



Topic 4:

WIPO's Draft Competency Framework

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Agenda

- WIPO's draft
- Objectives
- How many competencies are needed?
- How to order them?
 - Fields of learning: horizontal order
 - Hierarchy for vertical ordering
- Crossover
- Levels of proficiency
- Issues & Challenges

Competency models for patent examiners

- No "one fits all" approach
- Different competencies required depending on
 - How an office organizes substantive examination
 - Stand alone substantive examination (middle to large offices)
 - IPET, RPET: (more) emphasis on **prior art search skills**
 - Outsourcing (small offices): emphasis on **outsourcing/work-sharing skills**
 - Access to search and other tools
 - Additional skills needed for further activities like IP promotion, advisory services for applicants, ...
- Need to tailor a competency model
 - Select suitable competencies and level of required proficiency from **comprehensive set including any potentially required competency/skill/knowledge**

Objectives of generic competency framework

- Enable Offices to **define detailed individual competency models** adapted to an individual examiner's job description and the Office's examination policy by selecting appropriate competencies from the generic framework;
- Enable Offices to **communicate (individual or institutional) training needs** to donors in terms of **standardized** specified competencies in order to enable donors to respond to training needs more specifically;
- Enable donors to **describe content of training activities** and **define prerequisites** for participation in terms of competencies, in a **standardized** manner;
- Enable training administrators or managers to **assess and record individual prior learning** of trainees and identify training gaps;
- Enable training administrators or managers to **track and assess success of learning**, i.e. the competencies attained by individual examiners through their participation in various training activities of various providers, in a **standardized** manner;
- Enable training organizers or managers to **assign training opportunities** more effectively by taking into account prior learning and individual training gaps of candidates on the one hand, and content of training activities and prerequisites for participation on the other.

Objectives of generic competency framework

- Enable performance assessment
- Enable **standardized** reporting of WIPO to
 - Donors/providers
 - Beneficiary Office

Competencies and their intended use

- Wording of competencies may have to be different depending on the purpose of their use
 - For **characterizing job related performance** (assessments)
 - For **describing learning content** (learning outcomes/syllabi)
- Architecture of framework may have to be different
 - Whether to reflect examination procedure (workflow)
 - Whether to present just an inventory covering any potential learning content

To be explored in
this workshop

?Competencies reflecting procedure

- Existing competency models appear to reflect national examination procedure, i.e. reflect the sequence of steps/tasks in (stand-alone) substantive examination:
 - Certain skills needed for several competencies are repeatedly cited

Unit 4: Assess novelty

ELEMENTS <i>Elements describe the essential outcomes.</i>	PERFORMANCE CRITERIA <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Construe the scope of each claim.	1.1 The technical features of the claimed invention are identified. 1.2 The scope of each technical feature is interpreted. 1.3 The type of claim, and words with recognised special meanings are considered in order to determine the scope of the claim.
2. Determine relevant prior art.	2.1 Relevant prior art documents are identified. 2.2 Publication and/or priority dates are determined to ensure the document is potentially citable.
3. Determine if novelty exists.	3.1 Consideration is given as to whether each and every element or step of the claimed invention was explicitly or inherently disclosed in combination by the prior art document, to a person skilled in the art, on the date of publication of the document. 3.2 The document is read to determine whether the claimed invention is enabled. 3.3 Where applicable, a reasoned explanation is provided as to why the claimed invention is not novel.

Unit 5: Assess inventive step

ELEMENTS <i>Elements describe the essential outcomes.</i>	PERFORMANCE CRITERIA <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Construe the scope of each claim.	1.1 The technical features of the claimed invention are identified. 1.2 The scope of each technical feature is interpreted. 1.3 The type of claim, and words with recognised special meanings are considered in order to determine the scope of the claim.
2. Determine common general knowledge.	2.1 The problem solved by the invention is determined. 2.2 The person skilled in the art is identified. 2.3 The common general knowledge, in the light of the problem, of the person skilled in the art is determined (ie: that knowledge which every worker in the art may be expected to have gained as part of their technical 'know how', through training, experience, observation and reading).
3. Determine relevant prior art.	3.1 Relevant prior art documents are identified, whether they are single documents or combinations of documents. 3.2 Publication dates are determined to ensure the document is potentially citable.
4. Determine if an inventive step exists.	4.1 The differences and similarities between the relevant prior art documents and the claimed invention are identified. 4.2 The contribution of common general knowledge in combination with the relevant prior art is assessed. 4.3 The motivation of the person skilled in the art to combine documents is identified as required. 4.4 Where applicable, a reasoned explanation is provided as to why the claimed invention is obvious.

