



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



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**



■ § 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
- **Fictitious "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



■ Obviousness requires:

- *the person skilled in the art was capable to (“**could**”) develop the respective solution of a technical problem*

AND

- *the person skilled in the art had reason or motivation to (“**would**”) follow the respective path to the invention*

[BGH Installiereinrichtung II, 2011]



Not Obvious

- *“Following the path of the invention requires impulses, suggestions, hints or other reasons ...”*

[BGH Installiereinrichtung II, 2011]

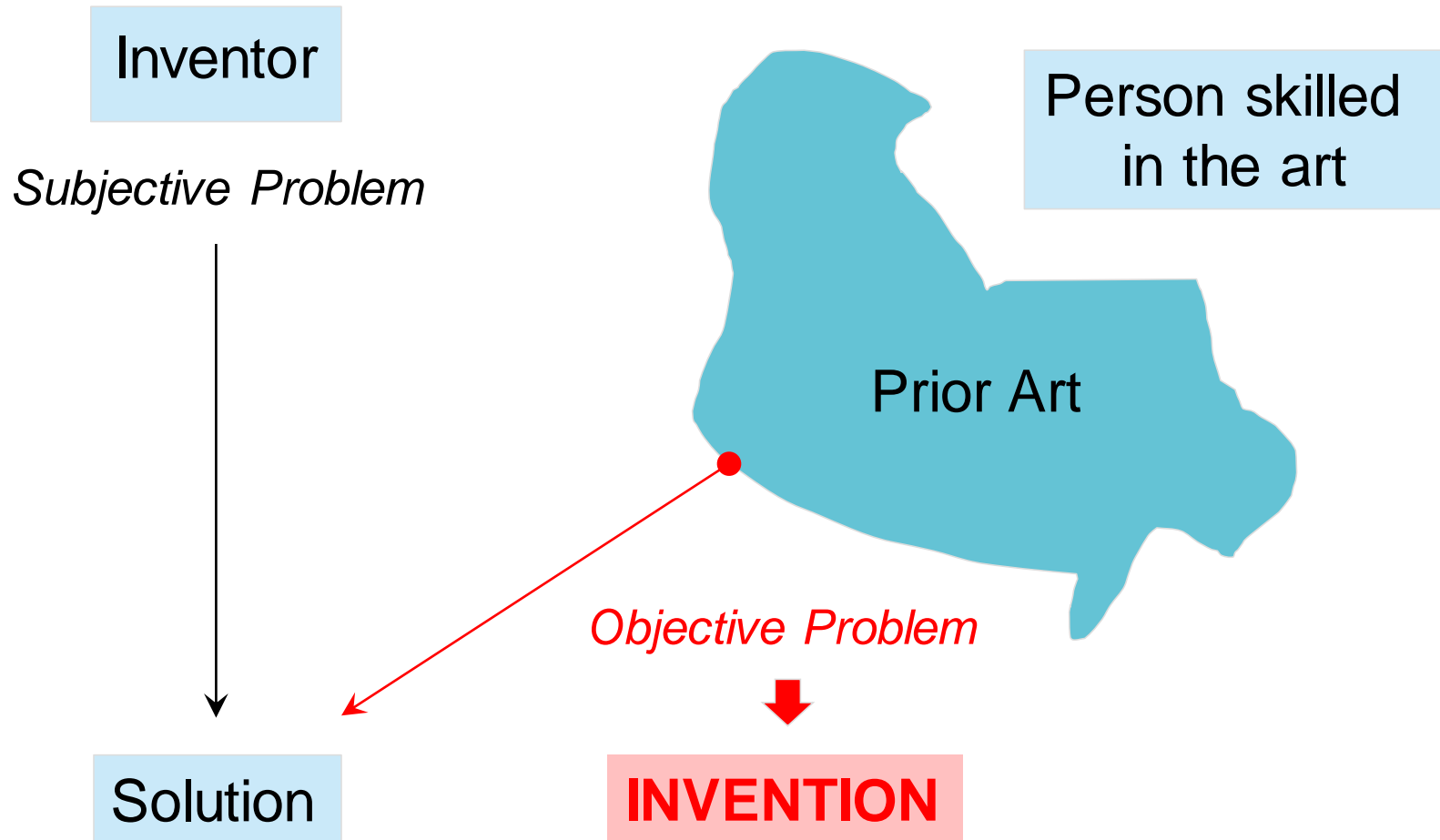
[BGH Betrieb einer Sicherheitseinrichtung, 2009]

