syngenta

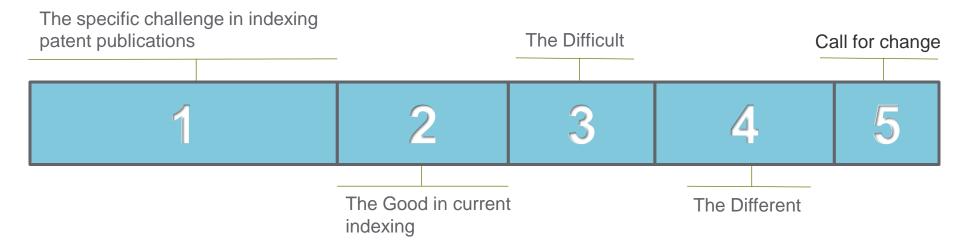
Do indexing systems of bibliographic databases meet today's user needs and expectations?

Nicolas Lalyre and Gerhard Fischer Intellectual Property Dept Information Research

ICIC 2013, Vienna, October 15, 2013

Classification: PUBLIC

Agenda

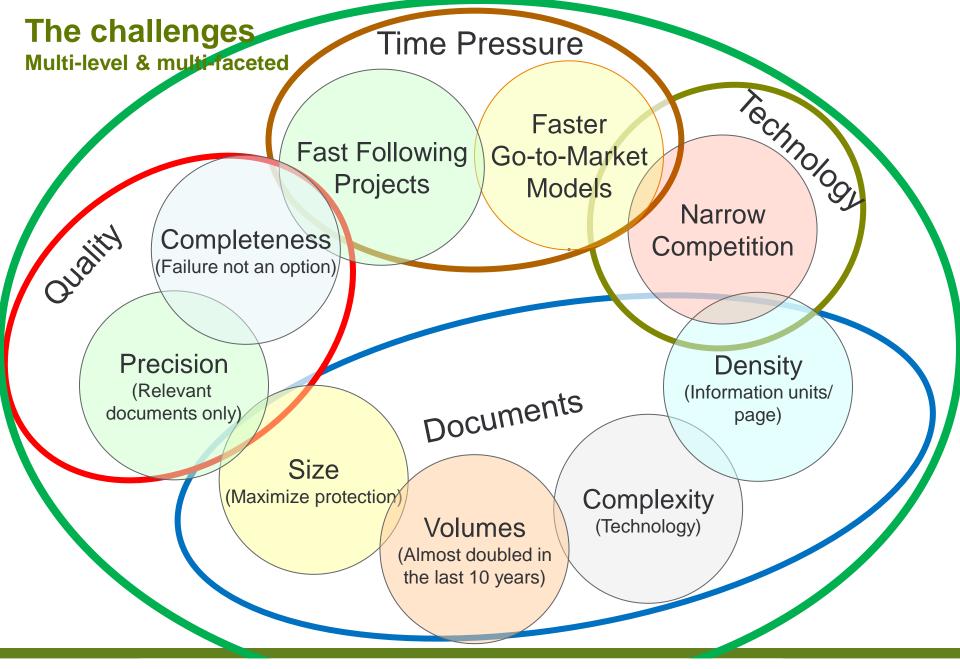




Scope and Limitations of presentation

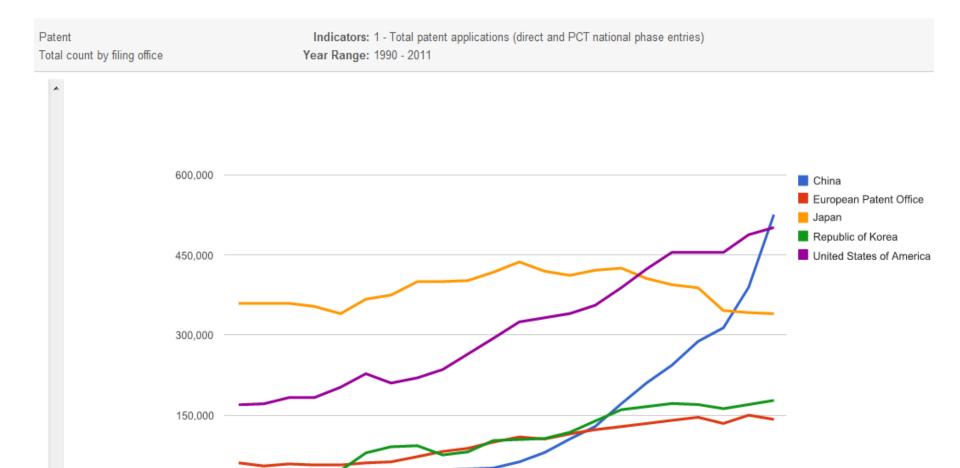
- Patent publications only
- Focus on life-science field
- Issues with indexing on bibliography information is not in scope
- Specific quality issues not addressed
- General issues are raised with call for action







