



INSTITUTE
Building Extraordinary IP Assets

SLW Institute International IP Webinar Series Episode 07

Global Patent Drafting and Filing Strategies

Today's Presenter...



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Presentation Outline

- **International Diversification**
- **Drafting Considerations for Japan, US
and Europe**
- **The Global Patent Application**
- **Special Considerations for Software
and Business Methods**
- **Global Filing Strategies**
- **Traps for US Attorneys**

International Diversification

- Substantive law on claim requirements and interpretation is different
- The impact of the content of the description, drawings and abstract on the scope of the claims varies
- Many competing requirements – compromise required
- Foreign requirements impact at first filing (priority)
- National drafter **MUST** take international requirements into account for first filed specification
- PCT system brings with it the need for a ‘global patent’ specification

Drafting for Japan

Drafting Considerations for Japan

- Headings are used
- Best mode not required but sufficiency is
- Incorporation by reference not allowed
- Claim elements need not be illustrated in the drawings
- No prosecution history estoppel

Drafting Considerations for Japan

- Means-plus-function claims not limited
- Multiply-dependent claims allowed
- Claims fees only for the numbered claims (dependency irrelevant)
- A limited number of independent claims in each category allowed

Drafting for US

Drafting Considerations for US

- Headings are required
- Best mode and sufficiency required
- Incorporation by reference allowed
- Claim elements must be illustrated in drawings
- Prosecution history estoppel – avoid admissions
- Include references to related applications

Drafting Considerations for US

- Means-plus-function claims limited under USC 112
- Multiply-dependent claims allowed but not if dependent upon multiply-dependent claims (claims fees payable for each dependency)
- A large number of independent claims of varying scope in each category desirable because of litigation environment. However, claims fees are a restraint.
- Relatively broad scope for amendment after filing date

Drafting for Europe

Drafting Considerations for Europe

- Headings not required but may be used
- Best mode not required but sufficiency is required
- Incorporation by reference not allowed
- Claim elements need not be illustrated in drawings
- No prosecution history estoppel
- Very limited scope for amendment after filing date – strict basis required – added matter trap – Art 123(2) and (3) – amendments must be “directly and unambiguously” derivable from the application as filed
- Strict basis for priority claim

Drafting Considerations for Europe

- Means-plus-function claims not limited
- Multiply-dependent claims allowed and advisable
- Claims fees only for the numbered claims for claims above 15 – but EU245 per claim. Beware the fee of EU610 for each claim above 50
- Only a minimum number of independent claims in each category allowed
- Two-part claim form NOT essential – merely preferred by EPO
- Reference numerals required in the claims – but not limiting on interpretation of scope of claims

Tips to Reduce Claims

- Multiple dependencies – e.g. dependent on more than one claim, any one of which can itself be dependent on multiple claims
- Concatenate claims using ‘and/or’
- List alternatives in one claim
- Apparatus for performing the method of any one of claims 1 to 20, comprising means for performing the steps ...
- Take care that claims dependencies in the ‘claim tree’ are consistent

The Global Patent Application

The Global Patent Draft

- Must be drafted for first filing (priority) - or soon after but before disclosure
- Must be drafted for a PCT filing – regional phase in EPO is not a European application ‘filing’
- Must be sufficient and best mode
- Use headings
- Avoid incorporation by reference for essential material
- Avoid or take care with patent profanities – ‘essential’, ‘preferable’, ‘the invention’, ‘required’, ‘aim’, ‘object’ ...

The Global Patent Draft

- Include references to related applications – required for US and can be deleted in other countries
- To provide full support, describe alternative embodiments and scope for intermediate generalized embodiments
 - Beware the practice in the US of describing all features of the embodiments as optional e.g. “may comprise...”. The EPO object that the specification does not include an enabling description of an embodiment.
- Ensure the description describes the technical features of the invention – software and business method inventions discussed later
- Avoid two-part claim form
- Do not add reference numerals – can be added later in Europe