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



The Objective Technical Problem

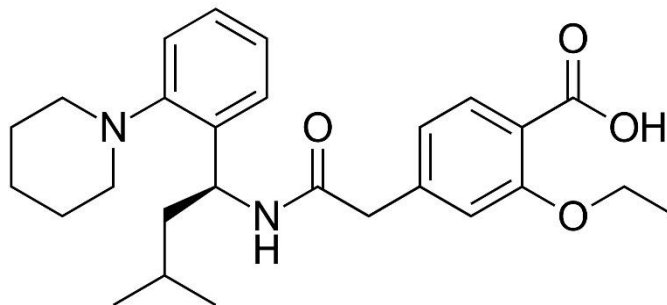
The Objective Technical Problem



The Objective Technical Problem

■ *Prior Art:*

- **Benzoic acid AG-EE 388 ZW**

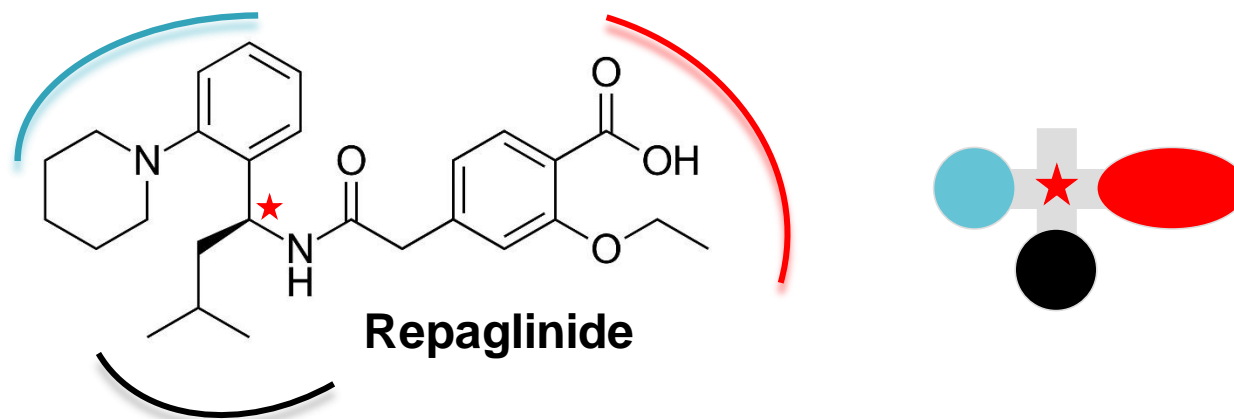


- and its physiologically compatible salts
- have valuable pharmacological properties
 - e.g. **decrease blood sugar level**

The Objective Technical Problem

■ *Invention:*

- Use of the **pure S(+)-Enantiomer** (Repaglinide) or pharmaceutically acceptable salt thereof

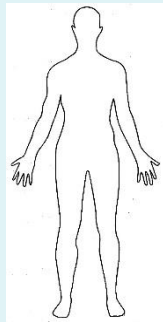
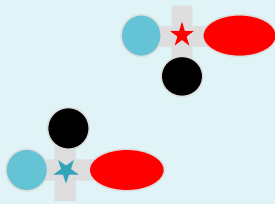


- in the preparation of a long-term antidiabetic agent
- **Advantage:** Fast effect, low drug plasma level, and fast elimination from blood stream

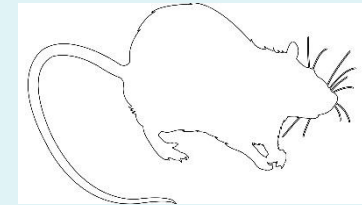
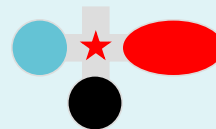
The Objective Technical Problem

