



DANISH PATENT AND TRADEMARK OFFICE

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

TURNING IDEAS INTO ASSETS®

Thorkild Sørensen M.Sc.E., Ph.D. EE.
Senior Technical Examiner

ICIC 2011 October



DANISH PATENT AND TRADEMARK OFFICE

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



DANISH PATENT AND TRADEMARK OFFICE

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
- Tel. (+45) 43508544 Email: ths@dkpto.dk



DANISH PATENT AND TRADEMARK OFFICE

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



DANISH PATENT AND TRADEMARK OFFICE

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



DANISH PATENT AND TRADEMARK OFFICE

Internal/Viewer

TURNING IDEAS INTO ASSETS®

Internal - Current Cluster: UKSEARCH

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	5 AND 4, 1

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 [G3]

AP - [Provisional] US20060875174P 20061215; US20070956785 20071214; EP20070869278 20071214; WO20070487571 20071214; [PCT Application] WO20070487571 20071214; JP20090541614 20071214; [Based on WO2008076879 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

PN - US2008149170 A1 20080626 DW200863
WO2008076879 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



DANISH PATENT AND TRADEMARK OFFICE

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



DANISH PATENT AND TRADEMARK OFFICE

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

TURNING IDEAS INTO ASSETS®

EpoqueNet Portalen * Sider der kræver logon på Epoxy*	Fandt du det du søgte? Hvis ikke så spørg EpoqueNet-kassen	Dokumentation Søgegruppens hjemmeside	Senest opdateret: 05. marts 2009 af Sven Nytoft Rasmussen
NYHEDER EpoqueNet * Søgegruppens nyhedsbrev	EPOQUE DATABASE FACTSHEETS Database factsheets - oversigt m. Epoque databaserne som PDF-filer.	DOKUMENT- OG FILHÅNDTERING Navngivning af logfiler og workinglist Tilføjelse af filer til update søgning Vejledning til oprettelse af PDF-dokumenter Datering af internetpublikationer	EPOQUENETUNDERVISNING A/holdt
FAQ FAQ - Søgegruppen FAQ - Epoque version 25. Jan. 2005 Skift af password i EpoqueNet & Epoxy IP-databaser til serviceopgaver Opdateret	KLASSESYSTEMER ECLA & ICO klassebøger som PDF-filer NY	PREPARATION Preparations til Epoque Lav dine egne preparasjoner Rexx preparasjoner Nyheder Rexx preparasjoner Automatisk overførelse af Highlight NY Brug af søgelist NY	SØGEEKSEMPLER Søgning efter US materiale i Epoque Brug af IFLIS-IPS konkordans NY Søgning med ICO koder Konkordanssøgning mellem IPC udgaver Søgning med IS-klasser og F-termer Søgning med F-termer
AKTUELLE EPOQUENET VERSION EpoqueNet version 3.11b	IPC B - factsheet G2D2 - Udvaldt ECLA-note F-termer hos JPO ICO koder factsheets	NOTER OM EPOQUE KOMMANDOER Trunkeringsreder i vieweren NY Exclusion qualifier * Screening truncation * Joint operator * Framing operator * Family transfer..._XT and *XT * The update...dates of the..._UP * Transfer extracted PVS..._TR and..._UM *TR * New parameters for..._IPOP * New parameters for..._ER SE * New parameters for..._HI SE * Removes a level of limitation..._UWLM *	VEJLEDNINGER UDGIVET AF EPO EpoqueNet User's Guides * EpoqueNet Quick Reference Guide Epoque nye kommandoer - juni '07
TIDLIGERE EPOQUENET VERSION EpoqueNet version 2.04b EpoqueNet version 2.03a * EpoqueNet version 2.02b EpoqueNet version 2.02 * EpoqueNet tidligere version 1.03	IP-klasser i Epoque (Dette link er midlertidigt deaktiveret. myh_søgegruppen) Inspecc Ondisc (med søgbar klassebøger) Vejledning til Inspecc Ondisc Decrest Manual Codes Kemisk (CPI)	DÆKNINGSOMFANG - COVERAGE PCT-minimum ink. kina og Skandinavien NY PVS patentsamling - oversat PVS patentsamling - placering NY EPODOC NY	
DIVERSE (for søgeekspertergruppen) EpoqueNet alle versioner* Epoxy Søgestrategi NY Søgestrategi	DIVERSE Elektriske (EPI) part 1: 0-17 Elektriske (EPI) part 2: 1-17 Elektriske (EPI) part 3: Indeks & IPC Derwent manual codes - WPI Derwent klasser - WPI		



