I don’t have to know it all…

**Article 15** Departments entrusted with the procedure

To carry out the procedures laid down in this Convention, the following shall be set up within the European Patent Office:

(a) a Receiving Section;
(b) Search Divisions;
(c) Examining Divisions;
(d) Opposition Divisions;
(e) a Legal Division;
(f) Boards of Appeal;
(g) an Enlarged Board of Appeal.
The job description: Articles 17 & 18

- The Search Divisions shall be responsible for **drawing up European search reports**.

- The Examining Divisions shall be responsible for the **examination** of European patent applications.

- An Examining Division shall consist of **three technically qualified examiners**. However, before a decision is taken on a European patent application, its examination shall, as a general rule, be entrusted to **one member of the Examining Division**. Oral proceedings shall be before the Examining Division itself. If the Examining Division considers that the nature of the decision so requires, it shall be enlarged by the addition of a legally qualified examiner. In the event of parity of votes, **the vote of the Chairman of the Examining Division shall be decisive**.
Mission Statement of the EPO

The mission of the European Patent Office – the patent granting authority for Europe – is to support innovation, competitiveness and economic growth for the benefit of the citizens of Europe.
European Patent System

• **One** application filed at one Office for
  38 member states ( + 2 "extension states")

• **One** procedure according to the European Patent
  Convention (EPC)

• **One** EP patent for all 38 member states
  (+ 2 "extension states")
### Member States (38)

<table>
<thead>
<tr>
<th>Country Code</th>
<th>Country Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>Albania</td>
</tr>
<tr>
<td>AT</td>
<td>Austria</td>
</tr>
<tr>
<td>BE</td>
<td>Belgium</td>
</tr>
<tr>
<td>BG</td>
<td>Bulgaria</td>
</tr>
<tr>
<td>CH</td>
<td>Switzerland</td>
</tr>
<tr>
<td>CY</td>
<td>Cyprus</td>
</tr>
<tr>
<td>CZ</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>DE</td>
<td>Germany</td>
</tr>
<tr>
<td>DK</td>
<td>Denmark</td>
</tr>
<tr>
<td>EE</td>
<td>Estonia</td>
</tr>
<tr>
<td>ES</td>
<td>Spain</td>
</tr>
<tr>
<td>FI</td>
<td>Finland</td>
</tr>
<tr>
<td>FR</td>
<td>France</td>
</tr>
<tr>
<td>GB</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>GR</td>
<td>Greece</td>
</tr>
<tr>
<td>HR</td>
<td>Croatia</td>
</tr>
<tr>
<td>HU</td>
<td>Hungary</td>
</tr>
<tr>
<td>IE</td>
<td>Ireland</td>
</tr>
<tr>
<td>IS</td>
<td>Iceland</td>
</tr>
<tr>
<td>IT</td>
<td>Italy</td>
</tr>
<tr>
<td>LI</td>
<td>Liechtenstein</td>
</tr>
<tr>
<td>LT</td>
<td>Lithuania</td>
</tr>
<tr>
<td>LU</td>
<td>Luxembourg</td>
</tr>
<tr>
<td>LV</td>
<td>Latvia</td>
</tr>
<tr>
<td>MC</td>
<td>Monaco</td>
</tr>
<tr>
<td>MK</td>
<td>Former Yugoslav Republic of Macedonia</td>
</tr>
<tr>
<td>MT</td>
<td>Malta</td>
</tr>
<tr>
<td>NL</td>
<td>Netherlands</td>
</tr>
<tr>
<td>NO</td>
<td>Norway</td>
</tr>
<tr>
<td>PL</td>
<td>Poland</td>
</tr>
<tr>
<td>PT</td>
<td>Portugal</td>
</tr>
<tr>
<td>RO</td>
<td>Romania</td>
</tr>
<tr>
<td>RS</td>
<td>Serbia</td>
</tr>
<tr>
<td>SE</td>
<td>Sweden</td>
</tr>
<tr>
<td>SI</td>
<td>Slovenia</td>
</tr>
<tr>
<td>SK</td>
<td>Slovakia</td>
</tr>
<tr>
<td>SM</td>
<td>San Marino</td>
</tr>
<tr>
<td>TR</td>
<td>Turkey</td>
</tr>
</tbody>
</table>

### Extension states (2)

<table>
<thead>
<tr>
<th>Country Code</th>
<th>Country Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>BA</td>
<td>Bosnia and Herzegovina</td>
</tr>
<tr>
<td>ME</td>
<td>Montenegro</td>
</tr>
</tbody>
</table>
My office…

only published files in this photo ofcourse…
Patent Grant Procedure, part I - before the break

my job starts here...

