Patent Search Strategies for Strategic Statistical Analysis

Ulrich Schmoch

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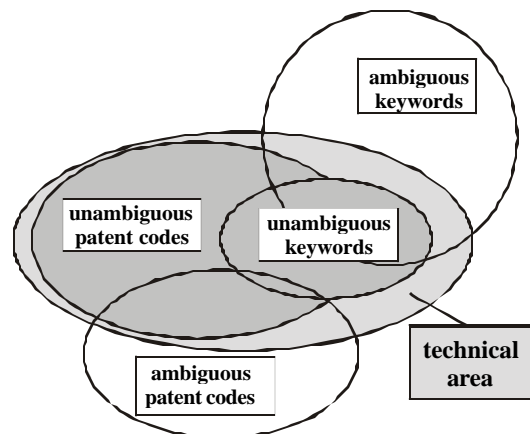
Fraunhofer Institute
Systems and
Innovation Research

Structure of the presentation

ν General rules

ν Illustration by selected examples

General rules for strategic patent searches

v Inclusion of as much documents (of a technological field) as possible

v Avoidance of wrong documents

v Focus on unambiguous documents

v Misleading data sets should be statistically insignificant

v Use of IPC codes whenever possible

Definition of technical areas

Definition of biotechnology

IPC code	content
A01H-001	processes for modifying genotypes
A01H-004	plant reproduction by tissue culture techniques
A61K-038	medical preparations containing peptides
A61K-039	medical preparations containing antigens or antibodies
A61K-048	medical preparations containing genetic material, gene therapy
C02F-003/34	biological treatment of water
C07G-011, C07G-013, C07G-015	antibiotics, vitamins, hormones
C07K-004, C07K-014, C07K-016, C07K-017, C07K-019	peptides, proteins
C12M	apparatus for enzymology or microbiology
C12N	micro-organisms or enzymes; genetic engineering
C12P	fermentation or enzyme-using processes for chemical purposes
C12Q	measuring and testing involving enzymes or micro-organisms
C12S	processes using enzymes or micro-organisms
G01N-027/327, G01N-033/53?, G01N-033/54?, G01N-033/55?, G01N-033/57?, G01N033/68, G01N-033/74, G01N-033/76, G01N-033/78, G01N-033/88, G01N-033/92	biotechnical analysis of biological materials

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Definition of biotechnology

ν Focus on IPC codes

ν Inclusion of codes outside the core area
(C12 = 77 percent of the sample, other important areas G01N, A61K)

ν Codes often on the low group and subgroup level

Definition of software

Alternatives:

v Keyword search (Software, computer program(s))

v IPC: G06F017, G06F019

v Intersection of G06 (computers) and specific IPC subclasses, e.g., H04Q (public switching)

v Keyword "method" and specific IPC subclasses

v "Method" and "G06"

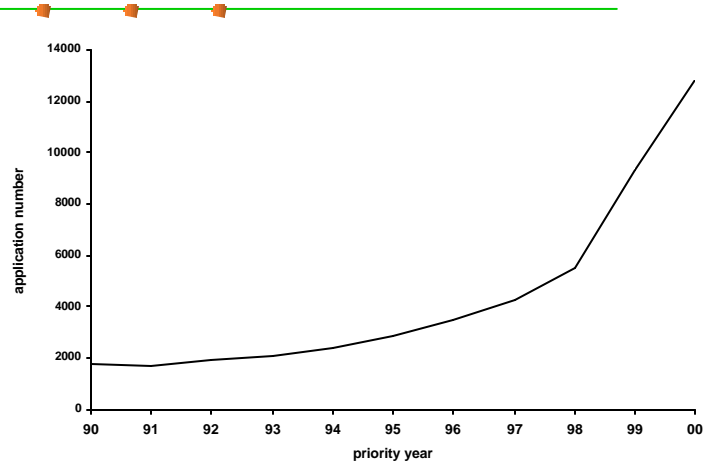# Results of software strategies
(share of all EPO patent applications in 2000)

No	Search step	Official data-bases	WPI
1	"Software, computer pro-gram+"	1.6	3.5
2	G06F017 or 019	4.4	6.2
3	G06 and specific IPCs	9.5	11.1
4	Steps 1, 2 or 3	10.1	11.8
5	"Method" etc. and specific IPCs	17.8	--
6	Total (4 or 5)	20.0	--
7	"Method" etc. and G06	7.6	
8	1 or 7	8.3	

Trend of software applications (EPO/PCT)

Basics for identifying appropriate IPC codes

ν Technical expertise
ν Expertise with patent classifications
ν Support by statistical checks
  ν Analysis of IPC codes linked to specific keywords
  ν Scan of small samples of front pages
ν Support by keyword manuals