DANISH PATENT AND TRADEMARK OFFICE

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



DANISH PATENT AND TRADEMARK OFFICE

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



DANISH PATENT AND TRADEMARK OFFICE

The biggest hurdle: Choice of main chapters

- Preparation
- Databases
- Syntax
- Class systems
- Links
- Scripts
- Culling tool, viewer
- Specialty searches
- For future editors
- 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



DANISH PATENT AND TRADEMARK OFFICE

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



DANISH PATENT AND TRADEMARK OFFICE

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/BI-terms, US-classes
- Links: One page with links, a headline corresponding to each sector
- Scripts:
- Viewer:
- Specialty search: Structure, Polymer, Sequence
- Maintenance



DANISH PATENT AND TRADEMARK OFFICE

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



DANISH PATENT AND TRADEMARK OFFICE

The end result (Front page in Danish)

Søgning

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



DANISH PATENT AND TRADEMARK OFFICE

One example, Databases:

Patent- og Varemærkestyrelsen

INTRANET

■ [Forside](#) ■ [Søg](#) ■ [Telefon](#) ■ [Menuoversigt](#) ■ [IT-superbrugere](#)

TURNING IDEAS INTO ASSETS®

- Gefion
- Personaleguide
- Internt bibliotek
- IT
- Kvalitetsstyringsystem
- Nyhedsarkiv
- Organisation
- Projekter
- Mål og resultater
- mTID (Tidsregistrering)
- Bestillinger
- JPR - Kunder & Kommunikation
- Sagsbehandling
- Økonomi
- Foreninger
- Presse

Du kan søge på denne side ved hjælp af tastekombinationen Ctrl+F.

Databaser (i alfabetisk rækkefølge)

STN superbrugere: BBH, TKH, TNI, ABW, MVS, DKP, SHG, PPH, ELU
Dialog superbrugere: BBH, TKH, AF, TNI, MVS
Questel superbrugere: AF, TKH
M-CAM superbrugere: OGB, THG, THS, JOO, AEG, ISR, TKH, PPH, BBH
CNWeb superbrugere: LHU, ISR, MLI
PatStat superbruger: TKH

- [AGRICOLA](#) via STN, landbrug, levnedsmidler
- [ALLOYS](#) via Epoque, legeringer
- [ANTE](#) via STN, nye teknologier inden for alle fagområder
- [APOLLIT](#) via STN, polymer
- [BIOENG](#) via STN, bioteknologi
- [Biosis](#) via STN, biologi, farmaci og biomedicin
- [BIOTECHABS](#) via STN, bioteknologi
- [CHEMICAL ABSTRACTS](#) via STN, kemi, bioteknologi, analysemetoder
- [CIVILENG](#) via STN, alle aspekter af engineering
- [CNWEB](#), kinesiske brugsmodeller og patentdokumenter (superbrugere: LHU, ISR, MLI)
- [COMPENDEX](#) via Epoque, bredt inden for området engineering (kemi, elektronik, mekanisk)
- [COMPENDEX](#) via STN, bredt inden for området engineering (kemi, elektronik, mekanisk)
- [COMPUAB](#) via STN, bredt inden for området computer science.
- [COMPU SCIENCE](#) via STN, bredt inden for området computer science.
- [COMPUTER & INFORMATION SYSTEMS ABSTRACT](#) via Dialog
- [COMPUTER NEWS FULLTEXT](#) via Dialog
- [CONFSCI](#) via STN, konferencer inden for alle fagområder
- [DIALOG TELECOMMUNICATIONS NEWSLETTERS](#) via Dialog
- [DISSABS](#) via STN, abstrakt af afhandlinger fra nordamerikanske universiteter. Dækker alle fagområder.
- [EMBASE](#) via STN, farmaci og biomedicin
- [ENCOMPLIT2](#) via STN, alternativ energi og petrokemi
- [EPODOC](#)
- [Esbiobase](#) via STN, biokemiske og kliniske områder



DANISH PATENT AND TRADEMARK OFFICE

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



DANISH PATENT AND TRADEMARK OFFICE

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



DANISH PATENT AND TRADEMARK OFFICE

Thank you for your attention!

TURNING IDEAS INTO ASSETS®

- Questions?