European Patent Office

Examination of CII and Business Methods Applications

WWW2006
Edinburgh

Dr. Clara Neppel
Examiner
EPO, München
Locations

Munich
PschorrHöfe

The Hague

Headquarters Munich
Isar building

Vienna

Berlin

Brussels
Bureau
Member states

Member states of the European Patent Organisation
AT Austria, BE Belgium, BG Bulgaria,
CH Switzerland, CY Cyprus, CZ Czech Republic,
DE Germany, DK Denmark, EE Estonia, ES Spain,
FI Finland, FR France, GB United Kingdom,
GR Greece, HU Hungary, IE Ireland, IS Iceland,
IT Italy, LI Liechtenstein, LT Lithuania,
LU Luxembourg, LV Latvia, MC Monaco,
NL Netherlands, PL Poland, PT Portugal,
RO Romania, SE Sweden, SI Slovenia,
SK Slovakia, TR Turkey

States entitled to join the European Patent Convention (EPC)
NO Norway

States which have been invited to join the EPC
HR Croatia, MK Former Yugoslav Republic of Macedonia (FYROM), MT Malta

States recognising European patents ("EXTension states")
AL Albania, BA Bosnia-Herzegovina, HR Croatia,
MK Former Yugoslav Republic of Macedonia (FYROM), YU Serbia and Montenegro
## Staff 2004

<table>
<thead>
<tr>
<th>City</th>
<th>Number</th>
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<tbody>
<tr>
<td>Munich</td>
<td>3 180</td>
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<tr>
<td>The Hague</td>
<td>2 349</td>
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<tr>
<td>Berlin</td>
<td>275</td>
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<tr>
<td>Vienna</td>
<td>114</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>5 918</strong></td>
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</table>
Procedures before the EPO

1. INSTANCE

grant of a European patent

EXAMINATION

refusal

OPPOSITION

maintenance

revocation

1. INSTANCE

validation in EPO member states

national patents

national courts

national law

2. INSTANCE

nullity infringement proceedings

national bodies
The examining division is responsible for the examination of European patent applications.

=> proceedings *ex parte*
An Opposition Division shall be responsible for the examination of oppositions against any European patent.

=> proceedings *inter partes*
The same bottle could be protected

by industrial design
  for its novel and **aesthetic** features

by trademark
  for its distinguishing features

by patent
  for its **technical** features such as pressure resistance
## Copyright & Patent Protection for Software

<table>
<thead>
<tr>
<th>right</th>
<th>subject-matter</th>
<th>software result</th>
<th>protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>copyright</td>
<td>original works</td>
<td>program code documentation (graphical user interface)</td>
<td>• reproduction</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• distribution</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• communication</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• modification</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(no private use)</td>
</tr>
<tr>
<td>patent</td>
<td>inventions with technical character</td>
<td>concept / method application of algorithms</td>
<td>• production</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• use</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• distribution</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(private use exception)</td>
</tr>
</tbody>
</table>
Software patent
- is a colloquial expression
- might mislead to the assumption that source/object code is patentable

Computer-implemented invention
- Claims which involve computers, computer networks or other conventional programmable apparatus whereby features of the claimed invention are realised by means of a program or programs
- Examples: mobile phone, ABS system
Claim Example

Example:

Method for purchasing and payment of goods and services, preferably audio and/or video data provided on a provider's platform in a computer network, like the Internet, comprising the steps:
- taking a customer's order for goods and services, preferably an order for audio and/or video data files;
- providing a download of ordered goods and services, preferably of audio and/or video data files, for the customer;
and
- debiting a mobile telephone account of the customer.
European Patent Convention

What is an Invention?

Patentable Inventions

European patents shall be granted for

- any inventions which
  - are susceptible of industrial application → A.57, A.52(4)
  - are new → A.54
  - and which involve an inventive step. → A.56
What is NOT an Invention?

The following, in particular, shall not be regarded as inventions:

a) discoveries, scientific theories, mathematical methods;
b) aesthetic creations;
c) schemes, rules and methods for performing mental acts, playing games or doing business, and programs for computers;
d) presentations of information;

...only to the extent to which a European patent application relates to such subject matter or activities as such.
European Patent Law

Legal Principle:
the patent monopoly must be justified by the technical contribution to the art.
Guidelines of the EPO

An invention must be of "technical character" to the extent that it
- must relate to a technical field
- must concern a technical problem
- must have technical features in terms of which the matter for which protection is sought can be defined in the claim
Technical character or technical effect are assessed without the knowledge of prior art, i.e. it is not a contribution approach (Computer Program Product T 1173/97; Pension benefit scheme T 931/95).

Decisive is the technical effect of the invention as defined in the claim when considered as a whole (Koch & Sterzel T26/86).
What is technical?

Rather than attempting a general definition of the term “technical”, the Board’s present approach is to stake out, through a series of individual decisions, the grey area requiring interpretation.
Technicality

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.

- technical character may be implied by the **physical features of an entity**
  - memory, port etc.
- Features relating to non-inventions within the meaning of Art. 52 (2) EPC are non technical features.

  • abstract ideas
  • selling, trading, insurance
  • choosing amongst candidates for a job
  • order placement and management
Computer Programs

The computer program, when carried out has to provide a "further technical effect".

