Inventive Step

The German Approach in the Light of Recent Decisions of the Federal Court of Justice (BGH)

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Inventive Step

- Legal Background

- The Objective Technical Problem
  Problem-Solution Approach in Germany

- Indicia for Assessing Inventive Step
  Recent Case Law in Germany
Inventive Step

Legal Background
Legal Background

- § 4 PatG

  • „Eine Erfindung gilt auf einer erfinderischen Tätigkeit beruhend, wenn sie sich für den Fachmann nicht in naheliegender Weise aus dem Stand der Technik ergibt.“

  • Invention is considered as involving an inventive step if
    - with regard to the state of the art
    - to a person skilled in the art
    - not obvious
State of the art

- § 3 PatG
  - Everything made available to the public before the date of filing of the application
    - by means of a written or oral description
    - by use
    - or in any other way
  - Not considered with respect to inventive step:
    - Content of patent applications which were filed prior to the filing date and which were published after that date
Person skilled in the art

- Constitutes the **standard** for assessment of the inventive step

**Fictuous ”person”:**

- ”Skilled practitioner” in the relevant field
- of average knowledge and ability
- with access to everything in the state of the art
  - aware of what is common general knowledge in a particular technical field at the filing date
  - has a normal capacity for routine work
  - may not consider documents which appear relevant only in knowledge of the invention (’ex post’)
Person skilled in the art

- **What it does:**
  - involved in constant development in their field
  - looks for suggestions in neighbouring and general technical fields, or even remote technical fields
  - may consult an additional specialist in a neighboring field
Person skilled in the art

How to determine:

- Appropriate skilled person in the field of the invention to whom the solving of a given problem would be typically assigned
- May in some fields be a team rather than an individual person
- Is the same person that decides if an invention is sufficiently disclosed
Not Obvious

- Obviousness requires:
  - the person skilled in the art was capable to ("could") develop the respective solution of a technical problem
  - the person skilled in the art had reason or motivation to ("would") follow the respective path to the invention

[BGH Installiereinrichtung II, 2011]
“Following the path of the invention requires impulses, suggestions, hints or other reasons …”

[BGH Installiereinrichtung II, 2011]
[BGH Betrieb einer Sicherheitseinrichtung, 2009]

• Objectification of “ex post” assessment needed!
• Complete consideration of all relevant facts case-by-case
Inventive Step

The Objective Technical Problem
The Objective Technical Problem

Subjective Problem

Prior Art

Objective Problem

Solution

INVENTION

Person skilled in the art

Inventor
The Objective Technical Problem

- **Prior Art:**
  - Benzoic acid AG-EE 388 ZW
    - and its physiologically compatible salts
    - have valuable pharmacological properties
      - e.g. decrease blood sugar level
The Objective Technical Problem

- **Invention:**
  - Use of the **pure S(+)‐Enantiomer** (Repaglinide) or pharmaceutically acceptable salt thereof
  - in the preparation of a long-term antidiabetic agent
  - **Advantage:** Fast effect, low drug plasma level, and fast elimination from blood stream
The Objective Technical Problem

- **Prior Art:**
  
  **Racemic mixture:** Blood sugar decrease in humans

  **Studies in rats:** Repaglinide is the effective form

- **Alleged Problem:**
  
  - Provide a long-term antidiabetic agent with superior pharmacokinetic properties
The Objective Technical Problem

- “Advantages of the invention … which … prove attainable only through the invention cannot determine the technical problem.”

  [BGH Repaglinid, 2014]

- Specific pharmacokinetic properties constitute a side effect coming along with the solution

- Objective Problem:
  - Provide a (long-term) antidiabetic agent with improved effectiveness
“Depending upon the circumstances of the technical area as well as of the individual case, each of several different ways of solving the problem may be obvious.”

[BGH Repagnilid, 2014]
The Path to the Solution

- “For the assessment of the question whether a certain starting point was plausible for the skilled person, it is irrelevant whether other starting points may appear even more obvious.”

