From information to intelligence…
…changing thrust in patent data management

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“..let me remind you that information is not knowledge, knowledge is not wisdom, and wisdom is not foresight. Each grows out of the other and we need them all”.

Arthur C. Clarke
Author of 2001
Searching for data is only the first step

Patent document dataset

Search

Analysis for decision making

Discover

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Automation allows us to work with large datasets, but people are the drivers.
Profile of an IP analyst

- Technical background
- Analytical skills
- Knowledge of patents and of their uses in business
- Understanding of business transactions
- Searching skills
- Presentation skills
Patent portfolio management trends

- Managing IP Portfolios to Create Value
- Efficient In- and Out-Licensing
- Evaluating JV or M&A Deals
What are some underlying questions?

- Managing IP Portfolios to Create Value
  Does my portfolio protect my products?

- Efficient In- and Out-Licensing
  Is my portfolio doing all that it can?

- Evaluating JV or M & A Deals
  Can I partner to make progress?

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A chemical product portfolio sorted by patent type

Composition & Activity

Process

Formulation

PRODUCT LIFE CYCLE 1974-1997

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Use patents as a source of intelligence

They are a surrogate measure for:

- Research Capability
- Dominance
- Focus
- Staying Power
Automation helps analyze on a broader scale

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Make broad comparisons with high levels of detail

Company 1

Company 2

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Today citation analysis can be applied more broadly

- One or a few patents
- An assignee portfolio
- A technology portfolio
- An industry portfolio
Premise: frequently cited patents are important

“This patent is frequently cited”...

Question: Compared to what?
Enabling technology may be extensively cited
Persistent citation means continued development

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Citation practices are variable

Extent of citation may vary by:

- technology
- maturity of field
- commercial-to-academic mix
- industry practices
- art group practices (PTO)

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Citation analysis to analyze competitors

• Citations of your technology by others:
  – Find potential licensees for your technology
  – Discover developing applications for a technology - are you in it or closed out of it?
  – Identify potential development partners
  – Uncover potential infringers

• Self-citation by others:
  – Evaluate extent and direction of competitor R&D
Self-citing is a sign of healthy R&D
Portfolios of head-to-head competitors

Company A
Company B

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Cases of choice are isolated for review

Company A = 38
Company B = 5

n = 4347

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Analysis of the citing cases:

- self vs. not-self
- main competitor vs. other competitors
These competitors have different R&D behaviors.

38 highly cited patents of Company A:
- Self cited: 28%
- Cited by other competitors: 63%
- Unk.: 9%
- Company A cites company B and vigorously self-cites

5 highly cited patents of Company B:
- Cited by company A: 13%
- Self cited: 5%
- Cited by other competitors: 75%
- Unk.: 7%
- Company B does not cite company A, has fewer self cites

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Traditional uses of patent information

• Are highly specific to a particular technology

• Address questions like:
  – freedom-to-operate
  – enforcement
  – patentability
New uses of patent information are being added

- To provide higher level views of:
  - entire companies
  - broad technology areas or
  - entire industries
- To address questions like:
  - Health of R&D program
  - Acquisition value
  - Post-merger portfolio rationalization

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Thank you!
Data from different engines analyzed on a single platform

SCIFINDER SEARCH 37
AURIGIN SEARCH 48
DERWENT SEARCH 45

Aurigin DEDUPES

130 ➔ 86

- Found by all methods 12
- SciFinder only 17
- Derwent only 15
- Aurigin only 22
- Aurigin and Derwent 12
- Aurigin and SciFinder 2

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P/I Ratio can show portfolio depth and vigor

Share During Confidential Negotiation Stages

Technology Covered

Number of cases

20

10

Improvements

Method of Making

Compositions

Uses

Filed

Granted

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