Trends in patent applications at the top five offices

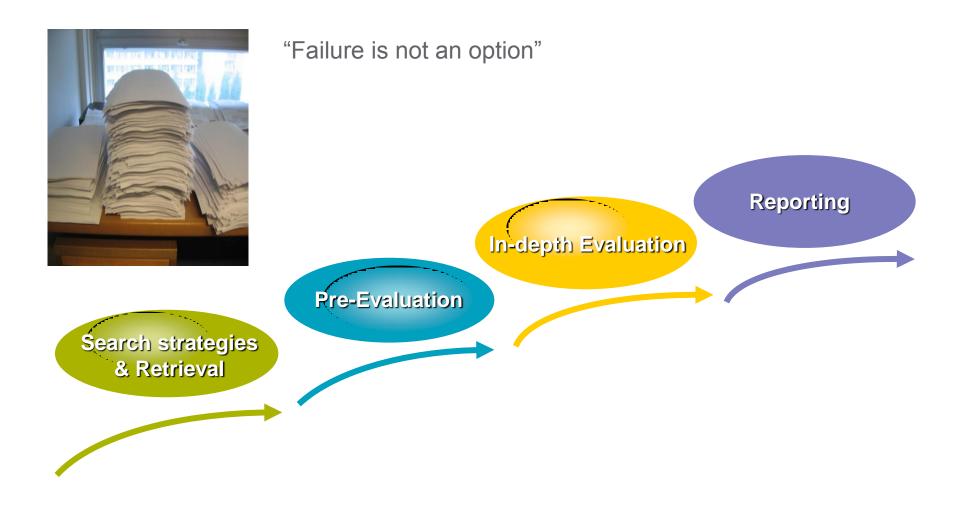






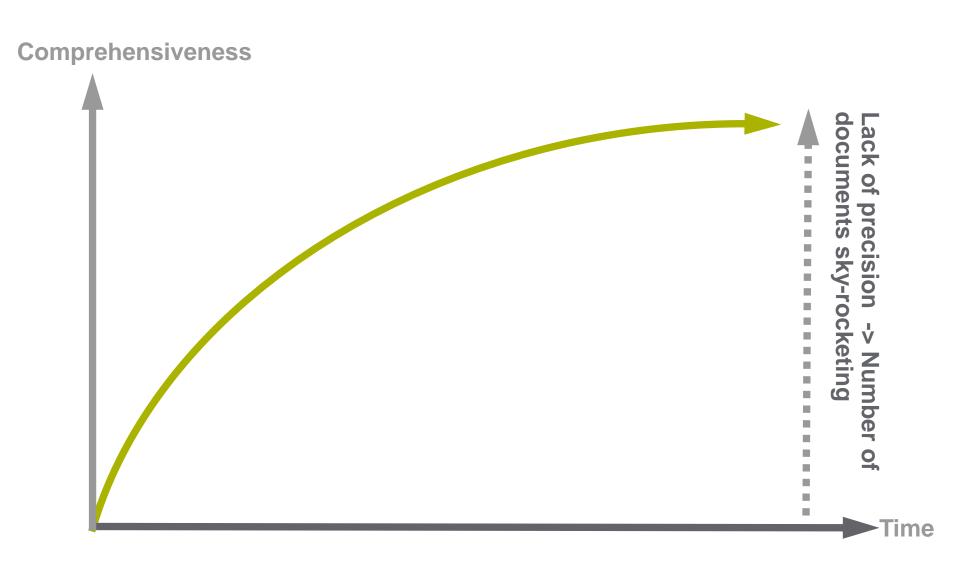
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The value-add working process