Applicant

European patent application

Filing and formalities examination

EPO

Search and search report together with preliminary opinion on patentability

Substantive examination

Refusal or withdrawal of application

Validation in designated states

Public domain

Publication of application and search report

Online access to application file and legal status information

Observations by third parties possible

Publication of patent specification

Grant of European patent
Patent Grant Procedure, part II - after the break

Applicant

- Refusal of application

EPO

- Substantive examination
- Grant of European patent
- Limitation or revocation proceedings
- Opposition proceedings
- Appeal proceedings

Public domain

- Opposition by third parties possible
- Exceptions and exclusions
Requirements of a European Patent Application - Article 78

1) A European patent application shall contain

- Request for grant (R. 41 EPC)
- Description (R. 42 EPC)
- Claims (Art. 84, R. 43 und R. 45 EPC)
- Drawings (R. 46 EPC)
- Abstract (Art. 85, R. 47 EPC)

and satisfy the requirements laid down in the Implementing Regulations

2) subject to paying a filing and search fee
How to file

• by hand

• by mail

• by fax (no paper confirmation)

• on-line
Where to file - filing procedure and forwarding to the EPO

Filing via the „national route“ may be necessary in case of:

- National security
- Nationals of the country
- First filings
- or other national requirements
  [see “National Law relating to the EPC“ ]
Where to file - filing procedure and forwarding to the EPO

- **Divisional application**
  - The Hague
  - Munich
  - Berlin
  - Examination as to secrecy?

- **European patent application**
  - National Patent Office
  - Communication under Rule 35(4) EPC
  - YES
  - National procedure
  - NO

Receipt for Documents [Form 1001.6]
Applications by residence

Most applications stem from EPO member states

Top 3 countries:
1. USA
2. Germany
3. Japan
Language requirements

Article 14

• filing in one of the official languages English, German or French

• or in any other language provided that a translation is provided afterwards
Obtaining a filing date

Rule 40 EPC

- a) an indication that a European patent is sought
- b) information identifying the applicant or allowing the applicant to be contacted
- c) a description and one or more claims in an admissible language

otherwise no date of filing

Article 90 EPC

- a) filing and search fee
- b) translation of application

(2) a reference to a previously filed application
Examination on filing and examination as to formal requirements
Article 90

Article 90 EPC

Request for Grant [EPO Form 1001]

Request for examination
Applicant’s and representative’s data
Designation of inventor
Title of the invention
Declaration of priority
Divisional application
### Request for grant of a European patent

#### Antrag auf Erteilung eines europäischen Patents

#### Requête en délivrance d’un brevet européen

<table>
<thead>
<tr>
<th>1. Antragsteller</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Applicant</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. Name of origin</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and address of the applicant or of the person holding the right to file the application</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Name of origin</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and address of the person holding the right to file the application</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>4. Name of origin</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and address of the person representing the applicant or the person holding the right to file the application</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Name of origin</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and address of the representative</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>6. Name of origin</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of the invention (in English)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Name of origin</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of the applicant or of the person holding the right to file the application</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. Name of origin</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Address of the representative</td>
<td></td>
</tr>
</tbody>
</table>

---

*Note: The form contains sections for the applicant's name, address, and description of the invention, among other details.*
EPO Fees

Fees for different events with discount for online filing

- Filing fee: EUR 105
- European Search fee: EUR 1105
- Designation fee: EUR 525
- Examination fee: EUR 1480
- Grant fee: EUR 830
- Publication fee: EUR 65

1 fee only
Additional fees

- pages fee for each page over 35: EUR 13
- the 16th claim and over: EUR 210
- renewal fees from the 3rd year on: EUR 420
- fee for publishing a new specification: EUR 60
Next Up - Search!

Applicant

- European patent application
- Filing and formalities examination

EPO

- Search and search report together with preliminary opinion on patentability
- Substantive examination
- Refusal or withdrawal of application
- Grant of European patent

Public domain

- Publication of application and search report
- Online access to application file and legal status information
- Observations by third parties possible
- Validation in designated states
Search - it's purpose

• To find the most relevant State of the Art

• The State of the Art is all information, relevant to the patentability of the invention, made available to the public (in writing or orally) prior to the date of filing of the patent application (Art. 54(2) EPC)

• The State of the Art is of relevance for the purpose of determining whether, and if so to what extent, the invention to which the application relates is new and involves an inventive step
As an example: shoes

QuickTime™ and a decompressor are needed to see this picture.

Shoes by Benjamin Adams
Where do we search?