The Global Patent Draft

- Include means-plus-function claims and non means-plus-function claims
- Include a set of European style multiply-dependent means-plus-functions claims – or equivalent language in the description as basis (e.g. multiply dependent numbered examples or embodiments)
- Include multiple independent claims – or equivalent language in the description as basis
- Generally include claim language (even means-plus-function language) in a section of the description e.g. under the Summary of the Invention or a section 'Alternative Embodiments'
- Beware the impact of EPO claims fees and restrictions on number of independent claims

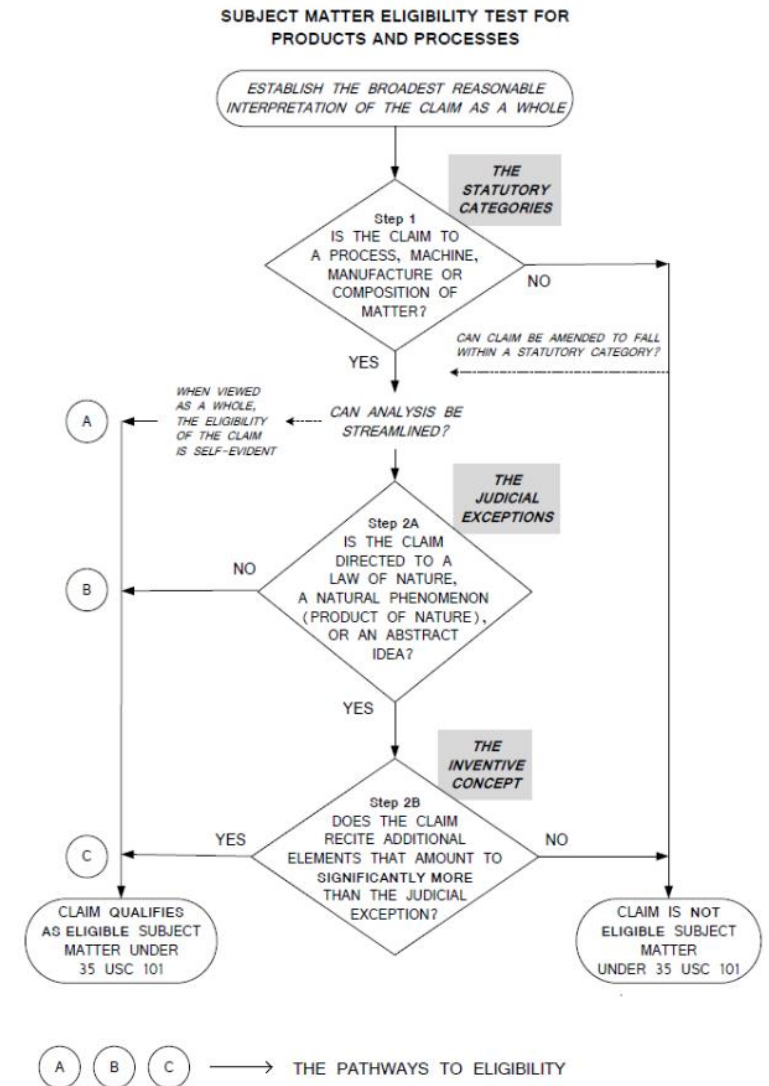
Special Considerations for Software and Business Methods

Japan

- A statutory invention is defined as *the creation of technical ideas using natural laws*
- Inventions allowed if achieved through the concrete use of hardware resources - must claim the interaction of hardware components
- Claims to a computer program are allowed (enhanced infringement rights by statute)
- Claims to a storage medium storing a computer program are allowed
- Claims to a signal carrying a computer are not allowed

US

- Anything under the sun that is made by man is patentable (Supreme Court)
- But - Alice – abstract inventions are non-statutory. Complex USPTO guidelines with multi-step test – “significantly more”
- Claims to a storage medium storing a computer program are allowed – “non-transitory medium”
- Claims to a signal carrying a computer are not allowed
- Claims to a computer program are not allowed



Europe - EPO

- Claims must define technical features of the invention
- The claimed invention must be a ‘technical solution to a technical problem’ – part of the determination of inventive step (EBA decision G3/08)
- In Europe non-technical features are deemed given to the skilled person for the solution of a technical problem – invention is in the implementation
- Software claims allowed as a storage medium, a signal, and a computer program