Comprehensiveness vs Precision



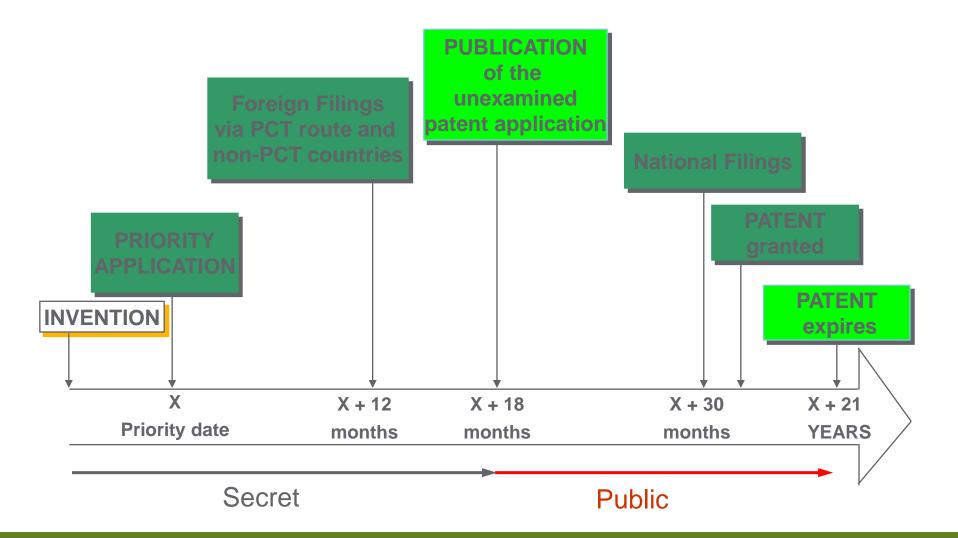


Parts of a patent publication

- First page
 - Bibliography including dates and patent classifications
 - Title and Abstract
- Description
 - Field of the invention
 - Background Art
 - Disclosure
 - Summary of the invention
 - Detailed description of the invention
 - Best Mode and Examples
- Claims



From invention to expiry of patent (PCT route): Patent family and publication stages





Hard to cope with issues in the indexing of patent publications or what is different to journal literature

- Broad claims allowed in some technical areas
 - prophetic compounds
 - Markush claims
- Laundry lists in description and claims
 - Mixtures
 - Formulations
 - Uses
- Specific legal wording



The Good (1)

- ✓ All parts of the document fully indexed (WPI only since 2000)
- ✓ Deep indexing of compounds per se including prophetics (REG/CA)
- Deep indexing of Markush structures from claims in MARPAT and MMS
- ✓ Indexing of concepts/features and man-made abstracts with a Controlled Vocabulary
- ✓ Database specific coding of concepts/features



The Good (2)

- ✓ Controlled Vocabulary and database specific coding constantly updated
- ✓ Simple instead of extended family construction if an equivalent appears to describe new inventive material, e.g. US continuations-inpart
- ✓ Indexing covers at least 20 years (important for FTO Searches)
- ✓ WPI abstracts are written in "patent language" eg. "new compound" whereas CA abstracts are written in scientific language "preparation of"



The Difficult

- □ The ever increasing size and volume of documents (average > 100 pages) generally weakens deep indexing efforts due to cost pressure
- □ Information from one patent family must be split in many database records due to technical constrains in databases, e.g. indexing of prophetic compounds in REG/CA
- Only up to 99 compounds per se are indexed from examples in WPI
- Man-made abstracts focused on claims in WPI
- No backfile indexing when database codes are changed over time: Section codes in CA, Manual Codes in WPI



The Different (1) – PCTs not indexed

Missing disclosure for patent families where national applications have published a few days before PCT applications which is a drawback of fast indexing.

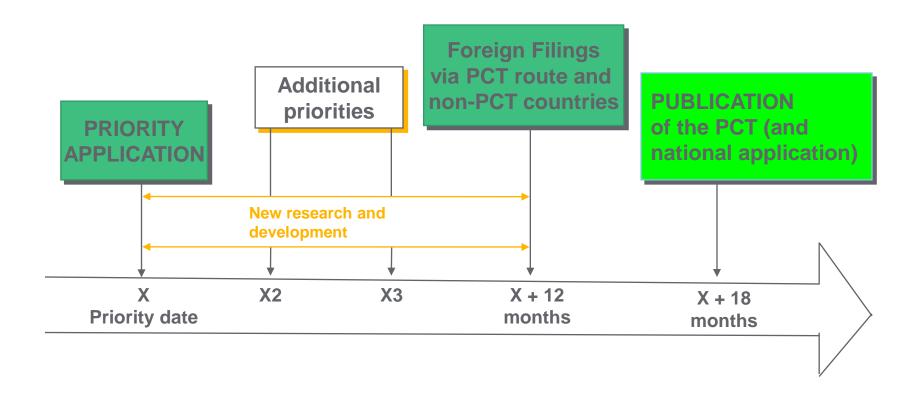
DE 19842894 (pub. 23.03.2000), claim 5: 46 different mixtures vs.

WO 00/16627 (pub. 30.03.2000), claim 5: 146 different mixtures

As a consequence on July 1, 2008 CAS began adding as basic patents both Patent Cooperation Treaty (PCT) applications and their original national equivalents



Additional matter added at the time X+12 to the PCT application





The Different (2) – Mixture indexing

Typical "list mixture" claim:

A composition comprising at last one compound selected from a list A (A1, A2, A3, A4,....) and at least one compound selected from a list B (B1, B2, B3, B4,.....).

There is no indexing in place which would allow to retrieve only mixtures where two compounds are in different lists.

Mixture searches retrieve 95-99% of non-relevant records.



