



European Patent
Office

Examination of CII and Business Methods Applications

WWW2006

Edinburgh

Dr. Clara Neppel
Examiner
EPO, München

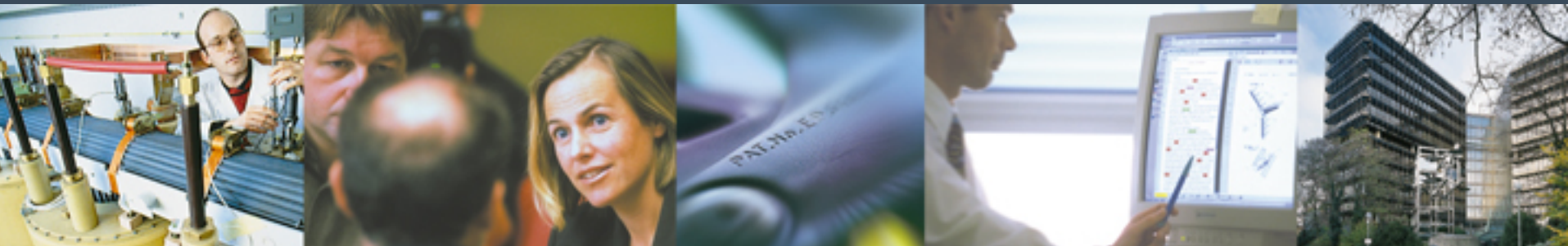


European Patent
Office



The European Patent Office

*Service For Industry
and
Public*





Locations

European Patent
Office

CII

Requirements

Examination
Practice

*Munich
PschorrHöfe*



The Hague



*Headquarters Munich
Isar building*



*Brussels
Bureau*



Vienna



Berlin



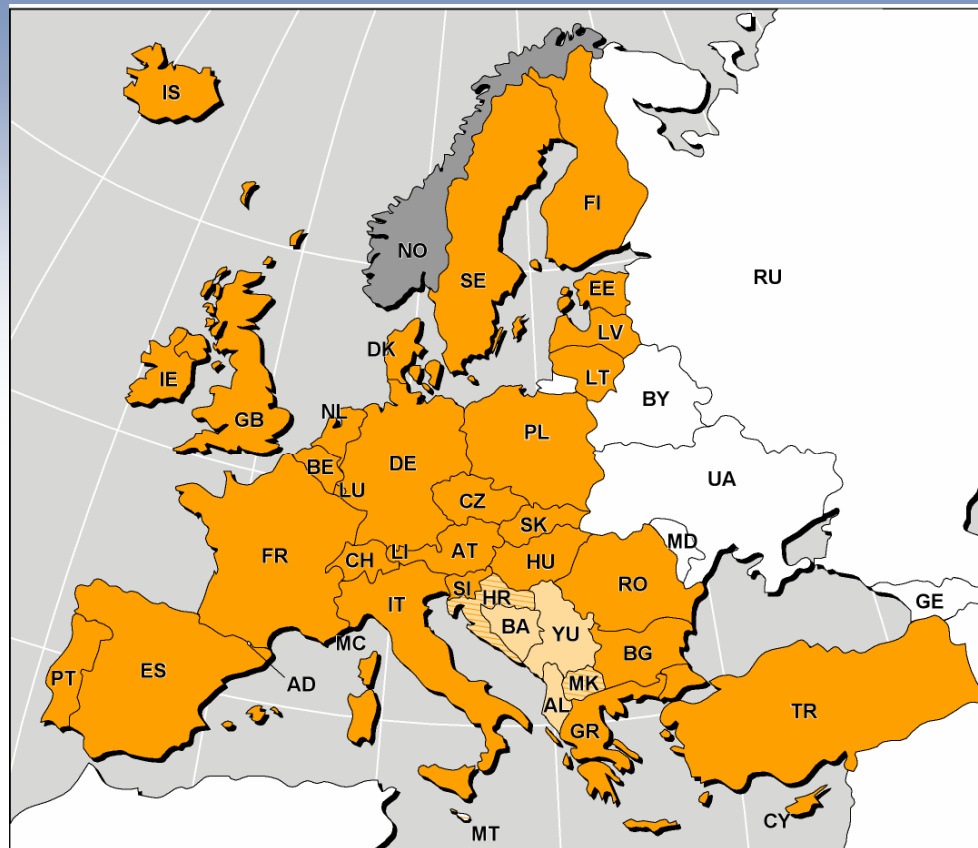
Member states

European Patent Office

CII

Requirements

Examination Practice



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

(05.2006)