■ *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.”***

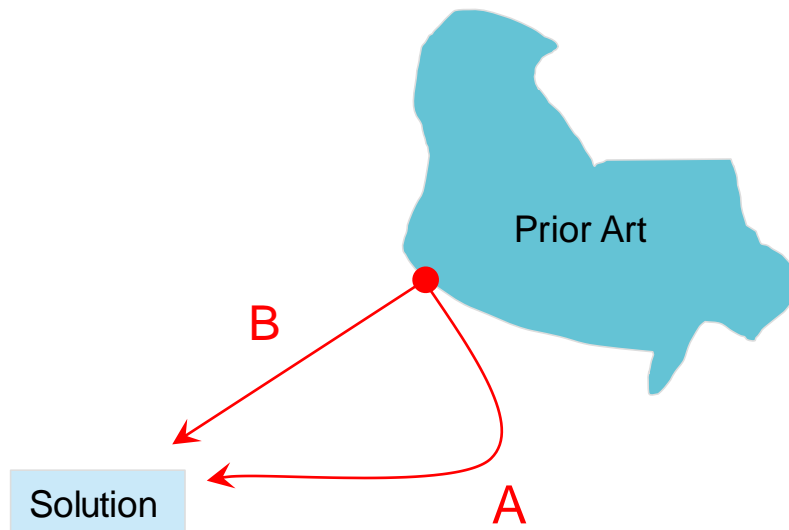
[BGH Repaglinid, 2014]

- Specific pharmacokinetic properties constitute a side effect coming along with the solution
- **Objective Problem:**
 - Provide a (long-term) antidiabetic agent with improved effectiveness

The Path to the Solution

- “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 Repaglinid, 2014]



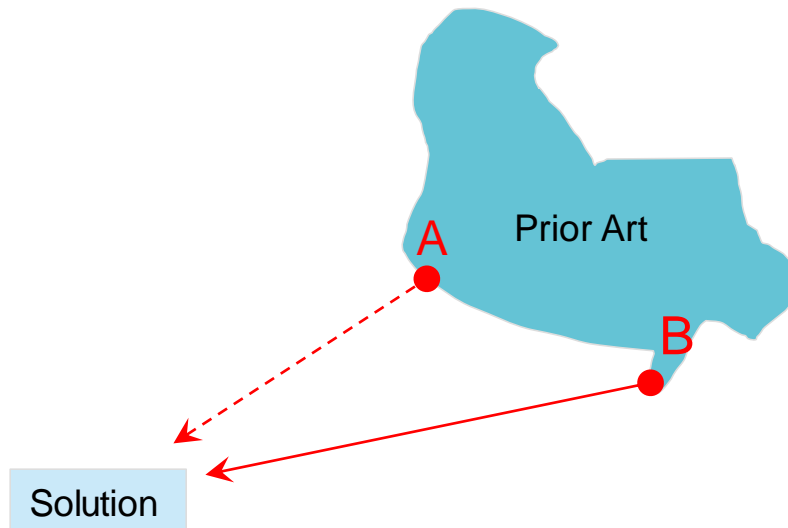
A: Racemic mixture proven pharmaceutically active in humans, pure enantiomers generally known as more efficient, thus testing of Repaglinid promising

B: Repaglinid proven efficient in animal studies, thus promising candidate for testing in humans

