JIPA Seminar

June 2021

Disclaimer

This presentation is intended to give you a basic understanding on recent case law at the EPO (European Patent Office). Any information given has been prepared to the best of our knowledge. Nevertheless, we cannot guarantee that the information is complete and considers all aspects of the case law correctly. In particular, in praxis, each case has particularities which have to be considered. Therefore, please do not base any practical decision on the information given to you in this presentation but please ask us or any other European patent attorney for specific advice for each case.

AGENDA

Introduction to our firm and myself

IP news in Europe

Main Topics: CII at the EPO, recent decisions concerning

A. Simulations and

B. Medical Software

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European Patent Attorney
European Trademark and Design Attorney

SSM

CV

Doctorial Thesis in Physics at Max Planck Institut 1993
Joined SSM 1993
German Patent Attorney 1996
European Patent Attorney 1997
Master of Laws 2006
Represents several global players on behalf of SSM
Handling of Landmark Decision Cases in field of CII and Medical Technologies
Usually twice a year travel to Japan since 2001

SSM

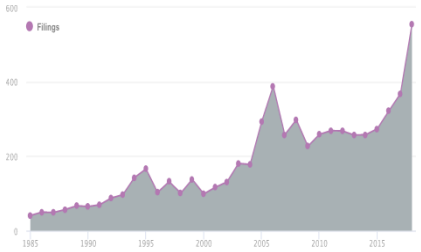
Mid-size IP firm (60 staff)
Founded in 1896
Located in Munich, Germany
All IP services
All technical fields
Worldwide network of associated firms

SSM: Best of two worlds:

- For each of our clients, we have a dedicated team of technical and formal experts deeply familiar with our client‘s needs and requirements and highly skilled in a broad range of IP services.
- The sizes of our specialised teams are flexibly adapted depending on our client‘s needs. This allows us to handle peak service demands of major global companies while we still concentrate on tailor-made services for our clients.

Development

Growing for decades



Facts about SSM:

- Dedication to client: Most of our 17 attorneys are equity partners (>70%)
- Extraordinary Qualifications:
  - Most of technical experts are patent attorneys (>75%)
  - About half of formal experts are certified paralegals
  - Multi-lingual and cultural approach: 2 Japanese patent attorneys, one with EPO qualification and one as trainee and one Chinese trainee
- Sustainable growth: 5 new partners in last 6 years. 4 highly qualified trainees.
- We offer inhouse training programs for trainees of our clients (one week to a few months)
- High loyalty of attorneys and other staff members to SSM (up to about 35 years)
- High loyality of clients, e.g. Ricoh Company since 1956 or Panasonic since 1985

Pending Decisions

- G1/21: Oral Proceedings by Video Conference (referral by T 1807/15).
  - ➢ Oral Proceedings by video conference took place without consent of parties. EBoA is asked to decide whether this is in line with the EPC (Art. 116(1) EPC). Interesting fact: Hearing took place on 28 May 2021 by video conference.
- G 4/19: Is there a legal basis in EPC for forbidding Double Patenting, in particular in case of internal priority?

Background Information on daily practice

- Examiners recently accept Interviews held via Microsoft Teams. This allows to share figures and claim wording instantly during the Interview. Examiners and our attorneys consider this to be very helpful to come to a common understanding.
- When claiming priority, recently, the EPO prefers that the applicant uses the DAS code if a Japanese priority is claimed. It is advisable to start using the DAS code already now, in order to become used to it before using the DAS code becomes obligatory by end of this year. Details can be found in the new EPO guidelines (A-III, 6.7).