RPET CM sample: examination skills

<p>5. Consider unity of invention</p>	<p>The examiner assesses unity of invention in uncomplicated examples.</p>	<p>The examiner demonstrates effective application of unity of invention in more complex generic, and technology- specific examples.</p>	<p>The examiner demonstrates thorough understanding and application of the concept of unity of invention when analysing increasingly complex real technology specific cases.</p>	<p>The examiner consistently and independently identifies unity of invention., and able to categorise the invention into appropriate groups. Any relevant objections are fully justified.</p>
<p>PQS 3.2.1 PQS 4.1, 5.1</p>				
<p>6. Consider industrial applicability</p>	<p>NOT COVERED IN PHASE A</p>	<p>The examiner demonstrates effective application of PCT criteria for industrial applicability in a mixture of technology-specific and more complex generic examples.</p>	<p>The examiner demonstrates a thorough understanding and application of PCT criteria for industrial applicability when analysing increasingly complex real technology specific cases.</p>	<p>The examiner consistently, accurately and independently checks whether inventions satisfy PCT criteria for industrial applicability. Any relevant objections are fully justified.</p>
<p>PQS 2.3.3 PQS 4.1, 5.1</p>				
<p>7. Determine if novelty exists</p>	<p>The examiner assesses novelty in simple example cases.</p>	<p>The examiner determines novelty in increasingly complex generic and simple technology-specific cases.</p>	<p>The examiner consistently applies his/her knowledge of novelty to increasingly complex real technology specific cases, and provides appropriate justifications for any objections.</p>	<p>The examiner consistently and accurately analyses prior art documents to assess whether each and every claimed element has been disclosed to a PSA by the priority dates. The examiner also consistently gives appropriate justifications for any relevant objections.</p>
<p>PQS 2.3.1 PQS 4.1, 5.1</p>				

Sample: RPET set of 23 technical skills

- Interpret specifications in accordance with rules of construction
- Consider the description
- Determine the invention
- Determine the scope of claims
- Consider clarity
- Consider clear and complete disclosure and full support
- Consider excluded subject matter
- Consider unity of invention
- Construe the scope of each claim (with regard to novelty and inventive step)
- Consider industrial applicability
- **Develop an effective search strategy**
- **Conduct online search**
- Determine relevant prior art
- Undertake appropriate record keeping

Sample: RPET set of 23 technical skills

- Determine if novelty exists
- Determine common general knowledge
- Determine if an inventive step exists
- Demonstrate knowledge and application of IPC system for indexing
- Produce first reports/opinions
- Consider amendments and/or arguments
- Determine the allowability of the amendments
- Demonstrate decision-making capability when considering attorneys'/ applicants' submissions
- Produce further reports (clear or adverse)

Lack of detail?

Sample: IPET competency units

Unit 2:	Construe patent specifications
Unit 3:	Evaluate patent specifications
Unit 4:	Assess novelty
Unit 5:	Assess inventive step
Unit 6:	Classify patent applications
Unit 7:	Conduct searches
Unit 8:	Produce examination reports

What **knowledge** and **skills** are required to conduct a prior art search?

Unit 7: Conduct searches

Elements and performance criteria



ELEMENTS <i>Elements describe the essential outcomes.</i>	PERFORMANCE CRITERIA <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine appropriate search strategies.	
2. Consider excluded subject matter.	
3. Conduct online search.	
4. Identify and retrieve relevant documents.	
5. Undertake appropriate record keeping.	



Lack of detail?

<p>1. Determine appropriate search strategies.</p>	<p>1.1 The claims and/or search statement are analysed to determine the subject of the invention with due regard to the description and drawings and with particular emphasis on the inventive concept.</p> <p>1.2 In close consultation with a three person search strategy team (comprising the search examiner and two 'consultant' examiners, at least one of whom has relevant searching experience), reliable, cost effective search strategies are developed (including, but not limited to keywords, classification marks, structure, sequence, recognition of analogous terms).</p>
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Why does such lack of detail suffice?

Because **content of training modules is controlled**: Trainers/content developers will assure that all relevant knowledge/skills will be covered.

An explicit detailed definition of subject matter to be learned is not needed.