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.**”*

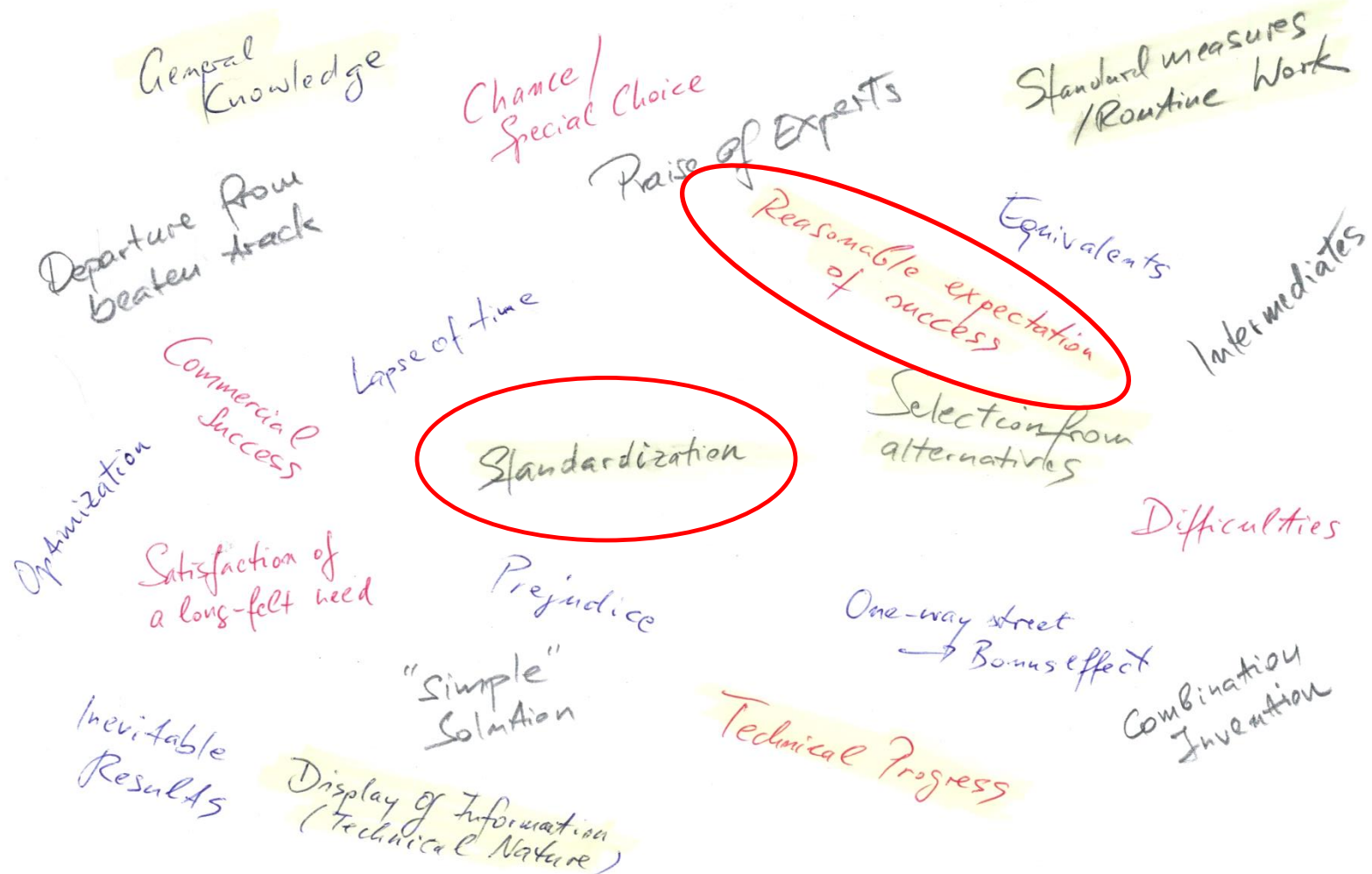
[BGH Fischbissanzeiger, 2009]