CII (Computer Implemented Inventions) at the EPO, recent decisions concerning

A. Simulations G 1/19

B. Medical Software T 944/15

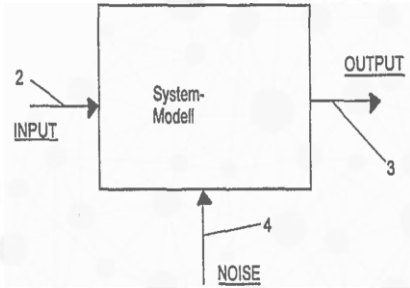
June 2021

I. Background

1. Importance of Simulation Software

- Simulation software market size is estimated to be around 10 billion dollars with double digit growth
- Two diverging decisions of different boards of appeal
- Petitition to Enlarged Boards of Appeal (Art 112a) to ensure uniform application of EPC
- Huge interest in decision: Many amicus curiae briefs

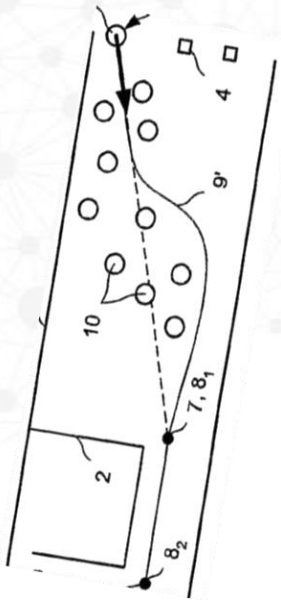
I. Background



2. Circuit Simulation T 1227/05 (Infineon)

- Numeric simulation of electronic circuit subject to noise
- Simulation of a specifically defined technical device (“class of technical items”) is technical (r. 3.1.1; see Headnote 1)
- If simulations precede actual production, then they are technical (see Headnote II)
- Claimed calculation of random numbers (for noise simulation) uses efficiently computer resource (r. 1.3)

I. Background



3. Modelling crowd movement in a building T 489/14

- Simulation of movements of pedestrians in building, physical boundaries and “personal space” of other pedestrians are not tolerated
- “a technical effect requires, at a minimum, a direct link with physical reality, such as a change in or a measurement of a physical reality” (r. 11)
- No such link in the claimed simulation method (and also no such link in the circuit simulation case T 1227/05)

II. Questions and Answers and Comments

1a. Q: Can a simulation as such produce a technical effect beyond implementation on a computer?

1b. A: Yes.

1c. Comment : Direct link to reality is no must.

That is, “Crowd Modelling” decision T 489/14 was wrong in this aspect.

II. Questions and Answers and Comments

2a. Q: Is it sufficient that the simulation is based on technical principles underlying the simulated system?

2b. A: No.

2c Comment: Simulation of a specifically defined technical device (“class of technical items”) is not necessarily technical.

That is “Circuit Simulation” decision T 1227/ 05 was wrong in this aspect.

II. Questions and Answers and Comments

3a. Q: Is there a different answer to the first and second question if CII simulation is part of a design process?

3b. A: No.

3c. Comment: If claimed simulation precedes actual production, this does not necessarily mean that simulation is technical.

That is, the “Circuit simulation” decision was wrong in this aspect.

III. Interesting Details and Conclusions

1. What is technical?

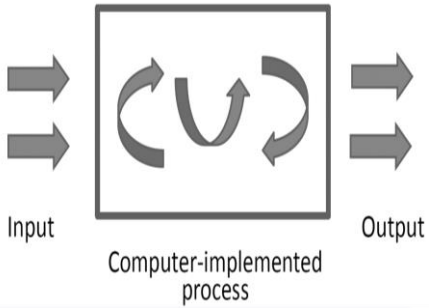
- The referring Board of T 489/14 asked for the “relevant criteria for assessing whether a computer-implemented simulation claimed as such solves a technical problem?”
- EBoA denied to answer this question since “notion of technicality needs to remain open” for future developments (r. 88).
- In my opinion this is good news for future developments since no strict definition for technicality has to be met.

