

Reform and organisation of manuals and guidelines for in-house information resources at the DKPTO

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ICIC 2011 October



Outline

- Introduction personal background
- Work as an examiner, what do we do
- Search/keywords/classes
- Key parts of the EPO system: Internal/Viewer
- DS/EN ISO 9001:2008 What's ISO and what's not
- Examples of earlier architecture
- Framework for the reform process
- Choice of principles for the new architecture
- The result after two years without major revisions
- Conclusion
- Questions



Thorkild Sørensen

- M.Sc.E. (2002)

– Ph.D.EE. (2005)

- >30 publications, among these co-inventor of US 7,062,140, and
 US 7,292,749 in G02B6/032, micro-structured optical fibres
- Worked with patents since 2001
- Worked at the DKPTO since 2006
- Broadened field of view some 20 examiners essentially cover G and H
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Examiner's work

- Read and understand:
 - Patent applications
 - Invention disclosures
- Plan search strategy:
 - Define essential elements
 - Prioritise and rank keywords
 - Choose databases, assess possibilities
- Carry out culling:
 - See and choose closest prior art
- Report:
- Write written opinion or the like



Search – keywords/classes

- Search statement
- Keywords: Priority and rank
- First preliminary search
- Iterative improvements
 - Classes come for free
 - Synonyms/Analogies/Languages
- Class/class keyword/keyword class/keyword keyword/class
- Fulltext, English, German, French, Spanish
- Alternative approaches:
 - Japanese classes
 - Manual Codes of Derwent's WPI



Internal/Viewer

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Internal - Current Cluster: UKSEAR