Sample: slightly more detail

Assessment Activity: Glossary of Terms

- Search theory
- Inventive concept
- Preliminary search
- IPC
- CPC
- Section, Class, Subclass, Main group and Subgroup
- Keywords
- Citation
- Three person team practice
- Evaluate and adapt
- Search Information Statement
- EPOQUE
- EPOQUE databases (EPODOC, WPIAP, TXTE, INSPEC, MEDLINE)
- Full text searching
- Internal
- X Full
- Viewer
- Operators
- Truncations
- Limiting a search
- Records, fields and Index
- Clusters
- Viewer Bars
- Drawers
- VIN
- Family Bar
- Vertical Button Bar

Sample competencies of examiner

Field: **Work-sharing**

- Examiner is capable of identifying patent family relations for given application [**basic**]
- Examiner is capable of researching examination status of family members [**basic**]
- Examiner is capable of retrieving examination work products for family members [**basic**]
- Examiner is capable of assessing applicability/utility of examination work products to application awaiting examination [**medium**]
 - Claims granted in other jurisdictions
 - Search and examination reports prepared in other jurisdictions
- Examiner is capable of selecting suitable claim set for grant [**medium**]
- Examiner is capable of communicating reasons for selecting a claim set and motivating applicant to adopt proposal [**medium**]
- Examiner is capable of utilizing foreign search reports/citations for preparing a search report for a pending application [**medium**]
- Examiner is capable of utilizing foreign examination reports/rejection rulings for preparing an examination report for a pending application [**advanced**]
- Examiner is capable of utilizing foreign examination reports for preparing a rejection ruling for a pending application [**advanced**]

Ordering competencies/skills/knowledge?

- Greater level of detail will lead to a larger number of skills and knowledge elements
 - How to organize a larger number of skills/knowledge elements?
 - Grouping in different **fields of learning**?
 - Related to job specific tasks?
 - Do we need additional hierarchy?
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- Compare with IPC scheme


To be explored in
this workshop

Example for ordering many elements: IPC

- Fields of learning <> Sections (Chemistry, Physics, Mechanical Engineering,..)
- Subdivision of each field of learning

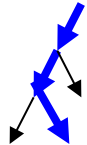
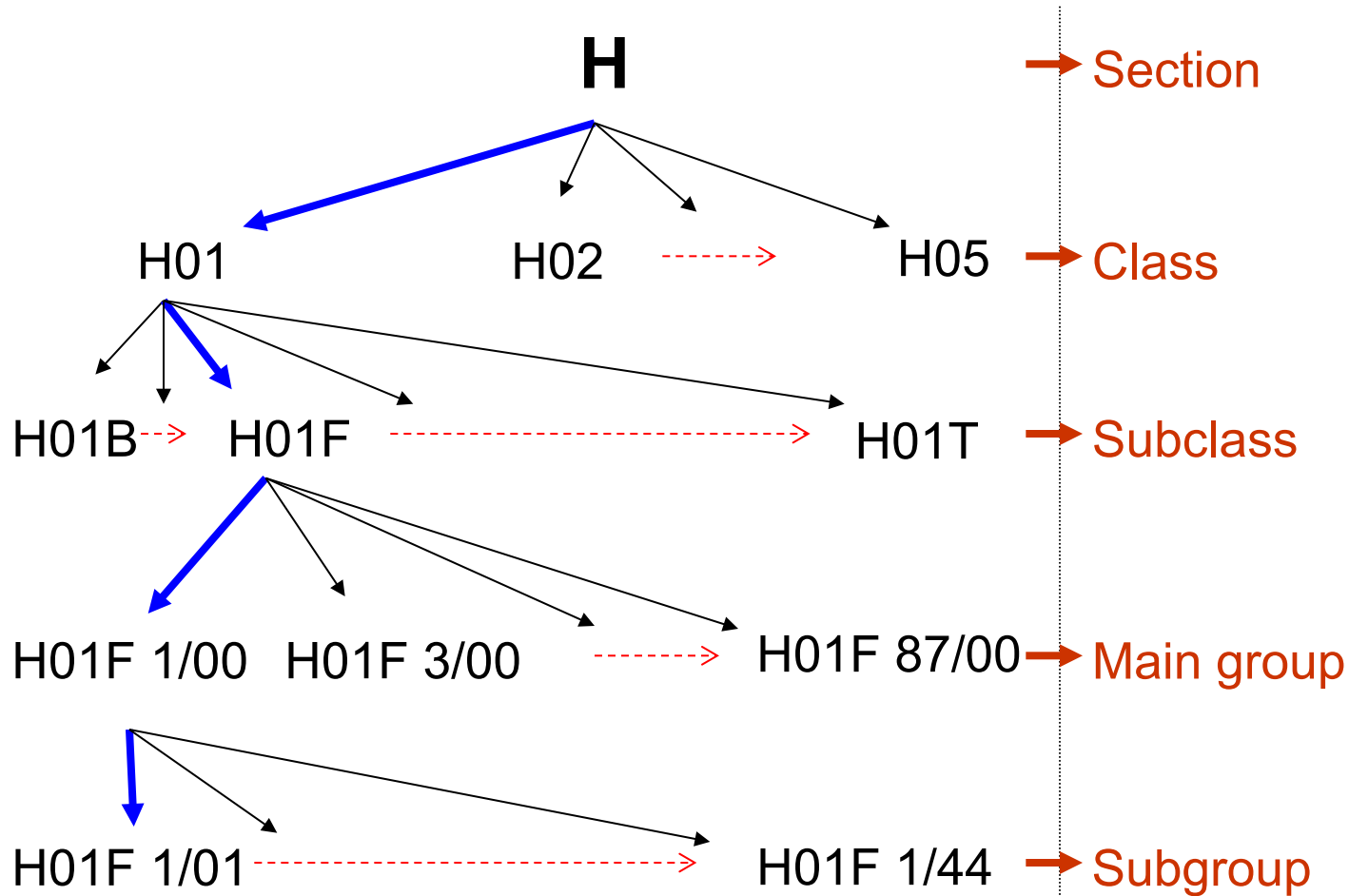
IPC logical/hierarchical structure