Presently:

- 135 different databases available internally
- 73.9 million electronically searchable patent documents in EPO’s main search database EPODOC
- In 2005 already: 62 million facsimile digitised documents (patent and non-patent literature)
Examples of databases (1)

- EPODOC (abstract database including PAJ)
- XFULL (fulltext patent databases)
- WPI ('derwent': abstract database)
- INTERNET with care!!
  - via google, ...
  - matweb
  - knovel
  - wikipedia, dictionaries for general terms
Examples of databases (2)

- NPL
Accessing the databases

Organization of the documents…

How do we navigate the maze?
Classification & retrievability of documents

- ECLA as well as IPC
  - European Classification / International Patent Classification

- ICO
  - Deep-indexing Codes

- KW
  - Keywords

still, but we are moving towards CPC!
Example of ECLA code for a *skiboot*

- **skiboot**: 1 class in IPC
- **A43B5/04**: Skiboots, similar boots

- **skiboot**: 38 classes in ECLA
- **A43B5/04E12M1**: Ski boots; Similar boots: Adjustment of different parts of the boot or foot position; Adjustment of the boot to the foot: to the instep of the foot, e.g. metatarsals; Metatarsal clamping devices: directly actuated by non flexible means, e.g. screws, levers
Example of ICO: example soles

- K43B714/00 Soles, insoles or innersoles, i.e. socks
- K43B714/20 provided with pads or holes on one or more locations
- K43B714/20A under the medial arch, i.e. the navicular or cuneiform bones
- K43B714/20B under the ball of the foot, i.e. the joint between the first metatarsal and first ph.
- K43B714/20C under the lateral arch, i.e. the cuboid bone
- K43B714/20F under the joint between the fifth phalange and the fifth metatarsal bone
- K43B714/20H under the heel, i.e. the calcaneus bone
- K43B714/20M under the midfoot, i.e. the metatarsals
- K43B714/20P under the toes, i.e. the phalanges
- K43B714/20R with removable or adjustable pads to allow custom fit
search strategy: peak pressure warning

- from specific to general

A43B7/00 footwear
with health ... arrangements

A43B3/00B: shoes with lights

ideal case!!

not yet classified?

alarm (keyword)

not patent dbase
search strategy: peak pressure warning

- use connectors to good document to find more ('citation hunting')
Ideal case: load 1 class into VIEWER
overlap with other fields - can make things easier and more difficult

• shoes with integrated wheels: *skates*

• promote safety through visibility: *lighting*

• sole peak pressure warning systems, step rhythm sensing, pedometers: *measuring and computers, software (!)*

• medication shoe: *medical field, therapy (!)*

• ventilation and cooling: *cooling, heating*

• generators for warming, cooling or battery charging: *electrics, electronics*
Search, overlap with other fields

- cross-over with other fields: consult the examiner in specific technical field
proper use of other tools
know and learn when they may be useful

• UCLA (USPTO)

  For example: rural type mailboxes, frames for framing football jerseys, clothes hangers for hockey jerseys, donut machines…

• FICLA, FTCLA (JPO)

  umbrellas, endoscopes

• DC, PLASDOC (DERWENT/WPI)
Xfull

fulltext searches, in lieu of or in addition to searching in classes
And load them into the VIEWER
When new technologies emerge...

- Continuous adaptation of the EPO tools
- Keywords may be created on the fly
- Internet

Generator (KW A43B): footwear generating energy by e.g. walking
**The result for the applicant**

<table>
<thead>
<tr>
<th>DOCUMENTS CONSIDERED TO BE RELEVANT</th>
<th>Category</th>
<th>Citation of document with indication, where appropriate, other passages</th>
</tr>
</thead>
<tbody>
<tr>
<td>I X</td>
<td>X</td>
<td>DE 43 03552 A (KUROPKA HORST) 11 August 1994 (1994-08-11)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* abstract *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* page 1, line 10 – line 25 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* page 3, line 12 – line 45 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* claims 1.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* abstract *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* page 2, line 15 – line 30 *</td>
</tr>
<tr>
<td></td>
<td></td>
<td>* page 4, line 15 – line 40 *</td>
</tr>
</tbody>
</table>

**Classfication of the application (IPC-7):**

- G02C7/02
- G02B5/22

**Claims:** 1-4

**Examiner:**

- 24 August 2001

**EP 00305103**

**DE 43 03552 A (KUROPKA HORST) 11 AUGUST 1994**

X (also Y or A)

*abstract*

* page 1, line 10 – line 25 *

* page 3, line 12 – line 45 *
Special cases - too many independent claims

Rule 62a

Applications containing a plurality of independent claims

(1) If the European Patent Office considers that the claims as filed do not comply with Rule 43, paragraph 2, it shall invite the applicant to indicate, within a period of two months, the claims complying with Rule 43, paragraph 2, on the basis of which the search is to be carried out. If the applicant fails to provide such an indication in due time, the search shall be carried out on the basis of the first claim in each category.

(2) The Examining Division shall invite the applicant to restrict the claims to the subject-matter searched unless it finds that the objection under paragraph 1 was not justified.
Special cases - unclear subject-matter

Rule 63

(1) If the European Patent Office considers that the European patent application fails to such an extent to comply with this Convention that it is impossible to carry out a meaningful search regarding the state of the art on the basis of all or some of the subject-matter claimed, it shall invite the applicant to file, within a period of two months, a statement indicating the subject-matter to be searched.

