Deckblatt Übersetzung

Daten der Übersetzung:

Court/Gericht:	Bundesgerichtshof
Date of Decision / Datum der Entscheidung:	2014-02-11
Docket Number / Aktenzeichen:	X ZR 107/12
Name of Decision / Name der Entscheidung:	Kommunikationskanal

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Arbeitskreis Patentgerichtswesen in Deutschland e.V.

FEDERAL COURT OF JUSTICE

IN THE NAME OF THE PEOPLE

JUDGMENT

X ZR 107/12

Pronounced on:
February 11, 2014
Wermes
Judicial Secretary as
Clerk of the court
registry

in the patent nullity proceedings

Kommunikationskanal/
Communication channel

EPC Art. 88

The priority of a prior application may be claimed if the technical instructions described therein on the basis of an example of an embodiment or in any other way appear to a skilled person as an embodiment of the more general technical teaching described in the subsequent application and this teaching in the generality disclosed in the subsequent application can already be taken from the prior application as belonging to the invention applied for.

Federal Court of Justice, judgment of February 11, 2014 – X ZR 107/12 –
Federal Patent Court

The X. Civil Senate of the Federal Court of Justice, following the oral hearing on February 11, 2014, attended by the presiding judge Prof. Dr. Meier-Beck, the judges Dr. Grabinski, Hoffmann and Dr. Deichfuß as well as the judge Dr. Kober-Dehm

ruled that:

> On appeal by the defendant, the judgment of the 5th Senate (Nullity Senate) of the Federal Patent Court pronounced on May 23, 2012 is amended. The action is dismissed.
>
> The costs of the legal dispute are ordered to be borne by the plaintiff.

By operation of law

Facts of the case:

1 The defendant is the proprietor of European patent 1 062 743 (patent in suit) granted with effect for the Federal Republic of Germany. The patent in suit, which was filed on December 24, 1999, claims the priority of four British patent applications and comprises six claims. The subsidiary claims 1 and 4, to which the further claims are referred back, read in the language of the proceedings as follows:

> 1. A radio station for use in a radio communication system having a communication channel between the radio station and a further station, the channel comprising an uplink and a downlink control channel for transmission of control information, and a data channel for the transmission of data, wherein closed loop power control means are provided for adjusting the power of the control and data channels, characterized by means for delaying the initial transmission of the data channel until after the initial transmission of the control channels during which delay the closed loop power control means is operable to adjust the control channel power.
>
> 4. A method of operating a radio station in a radio communication system having a communication channel between the radio station and a further station, the channel comprising an uplink and a downlink control channel for transmission of control information, and a data channel for the transmission of data, the method comprising adjusting the power of the control and data channels by means of closes loop power control and characterized by delaying the initial transmission of the data channel until after the initial transmission of the control channels during which delay the closed loop power control is operable to adjust the control channel power.

2 The plaintiff challenged the patent in suit in its entirety and claimed that the subject matter of the patent in suit was not patentable. The defendant defended the patent in suit as granted and with seventeen auxiliary requests.

3 The Patent Court declared the patent in suit to be null and void.

4 The defendant's appeal is directed against this, with which it defends the patent in suit as in the first instance, whereby it continues to pursue auxiliary

claims I to IV in an amended version and only in the alternative in the first instance version. The plaintiff opposes the appeal.

Grounds of the decision:

5 I. The patent in suit relates to a radio communication system with primary and secondary stations and a method of operating such a system.

6 1. The description begins by stating that there are two basic types of communication between a base station and a mobile station in a radio communication system. One is user traffic, such as voice or packet data, and the other is control information required to set and monitor various parameters of the transmission channel, enabling the base station and mobile station to handle user traffic. The patent in suit assumes radio communication systems in which one of the functions of the control information is to enable power regulation. Power regulation is required in both directions. The regulation of the power of the mobile station is to ensure that the base station receives the signals of different mobile stations at approximately the same power level. Regulation of the power of the base station is necessary to ensure that the mobile station receives the data with a low error rate, but at the same time interference with other radio cells or radio systems is kept to a minimum. In this respect, the patent in suit is based on the state of the art in which, in a two-way radio communication system, power regulation is performed in a closed loop in which the mobile station determines and signals to the base station any necessary changes in transmission power, and vice versa.