- ▶ hierarchical top level: 8 Sections

A	SECTION A — HUMAN NECESSITIES
B	SECTION B — PERFORMING OPERATIONS; TRANSPORTING
C	SECTION C — CHEMISTRY; METALLURGY
D	SECTION D — TEXTILES; PAPER
E	SECTION E — FIXED CONSTRUCTIONS
F	SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING
G	SECTION G — PHYSICS
H	SECTION H — ELECTRICITY 

next slide

IPC hierarchical structure



34 159 documents

H SECTION H — ELECTRICITY

H01 BASIC ELECTRIC ELEMENTS

H01F MAGNETS; INDUCTANCES; TRANSFORMERS; SELECTION OF MATERIALS FOR THEIR MAGNETIC PROPERTIES (ceramics based on ferrites C04B 35/26; alloys C22C; thermomagnetic devices H01L 37/00; loudspeakers, microphones, gramophone pick-ups or like acoustic electromechanical transducers H04R)

H01F 1/00 Magnets or magnetic bodies characterised by the magnetic materials thereof; Selection of materials for their magnetic properties (thin magnetic films characterised by the

- H01F 1/01 · of inorganic materials
- H01F 1/03 · · characterised by their coercivity [6]
- H01F 1/032 · · · of hard-magnetic materials [6]
- H01F 1/04 · · · · metals or alloys [6]
- H01F 1/047 · · · · · Alloys characterised by their composition [5,6]
- H01F 1/053 · · · · · containing rare earth metals [5,6]
- H01F 1/055 · · · · · and magnetic transition metals, e.g. SmCo₅ [6]
- H01F 1/057 · · · · · and IIIa elements, e.g. Nd₂Fe₁₄B [6]
- H01F 1/058 · · · · · and IVa elements, e.g. Gd₂Fe₁₄C [6]
- H01F 1/059 · · · · · and Va elements, e.g. Sm₂Fe₁₇N₂ [6]

One point for each subdivision

Section

Class

Subclass

Main group

Subgroups



12th level

98 docs

607 docs

▶ sufficiently small numbers

Fields of learning (tentative)

- Intellectual property protection
- National intellectual property protection
- PCT system
- Patent information
- Patent classification
- Formality examination
- Generic search methodologies (Prior art retrieval)
- Technology-specific search methodologies (Prior art retrieval)
- Search and examination databases and tools (Prior art retrieval)
- **Generic substantive examination**
- Technology-specific substantive examination
- Work-sharing
- Procedural and other administrative tasks
- Supplementary

To be discussed
in this workshop

Supplementary

This field comprises competencies, skills, knowledge which are **not** part of core activities of a patent examiner. An examiner may, however, be assigned such other task because of his expertise as an examiner of patents, or simply because of staff shortage (in smaller Offices)

- Advisory services:
 - Patent drafting
 - Filing patent applications
- Promoting IP, outreach...
- Enforcement, infringement,
- Quality management
- Technology transfer, commercialization,...
- Patent analytics and business use of patent information
- Hearing, appeal, opposition
- ISA specific tasks
- Specific search and examination or administration tools: specialized databases, IPAS

Work-sharing

This field comprises knowledge and skills required for utilizing search and examination products established by other patent offices for members of the patent family

- Work-sharing initiatives (ASPEC, PPH, ..)
- Family relations of a given application
- Examination status of family members
- Monitoring examination progress of family members
- PCT international phase work products
- Types of work products from national phases
- Technical platforms for retrieval and exchange of national phase work products
- Comparing national work products
- Differences of national examination practices
- Utilizing external work products for preparing examination reports, rejections, grants, etc
- WIPO's ICE service

