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EPO Case Law for Computer-Implemented Inventions (T 0550/14 [Catastrophe relief/SWISS RE] of 14.9.2021)

Does the Examining Division have to prove that a feature is not technical when assessing inventive step?

Die Beschwerde richtete sich gegen die Entscheidung der Prüfungsabteilung, eine von SWISS RE eingereichte europäische Patentanmeldung wegen mangelnder erfinderischer Tätigkeit zurückzuweisen. Die Erfindung bezog sich auf ein computerimplementiertes Verfahren zur Verwaltung der Finanzierung von Katastrophenhilfsmassnahmen und beanspruchte insbesondere eine Kapitalauszahlung in Abhängigkeit von einem parametrischen Index, der sich auf Informationen über Katastrophenereignisse bezieht. Die Kammer war der Ansicht, dass dieses Merkmal keine technischen Überlegungen erfordere und konnte keine Schwierigkeiten bei der Implementierung des Verfahrens auf einem allgemeinen vernetzten Computer erkennen. Daher musste die Patentanmeldung nach Artikel 56 EPÜ zurückgewiesen werden und auch die Beschwerde wurde zurückgewiesen. Die Kammer vertrat die Auffassung, dass es Sache des Beschwerdeführers ist, zu begründen, warum eine technische Wirkung vorliegt oder warum technische Erwägungen im Spiel sind und dass nicht die Prüfungsabteilung beweisen muss, dass ein Merkmal nicht technisch ist. Letzteres käme einer Definition des Begriffs «technisch» gleich, was die Kammern stets abgelehnt haben.

Le recours était dirigé contre la décision de la division d'examen de rejeter une demande de brevet européen déposée par SWISS RE pour défaut d'activité inventive. L'invention portait sur un procédé mis en œuvre sur ordinateur pour gérer le financement de mesures d'aide en cas de catastrophe. Le demandeur revendiquait notamment une méthode de versement de capital en fonction d'un indice paramétrique, qui serait obtenu à partir d'informations relatives à des catastrophes. La chambre de recours a estimé que cette caractéristique ne nécessitait pas de considérations techniques et n'a identifié aucune difficulté pour la mise en œuvre du procédé sur un quelconque ordinateur en réseau. Par conséquent, la demande de brevet devait être rejetée en vertu de l'art. 56 CBE, et le recours a également été rejeté. La chambre a estimé qu'il appartenait au recourant de justifier l'existence d'un effet technique ou l'implication de considérations techniques, et qu'il ne relevait pas de la responsabilité de la division d'examen de prouver qu'une caractéristique n'était pas technique. Apporter une telle preuve reviendrait à définir le terme «technique», ce que les chambres ont toujours refusé de faire.

I. Background of the Decision

1. Established Case Law Relating to Computer-Implemented Inventions

Computer-implemented inventions often claim a combination of technical and non-technical features. Frequently, it is disputed whether those features of the claim which distin-

guish the claimed invention from the prior art are technical or provide a technical contribution, in particular when the claimed invention relates to a computer-implemented method of doing business. With such inventions, the Examining Division at the EPO typically raises an objection due to lack of inventive step, which can pose a challenge to be overcome.

According to the established case law of the Boards of Appeal of the EPO, the requirement of inventive step must be assessed taking account of all features that contribute to the technical character of the invention¹. While the technical problem to be solved according to the «problem-solution

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¹ See in particular the decision T 0641/00 (Two identities/COMVIK) and G 1/19 (Pedestrian simulation).

approach» should not be formulated to contain indications of the solution or even partially anticipate it, merely because some feature appears in the claim does not automatically exclude it from appearing in the formulation of the problem. Accordingly, an applicant is advised to argue that the non-technical features contribute to the technical character of the invention, for example, by interacting with the technical features to solve a technical problem.

In another line of case law, the presence of an inventive step can be affirmed if the invention is based on technical considerations². The applicant is advised to argue why the non-technical features are not within the domain of the notional business person, but rather would be put to a person skilled in the art, and therefore that the non-technical features involve technical considerations and must be part of the solution to be assessed regarding inventive step.

While the Boards of Appeal have consistently refused to provide a definition of which kinds of features are to be deemed «technical», guidance on which types of features are considered non-technical is provided, for example, in the decision G 1/19, which held that «the term «non-technical features» refers to features which, on their own, would be considered «non-inventions» under Article 52(2) EPC³.»

2. Refusal in First Instance Proceedings

The applicant, SWISS RE, appealed a decision of the Examining Division to refuse its European patent application on the grounds of lack of inventive step. The decision held that claims 1 and 7 were considered to be a straightforward implementation of a business method on a generic computer system.

The invention of claim 1 concerned a computer-implemented method for managing funding of catastrophe relief efforts caused by natural or man-made disasters, such as earthquakes. Instead of the direct funding of relief efforts by a charitable organization (using donor funds), as occurs conventionally, the method provides for a special-purpose vehicle, which offers a financial product in return for a premium from the charitable organization (or directly from the donors). Investors invest in the product and receive in return a payment of the premium. Catastrophic event information is received from an information provider, and if a catastrophic event occurs within the contract duration of the financial product, capital is paid to the charitable organization depending on a parametric index of the received catastrophic event information⁴.