Staff 2004

European Patent
Office

CII

Requirements

Examination
Practice

Munich	3 180
--------	-------

The Hague	2 349
-----------	-------

Berlin	275
--------	-----

Vienna	114
--------	-----

Total	5 918
-------	-------





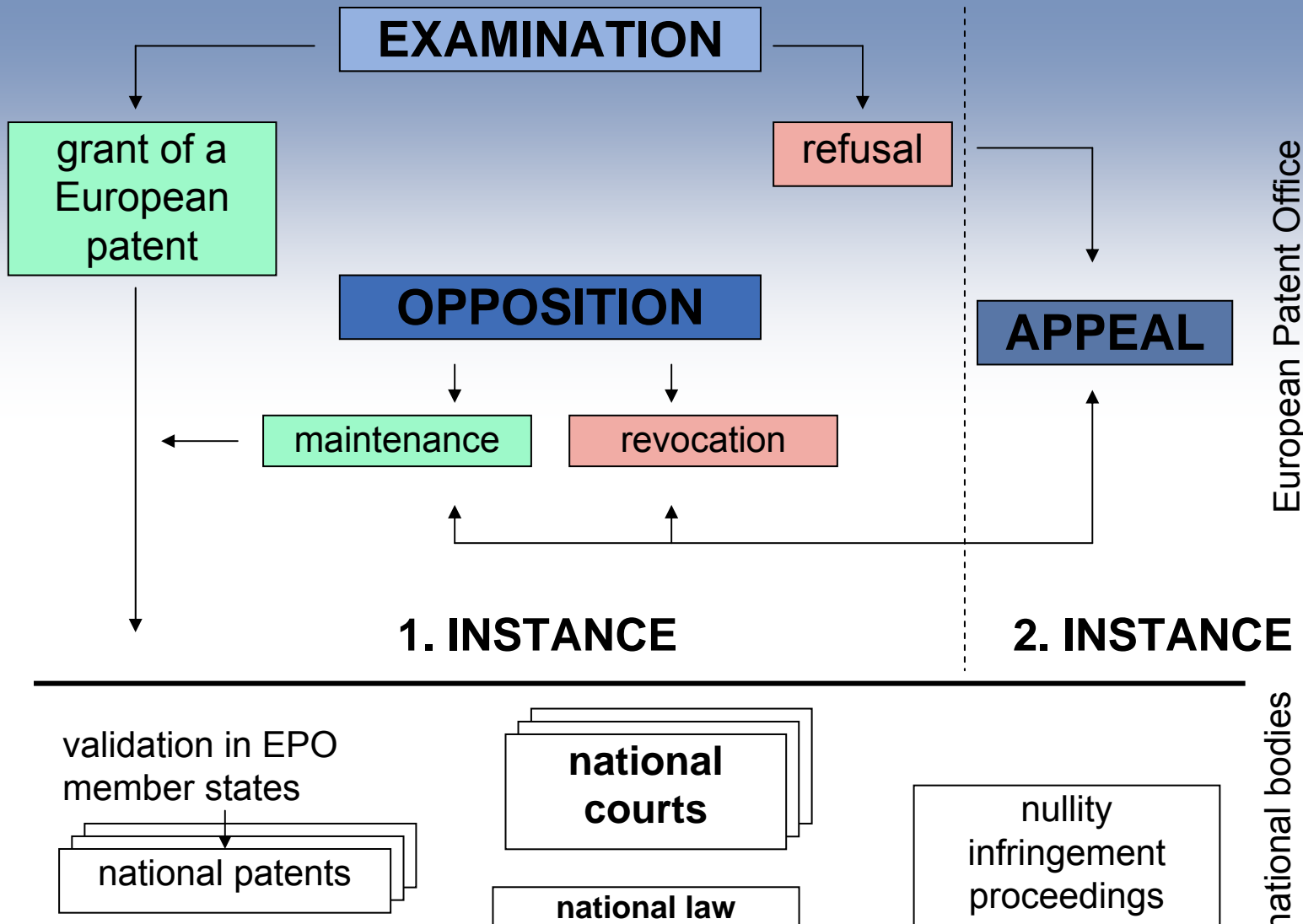
Procedures before the EPO

European Patent Office

CII

Requirements

Examination Practice



European Patent Office

national bodies



EPO procedure

European Patent
Office

CII

Requirements

Examination
Practice

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

=> proceedings *ex parte*





EPO procedure

European Patent
Office

CII

Requirements

Examination
Practice

An Opposition Division shall be responsible for the examination of oppositions against any European patent.

=> proceedings *inter partes*





Intellectual Property Rights



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

European Patent
Office

CII

Requirements

Examination
Practice

right	subject-matter	software result	protection
copyright	original works	program code documentation (graphical user interface)	<ul style="list-style-type: none">• reproduction• distribution• communication• modification (no private use)
patent	inventions with <u>technical</u> character	concept / method application of algorithms	<ul style="list-style-type: none">• production• use• distribution (private use exception)



IP for Software?

European Patent
Office

CII

Requirements

Examination
Practice

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

European Patent
Office

CII

Requirements

Examination
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.**



European Patent Convention

European Patent
Office

CII

Requirements

Examination
Practice

What is an Invention?

Patentable Inventions

European patents shall be granted for

- **any inventions** which → A.52(2)(3)
 - are susceptible of industrial application → A.57, A.52(4)
 - are new → A.54
 - and which involve an inventive step. → A.56

Art. 52(1)



European Patent Convention

What is NOT an Invention?

European Patent
Office

CII

Requirements

Examination
Practice

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;

A.52(2)

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

A.52(3)



European Patent Law