7 A disadvantage of this technique, according to the patent in suit, is that when transmission is started or after an interruption, power control takes a certain amount of time, during which there may be interference with data transmission. If the power is too low, the data will arrive damaged; if it is too high, undesirable interference will be caused.

8 The technical problem is therefore to solve these difficulties.

9 2. To solve this problem the patent in suit proposes in claim 1 a device, which has the following features (outline of the Patent Court in brackets)

1. a channel for communication between the radio station and another station (1a), comprising
   - 1.1 an uplink and a downlink control channel for transmitting control information (1b); and
   - 1.2 a data channel for transmitting data (1c);
2. means for delaying the start of transmission in the data channel until after the start of transmission in the control channels (1e); and
3. means for closed loop power control means (1d), which
   - 3.1 adjust the power of the control and data channels (1d), and
   - 3.2 can adjust the control channel power during the delay (*is operable to adjust the control channel power*, 1f).

10 3. As to the meaning of the features, it is to be noted:

11 The device is used in a radio communication system having a communication channel between a radio station and another station. This communication channel comprises two control channels and (at least) one data channel. The control channel is used to transmit control information. According to the linguistic usage of the patent in suit, these are signals, which are required to set and monitor the parameters of the transmission channel, which enable data to be transmitted by radio. This control information includes, in particular, signals for power control. All that is said about the data channel is that it is used to transmit data. It can be inferred from the description that this also means user data, such as voice, text or image data.

12 The patent in suit does not contain any further details about the design of the channels. From a technical point of view, a channel in the field of radio communication is understood to be a path for transmitting signals from one radio station to another. Accordingly, different channels do not necessarily have to be physically separated, for example in such a way that they occupy different frequencies. Separation can also be achieved in other ways, for example by allocating different time slots on a particular frequency, by structuring the transmitted data differently by means of specific information in a header, by using a spreading code specific to the particular subscriber device, or the like,

provided that it is ensured that the respective receiver can distinguish the transmitted data from other data transmitted on a different transmission path.

13 The means provided for power control operate in a closed control loop (feature 3), i.e., based on the transmitted power signal, feedback is provided from the receiving radio station to the transmitting radio station, which provides information on whether a change in power is required. They are used to regulate the power of both the control channels and the data channel (feature 3.1). In this context, it is envisaged for the start of transmission that transmission in the data channel is delayed, i.e. data (control information) is initially transmitted only via the control channels (feature 2). The time interval gained by this delay is used to regulate the power of the control channel (feature 3.2). The claim does not directly state whether and in what way the regulation of the power of the control channel affects the power of the data channel. However, the fact that the patent in suit is aimed at solving the problems arising from inadequate regulation with regard to the quality of the transmission of data suggests that the power regulation described in feature 3.2 is also used – in a manner not described in detail in the patent in suit – for the transmission power of the data channel. For otherwise, the transmission of the data that is of primary importance to the user would continue to be compromised. It is in line with this that paragraph 18 of the patent in suit states that the effort associated with the transmission of additional control information is compensated for by the fact that the user data transmitted to the base station via the data channel is received in better quality.

14 II. The Patent Court gave the following reasons for its decision:

15 The subject matter of the patent in suit as granted was not patentable.

16 The patent in suit could only claim the priority of the British patent application 9 922 575 (NK6) of September 24, 1999, but not that of the British patent applications 9 900 910, 9 911 622 and 9 915 569 (NK3 to NK5). These contained explicit statements for the skilled person to the effect that the communication channel was a frequency division duplex communication channel and that power control and bit rate information was transmitted via the control channels. In contrast, the granted patent claim 1 generally claims a communication channel in which unspecified control information is transmitted

via the control channels. Therefore, the subject matter of claim 1 was not the same invention as that to be found in NK3 to NK5.