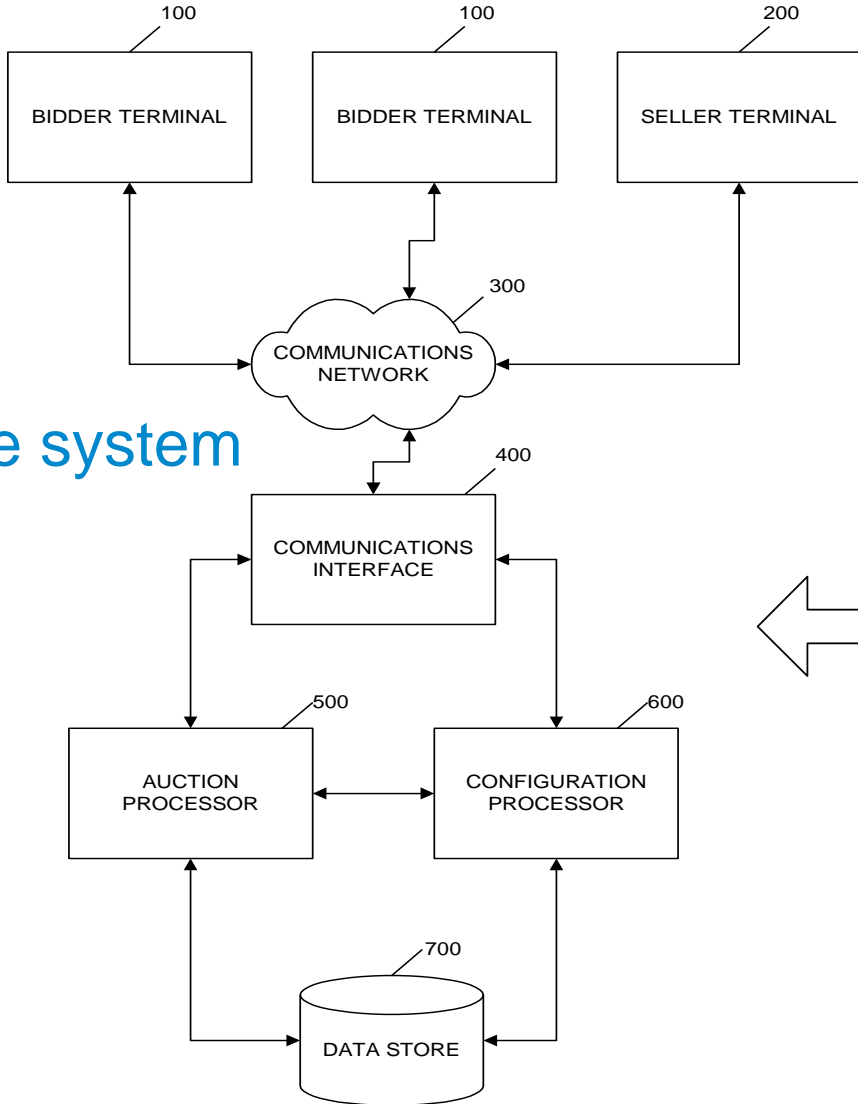
Drafting Tips

- The claims must define technical features and must define a technical solution to a technical problem – non-technical features will be ignored when assessing inventive step
- To support the claims, the description must describe:
 - Structure
 - Overall system
 - Internal computer structure
 - Code structure
 - Data structure
 - Function
 - Overall system function
 - Internal computer function
 - Code and data function