Generic substantive examination

- Clarity of claims
- Unity of invention
- Technical nature of inventions
- Exemptions/exclusions from patentability
- Sufficient and clear disclosure, enablement,...
- Industrial applicability
- Relevant prior art
- Validity of priorities
- Expert skilled in the art
- Novelty
- Inventive step/non-obviousness
- Additions to initial disclosure, admissible amendments
- Disclosure of origin of genetic resources
- Deposition of micro-organisms

Technology specific examination

- Software related inventions
- Business methods
- Pharmaceuticals and 2nd uses
- Inventions related to the use of genetic resources
- Diagnostic and therapeutic inventions
- Medical uses

Patent classification

- Elements of the IPC (symbols, titles, references, notes, ...)
- Hierarchical structure of the IPC
- Scope of classification places
- Electronic layer (Definitions)
- Revisions of the IPC, validity of codes and reclassification, Master Classification Database
- Classifying a patent application
- Identifying classification codes suitable for searching given subject matter
- Other classification systems (CPC; FI, F-terms; DECLA; DWPI classification (Manual Codes))
- Classification related tools

Patent information

This field comprises knowledge and skills related to various general aspects of patent information which form the basis for skills in other fields

- WIPO Standards
- National publication practices/policies and types of patent documents
- Structured and unstructured data
- Bibliographic data, validity of bibliographic data
- Components (structure) of patent documents: description, drawings, claims
- Types and categories of claims, claim interpretation
- Priority claims
- Patent family relations
- Legal status information
- Citation information
- Overview databases for patent information: primary (authoritative) sources, commercial secondary sources, free secondary sources
- Non-patent literature

Generic search methodologies and search related tasks

This field comprises knowledge and skills required for prior art searches which are **not** technology specific and which are **not** database specific

- Types of searches and their related goals/objectives
- Recall/precision dilemma
- Preparing a search
- Structured data and field identifiers
- Fielded search versus command query search
- Query syntax and operators (Boolean and proximity operators, truncations, stemming, nesting, ranges, phrases)
- Keyword searches, synonyms
- Classification searches
- Name searches
- Forward and backward citation searches
- Refining search strategies: field combinations
- Refining search strategies: recall and precision
- Structuring complex search queries, building of standardized subqueries/concepts

Generic search methodologies and search related tasks (continued)

- Fuzzy searches, natural language searches
- Cross lingual searches
- Cross database searches
- Searching unstructured data: text mining and clustering; similar documents
- Family reduction
- Finding language equivalents
- Specific search methodologies: searching functional features; searching non-technical features
- Stopping a prior art search
- Screening and evaluating result sets
- Display, filtering, selection and analysis options for result sets
- Recording search strategies
- Preparing search reports

Technology specific search methodologies

This field comprises knowledge and skills required for prior art searches which are technology specific and which build on knowledge and skills comprised by the field 'Generic ...'

- CAS registry codes
- Structure searches
- Sequence searches

Specific search and examination databases and tools

This field comprises knowledge and skills required for prior art searches which are database specific and which build on knowledge and skills comprised by the field 'Generic ...'

- Public secondary databases for patent information: Patentscope, Espacenet, Depatisnet, Google Patents, Patentlens, Chemspider
- Public primary (authoritative) databases for patent information: US-Pair, US-App, US-Pat, J-PatPlat, InPASS, ROSPATENT, ..
- Commercial databases for patent information: Thomson Innovation, Questel, LexisNexis,..
- TK databases: TCMDL China, TKDL India, KTKP Korea,
- Gene sequence databases/portals: GENESYS, GenomeQuest, ENSEMBL, ..
- Public databases/portals for NPL: Open Access, Google Scholar, Scopus, Medline,....
- Commercial databases for NPL
- Database access portals for LDCs, DCs: ASPI, research4life
- Professional examination tools: Epoquenet, Depatis
- Platforms for file inspection and work-sharing: WIPO-CASE, Espacenet Global Dossier and CCD, USPTO Global Dossier
- Classification tools
- Patent administration tools: WIPO-IPAS, ...
- Web-services for retrieving patent information

Intellectual property protection

- IP rights for protecting innovations and creativity
- Actors and institutions
- International and regional legal frameworks
- Socio-economic aspects of IP

National intellectual property protection

- National instrument for protecting IP
- Structure and functioning of national IPO(s)
- National and pertinent regional IP legislation
- Case law
- Examination Guidelines
- National administrative law
- Legal principles (party disposition, right to be heard)
- National patent prosecution workflow

Procedural and administrative tasks

- Preparation of work products (Report writing etc)
- Non-final actions (Search reports including search strategies, opinions, proposals for claim amendments)
- Final actions (rejections, grants)
- Preparing publications of specification
- Preparing and conducting hearings
- Appeal
- Opposition

Hierarchical structure

- Each field of learning is divided in separate units
- First layer: 'Fields of learning'
- Second layer
- ...
- Lowest layer

- Do we need further divisions?
- Where do we find definitions of specific skills/knowledge?