The normal technical effects like flow of electrical current is not sufficient.

T 1173/97; T 0935/97
### European Patent Law – EPO Practice

<table>
<thead>
<tr>
<th>Further technical effect</th>
<th>No further technical effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>control of a brake in a car</td>
<td>aesthetical effects of music or a video</td>
</tr>
<tr>
<td>faster communication between mobile phones</td>
<td>new rules for an auction scheme</td>
</tr>
<tr>
<td>secure data transmission (encryption of data)</td>
<td>selling and booking sailing cruise packages</td>
</tr>
<tr>
<td>resource allocation in an operating system</td>
<td>calculation of a pension contributions</td>
</tr>
</tbody>
</table>
Example: non technical

A method for evaluating leadership effectiveness, comprising the steps of:

- gathering target information quantifying at least one domain selected from the group consisting of having personal convictions, being visionary, building emotional bonds, being inspirational, being team oriented, being a risk taker and having a drive to excel;

- comparing the target information with a standard, the standard including standard values of the domain; and

- identifying non-standard responses of the target.
1. If the subject matter of the claims does **not** comprise a **technical character**

   object under Article 52(2) and (3)

   **No prior art search necessary!**
A method for on-line evaluating leadership effectiveness, comprising the steps of:

- providing an interface for gathering target information quantifying at least one domain selected from the group consisting of ....;

- sending this target information to a central server

- comparing the target information with a standard stored in the central server, the standard including standard values of the domain; and

- the central server identifying non-standard responses of the target.
2. If there is a **mix** of non-technical and technical features:

- "**requirement specification**" = instructions given to the programmer summarising the requirements of the customer.
  - *e.g. a business or administrative process to be automated*
  - skilled person is aware of it
  - normally found in description & (in summarised form) in claims

- **prior art in a field of technology**
based on the **technical** implementation set out in the claims and description:

**identify closest prior art in the field of technology**

**IF:**
so widely known as to be considered as **common-place**
e.g. computer network or general purpose computer

**THEN:**
no **written** evidence is necessary to prove its existence

[possible no-search]

**OTHERWISE:**
search for the closest document describing the technical features.
4. Identify **all the differences** between the subject matter of the claim and the closest prior art

**a)**
- if there are none
  - Not novel!

**b)**
- if the differences are **not technical**
  - no objective technical problem
  - Not inventive!
4. Identify all the differences between the subject matter of the claim and the closest prior art

c) if differences contain also technical features

i) formulate the objective technical problem
taking into account the requirements specification
e.g. "how to adapt system of CPA in order to implement the business concept"

Solution of the objective technical problem must require the technical features of the above identified differences.

ii) if the solution of the technical problem is obvious

Not inventive!
Only if also other requirements of the EPC fulfilled

-> GRANT
EPO Practice

Example:

Method for purchasing and payment of goods and services, preferably audio and/or video data provided on a provider's platform in a computer network, like the Internet, comprising the steps:
- taking a customer's order for goods and services, preferably an order for audio and/or video data files;
- providing a download of ordered goods and services, preferably of audio and/or video data files, for the customer;
and
- debiting a mobile telephone account of the customer.
<table>
<thead>
<tr>
<th>Requirement specs</th>
<th>Ordering and paying for goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closest prior art</td>
<td>Platform for downloading audio files from the Internet</td>
</tr>
<tr>
<td>Differences</td>
<td>Debiting mobile phone account</td>
</tr>
<tr>
<td>Technical problem</td>
<td>None</td>
</tr>
<tr>
<td>Mixed type claim</td>
<td>Yes</td>
</tr>
<tr>
<td>Technical</td>
<td>Yes</td>
</tr>
</tbody>
</table>

no inventive step involved
Example:

Method for purchasing and payment of goods and services, preferably audio and/or video data provided on a provider's platform in a computer network, like the Internet, comprising the steps:
- taking a customer's order for goods and services, preferably an order for audio and/or video data files;
- providing a download of ordered goods and services, preferably of audio and/or video data files, for the customer;
and
- debiting a mobile telephone account of the customer, whereby the purchase data are at least partially encrypted by a password.
### Technical

**Mixed type claim**

**Requirement specs**

**Closest prior art**

**Differences**

**Technical problem**

**Solution obvious**

<table>
<thead>
<tr>
<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ordering and paying for goods</td>
<td>Platform for downloading audio files from the Internet</td>
</tr>
<tr>
<td>Debiting mobile phone account and encrypting purchase data</td>
<td>Enhance data security</td>
</tr>
<tr>
<td>Was encryption known?</td>
<td></td>
</tr>
</tbody>
</table>
- Applications ending with a refusal or a withdrawal:

  • in the cluster "computers": over 50%

  • in the field "electronic commerce": over 70%
Basic components for the grant of a computer implemented invention

- Technical character
- Technical contribution
- New
- further EPC requirements

Art. 52 (2)(3)
Art. 54
Art. 56
European Patent Office

http://www.european-patent-office.org/

http://www.european-patent-office.org/legal/guiapp1/pdf/g1de_net.pdf

Guide for applicants

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