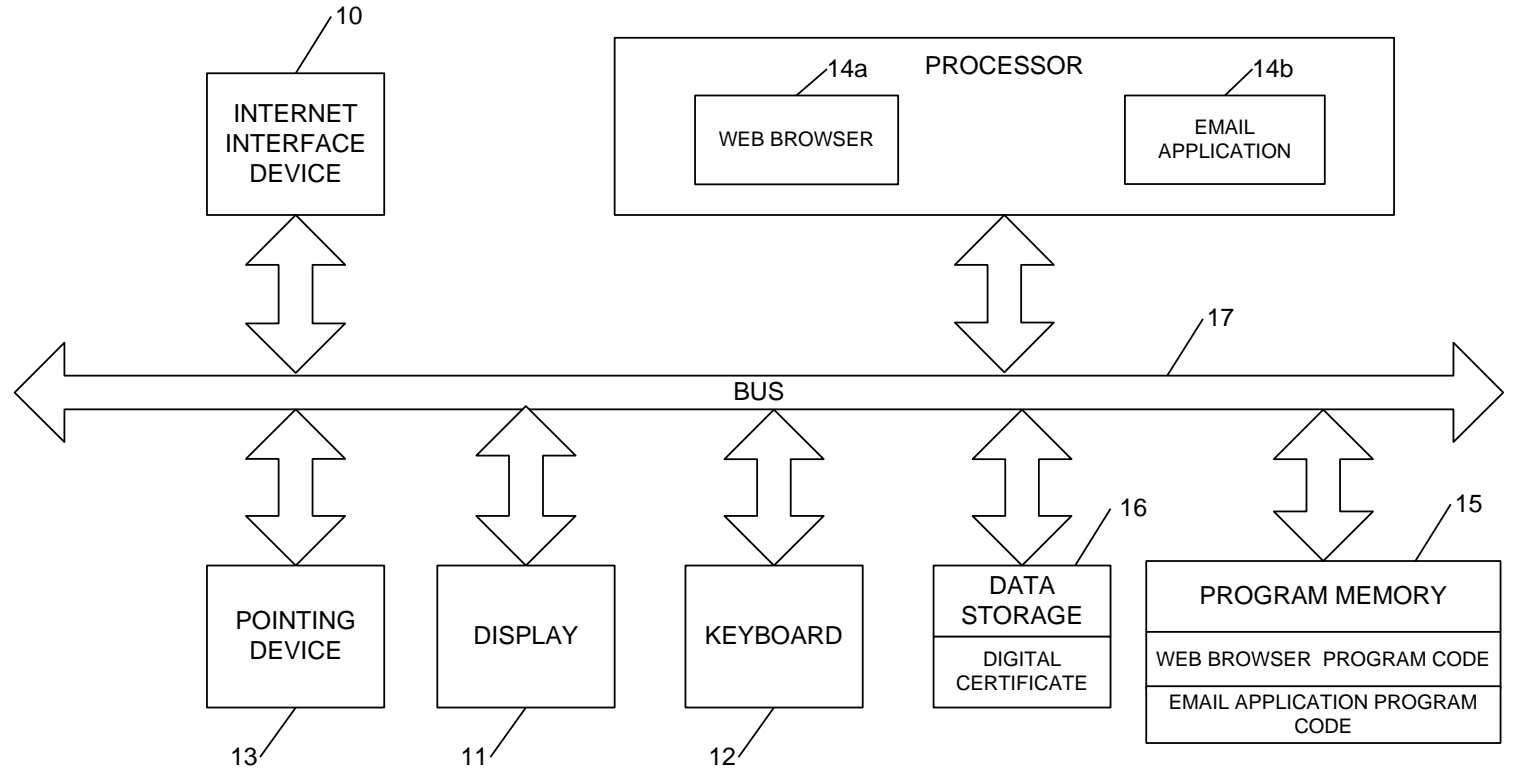
DETAILED TECHNICAL FEATURES ARE ESSENTIAL FOR THE EPO AND VERY DESIRABLE FOR THE US FOLLOWING ALICE