To be discussed
in this workshop

Further subdivisions

- Clarity of claims
- Unity of invention
 - A priori lack of unity
 - A posteriori lack of unity
- Technical nature of inventions
- Exemptions/exclusions from patentability
- Sufficient and clear disclosure, enablement,...
- Industrial applicability
- Relevant prior art
- Validity of priorities
- Expert skilled in the art
- Novelty
- Inventive step/non-obviousness
 - Problem solution approach
 - Tests for non-obviousness
- Additions to initial disclosure, admissible amendments

Compare with subdivisions of IPET

Sample IPET Module 2: 'Learning outcomes'

<p>Inventive step</p>	<p>To develop and understand the test for inventive step</p> <p>To know the role of relevant prior art in Inventive step</p> <p>Describe the relevant person skilled in the art in inventive step</p> <p>Understand problem-solution approach for testing inventive step</p> <p>Identify effect of single and combined disclosures in prior art on inventive step</p>
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Hierarchical structure

- Each field of learning is divided in separate units
- Do we need further divisions? Sometimes
- Similar to the IPC:
 - Subdivisions only serve the purpose of (thematic) ordering
 - The more skills/knowledge elements need to be ordered, the more subdivision/levels of hierarchy may be needed
 - May strongly depend on the subject matter

Hierarchical structure

- Each field of learning was divided in separate units
- First layer: 'Fields of learning'
- Second layer
- ...
- Lowest layer: Each element on the lowest level/layer may represent either
 - **Skill**
 - "Capable to research family information for a given application"
 - **Knowledge**
 - "Capable to explain the concept of a 'simple family'"
- Some elements may be represented both as knowledge or skill
 - Capable to describe the concept of family reduction (knowledge)
 - Capable to test if a specific database applies family reduction (skill)

Patent information

- WIPO Standards
- National publication practices/policies and types of patent documents
- Structured and unstructured data
- Bibliographic data, validity of bibliographic data
- Components (structure) of patent documents: description, drawings, claims
- Types and categories of claims, claim interpretation
- Legal status information
- Citation information
- Patent family information
 - Capable to explain the concept of a 'simple family'
 -
- Overview databases for patent information: primary (authoritative) sources, commercial secondary sources, free secondary sources
- Non-patent literature

Work-sharing

- Work-sharing initiatives (ASPEC, PPH, ..)
- Family relations of a given application
 - Capable to research family information for a given application
 -
- Examination status of family members
- Monitoring examination progress
- PCT international phase work products
- Types of work products from national phases
- Technical platforms for retrieval and exchange of national phase work products
- Comparing national work products
- Differences of national examination practices
- Utilizing external work products for preparing examination reports, rejections, grants, etc

Generic search methodologies

- Fuzzy searches, natural language searches
- Cross lingual searches
- Cross database searches
- Searching unstructured data: text mining and clustering; similar documents
- **Family reduction**
 - Capable to describe the concept of family reduction (knowledge)
 - Capable to test if a specific database applies family reduction (skill)
- Finding language equivalents
- Specific search methodologies: searching functional features; searching non-technical features
- Stopping a prior art search
- Screening and evaluating result sets
- Display, filtering, selection and analysis options for result sets
- Recording search strategies
- Preparing search reports

Crossover of skills/knowledge

- Particular skills/knowledge may be associated/required for several distinct examination tasks, as well as non-examination tasks (competencies)
- For example:
 - 'Construing claims' is needed for assessment of novelty, of inventive step, clarity of claims, preparing a search
 - 'Interpreting a limiting reference in IPC' is needed for
 - Classifying a patent application
 - Before publication/substantive examination
 - Reclassification before grant
 - Reclassification with IPC revisions
 - Identifying suitable IPC codes for search task
 - Patent analytics
- Should the same skill be repeated in several respective places of the framework?

Crossover of skills/knowledge

- Crossover: skill/knowledge is required for different competencies
- How to reflect crossover in the framework?
 - (i) Repeated entries, possibly with adapted wording; or
 - (ii) Only once in its respective generic field of learning ('classification')?
- Current preference is (ii)
 - Framework shouldn't attempt to reflect workflow/procedure
 - Framework shouldn't attempt to describe tasks of examination procedure (for example how to examine novelty)
 - Such procedures may depend on national specifics
 - Framework should only attempt to establish a comprehensive inventory of potentially relevant skills and knowledge (dictionary)
 - Each skill/knowledge element should therefore appear only once in dictionary