Example: a FTO search for a two-component mixture of dimoxystrobin+trifloxystrobin would retrieve this non-relevant document

WO 2013/127863 PCT/EP2013/053944

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Claims

- The use of an agrochemical composition comprising
 - A) at least one herbicide A selected from
 - A.a) acetylCoA carboxylase inhibitors (ACC inhibitors) selected f clethodim, cycloxydim, fenoxaprop, fenoxaprop-P, fluazifop, P, haloxyfop, haloxyfop-P, quizalofop, quizalofop-P, sethoxy tepraloxydim;
 - A.b) acetolactate synthase inhibitors (ALS inhibitors) selected fro rasulam, flumetsulam, foramsulfuron, halosulfuron, iodosulfu and
 - B) at least one fungicide B selected from
 - B.a) inhibitors of complex III at Q_o site selected from azoxystrobin methoxystrobin, coumoxystrobin, dimoxystrobin, enestrobur fenaminstrobin, fenoxystrobin/flufenoxystrobin, fluoxastrobin im-methyl, metominostrobin, picoxystrobin, pyraclostrobin, pstrobin, pyraoxystrobin, trifloxystrobin, 2-[2-(2,5-dimethylphe oxymethyl)phenyl]-3-methoxy-acrylic acid methyl ester, 2-(2



The Different (3) – Amended claims

Claims of US2001051649, equivalent of EP591764 (German language):

1. Use of the compound of the formula (I)

$$CI \longrightarrow CH_2 \longrightarrow N$$

$$CH_3 \longrightarrow CH$$

its metal salts or acid addition compounds as a microbicide for the protection of industrial materials.

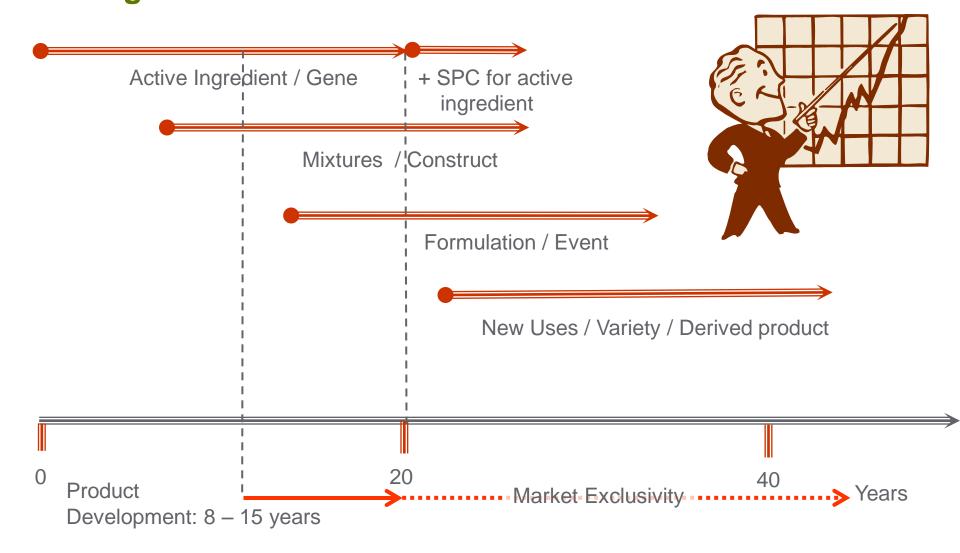
- Microbicidal compositions for the protection of industrial materials, containing a compound of the formula (I) according to claim 1 or its metal salts or acid addition compounds.
- 4. Composition according to claim 3, characterised in that it contains, as an additional component, at least one other antimicrobially active compound, fungicide and/or other active compound for broadening the spectrum of action or for achieving specific effects.

Claims of EP591764B2:

- 1. Combination of cyproconazole with tebuconazole or propiconazole.
- 2. Combination of cyproconazole with tebuconazole.
- Combination of cyproconazole with propiconazole.



Increased number of FTO searches due to Life-cycle management





Why indexing of granted patents would make a difference

- Only around 20-30% of the patent applications get ever granted
- Granted patents have in general a (very) reduced claim set
- We face an increasing number of FTO searches
- Granted and pending patents of major jurisdiction can be identified with an increasing reliability.

The indexing of granted patents would reduce the workload in professional patent searching and enhance FTO reliability.



The call for change Enhanced indexing

List allocation to mixtures components

- For mixture laundry lists
- For 2-component and multicomponent mixtures
- Backfile indexing for 20 years

Indexing of all PCTs

- Not yet a policy in World Patents Index
- Exclude potential to miss important disclosure

Indexing of granted patents

- To reduce workload for FTO searches
- Would also enhance reliability of FTO searches since broader and multiple strategies could be applied
- Amended claims can easily retrieved

Other

- Backfile indexing when database codes are changed (similar to major revisions of IPC in the past)
- Simple family construction as a standard (all priorities to match)
- Patent legal wording for patent abstracts in CA



Bringing plant potential to life