17 According to the result of the taking of evidence, the contributions "CPCH Physical Layer Procedures" and "Firm Handover over CPCH" of the company Golden Bridge Technology (NK15 and NK16) had already become known before the priority date, in the course of a conference held in South Korea from June 1 to 4, 1999, to the members of the 3GPP committees and thus to a cross-section of the most important companies in the field of mobile radio technology without any obligation of secrecy. NK15 anticipated all features of claim 1 as granted.

18 The patent in suit is also not valid in the version of the auxiliary requests.

19 III. This assessment does not stand up to legal review. The opinion of the Patent Court that the defendant cannot claim the priority of the British application 9 900 910 (NK3) is not correct.

20 1. When filing a European patent application, the priority right of a previous application may be claimed under Art. 87(1) EPC if both concern the same invention.

21 a) According to the case law of the Senate, this requirement is met if the combination of features claimed in the subsequent application is disclosed in its entirety in the previous application as belonging to the invention applied for (Federal Court of Justice, judgment of September 11, 2001 – X ZR 168/98, BGHZ 148, 383, 388 – *Luftverteiler*; judgment of January 30, 2008 – X ZR 107/04, GRUR 2008, 597, 599 – *Betonstraßenfertiger*). The subject matter of the claimed invention must be disclosed identically in the priority document; it must be the same invention (EPO GBK, decision of May 31, 2001 – G2/98, GRUR Int. 2002, 80; Federal Court of Justice, judgment of October 14, 2003 – X ZR 4/00, GRUR 2004, 133, 135 – *Elektronische Funktionseinheit*). In this context, the disclosure of the subject matter of the first application is not limited to the claims formulated therein; rather, it must be determined from the entirety of the application documents.

22 b) The principles of novelty testing apply to the assessment of identical disclosure (Federal Court of Justice, GRUR 2004, 133, 135 *Elektronische Funktionseinheit*). According to the established case law of the Senate, this requires that the skilled person can "directly and unambiguously" identify the technical teaching designated in the claim from the original documents (Federal Court of Justice, judgment of September 11, 2001 – X ZR 168/98, BGHZ 148, 383, 389 – *Luftverteiler*; judgment of July 8, 2010 – Xa ZR 124/07, GRUR 2010, 910, marginal no. 62 – *Fälschungssicheres Dokument*; judgment of August 14, 2012 – X ZR 3/10, GRUR 2012, 1133 marginal no. 31 – *UV-unempfindliche Druckplatte*) as a possible embodiment of the invention (Federal Court of Justice, judgment of September 11, 2001 – X ZB 18/00, GRUR 2002, 49, 51 – *Drehmomentübertragungseinrichtung*; judgment of February 18, 2010 – Xa ZR 52/08, GRUR 2010, 599 marginal no. 22, 24 – *Formteil*). It is therefore to be determined what the skilled person takes from the prior publication as the content of the given general teaching (Federal Court of Justice, judgment of December 16, 2008 – X ZR 89/07, BGHZ 179, 168 marginal no. 25 – *Olanzapin*). The decisive factor is the understanding of the skilled person at the time of filing the patent application claiming priority (Federal Court of Justice, GRUR 2004, 133, 135 – *Elektronische Funktionseinheit*).

23 c) The requirement of a direct and unambiguous disclosure must be applied in a way that takes into account that the determination of what is disclosed to the skilled person as an invention and what is disclosed as an embodiment of the invention has an evaluative character and avoids an unreasonable restriction of the plaintiff in exhausting the disclosure content of the prior application. In this respect, it must be taken as a basis that the interest of the plaintiff is regularly recognizably directed towards obtaining the broadest possible protection, i.e. to present the invention in as general a manner as possible and not to limit it to examples of application pointed out. Insofar as claims are already formulated in the application, these have a provisional character. Only in the course of the subsequent examination procedure is it necessary to work out what is protectable in the light of the state of the art and for which claims the plaintiff seeks protection. The subject matter of protection is not finally determined until the patent is granted with specific claims.