(2) If the statement under paragraph 1 is not filed in due time, or if it is not sufficient to overcome the deficiency noted under paragraph 1, the European Patent Office shall either issue a reasoned declaration stating that the European patent application fails to such an extent to comply with this Convention that it is impossible to carry out a meaningful search regarding the state of the art on the basis of all or some of the subject-matter claimed or, as far as is practicable, draw up a partial search report. The reasoned declaration or the partial search report shall be considered, for the purposes of subsequent proceedings, as the European search report.

(3) When a partial search report has been drawn up, the Examining Division shall invite the applicant to restrict the claims to the subject-matter searched unless it finds that the objection under paragraph 1 was not justified.
Extended European Search Report

Rule 62 EPC

• Search report accompanied by an opinion on patentability

• If valid examination request present before search is carried out, opinion follows search report as first communication by Examining Division

• Opinion not published with application, but open to file inspection

In case of a positive opinion this is a standard letter
Rough Timeline of Patent Granting Procedure

- **Filing**
- **Publication of application with SR (opinion available through file inspection)**
- **Entry into Examination Procedure**
- **Grant/Refusal**

**Events:**
- **Rule 62/63 communication**
- **EESR**
- **Communication examiner/applicant**

**Time (months):**
- 0
- 18

**Duration:** ≤6 months
Publication

• **18 months** from the date of filing
  (or from the priority date) **Art. 93 EPC**
  earlier publication on request!

• Kinds of publication:
  A 1 : with search report
  A 2 : without search report
  A 3 : search report only

• every Wednesday (14:00 CET)

• electronic publication:
  [https://data.epo.org/publication-server](https://data.epo.org/publication-server)
Title: APPARATUS FOR ENHANCING VISUAL PERCEPTION OF SELECTED OBJECTS IN RECREATIONAL AND SPORTING ACTIVITIES

ABSTRACT: To enhance perception of a yellow tennis ball......

Inventors: Ace Lobbit
London SW1, GB

Representative: Drafter, Patrick
1 Holborn Street
London,
United Kingdom

Applicant: Spectacular Spectacles Inc.
Wimbledon SW29
Great Britain

Designated Contracting States: AT BE CH ES FR GB...
Designated Extension States: AL

Applied No: 00305103.4
Date of filing: 16.06.2000

Designated Contracting States: AT BE CH ES FR GB...

Int Cl.: G02C7/02, G02B5/22

EP1 061 465
A1 (Also A2, A3)
File inspection Rule 145

• European patent applications are open to the public following publication (Art. 128 EPC)

• All parts of the file pertaining to examination, opposition and appeal procedures are open for inspection

• The parts of the file excluded from file inspection are listed in the OJ 2001, 458

• Online file inspection
  https://register.epo.org

• Inspection by furnishing paper copies still possible on request:
  – administrative fee (EUR 35) payable in advance
  – files over 100 pages as a rule made available on electronic storage media
Next Up - Examination!

- European patent application
- Filing and formalities examination
- Search and search report together with preliminary opinion on patentability
- Substantive examination
- Refusal or withdrawal of application
- Grant of European patent
- Publication of application and search report
- Online access to application file and legal status information
- Observations by third parties possible
- Validation in designated states
  - Publication of patent specification
Examination

Examiner's Division

1st exam. report (4-mth time limit)

Reply / Amendments

Communication under R. 71(3) or refusal

Applicant
Examination

Responsibility passes to Examining Division with validation of examination request

- Appointment of Examining Division
  1st member, 2nd member, chairman

- Examining Division decides on Grant or Refusal

  Based on EPC criteria for patentability
  - Novelty (Art. 54)
  - Inventive step (Art. 56)
  - Industrial applicability (Art. 57)
  - Etc. (non-unity, clarity .....)

  Majority rules… at least 2 members must agree
First Examiner

- Analyses application
- Writes communications to the applicant
- Analyses applicant’s replies and amendments
- Recommends grant
- Or decides to recommend refusal
Second Examiner

- Checks recommendation to grant (votum) or refuse
- Checks form of final text of patent application (Druckexemplar)
- Agrees to grant or refusal
- OR sends application back to the first examiner with comments
Chairman

- Checks legal and technical reasoning of the first examiner’s votum or refusal
- Carries out a detailed check of the text of the final application documents
- Agrees to grant or refusal
- OR sends the application back to the first examiner with comments
Governing principles

• Applicant has the right to be heard - Article 113

• Can request Oral Proceedings - Article 116
Next Up - Grant and Publication!