European Patent
Office

CII

Requirements

Examination
Practice

Legal Principle:

the patent monopoly must be justified by the
technical contribution to the art.



European Patent Law - What is an Invention?

European Patent
Office

CII

Requirements

Examination
Practice

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



European Patent Law - What is an Invention?

European Patent
Office

CII

Requirements

Examination
Practice

Case Law

- 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).



European Patent Law – Case Law

European Patent
Office

CII

Requirements

Examination
Practice

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

European Patent
Office

CII

Requirements

Examination
Practice

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.



Technicality

European Patent
Office

CII

Requirements

Examination
Practice

- **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



European Patent Law – Case Law

European Patent
Office

CII

Requirements

Examination
Practice

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

European Patent
Office

CII

Requirements

Examination
Practice

further technical effect

control of a brake in a car

faster communication
between mobile phones

secure data transmission
(encryption of data)

resource allocation in an
operating system

no further technical effect

aesthetical effects of
music or a video

new rules for
an auction scheme

selling and booking sailing
cruise packages

calculation of a pension
contributions



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.**



EPO Practice

European Patent
Office

CII

Requirements

Examination
Practice

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!



Example: mix of technical and non-technical

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.



EPO Practice

European Patent
Office

CII

Requirements

Examination
Practice

2. If there is a mix of **non-technical** and **technical** features:

**"requirement
specification"**

**prior art in
a field of
technology**

= 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



EPO Practice

European Patent
Office

CII

Requirements

Examination
Practice

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.