III. Interesting Details of G 1/19 and Conclusions

2. COMVIK Approach

- COMVIK approach (T 641/00) is suitable (r.136) and most important for assessment of simulations (r. 106 –r. 126)
- Any kind of hardware (e.g. computer) in the claim renders the claim eligible (low hurdle, r.31)
- Non-technical features solve no technical problem and are ignored when assessing inventive step (high hurdle, r.30)

III. Interesting Details of G 1/19 and Conclusions



3. Direct Link to physical Reality

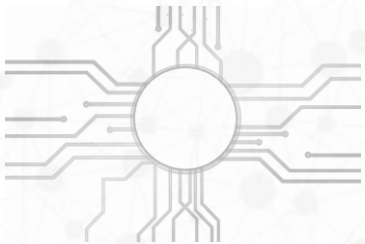
- While a direct link to technical reality is no must, it is "in most cases sufficient" (r.88)
- Example: input of measurement data or output of control data (r. 85; r.92; r.94;r.97; r.99)
- Measurements are of "technical nature, regardless of what use is made of the results" (r.99)

III. Interesting Details of G 1/19 and Conclusions

4. Simulations of technical and non-technical devices

- Simulation of technical system may solve no technical problem, e.g. simulation of billiard game (r.119)
- Simulation of non-technical system like weather simulation may solve technical problem, e.g. automatically close door depending on forecast (r.129)

IV. Simulation “as such” – computer resources



- A simulation “as such” is defined to have no interaction with external physical reality and has only numerical input and output (r.53)
- A simulation as such can solve a technical problem, if the simulation uses efficiently the resources of the computer (r.40, r. 127, r.128, also see r.1.3 of T 1227/05)
- Comment: Difficult to argue if common programming steps or modules are used!
- Advice: Advantage of efficient use of computer resources and how it is achieved should be disclosed in application text

IV. Simulation “as such” – “potential use”

- A simulation as such can solve a technical problem, “in exceptional cases” if “the potential use” of the data resulting from the simulation is limited to technical purposes over the whole scope of the claim (r. 128).
- Specific adaption of resulting data for the purposes of the intended technical use, i.e. implicit specification of potential use may be sufficient (r. 94, r.97-99, r.124, r.129, r.137, r.41).

IV. Simulation “as such” – definition of use

- There are many references to “use” in G 1/19 (r. 94, r.97-99, r.124, r.128, r.129, r.137, r.41).
- An analysis of these references supports assumption that the potential use of the data resulting from the simulation and the implicit specification of this use is very important to render a simulation as such technical.
- Advice: Giving a proper definition of the resulting data and its intended use will be the **key for drafting of claims** concerning simulation as such of a physical device (r. 94, r.97-99, r.124, r.128, r.129, r.137, r.41). It should be defined that the resulting data are used for a technical purpose.
- Advice: As a fallback position, draft use claims directed to specific technical use of resulting data.
- Advice: Give detailed support of technical use and technical purpose of resulting data in the description.

I. Therapeutic and surgical Methods

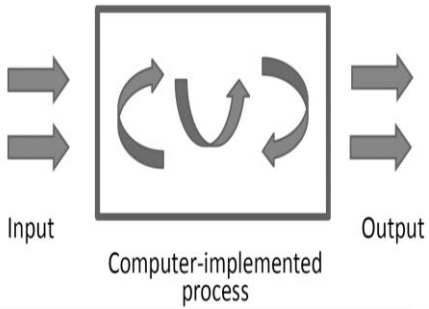
Art 53(c) EPC:

- "European **patents shall not be granted in respect of methods for** treatment of the human or animal body by **surgery or therapy** and diagnostic methods practised on the human or animal body; **this provision shall not apply to products**, in particular substances or compositions, for use in any of these methods."
- Comment: Before the new decision T 944/15 (issued February 2021), the above Art. 53(c) was generally understood in that medical method claims directed to therapy or surgery may be exempted from patentability while the corresponding product claims are generally patentable. According to the European Guidelines for Examination (G.II 4.2.1), corresponding **program claims** were, like **product claims**, also generally patentable.

II. T 944/15

- Concerned a CII method and a program for controlling timing of x-ray monitoring of a patient's position during radiation therapy. Timing of x-ray monitoring depends on therapy radiation dose. Control of radiation therapy in dependence on monitoring results was not claimed. That is, a therapeutic step was not claimed.
- Description describes use of monitoring for improving radiation therapy (r.25).
- BoA: "Nature of invention" is defined by complete application text and not just claims (r.16-21, r.46,r.49). "Nature of invention" is decisive for assessing Art. 53(c) (r.19, r.45).

