-citations	-0.007	---
Number of forward nonself-citations	0.223	+++
Generality index	0.021	+++
application year ~1999		(obs=102489)
Numbers of claims	-0.030	+++
Number of inventors	1.622	+++
Number of forward citations	0.240	+++
Number of forward self-citations	-0.032	---
Number of forward nonself-citations	0.293	+++
Generality index	0.022	+++
applied after 2000		(obs=59814)
Numbers of claims	-0.825	
Number of inventors	1.446	+++
Number of forward citations	0.142	+++
Number of forward self-citations	0.037	++
Number of forward nonself-citations	0.103	+++
Generality index	0.009	

Note:

+: UIC>matched, +++, 1% level, ++, 5% level, +, 1% level statistically significant

-: UIC<matched, ---, 1% level, --, 5% level, -, 1% level statistically significant