Structure

The system

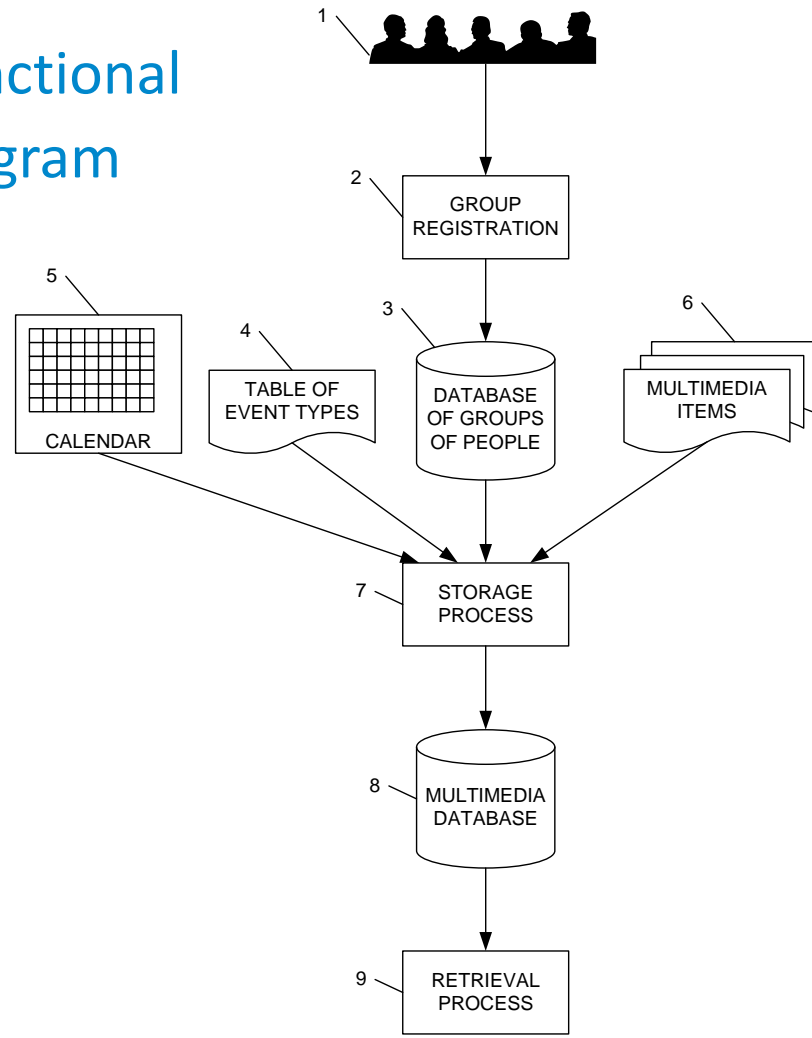


A terminal

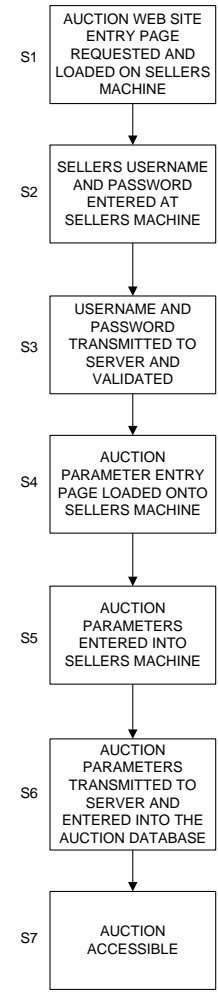


Function

Functional diagram



Flow diagram



Claims

- Claim a physical product with physical components not an abstract product or process, such as a look-up table, a stack, or a heap
- Client/server, transmitter/receiver, plug/socket type claims require multiple independent claims to each part to ensure infringement by a single infringer in a single country e.g. client apparatus, client method, client computer program (or storage medium), server apparatus, server method, and server computer program (or storage medium)

Claims

- Useful shorthand claim for computer programs in Europe to save claims fees:

A carrier medium carrying computer readable code, which when executed by a processor of a computer, causes the computer to carry out the method of any one of claims 1 to 50.

(carrier medium covers a storage medium and a signal – description needs to support this but beware invalidating your US claim by encompassing transitory media. Define a carrier medium as a transitory medium, such as a signal, and a storage medium. This allows surrender of the non-statutory transitory medium by amendment to storage medium)

- You can also use this shorthand for system claims for the EPO:

A system for processing data, the system comprising:

at least one processor; and

a storage medium storing processor implementable code, which when executed by the at least one processor, causes the system to carry out the method of any one of claims 1 to 50.