To be discussed
in this workshop

Example option 1: Skill in patent classification

- Elements of the IPC (symbols, titles, references, notes, ...)
- Hierarchical structure of the IPC
- Scope of IPC places
- Electronic layer (Definitions)
- Revisions of the IPC, validity of codes and reclassification, Master Classification Database
- Classifying a patent application
- Identifying classification codes suitable for searching a given subject matter
- Other classification systems (CPC; FI, F-terms; DECLA; DWPI classification (Manual Codes))
- Classification related tools

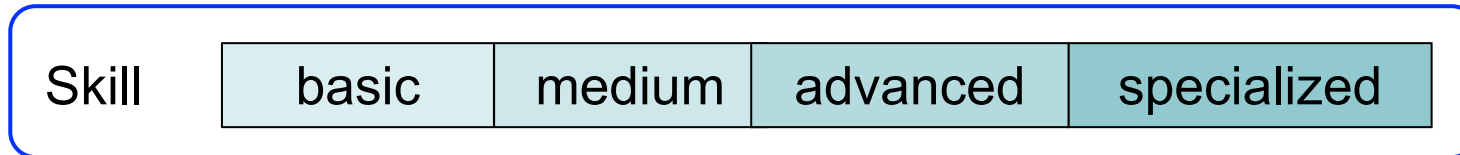
Example option 2: Skill in generic search methodologies and search related tasks

- Types of searches and their related goals/objectives
- Recall/precision dilemma
- Preparing a search
- Structured data and field identifiers
- Fielded search versus command query search
- Query syntax and operators (Boolean and proximity operators, truncations, stemming, nesting, ranges, phrases)
- Keyword searches, synonyms
- **Classification searches**
 - Identifying classification codes suitable for searching a given subject matter
 -
- Name searches
- Forward and backward citation searches
- Refining search strategies: field combinations
- Refining search strategies: recall and precision
- Structuring complex search queries, building of standardized subqueries/concepts

Example: Crossover of IPC skills/knowledge

- Generic IPC related skills should not be integrated in field "prior art search";
- Only IPC related skills which are exclusively applicable in "prior art search" may be placed there

Levels of proficiency



- Do we need different levels of proficiency?
- For what purpose?
- How many levels?

Example: Competency model for small IPO

Skill	basic	medium	advanced	specialized
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- Small offices usually depend on out-sourcing of examination or work-sharing
- Generic prior art search: **basic to medium** proficiency (depending on search tools available)
 - When an office hardly performs searches, or only in free databases, and mostly uses search reports done by others, it may suffice to know how searches are done
- Generic examination: **basic to medium** proficiency
 - It may suffice to understand the concepts of patentability if one uses reports of others
- Technology specific search and examination: **none**
- Patent information: **advanced** proficiency
- Work-sharing: **advanced** proficiency

Levels of proficiency (RPET)

Training progress

Technical skills	Phase A ¹	Phase B ²	Phase C ³	Competent, applied practice ⁴
17. Determine if an inventive step exists	<ul style="list-style-type: none"> □ The examiner demonstrates a basic knowledge of the tests for inventive step in simple example cases. 	<ul style="list-style-type: none"> □ Under close supervision the examiner uses recognised tests to determine inventive step in increasingly complex example cases and simple technology-specific cases. 	<ul style="list-style-type: none"> □ With support and feedback, the examiner consistently applies his/her knowledge of the tests for inventive step to increasingly complex real cases in his/her own technology, and provides appropriate justifications for any objections. 	<ul style="list-style-type: none"> □ With minimal supervision, the examiner consistently and effectively identifies similarities and differences between relevant prior art documents and the claimed invention. The examiner assesses the contribution of CGK in combination with the relevant prior art, and identifies the motivation of the PSA to combine documents. The examiner also consistently gives appropriate justifications for why claimed inventions may be obvious.

For each skill, proficiency increases gradually over subsequent training phases

Related to examiner's ability to treat increasingly complex cases

Levels of proficiency (IPONZ)