- European patent application
- Filing and formalities examination
- Search and search report together with preliminary opinion on patentability
- Substantive examination
- Grant of European patent
- Refusal or withdrawal of application
- Validation in designated states
- Publication of application and search report
  - Online access to application file and legal status information
  - Observations by third parties possible
- Publication of patent specification
Grant

• With the Communication pursuant to Rule 71(3) EPC the applicant:

  is informed that it is the intention of the Examining Division to grant a patent and is requested, within an non-extendable period of 4 months, to:

  • file the translations of the claims in the 2 EPO official languages other than the language of the proceedings
  • pay the fees for grant and printing and the fee for any additional claims
Grant - Publication

5 weeks necessary for technical preparation for publication; no amendments / corrections to specification possible

Day before: last chance for filing a divisional application

Start of Opposition period (9 months)

Start of time limit for validation with NPO’s
After Grant - the National Phase

- File translation of specification  
  Art. 65(1) EPC
- Appointment of representative
- Pay any national fee
- Pay renewal fees

see “National Law relating to the EPC“
Next Up… Coffee!

After the break:
• Exceptions and Exclusions
• Opposition
• Appeal
Patent Grant Procedure, part II

Applicant

EPO

Public domain

Refusal of application

Substantive examination

Grant of European patent

Opposition by third parties possible

Limitation or revocation proceedings

Opposition proceedings

Appeal proceedings

During Examination:

• Exceptions and Exclusions

After examination:

• Opposition
• Appeal

Exceptions and exclusions
Exceptions and Exclusions

Governed by:

- 2 Articles: Article 52(2)&(3) and Article 53
- An evergrowing amount of jurisprudence
Article 53 - Exceptions

European patents shall not be granted in respect of:

a) Inventions the commercial exploitation of which would be contrary to "ordre public" or morality; such exploitation shall not be deemed to be so contrary merely because it is prohibited by law or regulation in some or all of the Contracting States:

b) Plant or animal varieties or essentially biological processes for the production of plants or animals; this provision shall not apply to microbiological processes or the products thereof;

c) Methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practised on the human or animal body; this provision shall not apply to products, in particular substances or compositions, for use in any of these methods.
Article 52 - Exclusions

Non-Inventions under Article 52 (2) and (3):

Art. 52(2): The following, in particular, shall not be regarded as inventions
- discoveries, scientific theories, mathematical methods
- aesthetic creations
- schemes, rules and methods for performing mental acts playing games or doing business
- programs for computers
- presentations of information

Art. 52(3): Excluded only to the extent to which a European patent application relates to such subject-matter or activities as such.
Computer-implemented Inventions

• Computer-implemented invention

  - an invention whose implementation involves the use of a computer, computer network or other programmable apparatus
  - with features realised wholly or partly by means of a computer program

Examples:
  a program-controlled ...
  fault tolerance scheme;
  washing machine cycle;
  car braking system.
Computer-implemented Inventions

Coming back to Article 52...

Art. 52(2): The following, in particular, shall not be regarded as inventions

- discoveries, scientific theories, mathematical methods
- aesthetic creations
- schemes, rules and methods for performing mental acts playing games or doing business
- programs for computers
- presentations of information

Art. 52(3): Only to the extent to which a European patent application relates to such subject matter or activities as such.
Computer-implemented Inventions

Non-Inventions

- Narrow Interpretation
- Activities falling within the notion of a non-invention would typically represent purely abstract concepts devoid of any technical implication.
- A non-invention has no technical character
Computer-implemented Inventions

**Technical Character**

- An invention must have technical character
- no general definition of „technical“
- interpret grey areas
- series of individual Board's of Appeal decisions
Computer-implemented Inventions

Technical is

- processing **physical data** parameters or control values of an industrial process
- processing which **affects the way a computer operates**
  - saving memory, increasing speed
  - security of a process, rate of data transfer etc.
- the **physical features of an entity**
  - memory, port etc.
Computer-implemented Inventions

...for computer programs...

The computer program, when carried out has to provide a "further technical effect" going beyond the "normal physical effects"

The normal technical effects like flow of electrical current are not sufficient to establish a technical character

C-IV, 2.3.6
T1173/97 - IBM
T0935/97 - IBM
2-Step Rocket
Assessing Computer Implemented Inventions: a 2 Step Rocket

1. Technical character

2. Technical contribution
Examination Flowchart (exclusion, novelty) - 1st step

**Exclusion check: Is there a priori a technical effect?**

- **No**
  - No technical character, exclusion under Art. 52(2) and (3) EPC

- **Yes**
  - **Novelty check: Are all features known in combination from the prior art?**
    - **Yes**
      - Lack of novelty, Art. 54 EPC
    - **No**
Examination Flowchart (inventive step) - 2nd Step

Novelty established

- Determine the closest prior art
- Determine the difference over the prior art
- Establish the problem which is solved by this difference

No technical contribution, lack of inventive step (Art. 56 EPC)
- No

A technical effect arising from the problem/solution?
- Yes
- No

Lack of inventive step (Art. 56 EPC)
- Yes

Is the solution of the technical problem obvious?
- Yes
- No

Verify remaining EPC requirements
Examination Flowchart (overview)