File Edit PDB X-File Options Help

Search statement 5

? and 4,1

** SS 5 : Results 5

Search statement 6

? ..hi

Databases : WPI, EPODOC

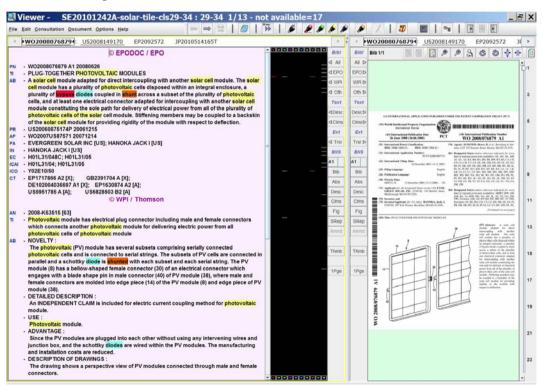
SS Results

1 1177 DIOD+ 1W SHUNT+
2 2596 DIOD+ 1D SHUNT+
3 40 PHOTO_VOLT
4 46435 PHOTO_VOLT+
5 AND 4, 1
```

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Internal - Current Cluster: UKSEARCH LIM (FULL) off - Search Re
File Edit PDB X-File Options Help
  3/5 (3/4 WPI) - (C) WPI / Thomson
  AN - 2008-K63515 [63]
  AP - [Provisional] US20060875174P 20061215; US20070956785 20071214;
        EP20070869278 20071214; W02007US87571 20071214; [PCT Application]
        W02007US87571 20071214; JP20090541614 20071214; [Based on W02008076879
       A 00000000]
  PR - US20070956785 20071214; US20060875174P 20061215
  TI - Photovoltaic module has electrical plug connector including male
        and female connectors which connects another photovoltaic module
        for delivering electric power from all photovoltaic cells of
        photovoltaic module
  IW - PHOTOVOLTAIC MODULE ELECTRIC PLUG CONNECT MALE FEMALE DELIVER
       POWER CELL
  PA - (EVER-N) EVERGREEN SOLAR INC
     - US2008149170
                            A1 20080626 DW200863
       W02008076879
                            A1 20080626 DW200863
        EP2092572
                            A1 20090826 DW200956
       JP2010514165T
                            T 20100430 DW201029
  ICAI- H01L31/04: H01L31/042: H01L31/05: H01R24/00
  ICCI- H01L31/04; H01L31/042; H01L31/05; H01R24/00
  AB - NOVELTY :
        The photovoltaic (PV) module has several subsets comprising
       serially connected photovoltaic cells and is connected to serial
       strings. The subsets of PV cells are connected in parallel and a
        schottky diode is shunted with each subset and each serial
        string. The PV module (8) has a bellow-shaped female connector (30) of
        an electrical connector which engages with a blade shape pin in male
        connector (40) of PV module (38), where male and female connectors are
       molded into edge piece (14) of the PV module (8) and edge piece of PV
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Internal/Viewer #2





ISO 9001:2008 - What's ISO and what's not:

Is:

- Total production: procedures, guidelines
- Organisation, structure

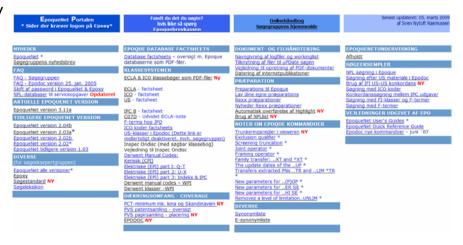
Is not:

- Intranet, information resource manuals
- Database factsheets
- Descriptions of syntax for each patent information system
- Misc. scripts, help programs and their use
- Resource planning system
- (Links to) external products that we use
- In-house sharing of knowledge



Examples of earlier architecture

- Please do not try to read from the screenshot below
- Extremely high number of entry points
- Vague grouping of information
- Links forming sort of a HTML macro-molecule
- Extremely high number of internal pages
- Low searchability





Guidelines for reform process

- Information resource manuals should be created by those who use it a lot
- Reform should be enabled fast a total of half a year was allocated for the project
- The system should not be too big
- There was a limit of 300 man-hours on the budget for this
- Searchability should be high
- Maintenance should be easy
- In the future, the editor job should be easily transferred



Motivation for the reform

- Efficiency
- The system should be handy and easy to use
- Low learning curve
- Joy of work
- Easily overviewed manuals
- Removal of doubt about when the job is good enough
- Clear criteria for when to stop a search



The biggest hurdle: Choice of main chapters

PreparationScripts

- Databases – Culling tool, viewer

SyntaxSpecialty searches

Class systems
 For future editors

Links
 Feedback, corrections, updates

Defining these 10 main chapters was the most time-consuming job Sorting and writing this was the most easy (and fun) part of the entire task



Architectural principles chosen:

- One file where possible
- No links a link page instead: If it exists, it's here
- Maintenance and information for future editors
- Grouping:
 - 1. Search strategy preparation
 - 2. Databases
 - 3. Syntax
 - 4. Class systems
 - 5. Links
 - 6. Scripts
 - 7. Viewer
 - 8. Specialty search: Structure, Polymer, Sequence
 - 9. Maintenance



Result, outcome

- Search strategy preparation: One file with no links
- Databases: One file with 73 headlines, no links
- Syntax: Grouping of 3 major systems: EPOQUE, Dialog, STN
- Class systems: IPC, ECLA, Derwent MC, F/FI-terms, US-classes
- Links: One page with links, a headline corresponding to each sector
- Scripts:
- Viewer:
- Specialty search: Structure, Polymer, Sequence
- Maintenance



What would be removed

- We removed:
- Issues that would be more appropriate in Guidelines for examination
- Issues that concern how to handle references found
- Material relevant to system maintenance, IT support or the like
- A high volume of small databases with narrow scope
- Our benefits were:
- Clearer criteria for what is a high-quality search
- Better possibilities for concentration on high-output work
- Increased focus on the particular search job
- Vastly increased possibilities for communication of declaring the contents of each search



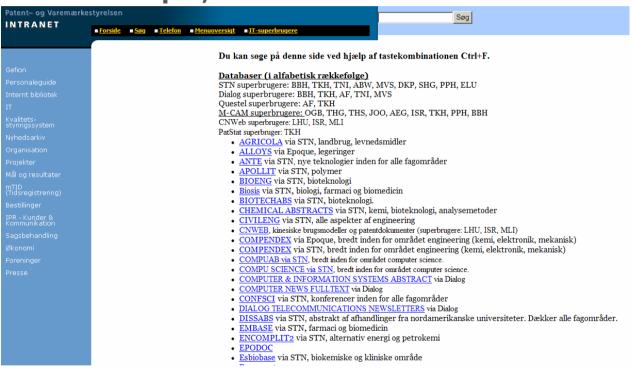
The end result (Front page in Danish)

Søgning

Forberedelse af opgaven	<u>Preparationer</u>
<u>Databaser</u>	<u>Viewer</u>
Syntax	Særlige søgninger
Klassesystemer	For future editors
<u>Links</u>	Rettelser og opdateringer



One example, Databases:





Principle for each piece:

- A minimum of entry-points, One page only
- One-document only for each piece of manual
- Headlines in the top of each document
- Easily searchable documents, "ctrl+F"
- Controlled branching (minimised)
- Clarity in work processes
- Choose a simple architecture and stick to it
- Ensure a low learning curve



Conclusions

- Analysis:
 Definitions of what is important
- Choice of architecture:
 What can we use, what can we build, what can be maintained
- Sorting of material:
 Export, delete, write short-hand versions of what we have
- Maintenance:
 Easy, low-cost maintenance. The system has proved robust over time



Thank you for your attention!

– Questions?