EPO Practice

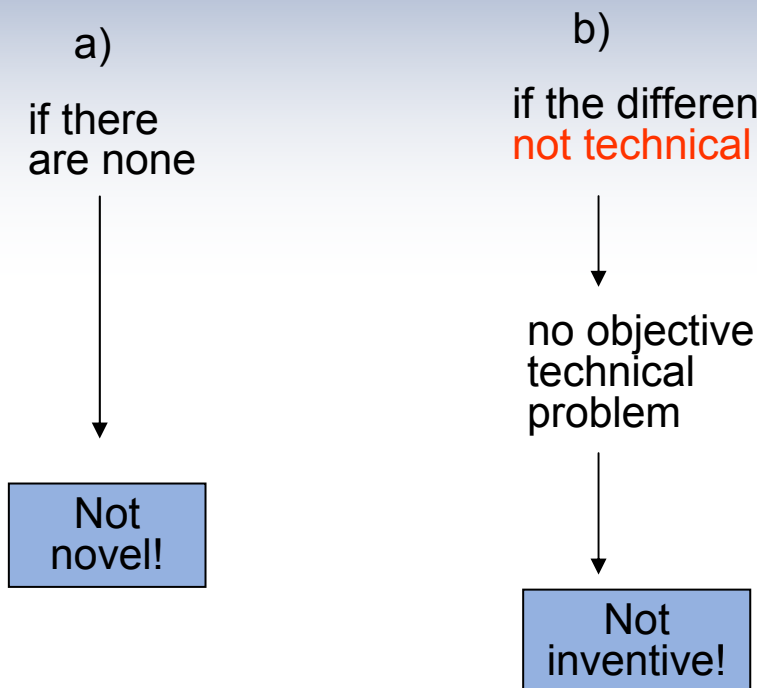
European Patent
Office

CII

Requirements

Examination
Practice

4. Identify **all the differences** between the subject matter of the claim and the closest prior art





EPO Practice

European Patent
Office

CII

Requirements

Examination
Practice

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!



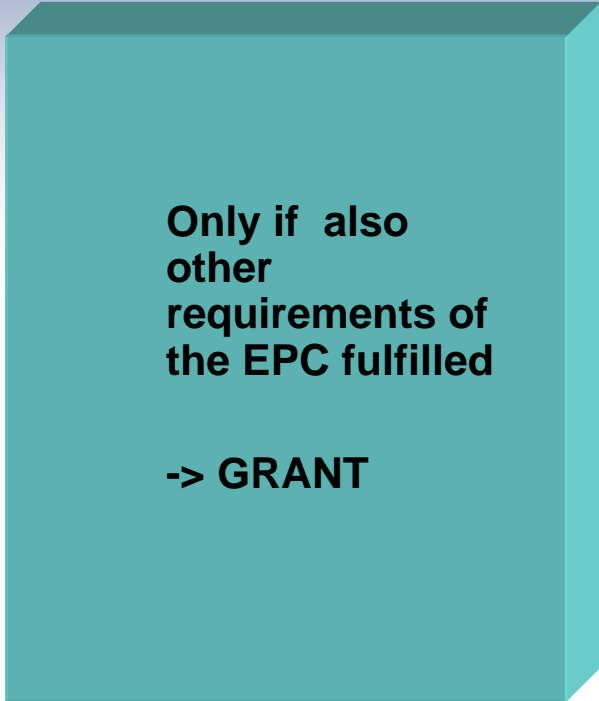
EPO Practice

European Patent
Office

CII

Requirements

Examination
Practice

A teal-colored 3D rectangular box with a slight shadow on the bottom and right sides, containing text.

**Only if also
other
requirements of
the EPC fulfilled**

-> GRANT



EPO Practice

European Patent
Office

CII

Requirements

Examination
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.**



EPO Practice

European Patent
Office

CII

Requirements

Examination
Practice

Technical

Yes

Mixed type claim

Yes

Requirement specs

[Ordering and paying for goods](#)

Closest prior art

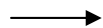
**Platform for downloading audio
files from the Internet**

Differences

Debiting mobile phone account

Technical problem

[None](#)



no inventive step involved



EPO Practice

European Patent
Office

CII

Requirements

Examination
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, whereby the purchase data are at least **partially encrypted** by a password.**



EPO Practice

European Patent
Office

CII

Requirements

Examination
Practice

Technical

Yes

Mixed type claim

Yes

Requirement specs

Ordering and paying for goods

Closest prior art

**Platform for downloading audio
files from the Internet**

Differences

**Debiting mobile phone account
and encrypting purchase data**

Technical problem

Enhance data security

Solution obvious

Was encryption known?