Step 1

1. Is there a priori a technical effect?
   - No: No technical character, exclusion under Art. 52(2) and (3) EPC
   - Yes: Are all features known in combination from the prior art?
     - Yes: Lack of novelty, Art. 54 EPC
     - No: Determine the closest prior art

Step 2

1. Determine the closest prior art
   - No technical contribution, lack of inventive step (Art. 56 EPC)
   - Yes: Determine the difference over the prior art
     - Establish the problem which is solved by the difference
       - A technical effect arising from the problem/solution?
         - Yes: Is the solution of the technical problem obvious?
           - Yes: Verify remaining EPC requirements
           - No: No technical contribution, lack of inventive step (Art. 56 EPC)
         - No: Lack of inventive step (Art. 56 EPC)
A computer-implemented method of ordering comprising:

- inputting order information into a computer, said order information containing an order code;
- storing said order information in said computer;
- transmitting said order data containing said order code to a central management computer unit for processing.

**Clearly Technical Aspect**

- inputting data into a computer
- storing said data in the computer
- transmitting said data to a central management computer unit for processing

**Non-Technical Aspects**

- recording order information
- sending said order information containing an order code to a central management unit for processing

**No Technical Interaction**
Example

• A computer-implemented method of controlling a physical process by analysing a functional relationship between two parameters, the method comprising

• [... a series of mathematical steps follow]

• wherein
• the range of one of said parameters is extended in accordance with data generated for use in the control of said physical process.

Clearly Technical Aspect

A computer-implemented method of controlling a physical process

Non-Technical Aspects

A method of analysing a functional relationship between two parameters comprising: a series of mathematical steps... wherein the range of one of said parameters is extended in accordance with data generated for use in

Contributes to technical character
Inventive step for computer-implemented inventions

Inventive?

A non-obvious technical contribution over the prior art in the technical field is necessary.
Exceptions

Surgery, therapy and diagnosis - general aspects

Article 53(c) EPC

methods for treatment of the human or animal body by surgery or therapy and diagnostic methods practised on the human or animal body; this provision shall not apply to products, in particular substances or compositions, for use in any of these methods.
Exceptions

Surgery, therapy and diagnosis - general aspects

**Purpose** underlying Article 53(c) EPC:
(socio-ethical and public health considerations)

Medical and veterinary activities should not be restrained by patent rights, i.e. doctors should not be hindered from exercising their professional skills when helping their patients (G5/83, G1/04)
Exceptions - Therapy and Surgery

“... treatment of the human or animal body by surgery or therapy”

Not allowable:
• injections, incisions, endoscopy, ablation
• dialysis, autologous transfusion

• Allowable:
• in vitro methods (e.g. blood testing)
• treatment of a dead body (e.g. excision of heart valves from cadavers)
• treatment of laboratory animals if they are subsequently sacrificed
Exceptions - Therapy and Surgery

- A **single** surgical or therapeutic step in a multi-step method is sufficient to exclude the whole claim from patentability (G1/04)
- A therapeutic or surgical step may also be **implicit** from the description or dependent claims (e.g. comparing pre- and postoperative tomographic images, cf. T1005/98, measuring blood pressure if this is done invasively)
Exceptions - Therapy and Surgery

**Indicators of medical character:**

- Involvement of a person of medical competence (medical/veterinary practitioner or other medically trained person, or supervision by such a person)
- Harmful side effects and health risks for the patient (e.g. laser irradiation of an artificial lenticule secured to the cornea, cf. T24/91)
Surgical treatment:

- Any non-insignificant intentional physical intervention is considered surgical
- The nature of the treatment is decisive rather than its purpose (which may be non-curative, e.g. sterilisation or insemination, or even non-medical, e.g. cosmetic or agricultural)
Exceptions - Surgery

Surgical methods

- **Invasive**
  e.g. removing carious material from a tooth, cutting gingival tissue, drilling the jaw bone for placing an implant, reaming a root canal of a tooth, retracting gingival tissue, injecting

- **Non-invasive** (“conservative”)
  e.g. repositioning, manipulating an organ or tissue

- **Minimally invasive**
  e.g. inserting probes and instruments into body cavities (even if the body tissue remains intact)
Exceptions - Therapy

**Therapeutic methods:**

- curing of diseases, illnesses, malfunctions, disorders, injuries, orthodontic treatment
- symptomatic therapy (relief of pain or discomfort, even of natural origin, e.g. due to menstruation or pregnancy; cf. T81/84, T24/91, T443/01)
- prophylactic treatment (cleaning plaque, cf. T290/86; brushing teeth, flossing methods)
Non-therapeutic methods:

- cosmetic and agricultural methods or athletic training, provided that the claim is limited to non-therapeutic indications and their effects can be clearly distinguished as having no therapeutic benefit.
- contraception (allowable under Art. 52(4) EPC, may not, however, be industrially applicable under Art. 57 EPC)
- Taking an impression in the mouth of a patient.
Exceptions - Diagnosis

Terminology and definitions (G1/04):

(i) Examination phase involving the collection of data
(ii) Comparison with standard values
(iii) Finding of any significant deviation, i.e. a symptom
(iv) Attribution of deviation to a particular clinical picture ("deductive medical or veterinary decision phase")

"Preceding steps constitutive for making a diagnosis" ("intermediate findings of diagnostic relevance")

(iv) "Diagnosis for curative purposes stricto sensu"

(i)-(iii):


General aspects of G1/04:

• The principle "exclusion clauses are to be construed narrowly" also applies in respect of the scope of the exclusion from patentability under Art. 52(4) concerning diagnostic methods.