24 aa) This point of view is based on the case law of the Senate, according to which generalizations of embodiments disclosed by the origin are also admissible when exhausting the content of the disclosure. Accordingly, a "broadly" formulated claim is unobjectionable from the point of view of inadmissible broadening at least if an embodiment example of the invention described in the application appears to a skilled person as an embodiment of the more general technical teaching circumscribed in the claim and this teaching in the generality claimed can already be inferred by him from the application – whether in the form of a claim formulated in the application, or whether according to the overall context of the documents – as belonging to the invention applied for (Federal Court of Justice, judgment of July 17, 2012 – X ZR 117/11, BGHZ 194, 107 marginal no. 52 – *Polymerschaum*). Such generalizations have been allowed primarily when, of several features of an embodiment which, taken together but also considered individually, are conducive to the success of the invention, only one or only individual ones have been included in the claim (settled case law since Federal Court of Justice, order of January 23, 1990 – X ZB 9/89, BGHZ 110, 123, 126 – *Spleißkammer*; more recently BGHZ 194, 107 marginal no. 52 – *Polymerschaum*; Federal Court of Justice, GRUR 2012, 1133 marginal no. 31 f. – *UV-unempfindliche Druckplatte*).

25 bb) The examination as to whether the subject matter of the invention is identically disclosed in the priority document shall be carried out according to comparable standards. The priority of a prior application can be claimed if the instructions described therein by means of an example of an embodiment or in any other way appear to a skilled person as an embodiment of the more general technical teaching described in the subsequent application and this teaching in the generality disclosed in the subsequent application can already be taken from the prior application as belonging to the invention applied for.

26 2. Accordingly, the defendant can claim the priority of NK3.

27 a) The description of priority document NK3 first mentions in general terms that the invention relates to a radio communication system and that, although it is described below with reference to the emerging UMTS system, it is understood that it is equally suitable for other mobile radio systems. The following paragraph discusses user traffic and control information in the same

general terms. The third paragraph explains that one function of control information in many communications systems is to enable power control (in a closed loop). The importance of power control in mobile radio systems for both the base station and the mobile stations is then explained.

28 The description cites the GSM system as an example of a combined time and frequency division access system employing power control, and adds, with reference to a U.S. patent specification, that power control for a spread spectrum Code Division Multiple Access (CDMA) system is similarly described.

29 The description of the disadvantage of the known solutions and the task derived therefrom is – as in the patent in suit – formulated in very general terms to the effect that the control circuits required some time to regulate the power level sufficiently precisely.

30 b) According to the description reproducing claim 1 of the application, the first solution according to the invention is that in a radio communication system with a primary station and a plurality of secondary stations with a frequency division duplex communication channel between primary and secondary station, comprising an uplink and a downlink control channel for transmitting power control and bit rate information and a data channel for transmitting data packets, and power control means for stepwise varying the power of the control and data channels. The second claimed solution, in accordance with claim 5 of the application, is that in a system described word-for-word (with the exception of the omitted power control means for varying the power of the control and data channels), the primary and secondary stations include means for delaying the start of transmission on the data channel relative to transmission on the control channels.

31 Referring to Figure 1, an embodiment is then described which is said to comprise a radio communication system capable of operating in a frequency duplex mode. Figure 2 schematically shows a conventional model for setting up a communication link, as used, according to the description, by a UMTS embodiment. This model is again used to describe the problem of power adaptation delay, the solution to which is explained by a delayed start of transmission on the data channel using Figure 3. Referring to Figure 4, the

second solution of a variable step size in power adaptation is explained. Finally, it is stated that embodiments of the invention have been described using frequency spreading techniques such as those used in UMTS embodiments; however, it is understood that the invention is not limited to use in CDMA systems.

32 c) Neither the problem description nor the embodiments explained in more detail with reference to the figures thus show any specific reference to the design of the communications channel as a frequency division duplex channel or to the fact that bit rate information is also transmitted on the control channel. The bit rate information is mentioned at all only in the rendering of the wording of the claims as filed. The description of the embodiments does, as stated, come back to the frequency duplex; however, a connection with the claimed solutions of the described technical problem of counteracting the difficulties of a timely power adaptation by a variation of the adaptation steps or by a delay of the start of the transmission on the data channel is not established. Neither is there any indication that the problem of power control arises only, or at least to a particular extent, in a radio communication system with a frequency-division duplex communication channel, nor is there any evidence that the choice of such a channel contributes in any way to solving this problem. The same applies to the design of the control channel in such a way that it also serves to transmit bit rate information.