II. T 944/15



- BoA: No technical effect of claimed data processing steps. BoA made this statement although the claims defined the use of radiation energy data and the output of control data to x-ray device. This seems to be in contradiction to G1/19 (published after decision T 944/15 was made).
- Effects of invention are outside of the computer and concern improvement of radiation therapy (r.32).
- BoA: Therefore, claimed method is excluded from patentability.
- BoA: The invention relies in the method (r.48). Therefore, and contrary to Guidelines G.II, 4.2.1, also **program claims are excluded** and most probably also **system claims would be excluded** (r.49-54). (Please note that decisions of BoAs overrule the Guidelines.)

III. Assessment of T 944/15

- T 944/15 was published February 2021 and is already cited by Examiners to reject program and system claims of medical software inventions. That is, decision is important for practice!
- However, other BoAs may come to a deviating decision since:

➢ contrary to T 944/15 (r.22), G 1/19 (r. 85; r.92; r.94;r.97; r.99) helds that CII steps relating to processing of measurement data and outputting of control data are considered to be technical

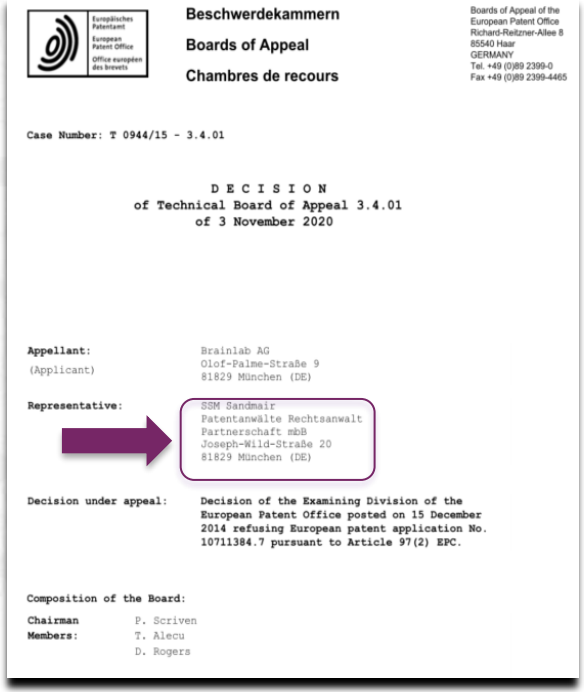
➢ contrary to T 944/15 (r.19, r.45), G 1/07 (r.4.3.2) can be understood in that claims are more important than “nature of invention” for assessing applicability of Art. 53(c)

➢ Art. 53(c) EPC explicitly states that exclusion of methods should not apply to products

IV. Advices in view of T 944/15

- T 944/15 was decided by BoA 3.4.01. This BoA handels applications concerning the following IPC classes: A61N; C40B20/08, 30/10; G01P, R, S, T; G06K (exc. 9); G09 (exc. B, F, G); G10, 12, 21, 99; H01P, Q; H05 (exc. F, G, K).
- If medical software application is rejected based on a reference to T 944/15, filing of an appeal should be considered in particular if application is in an IPC class not handled by BoA 3.4.01.
- If medical software application is to be filed in one of the above IPC classes and concerns therapy or surgery, filing of a national application in Europe, in particular in Germany should be considered.

IV. Advices in view of T 944/15



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Case Number: T 0944/15 - 3.4.01

D E C I S I O N
of Technical Board of Appeal 3.4.01
of 3 November 2020

Appellant: Brainlab AG
(Applicant) Olof-Palme-Straße 9
81829 München (DE)

Representative: SSM Sandmair
Patentanwälte Rechtsanwalt
Partnerschaft mbB
Joseph-Wild-Straße 20
81829 München (DE)

Decision under appeal: **Decision of the Examining Division of the European Patent Office posted on 15 December 2014 refusing European patent application No. 10711384.7 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman P. Scriven
Members: T. Alecu
D. Rogers

As our firm handled this appeal case and I was the main person in charge, I would be pleased to give more background information.

You can find my contact on the next slide:

THANK YOU FOR YOUR ATTENTION!

Further Information:

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