• “There is no reason to deviate from the established jurisprudence of the EPO" (i.e. T385/86, T775/92, T530/93, T1165/97, T807/98, ...), despite a broader interpretation suggested by T964/99.

In order to fall under the prohibition of Art. 52(4), the claim is to include all steps (i), (ii), (iii) and (iv).
Exceptions - Diagnosis

Involvement of medical or veterinary practitioner in diagnostic methods (G1/04):

- Diagnostic character may not depend on who is involved (participation, presence or responsibility of a med. or vet. practitioner, medicinal or non-medicinal support staff is not decisive)
- Legal certainty (no definition possible on a European level, assessment could change considerably in time)
- Protection of med. or vet. practitioners could be achieved by enacting legal provisions on the national level of the Contracting States if deemed necessary
Technicality (G1/04):

- The deductive decision phase (iv), i.e. the "diagnosis stricto sensu" is an intellectual exercise not regarded as an invention under Article 52(2) EPC, i.e. non-technical (unless carried out by a device)

- In order to be an "invention" under Art. 52(1) EPC, a diagnostic method must necessarily include further preceding technical steps (e.g. (i)-(iii)) in addition to (iv) when non-technical)

- A claim including technical and non-technical features may satisfy Art. 52(1) EPC if the non-technical features interact with technical features in order to bring about a technical effect (cf. T603/89)
Exceptions - Diagnosis

"practised on the human or animal body" (G1/04):

- Criterion to be considered only in respect of technical steps and must be fulfilled for all technical steps among the preceding steps (i)-(iii)

- Step (iv) as a purely intellectual exercise cannot be practised on the human or animal body

- Criterion is satisfied if the performance of the respective step implies any interaction with the human or animal body, necessitating the presence of the latter
Exceptions - Diagnosis

Essential features (G1/04):

- Even a non-technical feature must be included in the independent claim under Art. 84 EPC if it is constitutive for defining the invention.

- Applies to any non-technical preceding step (i)-(iii) as well as to the normally non-technical step (iv) "if its essentialness is unambiguously inferable" from the application as a whole.
Exceptions - Diagnosis

**Devices (G1/04):**

- If some or all of the preceding steps (i)-(iii) are carried out by a device without implying any interaction with the human or animal body (e.g. by using a software program), the respective steps do not satisfy the criterion "practised on the human or animal body"
  → **not objectionable** under Art. 52(4)

- If diagnostic conclusions are attained by a method not including the use of the device, those carrying it out will not be inhibited by the patent
Exceptions - Diagnosis

1. Are all phases (i)-(iv) claimed?
   - Yes
   - No

2. Determine technicality of each phase:
   - (i) Technical/non-technical?
   - (ii) Technical/non-technical?
   - (iii) Technical/non-technical?
   - (iv) Technical/non-technical?

3. Are all technical steps in phases (i)-(iii) "on body"?
   - Yes
   - No

   - Objection Art. 52(4)
   - Objection Art. 84

4. Is missing phase (i)...(iv) essential?
   - Yes
   - No

   - Missing phase included in claim

   - No objection Art. 52(4)
Exceptions

Surgery, therapy and diagnosis

An objection under Art. 52(4) EPC can be avoided by limiting the claim to a non-therapeutic, non-surgical or non-diagnostic method, even though these terms are not originally disclosed

("undisclosed disclaimer", G1/03, G2/03)

• However, at least one non-medical application(s) must have been disclosed

• A claim may not become contradictive in itself by terming an actually medical method as non-therapeutic, non-surgical or non-diagnostic (T67/02)
Another example

Claims 1 and 2 of the **Main Request** read:

**Claim 1:**
A make-up color image classification method comprising:

- an image index setting step (S1) for setting at least one of an image index chosen from among and indicating at least one of warm/cool, character and mind or an image index chosen from among and indicating at least one of light/dignified, mature/immature and mature;

- a made-up face data acquisition step (S2) for acquiring made-up face data for a plurality of types of make-up material for at least one of lip color and eye color applied to a face;

- a make-up color image evaluation step (S3), in which grading data is collected from a plurality of test subjects evaluating a color image of the make-up material based on the made-up face data using the image index as an evaluation criteria; and

- a make-up color image classification step (S5) for classifying the make-up material based on the obtained make-up material color image using the image index.