The outcome

European Patent
Office

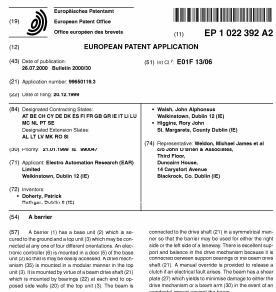
CII

Requirements

Examination
Practice

- Applications ending with a refusal or a withdrawal:

- in the cluster "computers": **over 50%**
- in the field "electronic commerce": **over 70%**





conclusion

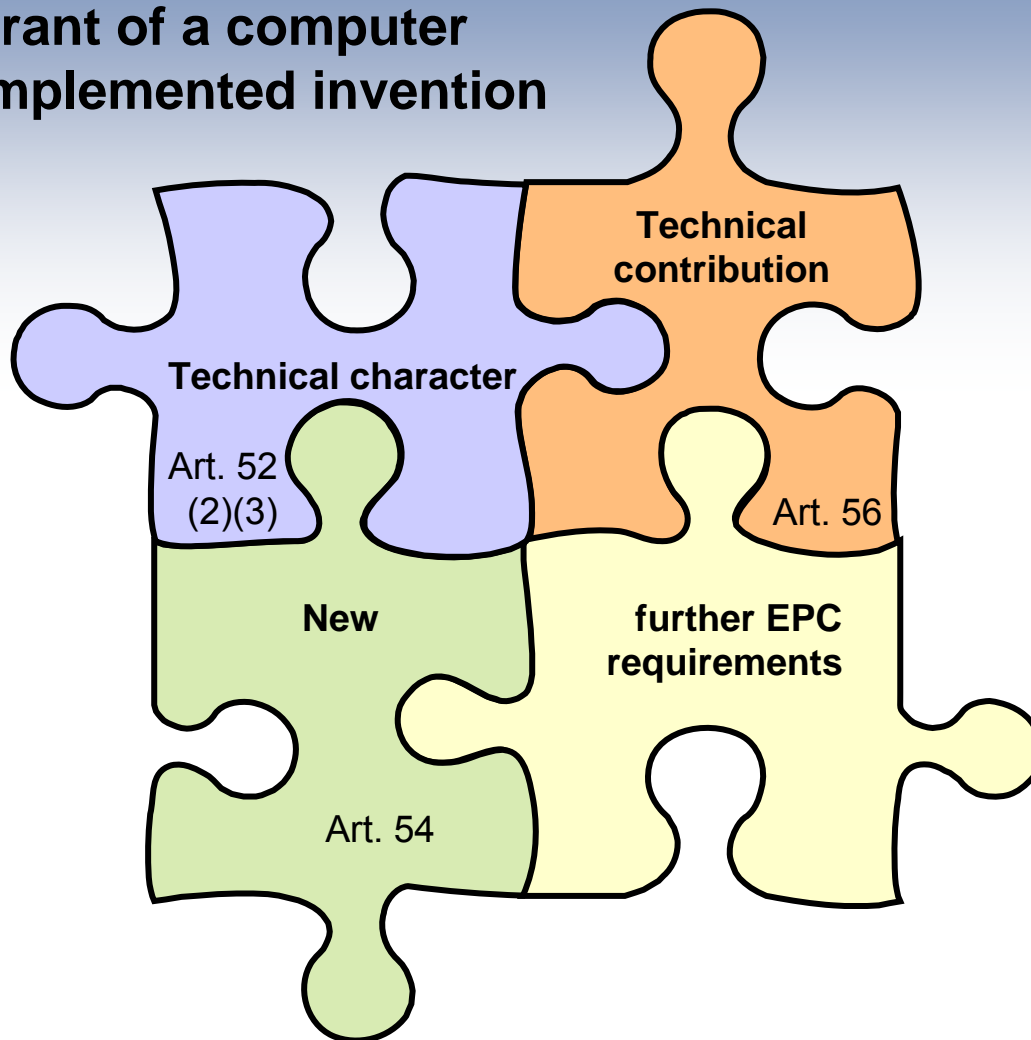
European Patent
Office

CII

Requirements

Examination
Practice

Basic components for the grant of a computer implemented invention





European Patent Office

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

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

Guide for applicants

Dr. Clara Neppel
Examiner,
Dir. 2.2.21,
cneppel@epo.org