33 d) Accordingly, it is readily apparent to the skilled person who is faced with the question of which technical teaching for solving the described technical problem he can take from the priority document that the general technical teaching is already disclosed in NK3, in a radio communication system with uplink and downlink control channels for the transmission of control information, to use advantageously the means known per se for power control with a closed control loop in such a way that means are provided for delaying the start of the transmission in the data channel until after the start of the transmission in the control channels, so that during this delay the control channel power can be adapted. At the same time, it is thus obvious to him that this general teaching is explained merely by way of example on the basis of a usual embodiment of such a radio communication system, in which the communication channel is

designed as a frequency division duplex channel and the control channel also serves for the transmission of bit rate information.

34 e) This assessment is not contradicted by the findings of the Patent Court, which merely states that the priority document contains "explicit statements regarding the design of the communication channel" and that the skilled person will relate the remaining content of the description to this. From his findings, there are no indications that the design of the communication channel as a frequency division duplex channel or the choice of a control channel in which bit rate information can also be transmitted contribute anything to the solution of the technical problem of power control dealt with in NK3, let alone that they would be necessary for this.

35 f) Therefore, contrary to the opinion of the Patent Court, the patent in suit rightly claims the priority of NK3 of January 16, 1999. Accordingly, the citations NK9, NK11, NK15, NK16, NK19 and NK21, which, according to the plaintiff’s submissions, were not published until spring 1999, must be disregarded in the assessment of patentability. The decision of the Patent Court, which allowed the application on the grounds that the subject matter of claims 1 and 4 was anticipated by NK15 and NK16, can therefore not be upheld.

36 IV. The contested judgment is also not correct in its result for other reasons.

37 1. The American patent specification 5 841 768 (NK7) neither anticipates nor suggests the subject matter of patent claim 1.

38 It is true that NK7 deals with the regulation of transmission power in a radio communication system during the establishment of a connection. However, in the early phase of connection establishment dealt with therein, this is not done by closed-loop power control means. As can be seen from the description (column 6, lines 56 ff.), such means are used only at a later stage, namely when the procedure proposed in NK7 has already been completed. NK7, which mentions the power control means also presupposed as known by the patent in suit and forming the starting point of the solution according to the invention with reference to US patent specification 5 056 109, also discussed in

the patent in suit, as a means of power adaptation, but rejects it as not very suitable (column 2, lines 42 to 62), proposes instead a different solution. It starts at an early stage of the connection set-up, when a power control loop has not yet been established (column 2, lines 27 to 30) and a communication channel does not yet exist but is only being established (Abstract, column 2, column 3, line 8, column, line 56, column 5, lines 45 to 48 and line 60; column 8, line 60 as well as Figure 11B). In contrast, the patent in suit deals with a stage of (re)establishing a connection in which a communication channel has already been established. The fact that signals are exchanged between the mobile station and the base station (*request and acknowledgement*) even at the earlier stage of connection establishment, which is the subject of NK7, does not allow the conclusion that a communication channel or a control channel has already been established. Rather, the corresponding signals are transmitted on a shared channel (*random access channel – RACH*).

39 Accordingly, it is not apparent from NK7 that means are provided therein for delaying the start of transmission in the data channel at a time when control channels have already been established on which transmission is already commencing (feature 2). Nor does the citation deal with, nor can it suggest, means for regulating the transmission power precisely in this period after the control channels have been set up but before transmission in the data channel begins (feature 3.2).

40 2. The plaintiff did not return to the "Specifications of Air-Interface for 3G Mobile System" in version 0.5 (NK13), which had been introduced in the first legal action, after the defendant had argued that it had not been published.

41 V. The decision on costs is based on Sec. 121(2) Patent Act and Sec 91(1) Code of Civil Procedure.

Meier-Beck Grabinski Hoffmann

Deichfuß Kober-Dehm

Previous instance:
Federal Patent Court, judgment of May 23, 2012 – 5 Ni 22/10 (EP) –