[BGH Opto-Bauelement, 2016]
The Path to the Solution

- “Nearest” solution not necessarily the only obvious solution
- Different problems/different paths may lead to the same solution
- “Nearest” state-of-the art can not always be taken as the sole starting point

- “The choice of a particular document (or prior use) as the starting point for solving the problem generally requires justification.”

[GH Fischbissanzeiger, 2009]
Inventive Step

Indicia for Assessing Inventive Step
Indicia for Assessing Inventive Step

- General Knowledge
- Chance / Special Choice
- Praise of Experts
- Standard measures / Routine Work
- Reasonable expectation of success
- Equivalents
- Selection from alternatives
- Intermediates
- Difficulties
- Standardization
- Departure from beaten track
- Commercial Success
- Length of time
- Prejudice
- One-way street
- Combination
- Inevitable Results
- "Simple" Solution
- Technical Progress
- Display of information (technical nature)

December 11-15, 2017  SCP27: Inventive Step Germany
Standardization

- Telecommunications Network

Allocating Access to Multiple Users

- Access Denied
- Access Granted
Standardization

- **Invention:**
  - Method for allocating access rights for a telecommunications channel in shared use by several subscriber stations
    - **Information signals** submitted to stations which may include various types of authorization data
    - **Subscriber station checks** whether and which particular type of authorization data was submitted and compares with corresponding data of user station
    - Access right is assigned based on the result of the comparison

- **Prior Art (among others):**
  - Telecommunication Standard GSM 04.60, V6.1.0 and V6.2.0
New Standard

Would the skilled person fall back on?

Old Standard

Not Obvious

New Standard superior
Old Standard outdated

Skilled person no longer interested

INVENTION
Novel „old-fashioned“ solution

Area of the problem no longer regulated by new standard, but
Skilled person still interested
“The fact that a solution was only shown in an earlier version of a technical standard, but was not followed up in a later version, does not automatically lead to the conclusion that this way is not obvious.”

[BGH Zugiffsrechte, 2014]

Also: Motivation to further develop a routine, if
- described in the draft of a technical standard in a certain way … set out to be concretised by the skilled person, or …
- still incomplete … and needs to be completed in the further standardization process

[BGH Anrufroutingverfahren, 2016]
Expectation of Success

- **Invention:**
  - Diagnostic immunoassay for the diagnosis of sprue or coeliac disease:
    - Detection of antibodies against tissue transglutaminase (tTG) from body fluids
    - using a previously identified antibody-antigen reaction
Expectation of Success

- **Prior Art:**
  - **Abstract (authored by inventors)** about unfinished research reporting two antigens of a coeliac specific immune reaction
  - **claiming they have identified** tTG as the so-far unknown endomysial **autoantigen** characteristic for coeliac disease

antibody

antigen

PROBABLY identified
Expectation of Success

**Objective Problem:**
- Provide a low-cost, non-invasive, specific, quantitative, and efficient diagnostic test for coeliac disease

**Obstacles:**
- Abstract reports *preliminary* studies without any details about experimental conditions and installations: **No verification possible**
- “Identification” of antigenic proteins only by molecular mass: **Far-fetched claim** at the time

Solution not obvious!
Expectation of Success

- “The success expectation ... can be influenced by the extent to which the information ... allows to assess the appropriateness and reliability of the experimental installation and execution as well as the reproducibility of the results.”

  [BGH Zöliakiediagnoseverfahren, 2014]

- Technical development does not necessarily follow a path which in hindsight analysis may be viewed as plausible or even inevitable
Conclusion

- "Could-Would": Objectification of “ex post” assessment necessary!

- **Objective Technical Problem** has to reflect the actual accomplishment of the invention (e.g., shall not contain aspects of the solution)

- Complete consideration of all relevant facts case-by-case: “Catalogue” of indicia

- No exclusive path to assess the inventive step, but only one correct answer