	<i>Associate I Examiner</i>	<i>Associate I/II Examiner</i>	<i>Associate II Examiner</i>	<i>Patent Examiner</i>	<i>Senior Patent Examiner</i>	<i>Principal Patent Examiner</i>
9. Novelty	<p>Demonstrate an understanding of novelty and its application to simple example cases.</p> <p>Demonstrates an knowledge of relevant caselaw, including the concepts of planting the flag and inherent disclosure.</p> <p>Distinguish over inventiveness.</p>	<p>Demonstrate basic knowledge and application of requirements of novelty to simple subject matter for technology specific cases.</p> <p>Including identifying differences between claimed subject matter and prior art documents.</p> <p>Demonstrate ability to distinguish novelty from inventiveness.</p>	<p>Demonstrate steadily increasing knowledge and application of requirements of novelty to moderate to more complex subject matter for technology specific cases.</p> <p>Including identifying differences between claimed subject matter and prior art documents.</p> <p>Identify where disclosure is inherent in a document.</p> <p>Demonstrate ability to distinguish novelty from inventiveness.</p>	<p>Demonstrate knowledge and application of novelty to a range of subject matter, including complex subject matter for technology specific cases.</p>	<p>Proficient in application of law and practice with regard to novelty. Addresses complex subject matter and deeper areas of law with strong knowledge of legal tests and their application.</p>	<p>Fully proficient in dealing with law and practice.</p> <p>Addresses complex subject matter and deeper areas of law and practice.</p>
10. Common general knowledge	<p>Demonstrate basic knowledge of the meaning of common general knowledge, and identification of the person skilled in the art for simple cases and examples.</p>	<p>Demonstrate an understanding of common general knowledge and application to simple to moderately complex technology specific cases.</p> <p>Includes application of understanding during formulation of search strategy, claim construction, identification and examination of relevant prior art base and prior art materials.</p>	<p>Demonstrate an understanding of common general knowledge and application to a range of moderate to increasingly complex examples and technology specific cases.</p> <p>Includes application of understanding during formulation of search strategy, claim construction, identification and examination of relevant prior art base and prior art materials.</p>	<p>Demonstrate consistent application of common general knowledge, and PSA for a range of subject matter and cases, including during formulation of search strategy, claim construction, identification and examination of relevant prior art base and prior art materials for a range of subject matter including complex cases.</p>	<p>Proficient in identification of the PSA and the CGK for a range of subject matter, including for complex subject matter where the PSA maybe cross-technology team(s).</p> <p>Consistent application of the most appropriate PSA & CGK in examination and searching.</p>	<p>Fully proficient in identification of the PSA and the CGK for a range of subject matter, including for complex subject matter where the PSA may be cross-technology team(s).</p>

Training progress

Career progress

Proficiency of an examiner

Aspects of increasing proficiency/expertise of an examiner:

- Level of output (performance)

- Related to particular examination **skill**:
 - Ability to treat increasingly complex cases
 - Treating cases in an increasingly consistent manner, ...
- Highly proficient examiner: disposing of additional (optional) **skills**

- Related to particular **knowledge**:
 - Knowledge is present or lacking; mandatory or optional
- Highly proficient examiner would dispose of additional specialized (optional) knowledge (which may enable her/him to handle additional non-standard tasks)

Basic/advanced/specialized Skills&Knowledge

- Basic skills: indispensable/mandatory skills that should be mastered at an early stage of a professional career;
 - required for examination of any application, for example:
 - 'Assessing clarity of claims'
 - required for examination of any PCT national phase entry:
 - 'Researching patent family of a given application'
- Advanced skills: specific skills required only for more complex or contentious applications
- Specialized (optional) skills: skills required for specific (non standard) tasks
- Skills example: Search methodologies
 - Basic (mandatory): Using Boolean operators in fielded searches
 - Advanced: Using proximity operators field identifiers in command query
- Knowledge example: International legal frameworks
 - Basic: Paris Convention, PCT
 - Specialized: PLT, PGRFA, Nagoya Protocol

Sample competencies of examiner

Field: **Work-sharing**

- Examiner is capable of identifying patent family relations for given application [**basic**]
- Examiner is capable of researching examination status of family members [**basic**]
- Examiner is capable of retrieving examination work products for family members [**basic**]
- Examiner is capable of assessing applicability/utility of examination work products to application awaiting examination [**medium**]
 - Claims granted in other jurisdictions
 - Search and examination reports prepared in other jurisdictions
- Examiner is capable of selecting suitable claim set for grant [**medium**]
- Examiner is capable of communicating reasons for selecting a claim set and motivating applicant to adopt proposal [**medium**]
- Examiner is capable of utilizing foreign search reports/citations for preparing a search report for a pending application [**medium**]
- Examiner is capable of utilizing foreign examination reports/rejection rulings for preparing an examination report for a pending application [**advanced**]
- Examiner is capable of utilizing foreign examination reports for preparing a rejection ruling for a pending application [**advanced**]

Issues

- Do we need knowledge & skill elements? Or skills only (wording knowledge as skill)?
- When should we create subdivisions to facilitate thematic ordering?
- Do we need repetitions of elements in different parts of the framework when skills are associated with several distinct examination tasks?
- Should the framework include proficiency levels and their definitions?
- Should the framework flag certain knowledge/skills as mandatory? Or others as optional?
- How do we reflect aspects of national practice?
- Do we need symbols to identify each framework element, like in the IPC?

Thank you

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