Global Filing Strategy

US Focused Strategy - 1

- File US provisional
- Include European style claims and US claims
- No Claims fees incurred
- 21 year patent term – US patent delayed
- At priority deadline file full US application by amending provisional and file PCT (or nationals) with amended specification to suit

US Focused Strategy - 2

- File PCT application at USPTO
- Include European style claims and US claims – order depends on ISA (EPO will search the first group of claims)
- No claims fees incurred
- 20 year patent term – US patent delayed
- At national phase file preliminary amendment in US to reduce claims fees and delete US claims for EPO

US Focused Strategy - 3

- File full US application
- Include US claims and text of European claims in description – or at least basis for multiple dependencies and means-plus-function language
- 20 year patent term – US not delayed
- At priority deadline file PCT or national applications by amending the claims to replace US claims with European claims

European Focused Strategy

- File a full EPO application or a European country national application
- Include European claims first and US claims at the end – or language of US claims in description to reduce claims fees
- 21 year US patent term US patent delayed
- At priority deadline file US national application by amending the claims to reduce multiple dependencies or file PCT application and delay amending the claims until US national phase

International Focused Strategy

- File full EPO or national application or a PCT AND (simultaneously)
- File US provisional or full application

Benefits

- Separates US from the rest of the world
- It allows the specifications to be tailored to the US and the rest of the world independently e.g. it avoids concerns over ‘means-plus-functions’ claims
- Avoids delaying the US application
- Parallel PCT offers an opportunity for a US filing 30 months later

General Foreign Filing Strategy Issues

- Protect markets rather than manufacturing centers – blocking markets prevents importation of manufactured products
 - But may be more cost effective to block known key manufacturing centers
- Issues to be considered in selecting the country:
 - Cost v value of market (cost and potential benefit)
 - Relationship between the patented product and the business (core/peripheral, life of product, investment in product)
 - Purpose of patent? (protection, improve market position, significant to a competitor's business, defensive purposes, potential licensees or partners)
 - Foreign filing strategy must comply with the company's business and IP strategy
 - Patentability and enforcement standards in the country

General Foreign Filing Strategy Issues

- **Route for foreign filing:**
 - Paris Convention
 - PCT (Patent Cooperation Treaty)
 - EPO (European Patent Office)
 - ARIPO (African Regional Industrial Property Organization)
 - OAPI (African Union Territories)
 - Eurasian patent (Eastern Europe)
 - GCC (Gulf Cooperation Council)
- **Urgency of patent grant:**
 - Deferral delays costs and enables more information about the product and the market to be obtained. Use of PCT for example will delay costs.
 - Need granted patent for licensing or enforcement purposes
 - The EPO is slow – consider national filings

Traps for US Attorneys

Priority

- Use of continuations and continuation-in-parts may lose priority claim
- Paris convention requires that the European priority application must be filed within 12 months of the first application for the invention anywhere in the world.
 - US provisional date starts the clock
- It is only possible to claim priority from a CIP application with an earlier US filing date of more than 12 months for the subject matter added when the CIP was filed
 - Might be able to argue it is a new ‘invention’?

Basis

- **Reliance on provisional specification for priority**
 - Strict basis required for priority in Europe – almost literal wording required in the provisional specification for the language of the claims
 - Potentially fatal where there is a disclosure by the applicant after the priority date but before the filing date
- **Reliance on the ability to amend the claims broadly in Europe based on the description**
 - Strict basis required for amendments to claims – almost literal wording required in the description
 - Intermediate generalization not allowed

Novelty – EPO considerations

- Prior art comprises anything made available to the public anywhere in the world by whatever means prior to the priority date e.g. publication, use, sale.
- Confidential or secret prior use is not prior art.
- There is no grace period.
- The applicant's own disclosures and prior published applications are prior art (prior unpublished European application are prior art for novelty purposes only).

Patentable subject matter – EPO considerations

- Non-technical inventions are excluded from patentability in Europe and many other countries.
- Methods of treatment by surgery, or therapy and diagnostic methods are not patentable in Europe and many other countries.

Summary Points

- Strategy will depend upon client focus (and security restrictions)
- Strategy 1 has the most advantages in US and internationally although the international strategy offers the same advantages but is more costly up-front
- First filed patent application **MUST** include a full ‘international’ style specification
- A pre-filing review by a foreign attorney is recommended
- Beware the traps!

A full discussion on this subject is available in:



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Software Patents

Law *and* Practice

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Drafting and Filing International Patent
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And the latest cumulative supplement

**Thank You For Your Interest.
Questions?**

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