

Computer-Implemented Inventions in Europe and Germany

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Outline



EPO approach to “CII”

Adapted problem/solution approach

Enlarged Board of Appeals, G 3/08



Latest developments in Germany

BGH, “Control device for Examination Modalities”

BGH, “Dynamic Document Generation”

A.1) Examination Practice of EPO

- “Invention” not defined in EPC or case law
- no invention: software, business methods **as such**, (A 52 EPC)
- Case law: “Invention” implicitly requires **technical character**
- three-step test to allowability of software-based inventions:

(i.) Technical character of the claim

- without knowledge of prior art (*a priori*)
- needs not to be novel or inventive

1st “tech hurdle”

(ii.) Novelty

2nd “tech hurdle”

(iii.) Inventiveness of technical features

- adapted problem/solution approach

A.2) Adapted Problem/Solution Approach

- a) Does the claim exhibit technical character? 1st hurdle (!)
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- b) Mix of technical and non-technical features?
- i. Identify non-technical features, deriving invention's non-technical context
 - ii. non-technical context is, by definition, known to skilled person
- c) Closest prior art based on technical features?
- d) Identify differences between claim and closest prior art
- i. no differences \Rightarrow *not novel*
 - ii. non-technical diff. \Rightarrow *no technical problem, claim obvious*
- e) Technical problem considering non-technical context 2nd hurdle (!)
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\Rightarrow **“Beef” of claim must be technical**

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A.3) Technical character

1st hurdle

Apparatus: technical *per se*

Method: requires implementing in technology

Technical:

- controlling physical entities
- processing physical data (control value, etc.)
- increasing efficiency, security of computer
- computers exchanging signals via a network

Non-techn.:

- social/commercial interaction between humans
- processing text, business data, monetary values

⇒ ***The simplest technical feature is sufficient***

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A.4) Technical problem

2nd hurdle

Non-technical features are

- deemed to be known, usable for technical problem

Technical problem

- novel technical features: must not take into account
- novel non-tech. features: can be taken into account (!)

Invention: Shared identities in SIM for GSM network (T 641/00)

Prior art: Multi-identity SIM for non-GSM mobile network

novel features:

1. multi-identity SIM for GSM network
2. identities selectively usable
3. *distributing costs among users* ⇒ **non-technical**

Problem: GSM-SIM allowing discrimination between calls by different users/purposes

A.5) Enlarged Board of Appeals - G 3/08

Referral to EBoA of former EPO President Brimlow (A. 112 EPC)

- to clarify the limits of patentability in the field of computing
- due to alleged conflicting BoA decisions on patentability of CII

Found inadmissible:

- cited decisions represent legitimate development of case law
- case law does not always develop linearly, especially in new fields

Consequence: established case law confirmed by EBoA

A.6) G 3/08 – bottom line

Bottom line: CIIs are patentable under the EPC if:

- they have technical character due to a technical product or a method employing technical means (*patent-eligibility*), and
 - technical features are novel and inventive over prior art (*inventive step* \Rightarrow *problem/solution approach*).
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Some considerations of EBoA:

- Emphasis lies on function of program rather than claim category
- “Program” refer to instructions specifying a method
- Features may not be “weighted” as to their essence for a teaching

B.1) BGH X ZB 22/07, 20 January 2009

Invention: “control device for examination modalities”

- Adequate medial imaging device selected based on diagnosis data
- Parameters of imaging device (e.g. resolution) are determined
- Software embedded in control device and connected to database

DPMA (1st inst.): lack of inventive step

BPatG (2nd inst.): lack of “technicality”, since method relates to

- implementing mental act of physician by software
- deriving logical conclusion from given data

B.2) The BGH's ruling in X ZB 22/07

general approach: a method claim is patentable if:

- technical problem is solved by technical means
- program running on computer is not sufficient

BGH: instant claims exhibits “technicality” since

- Presence of non-tech features is irrelevant for “technicality”
- Processing, storing, transmitting data by apparatus “technical” (!)
- Program embedded in technical procedure “technical” *per se*

Bottom line:

Embedded software controlling apparatus: **technical**

B.3) BGH X ZB 10/08, 22 April 2010

Invention: “Generating structured documents” (e.g. XML)

- Client requests content from resource-limited server
- Server generates document by “lean” module (e.g. in C++)
- Module more resource-efficient than full (Java) Virtual Machine

DPMA (1st inst.): lack of inventive step

BPatG (2nd inst.): lack of “technicality”, since method relates to

- circumventing JVM by directly using instruction set
- solution is only “conceptual”, rather than technical

B.4) The BGH's ruling in X ZB 10/08

general approach: a method claim is patentable if:

- technical problem is solved by technical means

BGH: instant claims exhibits “technicality” since

- Cooperation of elements of data processing system “technical” (!)
- Considering technical facts of server (limited resources) sufficient
- Resource-limited server directly addresses instruction set

Bottom line:

Resource-efficient client/server interaction: **technical**

B.5) Relevance of “new” BGH approach

- German practice more restrictive than EPO approach
 - BGH case law somewhat “twisted”, while EPO more consistent
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- Latest BGH case law clarified that
 - Non-tech features are irrelevant for “technicality”
 - Processing, storing, transmitting data by apparatus is technical
 - Cooperation of elements of data processing system is technical
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- Stakeholders see convergence of BGH towards EPO approach
 - BGH decisions not so “surprising” in view of settled case law

***Thank you for
your kind attention!***

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