Indicia for Assessing Inventive Step

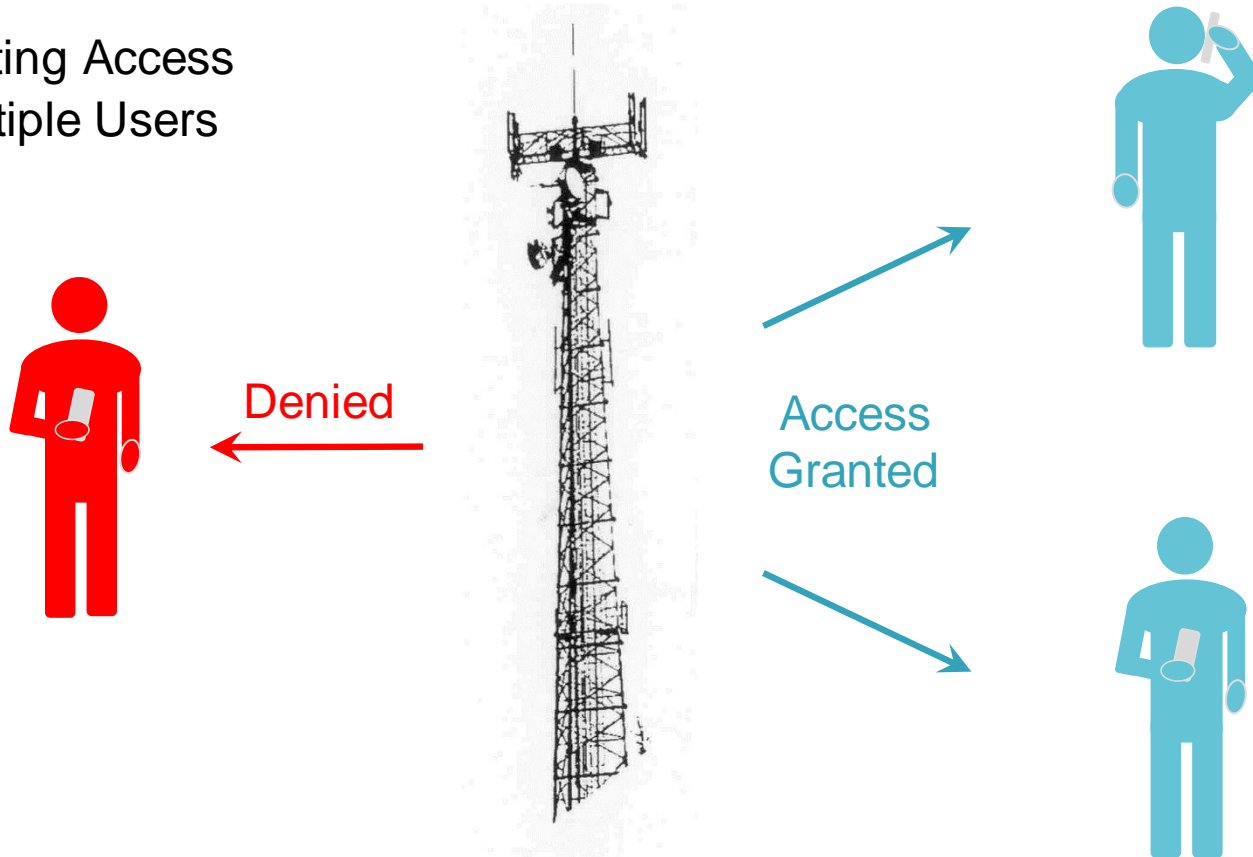


Indicia for Assessing Inventive Step



■ *Telecommunications Network*

Allocating Access
to Multiple Users





Standardization

■ *Invention:*

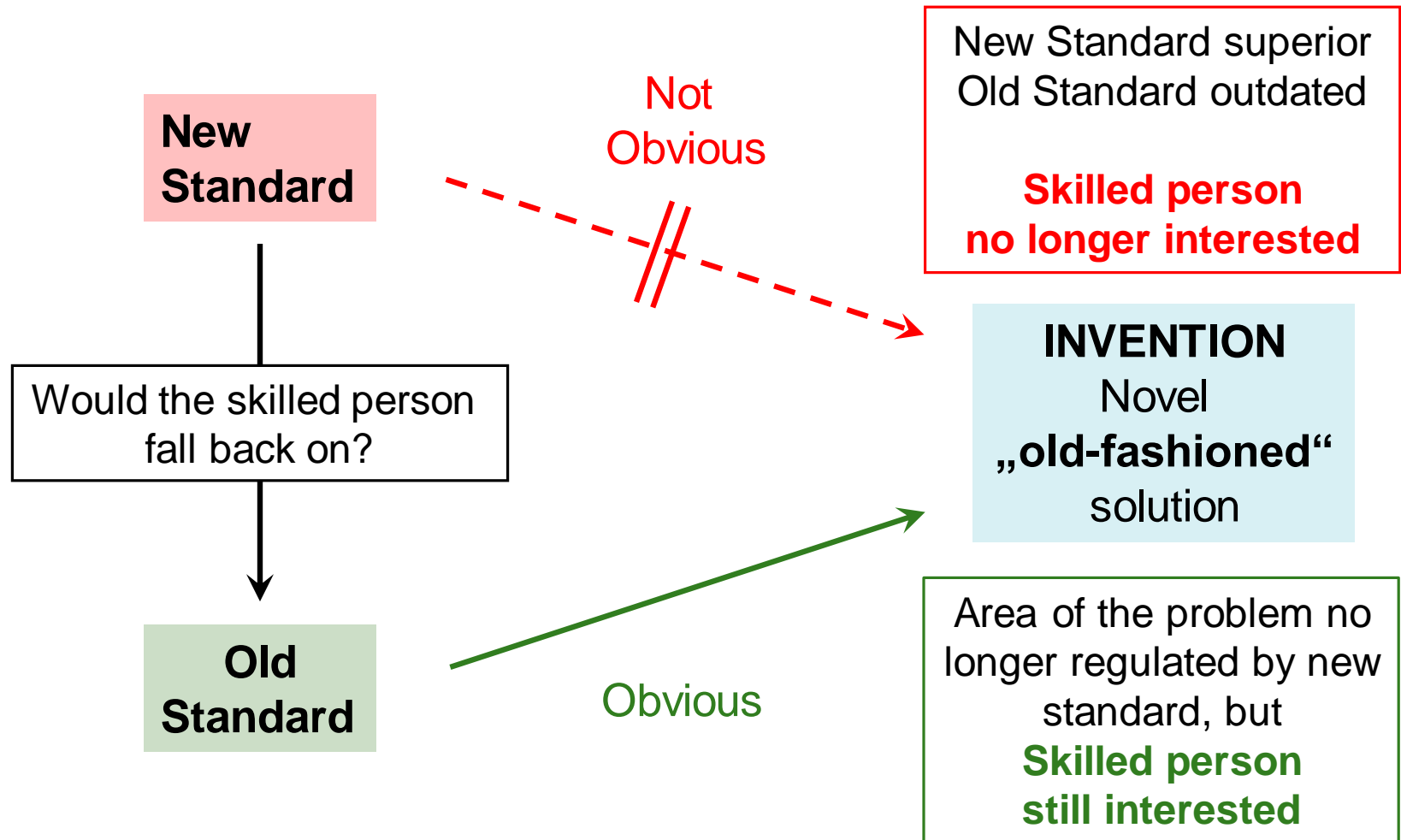
- Method for allocating access rights for a telecommunications channel in shared use by several subscriber stations
 - **Information signals** submitted to stations which may include **various types of authorization data**
 - **Subscriber station checks** whether and which particular type of authorization 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



Standardization