**Claim 2:**
The make-up color image classification method as claimed in claim 1, wherein the image index setting step comprises taking as coordinate axes and classifying two-dimensionally the color image index chosen from among and indicating at least one of warm/cool, character, mind and the color image index chosen from among and indicating at least one of light/dignified, mature/immature, mature.

What do you think?
Another example

5. Though the refusal is based on Article 123(2) EPC, it seems that an allowable set of claims which would grosso modo correspond to the set of claims of the main request would still not meet the requirements of Article 52(1) with respect to inventive step.

Even if the reasoning of the applicant given on page 3 of his letter dated 23.03.2007 is followed ignoring the perceived non technical aspects of the invention, and considering the method of claim 1 to merely relate to:

- setting an image index
- acquiring a plurality of data
- collecting data using the image index as evaluation criteria
- classifying the data using the image index;

then these method steps have already been disclosed in EP-A-0 828 230 (SHISEIDO CO LTD) 11 March 1998 (1998-03-11).

In retrospect: could have also been refused on Article 52(2) and 52(3)
Black and white and a million shades of grey

To this purpose exactly, are provided:

- Applicant
  - Refusal of application
- EPO
  - Substantive examination
  - Grant of European patent
- Public domain
  - Exceptions and exclusions
  - Opposition by third parties possible
  - Limitation or revocation proceedings
  - Appeal proceedings
  - Opposition proceedings
Opposition

• Opposition is a centralized EPO procedure for challenging the validity of a granted European Patent

Article 99

– It must be filed within 9 months of the mention of grant being published
– It can be filed by any person

• Provision for existance of OPPO divisions in Article 15
• Consistency of the division in Article 19
Opposition Division

First examiner         second examiner          chairman

If necessary a lawyer
Opposition Division vs. Examining Division

Crucial difference:

- In examination: *inter partes*
- In opposition: *ex partes*

In general there is a high percentage of oral proceedings
Opposition - Possible Outcomes

Article 101

- Maintained as granted
- Maintained in amended form
- Revoked
Opposition - when none is filed

• NO notice of opposition (Art. 99 EPC) received within period of 9 months after publication of the mention of grant patent proprietor is informed

• The information that no opposition was filed is published in the European Patent Bulletin
Limitation procedure (Art. 105 a-c EPC)

At any time after the grant the patent proprietor may request limitation of the patent by filing a new set of claims.

• The decision to limit the European patent takes effect on the date on which it is published in the Bulletin.

• The effect of the decision to limit the patent is that the patent is limited ab initio in all contracting states for which the patent was granted.

• Opposition proceedings have precedence (R. 93 EPC).
Subject of limitation proceedings

• EP as granted or amended in most recent procedure before the EPO
  
  • Opposition
  • Limitation

• NO centralised LP can be based on a version of EP as amended in national proceedings
Requirements of request for limitation

- **Entitlement:** Requester must be EP proprietor

- **Request** filed at EPO
  - Any time after grant
  - Even after EP has lapsed

- **No pending opposition**
Examination of request for limitation

- Examining Division examines whether amended claims:
  - constitute a limitation of granted claims
    *i.e.* a reduction in extent of protection conferred
  - comply with Art. 84 + Art. 123(2) and (3)

- NO examination of
  - Residual subject-matter
  - Objective of limitation actually achieved
Appeal - appealable decisions **Article 106**
Appeal

- Only by parties adversely affected Article 105

- Within 2 months
- Provide grounds within 4 months
- Pay a fee Article 108
Appeal

- Treated by the Boards of Appeal (again Article 15)

Two technical members and one legal member

If the first instance consists of 4 members then one supplementary legal and technical
Appeals and case law

Appeals automatically generate jurisprudence

- In principle a board of appeal decision **applies only to the case which was appealed**

- A first case instance may ignore a BoA decision for a case which is different from the case which was appealed, even if similar

However...

- Some decisions considered particularly important, such as
  - Definition of problem-solution approach for assessing inventive step **T386/89, T184/82**
  - Introduced into the Guidelines and considered case law
Enlarged Boards of Appeal

• You wouldn’t believe it, but their existence is laid down in Article 15 and what they do in Article 22:

• Clarify points of law…

• On request of Board of Appeal or the President

• Common case: Diverging Boards of Appeal decisions on a certain topic

• Current examples:
  – G1/07, G1/04: diagnostic methods, surgery
  – G1/05, G1/06: divisionals
Enlarged Board of Appeal

2 technical and 5 legal members, the chairman is always a legal member
Board of Appeal decision case law?

- Decision of EBoA binding on BoA for appeal in question Article 112(3)

but…

- Decision to ensure uniform application of law Article 112(1)

so…

- EBoA decisions or G-decisions will be applied for all future examination, so in practice they become law
Thank you for your kind attention

Questions?