The applicant argued that the invention concerned an entirely new business model involving the expertise of an assurance expert and a capital risk expert without knowledge about parametric triggering criteria, which are measurable parameters and therefore technical. The applicant argued that technical knowledge was therefore required to develop the new business method⁵.

II. Decision of the Board of Appeal

During appeal, the appellant argued that the invention was an entirely new business method which did not exist in the prior art. Technical considerations were needed, it was argued, to derive the concept of using an electronic parametric triggered payout⁶. It was only through the collaboration of a group of persons that the invention was able to be realized, with a technically skilled person included in the group. The appellant further argued that, in order to implement a «trigger»-based management of the funding of catastrophe relief efforts, an understanding of the data structures and computer process steps was required, in particular, how the system of the «special purpose entity» had to interact with other systems. This went beyond the normal technical know-how of the skilled person and beyond a «stand-alone» network computer⁷.

The Board agreed with the Examining Division that a valid starting point is a networked computer system, comprising a control module and several functional modules. Such a «networked» system can be interconnected with other networked computers via a telecommunications network⁸.

The invention was considered to differ from the prior art by all the features of the relief payout scheme, and the question was whether the Division was right to consider all these features as being non-technical⁹.

In particular, concerning the feature of the parametric trigger, the Board agreed with the Examining Division that «the business person in the form of an insurance expert would naturally have to consider the conditions under which the payout would be made. These conditions are part of the business method and would depend on the type of financial model being used. Whereas a conventional insurance might link the payout to loss, the method of the invention links the payout to the nature of the catastrophe, which makes sense if the cost is being covered by a financial product¹⁰.»

The Board considered that the «parametric trigger» was simply a broad term covering parameters defining the catastrophe, and that in determining this parametric in-

2 See, for example, the decision T 769/92 (General purpose management system/SOHEI) and, more recently, the decision T 2314/16 (Distributing rewards ...).

3 G 1/19, point 32. According to Article 52(2) EPC, these are, in particular: «(a) discoveries, scientific theories and 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.» Point 75 of the same decision holds that «In accordance with its earlier case law and with the approach chosen by the legislator, the Enlarged Board will, in the present case too, refrain from putting forward a definition for «technical»»

4 See the decision, points 1.1 to 1.5.

5 See the decision, point 3.2.

6 See the decision, point 2.4.

7 See the decision, points 2.4 and 2.5.

8 See the decision, point 2.7.

9 See the decision, point 2.8.

10 See the decision, point 2.11.

formation, the triggering criteria and the trigger level do not require any technical considerations¹¹.

The Board could not see any difficulties for the person skilled in the art of data processing to implement the business concept on generic networked computer systems and that therefore, the present application had to be refused under Article 56 EPC^{12, 13}. The appellant's request for remittal for further search and examination could not be granted, as the Board was able to take the decision without remitting the case to the Examining Division¹⁴.

The Board stated that the appellant's wish for the Board to define criteria that the Examining Division should use to prove that a feature is not technical is «tantamount to defining the term technical, which the Boards have consistently declined to do», and referred to the decisions T 2314/16 – Distributing rewards/RAKUTEN and T 1463/11 – Universal merchant platform/CardinalCommerce, for guidance on the issue of technicality or to help classify whether borderline features are on the technical or non-technical side¹⁵. The Board further included a piece of advice for the Examining Division, namely to search for and start from a document that already discloses some of the alleged non-technical features, thus avoiding a discussion on these features¹⁶.

III. Conclusion and Outlook

The Board refused the patent application for lack of inventive step pursuant to Article 56 EPC. It held that the feature of the «parametric trigger» did not require any technical considerations and that the features of the business method could be implemented on a known networked computer without difficulty. Further, it affirmed that the Boards have consistently declined to define the term «technical», which is in line with the earlier decision G 1/19 in which it was held that defining «technical» was undesirable as «any definition of a technical invention may have to be extended in the course of time in order to accommodate new technical or scientific developments or to reflect societal changes.»¹⁷ This further develops the case law that, once a feature has been established to be non-technical, the applicant must argue why this non-technical feature provides a technical contribution. Furthermore, it is to be expected that Examining Divisions will more often cite prior art which discloses at least some of the non-technical features, thereby streamlining the discussion of inventive step.

Borderline cases, often relating to computer-implemented business methods, will continue to spur the further development and refinement of the case law providing greater predictability of outcome for applicants.

¹¹ See the decision, point 2.11.

¹² See the decision, point 2.13.

¹³ Article 56 EPC: «An invention shall be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to a person skilled in the art ...»

¹⁴ See the decision, point 3.

¹⁵ See the decision, point 3.3.

¹⁶ See the decision, point 3.5. The Board further made reference to T 756/06 -Displaying a schedule/FUJITSU, point 5 or T 368/05 – Integrated account/CITIBANK, point 8).

¹⁷ See the decision G 1/19, point 77.