Standardization

- *“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 Zugriffsrechte, 2014]

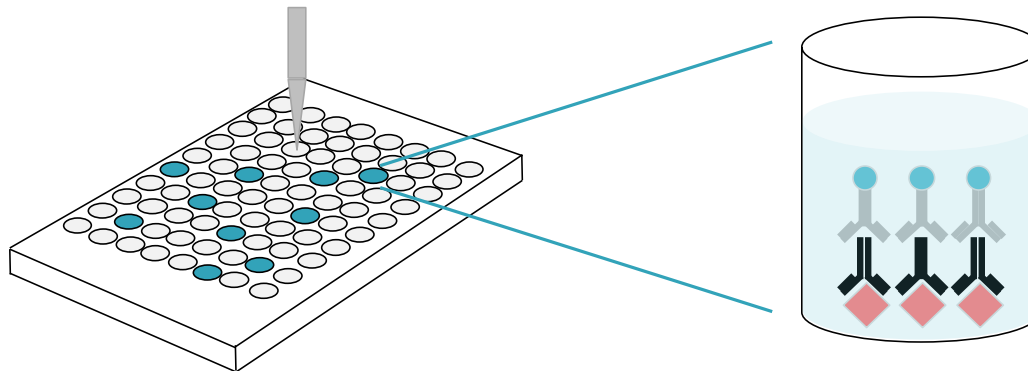
- **Also: Motivation to further develop a routine**, if
 - described in the draft of a technical standard in a certain way ... **set out to be concretised** by the skilled person, or ...
 - **still incomplete** ... and **needs to be completed** in the further standardization process

[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**

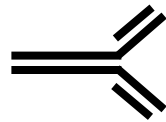




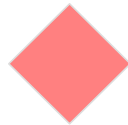
Expectation of Success

■ *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